

Rare, Threatened, and Endangered Plants of Maryland

March 2021





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Cover photo: The extraordinary flower of Kidneyleaf Grass-of-Parnassus (*Parnassia asarifolia*). Photo credit: Jennifer Selfridge.

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INTRODUCTION

The following report identifies 741 native Maryland plants that are among the least understood, the rarest, and the most in need of conservation efforts. It includes species occurring in Maryland that are on the federal list of Endangered and Threatened Wildlife and Plants under the Endangered Species Act (ESA), species currently on the State's Threatened and Endangered Species List, and additional species that are considered rare or under assessment by the Wildlife and Heritage Service. The purpose of this report is to inform the public of rare species, to provide an indication of their degree of rarity, to solicit additional information on the status and distribution of these species, and to promote an interest in their conservation. For more information about Maryland's botanical heritage see the 2014 report of the Maryland Botanical Heritage Work Group to the Governor and the Maryland General Assembly, available at: <http://msa.maryland.gov/msa/mdmanual/26excom/html/04botanical.html>.

Compiled by Wildlife and Heritage Service staff and conservation partners, these treatments of rare species are a result of more than 40 years of effort to gather, research, and analyze data from numerous sources, such as herbaria, scientific literature, unpublished documents, reports from botanists and amateur naturalists, and extensive field work conducted by scientists from the Department of Natural Resources (DNR). Our knowledge of Maryland's flora has grown steadily. Wildlife and Heritage Service biologists and cooperators have located species which were previously unrecorded for the state and have discovered that some species are scarcer than previous records indicated. Similarly, some species are now known to be either more widespread or less vulnerable than previously believed. Thus, the conservation rank and legal status of each species are periodically revised to keep pace with new information. The list was first published in 1984, and its last revision was in 2019.

The primary Maryland law (enacted in 1975) that allows and governs the legal listing of endangered species is the Nongame and Endangered Species Conservation Act (Annotated Code of Maryland 10-2A-01). The Act is supported by regulations (Code of Maryland Regulations, COMAR 08.03.08) that define listing criteria for endangered, threatened, and endangered extirpated species; establishes the purpose and intent of collecting permits; and lists prohibited activities. Maryland regulations may be found online at: <http://www.dsd.state.md.us/COMAR/ComarHome.html>

The Wildlife and Heritage Service (the Service) within DNR is the lead state agency responsible for the identification, ranking, protection, and management of rare and endangered species and natural communities in Maryland. The Service seeks to identify and sustain populations of rare plants and animals through the maintenance of healthy natural ecosystems. The Service maintains a database of natural areas and occurrences of rare, threatened, and endangered plant and animal species. This database is aligned with the NatureServe network, an international association of over 80 programs that tracks and monitors species and plant communities using identical methodologies across all 50 states, Canada, and Latin America. Wildlife and Heritage Service biologists are concerned with many more species than those included on Maryland's regulated list of threatened and endangered species. Some of these additional species are potential candidates for listing and usually require further investigation into their conservation status and rank. Others are thought to be secure at present but are worthy of attention because of limited distributions, declining populations, or other ecological vulnerabilities.

ABOUT THIS LIST

The State Botanist established a committee to review the format and information content of the Maryland list of rare, threatened, and endangered plant species. The committee's recommendations have been incorporated into this and future documents, and they represent substantial changes to the presentation and content of the Maryland list. This revised and updated list incorporates proposals to alter the Maryland legal status (defined in Table 2 and identified in Appendix I); changes in State ranks; emendations to the County and/or Physiographic Province distributions of species; incorporates additional flowering and fruiting dates; and finally, improvements to species treatments.

UNDERSTANDING CONSERVATION RANK AND LEGAL STATUS

Conservation status ranks are intended to indicate risk of elimination or extinction in the foreseeable future and are arranged along a simple numerical scale (1-5) with the lower numbers reflecting increasing rarity and risk. Conservation ranks also present geographic information about rarity. State ranks (S ranks) communicate the rarity of the species in the state whereas global ranks (G ranks) communicate the rarity of the species throughout its range (although most species are far from being globally distributed). The rank of a species is determined through analyses of population number, size, viability, threats, and trends, among other things. The final metric, a combination of the numeric index (1-5) and the geographic identifier (G or S), distills this large amount of information into a single metric. Thus, for a particular plant species that has a global rank of G1 and a state rank of S1, the species is not only rare and at risk of elimination from within Maryland but also rare throughout its entire range and at risk of extinction. Similarly, a plant species with ranks of G5 and S5 relate that the plant is common in Maryland and is demonstrably secure throughout the species' global range.

Most species have single-valued conservation ranks; however, some variations are possible. Range ranks, e.g., G1G2 or S1S2, indicate the (usually narrow) range of uncertainty in the rank. For example, a species may have more populations than is typical of the lower rank but few are protected; this may affect the viability of the population(s). A taxon (T) rank follows the global (G) rank of the full species as a qualifier to indicate the conservation status of the subspecies or variety of that species, e.g., G5T3. The latter indicates that the subspecies or variety is much rarer than the typical species; the typical species may or may not occur in Maryland. A global rank may also be followed by a 'Q'-qualifier to indicate that there are prevailing taxonomic questions for that species (e.g., G4Q). A '?'-qualifier may be used to indicate that there is a level of uncertainty in the global or state rank (e.g., G4? or S2?). Finally, the "!" symbol to the right of a species name indicates that the conservation status of that species is currently under review. Proposals to alter the Maryland status are identified in parentheses in the State Status column and defined in Table 2; however, these proposals will require processing regulatory changes. Definitions of conservation status ranks and rank qualifiers are presented in Table 1. State ranks for many species are modified annually or as needed to reflect current information. All member programs of the NatureServe Network of Natural Heritage Programs and Conservation Data Centers across the Western Hemisphere use the same ranking system and format. This allows direct conservation status comparisons across the political and geographic landscape, and it is one of the most powerful aspects of the Network.

Table 1. Definitions of Global (G) and State (S) Conservation Ranks and Rank Qualifiers.

Rank	Definitions global/state
GX or SX	Presumed Extirpated —Species believed to be extirpated from the jurisdiction (i.e. global, or state/province). Not located despite intensive searches of historical sites and other appropriate habitat, and virtually no likelihood that it will be rediscovered.
GH or SH	Historical (Possibly Extirpated) —Known only from historical records but still some hope of rediscovery. There is evidence that the species may no longer be present in the jurisdiction, (i.e. global, or state/province) but not enough to state this with certainty.
G1 or S1	Critically Imperiled/Highly State Rare —At very high risk of extinction or extirpation due to very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors. Typically occurring in five or fewer populations.
G2 or S2	Imperiled/State Rare —At high risk of extinction or extirpation due to restricted range, few populations or occurrences, steep declines, severe threats, or other factors. Typically occurring in 6-20 populations.
G3 or S3	Vulnerable/Watchlist —At moderate risk of extinction or extirpation due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors. Typically occurring in 21-80 populations.
G4 or S4	Apparently Secure —At fairly low risk of extinction or extirpation due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
G5 or S5	Demonstrably Secure —At very low risk of extinction or extirpation due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
S3.1	Vulnerable and globally rare —A species that is actively tracked by the Service because of the global significance of Maryland occurrences. Although not currently threatened or endangered, Maryland occurrences may be critical to the long-term security of the species.
SE	Exotic —Established but not native to Maryland.
SNA	Not Applicable —A conservation status rank is not applicable because the species is not a suitable target for conservation activities.
SNR	Not ranked.
SR	Reported —Reported from Maryland but without persuasive evidence that would provide a basis for either accepting or rejecting the report. These species are presented in Appendix II.
SRF	Reported falsely —Reported in error from Maryland and the error may persist in the literature. These species are presented in Appendix II.
SU	Status Uncertain —A numerical rank cannot be established with confidence for reasons including lack of historical records, low survey effort, cryptic nature of the species, or concerns that the species may not be native to the state. Uncertainty spans a range of more than three ranks as defined above.
Q	A rank qualifier —Indicates that the taxon has questionable, controversial, or uncertain taxonomic standing, e.g., treated by some authors as a species, whereas others treat it as a subspecies or variety or not at all.
T	A rank qualifier —Indicates that the infraspecific taxon (subspecies or variety) is ranked differently than the typical species.
?	A rank qualifier —Indicating uncertainty that may span 2-3 ranks as defined above.
!	An indicator that the conservation status of that species is currently under review.

Legal status presents a simple hierarchy of endangerment in three, mostly familiar, categories: Threatened (the lowest status), Endangered (the highest status), and Endangered Extirpated (a category unique to Maryland). Definitions of legal statuses are presented in Table 2. Legal protection statuses of species are typically reviewed and updated, if needed, every two to three years. All species listed as threatened and endangered at the federal level are also listed within Maryland regulations.

Table 2. Definitions of State and Federal legal protection status.

State Status	Definition
Endangered (E)	A species whose continued existence as a viable component of Maryland’s flora is determined to be in jeopardy.
Threatened (T)	A species that appears likely, within the foreseeable future, to become endangered in Maryland.
Endangered Extirpated (X)	A species that was once a viable component of the flora of Maryland, but for which no naturally occurring populations are known to exist.
Proposed Delist (PD)	A species proposed for delisting by the Service. These proposals are indicated in parentheses to the right of the current State Status.
Proposed Endangered (PE)	A species proposed for listing as endangered in Maryland. These proposals are indicated in parentheses to the right of the current State Status.
Proposed Threatened (PT)	A species proposed for listing as threatened in Maryland. These proposals are indicated in parentheses to the right of the current State Status.
Federal Status	Definition
Endangered (LE)	Taxa listed as Endangered under the federal ESA; in danger of extinction throughout all or a significant portion of its range.
Threatened (LT)	Taxa listed as Threatened under the federal ESA; likely to become endangered within the foreseeable future throughout all or a significant portion of its range.

GUIDE TO THE LIST

The rare, threatened, and endangered plant species is arranged alphabetically by scientific name. Taxonomy follows Weakley’s *Flora of the Southern and Mid-Atlantic States* (2015, 2020) unless stated otherwise (Weakley’s Flora is freely available for download at <http://www.herbarium.unc.edu/flora.htm>). The header on each page of the treatments shows (from left to right) Scientific Name, Common Name, the Global Rank (G rank), State Rank (S rank), State Status (if any), and Federal Status (if any). Common names, global ranks, and state ranks may also be found at the NatureServe Explorer website at: <http://explorer.natureserve.org/>. Below the first line of each treatment more detailed information is presented. A key to the treatments is presented in Figure 1 on page 12. Directly underneath the scientific name of the species is the scientific name of the plant family followed by the common name of the family in parentheses.

Taxonomic synonyms (**Syn**) in common use correspond to four major references for our region starting with R. G. Brown and M. L. Brown's 1972 *Woody Plants of Maryland* and M. L. Brown and R. G. Brown's 1984 *Herbaceous Plants of Maryland*; H. A. Gleason and A. Cronquist's 1991 *Manual of Vascular Plants of Northeastern United States and Adjacent Canada*; and M. L. Fernald's 1950 *Gray's Manual of Botany, 8th Edition*. Taxonomic references (**Taxref**) point to a published source; this generally refers to Weakley (2015) unless otherwise noted. Taxonomic notes (**Taxnote**) are provided to detail our understanding of the taxonomy of the species. Conservation and ecology notes (**Cons/Econote**) detail factors influencing the rank and status of the species, but also include more general ecological notes. The species' most commonly associated habitat in Maryland (**Habitat**) is presented as synoptically as possible given the need to conserve space. Some habitat descriptions follow Harrison and Stango (2016) plant community descriptions according to the taxonomy of the National Vegetation Classification (<http://usnvc.org/explore-classification/>). The Maryland distribution (**Distr**) of the species is presented, first by major physiographic province (see Figure 2 for definitions), followed by county names in parentheses. Three distributional qualifiers (?, *, I) may occur in the county distribution to indicate particular circumstances (see [Table 3](#) for definitions). Distributional data comes from a variety of sources but mostly from the records and databases of the Maryland Natural Heritage Program, the Maryland Biodiversity Project, and the Maryland Department of Natural Resources Herbarium (international acronym is TAWES). Finally, flowering (**Flw**) and fruiting (**Fr**) periods for the species appear on the last line of the treatment. These are Maryland-specific and data collection is ongoing. Treatments are followed by a full **index** of the genera.

Appendix I details the changes in rank and legal status for all species since the last publication of the list in March 2019.

Appendix II details the list of species reported or falsely reported that have been or are attributed to Maryland and that are not presented in the body of the treatments.

Appendix III contains a list of 69 ecological community groups that are currently recognized by the Maryland Natural Heritage Program.

The **Literature Cited** section contains all sources cited in the plant treatments.

A **glossary** of select terms is provided at the end of this document.

Table 3. Definitions of qualifiers used in the county distribution of species.

Distributional Qualifier	Definition
County name?	Record for the county is reported but unverified or may indicate that the record occurs outside of the known range or in atypical habitat.
County name*	Record for the county is based upon a historical collection but no extant population is known.
County name ^I	Record for the county is the result of an introduction.

ADDITIONAL RESOURCES AND IMPORTANT LINKS

National

The U.S. Department of the Interior, Fish and Wildlife Service's (USFWS) Office of Endangered Species publishes a list of federally-designated Threatened and Endangered species. Copies of the USFWS publications: Endangered and Threatened Wildlife and Plants, and Plant Taxa for Listing as Endangered or Threatened Species; Notice of Review (reprinted from the Federal Register), may be obtained from the Publication Unit, U.S. Fish and Wildlife Service, Washington DC 20240 or viewed at: <http://www.fws.gov/endangered/>

The Biota of North America Program (Synthesis of North American Flora) includes links to county-level distributions and taxonomic information of plant taxa occurring in North America at the following link: www.bonap.org.

NatureServe compiles data from all member programs in the Network of Natural Heritage Programs and Conservation Data Centers and provides a synthesis in the form of species summaries on their Explorer website: <http://explorer.natureserve.org>

Regional

The Virginia Botanical Associates provide an excellent online atlas of the Virginia flora at: www.vaplantatlas.org.

The Mid-Atlantic Herbaria Consortium provides a searchable database of vascular plant specimens and images at: <http://midatlanticherbaria.org/portal/index.php>

Maryland

The Maryland Plant Atlas provides information on the distribution of plant species in Maryland at: <http://www.marylandplantatlas.org/index.php>

The Maryland Biodiversity Project provides information on all species at: <http://www.marylandbiodiversity.com/>

The Smithsonian Institution provides online searches of plant species in the Flora of the Washington-Baltimore Area at: www.botany.si.edu.

For more information about Maryland's botanical heritage see the 2014 report of the Maryland Botanical Heritage Work Group to the Governor and the Maryland General Assembly, available at: <http://msa.maryland.gov/msa/mdmanual/26excom/defunct/html/04botanical.html>

To obtain additional copies of this report; to receive a copy of Rare, Threatened, and Endangered Plants of Maryland; or to receive other information on Maryland's rare species and natural areas; please contact the Maryland Wildlife and Heritage Service at Tawes State Office Building, E-1, 580 Taylor Avenue, Annapolis, MD 21401 or visit the website at:

http://dnr.maryland.gov/wildlife/Pages/plants_wildlife/rte/rteplants.aspx

The Maryland Geological Survey (<http://www.mgs.md.gov/>) provides detailed physiographic maps with accompanying explanatory text, available at: http://www.mgs.md.gov/geology/physiographic_map.html.

HOW YOU CAN HELP

You can take an active part in conserving Maryland's rare species by contacting the Wildlife and Heritage Service with the following types of information:

I. Submitting information on rare, threatened, or endangered species

1. Location details should be included (exact mapped location using GPS is preferred, but not required). Online applications such as Google Earth are invaluable but precise, written directions including driving and walking are acceptable.
2. Documentation that includes a photograph, description of the species, identification source, and habitat description should accompany the report.
3. Information on the ecology or biology of the species including observed and/or identified pollinators should accompany the report.

**Additional information, including a downloadable .pdf of our rare plant reporting form can be found at:

https://dnr.maryland.gov/wildlife/Pages/plants_wildlife/rte_reportinginst.aspx

II. Assisting the Service with rank and status

1. Submit data indicating that a species should be assigned a different rank and status, with supporting documentation.
2. Submit nominations of additional species to be included on the list or of species that should be deleted from the list, with supporting documentation.
3. Submit information on historical collections or from documentation in the scientific literature.

RARE, THREATENED, AND ENDANGERED PLANTS OF MARYLAND

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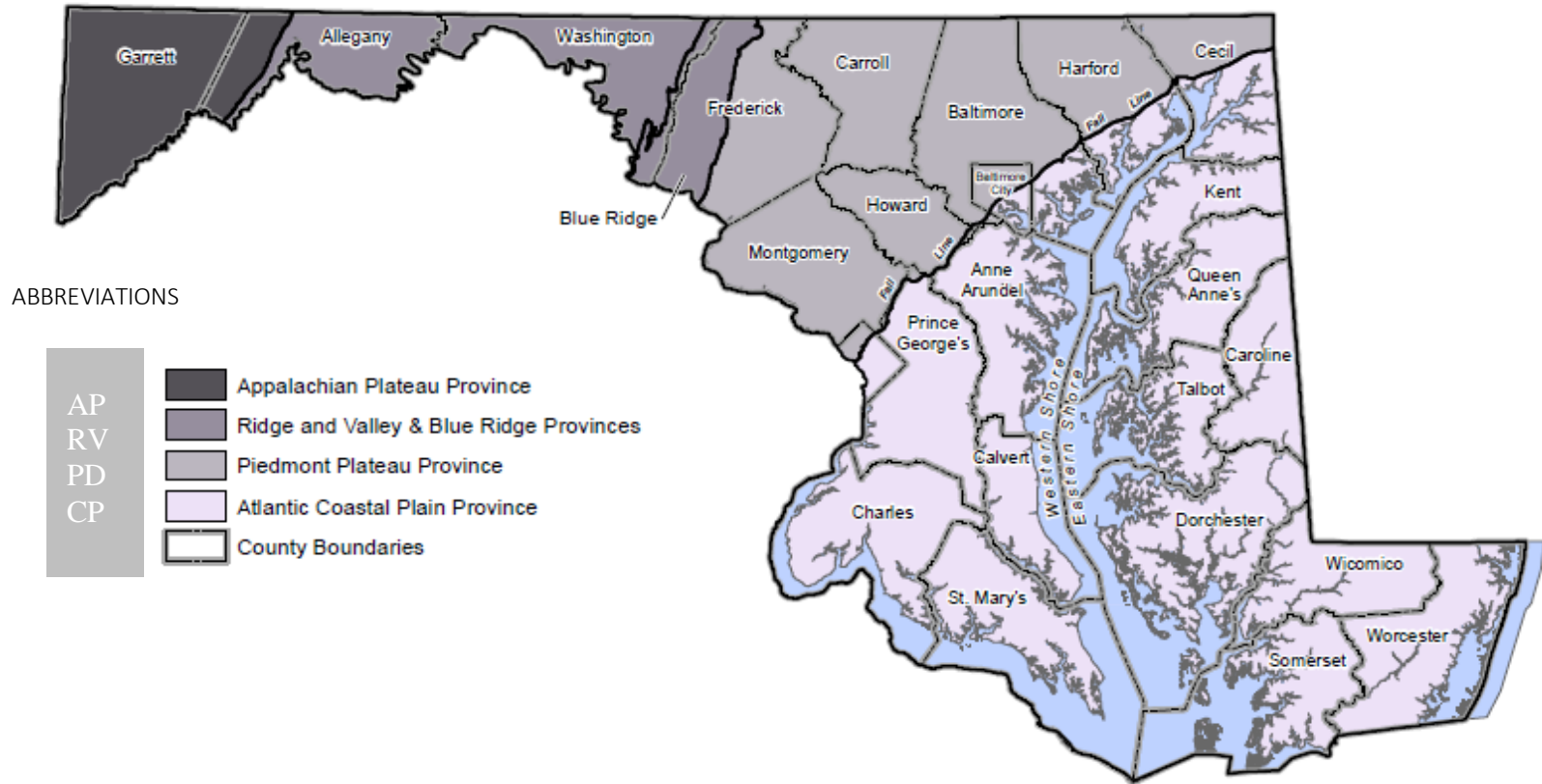
Figure 1. Quick reference to plant treatments. Superscript numerals in the example (Harperella) identify terms that are defined in the key.

Scientific Name ¹	Common Name ²	Global Rank ³	State Rank ⁴	State Status ⁵	Federal Status ⁶
<i>Harperella nodosa</i> Rose ⁷ Apiaceae (Carrot Family) ⁸ Syn: <i>Ptilimnium nodosum</i> (Rose) Mathias ⁹ Taxref: Feist et al. 2012. ¹⁰ Taxnote: Feist et al. resurrected the genus <i>Harperella</i> from within <i>Ptilimnium</i> based on an analysis of molecular markers and morphology. Inclusive of <i>H. vivipara</i> (Rose) and <i>H. fluviatilis</i> (Rose) for which Feist et al. found only marginal taxonomic evidence. ¹¹ Cons/Econote: Endangered via landscape-level changes in stream flows and rangewide habitat loss; restricted to two streams in Maryland. ¹² Habitat: Riverside bedrock scour bars. ¹³ Distr. RV (Allegany, Washington). ¹⁴ Flw: Aug- Sept; Fr: Oct.	Harperella	G2	S1	E	LE

Key

1. Scientific name: the correct citation of a scientific name includes the author of the species. In this example that person was the American botanist Joseph Nelson Rose (1862-1928).
2. Common Name: common names in this document have been standardized to the common names utilized by NatureServe.
3. Global Rank: refers to the conservation rank of the plant throughout its range. See Table 1 for definitions.
4. State Rank: refers to the conservation rank in Maryland. See Table 1 for definitions.
5. State Status: refers to the legal protection status of a species under the Maryland Nongame and Endangered Species Conservation Act. See Table 2 for definitions.
6. Federal Status: refers to legal protection status of a species as determined by the U.S. Fish and Wildlife Service’s Office of Endangered Species, in accordance with the federal Endangered Species Act. See Table 2 for definitions.
7. Scientific family name (common family name): the scientific (Latin) name of the plant family followed by its common name in parentheses.
8. Syn: refers to synonyms for scientific names that have been used in other lists, floras, and manuals.
9. Taxref: a taxonomic reference may be provided for the name(s) used in this document when the treatment differs from Weakley (2015) or when reference to a primary literature source may be helpful to the reader. Full citations (e.g., author, year, title, journal) may be found in the Literature Cited.
10. Taxnote: taxonomic notes are provided (when needed) to detail the taxonomic treatment used in this document.
11. Cons/Econote: conservation and ecology notes are provided for most species in order to relate factors influencing conservation ranks and statuses.
12. Habitat: refers to a summary of the known habitats for the species in Maryland.
13. Distr: provides the distribution of the species by Physiographic Province (see Figure 2) followed by the documented county distribution in parentheses.
14. Flw: Fr: flowering (Flw) and fruiting (Fr) periods are provided for species for which we have precise data.

Figure 2. Generalized map of Maryland physiographic provinces and county boundaries



* In the map above the Blue Ridge Province is included within the larger Ridge and Valley Province. Detailed maps of Physiographic Provinces and smaller subdivisions are available from the Maryland Geological Survey. See section, Additional Resources and Important Links, for links to information regarding Maryland physiography.

Rare, Threatened, and Endangered Plants of Maryland

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Species Treatments

“Optimism is a good characteristic, but if carried to an excess, it becomes foolishness. We are prone to speak of the resources of this country as inexhaustible; this is not so.”

Theodore Roosevelt, Seventh Annual Message to Congress, 3 December 1907

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Abies balsamea</i> (Linnaeus) P. Mill Pinaceae (Pine Family)	Balsam Fir	G5	S1		
Cons/Econote: Peripheral in Maryland; isolated occurrences with few trees.					
Habitat: Mesic coves and outcrops at higher elevations.					
Distr. AP (Garrett).					
Flw: May-Jun; Fr: late Aug-Sept.					
<i>Aconitum uncinatum</i> Linnaeus Ranunculaceae (Buttercup Family)	Blue Monkshood	G4	S1	E	
Cons/Econote: Endangered by habitat loss. Excessive deer browse limits reproduction at some sites.					
Habitat: Rich, montane alluvial woods, river banks, scour bar boulders.					
Distr. AP (Garrett).					
Flw: Aug; Fr: Sept-Oct.					
<i>Actaea podocarpa</i> A.P. de Candolle Ranunculaceae (Buttercup Family)	American Bugbane	G4	S2		
Syn: <i>Cimicifuga americana</i> Michaux					
Cons/Econote: Endemic to southern and central Appalachians; Maryland populations are confined to a narrow geographic area.					
Habitat: Rich montane forests.					
Distr. AP (Garrett).					
Flw: Aug; Fr: Sept.					
<i>Adlumia fungosa</i> (Aiton) Greene ex Britton, Sterns & Poggenburg Fumariaceae (Fumitory Family)	Climbing Fumitory	G4	S2	T	
Cons/Econote: This species reaches highest density in open-canopy habitats and thus faces increased competition with invasive species.					
Habitat: Rocky woodlands, cliffs and outcrops over mafic to slightly acidic siltstones, sandstones and shales, and sometimes found growing—strikingly—in small amounts of organic soil on the tops of boulders.					
Distr. AP, PD*, RV (Allegheny, Baltimore*, Frederick, Garrett, Washington).					
Flw: late Jul-Sept; Fr: Sept-Nov.					
<i>Aeschynomene virginica</i> (Linnaeus) Britton, Sterns & Poggenburg Fabaceae (Legume Family)	Sensitive Joint-vetch	G2	S1	E	LT

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Endangered by habitat loss, stream sedimentation and to an unknown extent, sea level rise associated with global warming. See Tyndall (2011) for monitoring data on Maryland populations. The use of a drone and aerial imagery has greatly facilitated our population monitoring in these difficult-to-survey habitats.</p> <p>Habitat: Fresh tidal marshes.</p> <p>Distr. CP (Calvert, Charles, Prince George's, Somerset, Wicomico*).</p> <p>Flw: mid Aug-early Oct; Fr: Sept-Oct.</p>					
<i>Agalinis auriculata</i> (Michaux) Blake	Earleaf False Foxglove	G3	S1	E	
<p>Orobanchaceae (Broomrape Family)</p> <p>Cons/Econote: Critically endangered by long-term habitat loss and displacement by invasive species.</p> <p>Habitat: Meadows and woodland borders over mafic or calcareous substrates.</p> <p>Distr. CP, PD, RV (Frederick, Montgomery, Prince George's).</p> <p>Flw: mid Sept; Fr: Oct-Nov.</p>					
<i>Agalinis decemloba</i> (Greene) Pennell !	Blue Ridge False Foxglove	G3G4	S1	E	LE (PD)
<p>Orobanchaceae (Broomrape Family)</p> <p>Syn: <i>Agalinis acuta</i> Pennell</p> <p>Taxnote: Pettingill and Neel (2011) found insufficient evidence to support the evolutionary distinctiveness of <i>A. acuta</i> recommending synonymizing under <i>A. decemloba</i> but continued federal protection under the Endangered Species Act.</p> <p>Cons/Econote: Endangered by habitat loss and fragmentation of historically connected barrens, fire exclusion, and white-tail deer herbivory. A range-wide status assessment is being performed in 2020 to determine whether a delisting proposal should be published by the U.S. Fish and Wildlife Service.</p> <p>Habitat: Remnant grassland and barrens (savannas) over ultramafic (serpentine) to acidic (sand) substrates.</p> <p>Distr. CP, PD (Baltimore, Prince George's*).</p> <p>Flw: mid-Sept; Fr: late Sept-Oct.</p>					
<i>Agalinis obtusifolia</i> Rafinesque	Ten-lobe False Foxglove	G4	SH	X	
<p>Orobanchaceae (Broomrape Family)</p> <p>Taxnote: Pettingill and Neel (2011) demonstrated that <i>A. obtusifolia</i> is distinct from <i>A. decemloba</i> and that the subsuming of <i>A. decemloba</i> under <i>A. obtusifolia</i> is in error.</p> <p>Cons/Econote: The species appears to have been frequently collected from about 1902-1937 within a 60 km radius of the District of Columbia. All of these collections were made from areas that are currently heavily urbanized and all are presumed extirpated. The decline in Maryland populations is mirrored by a widespread regional decline. The late F. W. Pennell, a noted <i>Agalinis</i> expert, made several collections of <i>A. obtusifolia</i> from the District of Columbia and from Prince George's County in the early 1900s. Despite the taxonomic confusion, <i>A. obtusifolia</i> is firmly established as a historical component of the Maryland flora.</p> <p>Habitat: Sandy barrens and woodland glades.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Distr. CP*, PD? (MD records are a heterogeneous assemblage of perhaps several species: Baltimore?, Calvert?, Charles?, Howard?, Montgomery?, Prince George's*).</p> <p>Flw: mid Sept-early Oct; Fr: Oct.</p>					
<i>Agalinis setacea</i> (J.F. Gmelin) Rafinesque Orobanchaceae (Broomrape Family)	Threadleaf Gerardia Thread-leaved Gerardia	G5?	S2	E	
<p>Cons/Econote: Endangered by habitat loss, woody succession of barrens habitat and poor protection status of several populations.</p> <p>Habitat: Sandy fields and roadsides, inland sand dune and ridge woodlands.</p> <p>Distr. CP (Anne Arundel*, Baltimore, Calvert, Caroline, Charles, Montgomery*, Prince George's*, Talbot*, Wicomico, Worcester).</p> <p>Flw: early-mid Sept; Fr: late Sept-Oct.</p>					
<i>Agalinis skinneriana</i> (A. Wood) Britton Orobanchaceae (Broomrape Family)	Pale False Foxglove	G3G4	S1	E	
<p>Taxnote: Pettingill and Neel (2008) confirmed that Maryland plants were sister to the sample from Missouri (within the core range of the species) but indicate that further investigation may be warranted to determine if the Maryland populations are actually an unrecognized species, as our populations are striking disjuncts from Midwestern prairies.</p> <p>Cons/Econote: Endangered by habitat loss, damage by off-road vehicles and woody succession of barrens habitat.</p> <p>Habitat: Sandy roads, barrens and fields.</p> <p>Distr. CP: (Cecil*, Charles, Dorchester, Prince George's).</p> <p>Flw: Aug-Sept; Fr: Sept-Oct.</p>					
<i>Agastache scrophulariifolia</i> (Willdenow) Kuntze Lamiaceae (Mint Family)	Purple Giant-hyssop	G4	S1S2	T	
<p>Cons/Econote: Threatened by alteration of edge habitats by invasive species and excessive deer browse.</p> <p>Habitat: Forest clearings, field edges, roadsides.</p> <p>Distr. PD, RV (Baltimore*, Carroll?, Frederick, Washington?; distribution likely incomplete).</p> <p>Flw: late Jul-Aug; Fr: Sept-Oct.</p>					
<i>Agrimonia microcarpa</i> Wallroth Rosaceae (Rose Family)	Small-fruited Agrimony	G5	S1?		
<p>Taxnote: Small plants of the common and widespread <i>A. pubescens</i> are frequently mistaken for this species. Better keys to the genus are available in Weakley (2020).</p> <p>Cons/Econote: The distribution of this species in Maryland is enigmatic. Historically this species has been reported as far west as Washington County (Shreve et al. 1910) and as far north as northern Cecil County (Reed 1986) but is currently known from the Coastal Plain as far south as Dorchester and Charles counties. This species occupies a wide range of geological substrates from strongly acid to ultramafic. Habitat at the largest known population is unremarkable and there appears to be much available, yet unoccupied habitat, for</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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the species. Additionally, the Service has noted broad fluctuations in population size that are not associated with changes in habitat (similar to an annual habit?).

Habitat: Dry-mesic oak and dry pine-oak forests and woodlands over rocky, sandy or gravelly substrates.

Distr. CP, PD, RV? (Anne Arundel*, Baltimore*?, Caroline, Cecil*, Charles, Dorchester, Frederick?, Howard, Montgomery*?, Prince George's?, Washington?).

Flw: Aug-Sept; **Fr:** Sept-Oct.

<i>Agrimonia striata</i> Michaux	Woodland Agrimony	G5	S1	E
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Rosaceae (Rose Family)

Cons/Econote: Endangered by habitat loss and displacement by invasive species.

Habitat: Basic mesic forests, rich bottomland forests.

Distr. CP*, PD, RV (Alleghany, Baltimore, Cecil*, Howard*, Prince George's*).

Flw: mid Aug-early Sept; **Fr:** Sept-Oct.

<i>Aletris aurea</i> Walter	Golden Colicroot	G5	SH	X
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Nartheciaceae (Bog-asphodel Family)

Cons/Econote: Maryland populations represented the northern extent of the southeastern coastal range. Last collected in 1918 and presumed extirpated.

Habitat: Acidic seepage wetlands.

Distr. CP* (Prince George's*).

Flw: Jul. (McAtee collected a specimen on July 18, 1918; flowering several weeks later than *A. farinosa* accordingly to Weakley 2015).

<i>Alnus maritima</i> (Marshall) Muhlenberg ex Nuttall	Seaside Alder	G3	S3.1
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Betulaceae (Birch Family)

Taxnote: Maryland and Delaware plants are ssp. *maritima*. See Schrader & Graves (2004) for discussion of the subspecies.

Cons/Econote: Endemic to the Delmarva Peninsula in four Maryland counties and Sussex County, Delaware (erroneously reported from Kent County, DE). Locally abundant and comprising distinctive shrubland and woodland natural communities along tidal rivers and occasionally old millponds (Harrison and Stango 2003). See Shreve et al. (1910, p. 128, 424) for a historical discussion of the association with Atlantic White Cedar and the distribution of this species in Maryland. The species is particularly susceptible to salt water intrusion (Schrader & Gallagher 2003), thus, past hurricanes and accompanying storm surge may be responsible for the current distribution. Sea-level rise and saltwater intrusion after 'Superstorm Sandy' is responsible for the extirpation of a population in Delaware (W. McAvoy, pers. comm.).

Habitat: Ecotones between fresh tidal marshes and tidal swamps, open-canopy Atlantic white cedar swamps. As a matter of coincidence, specimens have not been collected on the Somerset County side of Dividing Creek but the plant is abundant on the Worcester County side.

Distr. CP (Dorchester, Somerset?, Wicomico, Worcester).

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: Jul; Fr: mid Aug-early Oct.					
<i>Amaranthus pumilus</i> Rafinesque Amaranthaceae (Amaranth Family)	Seabeach Amaranth	G2	S1	E	LT
Cons/Econote: Extirpated from much of its historic range (Hancock & Hosier 2003); this species occupies dynamic coastal beach habitat that has been altered by decades of coastal development. Rediscovered on Assateague Island in 1998 after 31 years of absence (Tyndall et al. 2000). The Service performs annual monitoring of the species on Assateague Island.					
Habitat: Barrier Island beaches, foredunes.					
Distr. CP (Worcester).					
Flw/Fr: Jul-Sept.					
<i>Amelanchier humilis</i> Wiegand Rosaceae (Rose Family)	Running Shadbush	G5	S1	T	
Taxnote: A widespread species in the northeastern U.S. having both diploid and polyploid populations (Burgess et al. 2014). Maryland populations are near the southern terminus of the species' range and some Maryland plants were determined to be triploid.					
Cons/Econote: Threatened by competition and displacement by non-native, invasive shrubs, particularly <i>Lonicera maackii</i> .					
Habitat: Outcrops of limestone or other calcium-bearing substrates.					
Distr. RV (Allegany, Washington).					
Flw: early May; Fr: Jun.					
<i>Amelanchier nantucketensis</i> Bicknell Rosaceae (Rose Family)	Nantucket Shadbush	G3Q	S1	T	
Taxnote: A widespread tetraploid (Burgess et al. 2014) in the northeastern U.S. with several striking disjuncts in the southeastern U.S., including Maryland. Our plants typically andropetalous (appearing much like a wider stamen) with few 'normal-looking' petals.					
Cons/Econote: Threatened by competition and displacement by invasive species and habitat alteration. Restricted to a small linear population along the Potomac Gorge.					
Habitat: Ancient bedrock scour bar terraces and cliff faces.					
Distr. PD (Montgomery).					
Flw: mid Apr; Fr: May-Jun.					
<i>Amelanchier sanguinea</i> (Pursh) A.P. de Candolle Rosaceae (Rose Family)	Roundleaf Serviceberry Roundleaf Shadbush	G5	S1	E	
Taxnote: Comprising a complex group of morphologies and ploidy levels across the species' range in the eastern U.S. (Burgess et al. 2014). Maryland plants are tetraploid and are perhaps a different taxon altogether.					
Cons/Econote: Endangered by habitat loss and displacement by invasive species.					
Habitat: Outcrops of calcareous shale or limestone.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Distr. AP, RV (Allegheny, Garrett). Flw: early May; Fr: Jun.</p>					
<p><i>Amelanchier spicata</i> (Lamarck) K. Koch Rosaceae (Rose Family) Syn: <i>A. stolonifera</i> Wiegand Taxnote: A widespread, tetraploid apomict of the northeastern U.S. (Burgess et al. 2014; Campbell et al. 2014). Cons/Econote: Intolerant of shade, Maryland plants are restricted to a narrow zone of (chiefly) acidic sandstone glades. Plants in harsh habitat may be less than 20 cm in height and may be overlooked when not in flower. Habitat: Outcrops of acidic rock, sandstone glades (frequently in the Oriskany Formation). Distr. AP, PD*, RV (Allegheny, Frederick, Howard*, Washington). Flw: late Apr-early May; Fr: Jun.</p>	Running Serviceberry	G5	S2		
<p><i>Amianthium muscitoxicum</i> (Walter) A. Gray Melanthiaceae (Bunchflower Family) Syn: <i>A. muscaetoxicum</i>, an orthographic variant. Cons/Econote: Upgraded from the Watchlist (S3) in 1999 based upon observed declines in range and population size due to heavy browse by white-tailed deer, and encroachment of invasive species. The Service requests additional information to evaluate this species' conservation status. Habitat: Sandy or rocky knolls in open, dry-mesic forests. Distr. AP*, CP, PD, RV (Anne Arundel, Baltimore, Cecil, Charles, Dorchester, Frederick, Garrett*, Howard, Harford, Prince George's*, Washington). Flw: late May-mid Jun; Fr: Aug-Sept.</p>	Fly-poison	G4G5	S2		
<p><i>Ammannia latifolia</i> Linnaeus Lythraceae (Loosestrife Family) Cons/Econote: Recent surveys have failed to find this species in previously occupied habitat. Saltwater intrusion into baymouth barrier wetlands (Sipple 1982) is suspected to be associated with the decline at one site; however, other sites that are clearly brackish are extant. Habitat: Brackish to fresh tidal marshes. Distr. CP (Baltimore*, Calvert, Cecil*, Charles*, Dorchester, Kent, Queen Anne's, Somerset, St. Mary's*, Worcester). Flw: Aug-Sept; Fr: Oct.</p>	Koehne Ammannia	G5	S2		
<p><i>Amphicarpum amphicarpon</i> (Pursh) Nash Poaceae (Grass Family) Syn: <i>Amphicarpum purshii</i> Kunth Cons/Econote: An Atlantic Coastal Plain endemic, restricted to the lower Eastern Shore in Maryland but often locally abundant.</p>	Blue Maidencane	G4	S3		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Habitat: Sandy soils, frequent in clearings under powerlines and edges of pine flatwoods.					
Distr. CP (Wicomico, Worcester).					
Flw/Fr: Sept.					
<i>Anagallis minima</i> (Linnaeus) E.H. Krause	see <i>Centunculus minimus</i> Linnaeus				
<i>Anaphalis margaritacea</i> (Linnaeus) Bentham & Hooker f. Asteraceae (Aster Family)	Pearly Everlasting	G5	S3		
Habitat: Dry to moist gravelly or sandy soils, old fields and clearings.					
Distr. AP, PD*, RV (Cecil*, Frederick, Garrett).					
Flw: Jul-Aug; Fr: Aug-Sept (Oct).					
<i>Anemone canadensis</i> Linnaeus Ranunculaceae (Buttercup Family)	Canada Anemone	G5	SH	X	
Cons/Econote: Apparently very rare in the southeastern U.S.; two Maryland collections dated 1879 and 1898.					
Habitat: Mesic hardwood forests.					
Distr. CP* (Harford*, Prince George's*).					
Flw: late May (Steele collected a flowering specimen 25 May 1898).					
<i>Anemone lancifolia</i> Pursh Ranunculaceae (Buttercup Family)	Mountain Thimbleweed	G5	S1?		
Taxnote: Intergrades with the more common <i>A. quinquefolia</i> .					
Cons/Econote: Endemic to the southern and central Appalachians; the status of this species in Maryland has not been determined with precision; not relocated at its historical collection site along Fifteenmile Creek.					
Habitat: Basic mesic forest (calcareous shale).					
Distr. RV (Allegheny).					
Flw: early May; Fr: June					
<i>Angelica atropurpurea</i> Linnaeus Apiaceae (Carrot Family)	Great Angelica	G5	SH	X	
Cons/Econote: Known from a few collections 1907-1941.					
Habitat: Shell-marl (coastal), rich northern hardwood bluffs and slopes (mountains).					
Distr. AP*, CP* (Calvert*, Garrett*).					
Flw: late May-Jun; Fr: Jun-Jul.					
<i>Angelica triquinata</i> Michaux	Filmy Angelica	G4	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Apiaceae (Carrot Family) Cons/Econote: A southern and central Appalachian endemic. Endangered by habitat loss. Habitat: Rich, mesic northern hardwood forests; Appalachian fens. Distr. AP (Garrett). Flw: Jun-Jul; Fr: late Jul-Sept.</p>					
<i>Antennaria solitaria</i> Rydberg	Single-head Pussytoes	G5	S2	T	
<p>Asteraceae (Aster Family) Cons/Econote: Known from a series of isolated populations, often in low numbers, and with few protected populations. Habitat: Oak-beech-heath bluffs and woodlands often on steep, actively eroding slopes and occasionally on tip-up mounds of fallen trees. Distr. CP (Anne Arundel, Calvert, Caroline, Cecil, Charles, Harford, Prince George's, Queen Anne's, Talbot, Worcester). Flw: late Apr; Fr: May-Jun.</p>					
<i>Anthoxanthum hirtum</i> (Schrank) Y. Schouten & Veldkamp	Vanilla Grass, Holy Grass	G4G5	S1	E	
<p>Poaceae (Grass Family) Syn: <i>Hierochloe odorata</i> (Linnaeus) P. Beauv. Cons/Econote: Endangered by habitat loss, fire exclusion, and woody plant succession. Habitat: Streambanks and seeps over serpentine. Distr. PD (Baltimore). Flw/Fr: mid May</p>					
<i>Arabis missouriensis</i> Greene	see <i>Borodinia missouriensis</i> (Green) P.J. Alexander & Windham				
<i>Arabis patens</i> Sullivant	Spreading Rockcress	G3	S3		
<p>Brassicaceae (Mustard Family) Habitat: Dry-mesic calcareous forests, boulderfield forests, northern hardwood forests. Distr. AP, PD, RV (Allegany, Frederick, Garrett, Montgomery, Washington). Flw: Apr-mid May; Fr: May-Jul.</p>					
<i>Arabis pycnocarpa</i> M. Hopkins var. <i>adpressipilis</i> M. Hopkins	Hairy Rockcress	G5T4Q	S1S2		
<p>Brassicaceae (Mustard Family) Syn: <i>A. hirsuta</i> (Linnaeus) Scopoli var. <i>adpressipilis</i> (M. Hopkins) Rollins Cons/Econote: Populations are apparently very narrowly and linearly distributed along the Potomac River (see also Beckman 2003). Habitat: Limestone outcrops and cliffs, basic mesic forest, rich boulderfield woodlands. Distr. PD, RV (Montgomery, Washington; distribution likely incomplete). Flw: Apr-May; Fr: May-Jul.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Arabis pycnocarpa</i> M. Hopkins var. <i>pycnocarpa</i> Brassicaceae (Mustard Family) Syn: <i>A. hirsuta</i> var. <i>pycnocarpa</i> (M. Hopkins) Rollins Cons/Econote: Our knowledge of this species in Maryland is represented by a single collection. Habitat: Limestone bluff. Distr. RV (Washington). Flw: early May; Fr: late May-Jul.	Western Hairy Rockcress	G5T5	S1		
<i>Arabis shortii</i> (Fernald) Gleason	see <i>Borodinia dentata</i> (Rafinesque) P.J. Alexander & Windham				
<i>Aralia hispida</i> Ventenat Araliaceae (Ginseng Family) Cons/Econote: Endangered by fire exclusion. According to Weakley (2015) this species appears to be strongly dependent on recurring disturbance, such as fire. Habitat: Dry, often rocky or sandy barrens. Distr. AP (Garrett). Flw: mid Jun-Jul; Fr: Aug.	Bristly Sarsaparilla	G5	S1	E	
<i>Aralia racemosa</i> Linnaeus Araliaceae (Ginseng Family) Cons/Econote: Added to the Maryland tracking list as a species of concern in 2012. Documented from a few areas and observed to occur in low numbers; some historical stations may have been extirpated. The Service requests additional information to evaluate this species' conservation status. Habitat: Basic mesic forest; openings amongst outcrops in rich soils. Distr. AP, CP*, PD*, RV (Allegany, Anne Arundel*, Frederick, Garrett, Howard*, Montgomery*, Washington*). Flw: late Jun-Jul; Fr: Sept.	American Spikenard	G4G5	S2S4		
<i>Arctostaphylos uva-ursi</i> (Linnaeus) Sprengel Ericaceae (Heath Family) Cons/Econote: Wide-ranging circumboreal species with scattered stations south to Delaware and n. Virginia. Confined to a single relictual population that has declined in recent years. The Service is studying methods for safeguarding these plants. Habitat: Exposed summit of shale ridge. Distr. RV (Allegany). Flw/Fr: not observed.	Bearberry	G5	S1	E	
<i>Arethusa bulbosa</i> Linnaeus	Dragon's Mouth Orchid	G4	SX	X	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Orchidaceae (Orchid Family)	Swamp-pink				
Cons/Econote: Last seen in 1918 at Suitland Bog and known from the “magnolia bogs” as early as 1809 (McAtee 1922). The Queen Anne’s County station reported by Reveal & Broome (1981) citing Shreve (1910) is an error; Shreve (1910) reported <i>Calopogon tuberosus</i> (as <i>Limodorum</i>) and not <i>Arethusa</i> . The species was collected in Maryland in the period from 1696-1700 by Krieg and Vernon, or Hugh Jones (British Museum of Natural History, London) (Reveal & Broome 1981).					
Habitat: Fall Line terrace gravel bogs.					
Distr. CP* (Prince George’s*).					
Flw: late May; Fr: Jul?.					
<i>Aristida lanosa</i> Muhlenberg ex Elliott	Woolly Three-awn	G5	S1	E	
Poaceae (Grass Family)					
Cons/Econote: Endangered by conversion of barrens habitat to loblolly pine plantations, and limited to a few extant populations. Fire suppression may play a role in this species’ rarity.					
Habitat: Dry sandy openings of inland sand dunes and ridges.					
Distr. CP, PD* (Anne Arundel?, Calvert*, Dorchester, Howard?, Montgomery*, Worcester).					
Flw/Fr: Sept-Oct.					
<i>Aristida tuberculosa</i> Nuttall	Seabeach Needlegrass	G5	S3		
Poaceae (Grass Family)					
Cons/Econote: Restricted in Maryland to Assateague Island but frequent in habitat (Lea et al. 2000).					
Habitat: Dry, open woodlands and dwarf shrublands dominated by <i>Hudsonia tomentosa</i> (beach heather).					
Distr. CP (Worcester).					
Flw/Fr: late Aug-Sept.					
<i>Aristida virgata</i> Trinius	Wand-like Three-awn Grass	G5	S1S2	E	
Poaceae (Grass Family)					
Syn: <i>A. purpurascens</i> Poirlet var. <i>virgata</i> (Trinius) Allred					
Cons/Econote: Endangered by woody succession of open barrens habitat and herbicide applications at unprotected sites.					
Habitat: Seasonally wet to dry sandy and/or peaty soils of clearings and acidic seeps.					
Distr. CP (Wicomico, Worcester).					
Flw/Fr: Sept-Oct.					
<i>Aristolochia macrophylla</i> Lamarck	see <i>Isotrema macrophyllum</i> (Lamarck) C.F. Reed				
<i>Armoracia lacustris</i> (A. Gray) Al-Shehbaz & V. Bates	Lake-cress	G4?	S1	E	
Brassicaceae (Mustard Family)					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Taxref: Fernald 1950. Syn: <i>Rorippa aquatica</i> (Eaton) E.J. Palmer & Steyermark <i>Armoracia aquatica</i> (Eaton) Wiegand <i>Neobeckia aquatica</i> (Eaton) Greene Taxnote: As evidenced from the list of synonyms above, this species has been placed under many different genera. This evidence has not been reviewed and here follows the familiar treatment as <i>Armoracia</i>. Cons/Econote: Known only from sites along the Potomac River and represented by very few plants. Endangered by habitat loss likely precipitated by changes in historical patterns of flooding along the Potomac. Wiegand (2010) also cites excessive deer browse and displacement by invasive plants. Habitat: Marsh in muck soils. Distr. PD (Montgomery). Flw: Jun; Fr: Jun-Jul.</p>					
<i>Arnica acaulis</i> (Walter) Britton, Sterns, & Poggenburg Asteraceae (Aster Family)	Leopard's-bane	G4	S1	E	
<p>Cons/Econote: A rare species of Pine Barrens and grasslands. Endangered by habitat loss and conversion; the majority of our records are historical (1874-1965), many of these collections from along the Fall Line, which is now heavily urbanized. There are no protected stations for this species that was once, from the collection record, apparently widespread. Habitat: Seepage meadow underlain by ultramafic substrate. Distr. CP*, PD (Anne Arundel*, Baltimore, Cecil*, Charles*, Montgomery*, Prince George's*, St. Mary's*). Flw: mid May-mid Jun; Fr. Jun-Jul.</p>					
<i>Arnoglossum reniforme</i> (Hooker) H.E. Robinson Asteraceae (Aster Family)	Great Indian-plantain	G4	SH	X	
<p>Syn: <i>Cacalia muehlenbergii</i> (Schultz-Bipontius) Fernald Taxnote: The genus <i>Cacalia</i> corresponded to a heterogeneous mix of at least eight different genera and the name was rejected in order to prevent confusion. Stem is green and conspicuously grooved when compared to the common <i>A. atriplicifolium</i>. Cons/Econote: A declining species in our area and very rare regionally. A recently discovered specimen collected in 1994 from a Carroll County population suggests the species is probably extant; however, the habitat has not been surveyed exhaustively and the location has not been verified to contain extant plants. Habitat: Rich alluvial woods. Distr. PD* (Baltimore*, Carroll, Montgomery*). Flw: late Jun-Jul; Fr: Aug-Sept.</p>					
<i>Aronia prunifolia</i> (Marshall) Rehder Rosaceae (Rose Family)	Purple Chokeberry	G4G5Q	S3		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Syn: <i>Photinia floribunda</i> (Lindley) J.B. Phipps <i>Aronia ×floribunda</i> (Marshall) Rehder <i>Pyrus floribunda</i> Lindley</p> <p>Taxnote: According to Weakley (2015) this taxon occurs outside of the ranges of its parents (<i>A. melanocarpa</i> x <i>A. arbutifolia</i>) and should be treated as an independent lineage. Sometimes combined with <i>Photinia</i>; however, support for combining these two genera is weak (see Potter et al. 2007; Campbell et al. 2007).</p> <p>Habitat: Acidic seepage swamps.</p> <p>Distr. AP, CP, PD, RV (Allegany, Anne Arundel, Baltimore, Cecil, Dorchester, Garrett, Howard, Montgomery, Prince George's, St. Mary's, Washington, Wicomico, Worcester; distribution likely incomplete).</p> <p>Flw: Jun; Fr: Aug-Sept.</p>					
<p><i>Arundinaria tecta</i> (Walter) Muhlenberg Poaceae (Grass Family)</p> <p>Syn: <i>A. gigantea</i> (Walter) Muhlenberg <i>A. gigantea</i> ssp. <i>tecta</i> (Walter) McClure</p> <p>Taxnote: Maryland plants have been treated as a subspecies of <i>A. gigantea</i> and as a species, as treated here. <i>A. tecta</i> has a smaller stature than <i>A. gigantea</i> and reportedly these species have different life-histories.</p> <p>Habitat: Fresh tidal swamp forests, acidic seepage swamps.</p> <p>Distr. CP (Anne Arundel, Baltimore, Charles, Dorchester, Howard, Kent*, Prince George's, Worcester*).</p> <p>Flw/Fr: (rarely)</p>	Switch Cane	G5	S2		
<p><i>Asclepias lanceolata</i> Walter Apocynaceae (Dogbane Family)</p> <p>Cons/Econote: Reported as occurring frequently in Worcester County (Brown & Brown 1984); this has not been the assessment of staff and cooperators over the last 30 years. This may be evidence of a rapid decline; however, it may also be evidence of difficult-to-survey habitats.</p> <p>Habitat: Fringing areas of emergent vegetation in fresh tidal habitats.</p> <p>Distr. CP (Dorchester, Worcester).</p> <p>Flw: Jul; Fr: Aug-Oct.</p>	Smooth Orange Milkweed	G5	S1		
<p><i>Asclepias purpurascens</i> Linnaeus Apocynaceae (Dogbane Family)</p> <p>Cons/Econote: Occurring as scattered populations and generally in low numbers. Habitat conditions do not appear to be overly restrictive but documented stations for this species are scarce.</p> <p>Habitat: Meadows, thickets and clearings in rich (often alluvial) soils.</p> <p>Distr. AP, CP, PD, RV (Cecil, Frederick, Garrett, Harford, Montgomery, Talbot).</p>	Purple Milkweed	G5	S2		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: Jun-Sept; Fr: Sept-Nov.					
<i>Asclepias rubra</i> Linnaeus Apocynaceae (Dogbane Family)	Red Milkweed	G4G5	S1	E	
Cons/Econote: Endangered by habitat loss and alteration via woody succession, salt water intrusion, and herbicide use in some populations. Reproduction in our small populations is also severely limited by ill-timed mowing and significant deer browse. There are few protected sites for this species and at no site does the Service have management authority. The Service is studying methods to restore this species to historical habitat.					
Habitat: Open-canopy acidic seepage wetlands and sandy/peaty meadows (chiefly powerline rights-of-way).					
Distr. CP, PD*, RV*? (Baltimore, Caroline*, Carroll*, Dorchester, Frederick*?, Prince George's, Wicomico, Worcester).					
Flw: late Jun through Jul; Fr: Aug-Sept.					
<i>Asclepias verticillata</i> Linnaeus Apocynaceae (Dogbane Family)	Whorled Milkweed	G5	S3		
Cons/Econote: Rare and mostly historical on the Coastal Plain and maintained on the Watchlist due to loss of the coastal populations. A frequent component of serpentine barren and shale barren woodlands and glades. This species is a restoration target on inland sand dunes on the Eastern Shore where it was historically present but apparently now extirpated due to habitat loss (fire-suppression?).					
Habitat: This species occurs in a variety of dry, open-canopy barrens, thin-canopied woodlands and outcrops and over a variety of substrates ranging from acidic (dry sands) to mafic (limestone, shale, metabasalt, oyster shell middens) and ultramafic substrates (serpentine, greenstone).					
Distr. CP, PD, RV (Allegany, Anne Arundel*, Baltimore, Calvert, Caroline*, Carroll*, Cecil, Charles*, Dorchester, Frederick, Harford, Howard, Kent, Montgomery, Prince George's*, Queen Anne's*, St. Mary's*, Washington, Wicomico*, Worcester*).					
Flw: mid Jul-Aug; Fr: Sept-Oct.					
<i>Asplenium bradleyi</i> D.C. Eaton ! Aspleniaceae (Spleenwort Family)	Bradley's Spleenwort	G4	S1	X (PE)	
Taxnote: <i>Asplenium</i> form a well-studied complex of species involving the interplay between hybridization and polyploidy that directs evolution in this genus. This species is a fertile allotetraploid derived from hybridization between <i>A. montanum</i> and <i>A. platyneuron</i> .					
Cons/Econote: A general decline in occupied habitat has occurred over the last 50 years. Currently restricted to two extant stations. The historical location (Alberton) that has been georeferenced to Howard County may be a general placename used by the collector (F.H. Knowlton, September 1897) and not the site of collection, which may actually be on the Baltimore County side of the Patapsco River. The Service is considering a proposal to list this species as Threatened.					
Habitat: Narrow, sheltered rock crevices over acidic (gneiss, schist) substrates having inclusions of Cockeysville marble.					
Distr. PD (Baltimore, Harford, Howard?*).					
Phenology: plants are most visible late Feb-May (Jun), detectability varies according to spring precipitation (P. Stango, pers. comm.).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Asplenium pinnatifidum</i> Nuttall Aspleniaceae (Spleenwort Family)	Lobed Spleenwort	G4	S1	E	
<p>Taxnote: <i>Asplenium</i> form a well-studied complex of species involving the interplay between hybridization and polyploidy that directs evolution in this genus. Davis (2014) provides a valuable discussion of taxonomic complexity at one Maryland site where <i>A. pinnatifidum</i>, <i>A. montanum</i>, <i>A. x trudelli</i> Wherry (a sterile triploid hybrid, <i>montanum x pinnatifidum</i>) and other intermediate forms occur.</p> <p>Cons/Econote: Occurring in specialized habitats and always in very low numbers. According to Weakley (2015) this species is a fertile allopolyploid derived from hybridization between <i>A. montanum</i> and <i>A. rhizophyllum</i>. The parent species have very different habitat preferences and this may be one factor in the species' rarity.</p> <p>Habitat: Outcrops of sandstone, quartzite, phyllite and other felsic rocks.</p> <p>Distr. PD, RV (Allegany, Baltimore, Cecil, Frederick, Harford, Montgomery, Washington).</p> <p>Phenology: plants are visible from May-Oct (Davis 2014).</p>					
<i>Asplenium resiliens</i> Kunze Aspleniaceae (Spleenwort Family)	Black-stem Spleenwort	G5	S1		
<p>Cons/Econote: Listing of a sterile triploid hybrid is problematic; Barrington (2011) provides a valuable discussion. The key variable to listing of a hybrid taxon is whether the lineage has a unique gene pool that could be lost by extinction. Two characteristics are required: (1) The lineage needs to be capable of at least limited sexual reproduction and (2) Genetically isolated from other lineages so that it has a discrete evolutionary fate. <i>Asplenium resiliens</i> meets neither of these criteria. Apomixis is obligate, thus the triploid taxa are not capable of sexual reproduction and the lineage contains only genetic variation present in other diploid progenitors so that there is no unique combination of germplasm in <i>A. resiliens</i>. However, the taxon is rare in Maryland and deserving recognition in that it occurs as a component of a vulnerable ecological community.</p> <p>Habitat: Limestone cliffs.</p> <p>Distr. RV (Washington).</p>					
<i>Asplenium ruta-muraria</i> Linnaeus Aspleniaceae (Spleenwort Family)	Wallrue Spleenwort	G5	S3		
<p>Taxnote: North American plants are var. <i>cryptolepis</i> (Fernald) Wherry</p> <p>Cons/Econote: Occurring in scattered locations on mafic outcrops, this species may be affected by competition with invasive species, particularly exotic honeysuckles, <i>Lonicera maackii</i> and <i>L. japonica</i>.</p> <p>Habitat: Limestone bluffs or other mafic outcrops.</p> <p>Distr. AP, RV (Allegany, Garrett, Washington).</p> <p>Phenology: Best identified in April.</p>					
<i>Astragalus canadensis</i> Linnaeus Fabaceae (Legume Family)	Canadian Milkvetch	G5T5	S1	E	
<p>Taxnote: Maryland plants are the wide-ranging var. <i>canadensis</i>.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Endangered by habitat loss and excessive browse by white-tailed deer. Maryland stations could scarcely be called populations, rather scattered plants at six locations. Habitat: Scoured bedrock terraces, rocky dry woodlands. Distr. AP, PD, RV (Allegheny, Frederick, Garrett, Montgomery). Flw: Jul; Fr: late Jul-Aug.</p>					
<i>Astragalus distortus</i> Torrey & A. Gray Fabaceae (Legume Family)	Ozark Milkvetch	G5	S2	T	
<p>Taxnote: This species occurs in two disjunct areas in the U.S.; one population centered around the Ozarks and the other in the central Appalachians (MD, VA and WV). Eastern plants are var. <i>distortus</i> but taxonomic investigation is warranted. Cons/Econote: Occurring in scattered, small populations under very specific habitat conditions. Piedmont stations not seen since 1939. Habitat: Shale barrens and shale cliffs. Distr. PD*, RV (Allegheny, Montgomery*). Flw: late Apr-May; Fr: Jun-Jul.</p>					
<i>Atriplex mucronata</i> Rafinesque Chenopodiaceae (Goosefoot Family)	Seabeach Orach Crested Saltbush	GNR	S1S2		
<p>Syn: <i>A. arenaria</i> Nuttall <i>A. pentandra</i> (Jacquin) Standley ssp. <i>arenaria</i> (Nuttall) Hall & Clements <i>A. cristata</i> Humboldt and Bonpland ex Willdenow Taxref: An understanding of the geographic distribution of these seabeach taxa is poorly developed but is treated here as in Weakley (2020) as occurring along the Atlantic Coastal Plain from New Hampshire to Florida, west to Texas. Taxnote: This species has been treated under a variety of names (and Families) and Maryland specimens require careful study. Cons/Econote: Widespread on Assateague Island but numbers fluctuate from year to year. Lea et al. (2000) suggest that this species, like many seabeach annuals, is dependent upon natural disturbances, particularly storm overwash. Habitat: Overwash flats and bayside salt marshes. Distr. CP (St. Mary's*, Worcester).</p>					
<i>Aureolaria flava</i> (Linnaeus) Farwell Orobanchaceae (Broomrape Family)	Smooth Yellow False Foxglove	G5	S3		
<p>Cons/Econote: The Service requests additional information to evaluate this species' conservation status and distribution. Habitat: Upland oak forests and woodlands, river bluffs, rocky forested slopes. Distr. AP, CP*, PD, RV (Allegheny, Baltimore, Cecil, Frederick*, Garrett, Howard, Montgomery, Prince George's*, Washington; distribution likely incomplete). Flw: late Jul-mid Aug; Fr: Sept.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Aureolaria levigata</i> (Rafinesque) Rafinesque Syn: <i>A. laevigata</i> (Rafinesque) Rafinesque Orobanchaceae (Broomrape Family) Cons/Econote: This species was featured in the Fall 2019 issue of Marilandica (Vol. 10, issue 2), a publication of the Maryland Native Plant Society. A Southern and Central Appalachian endemic, this species is infrequent in Maryland and some parts of the (MD) range are now historical. The Service appreciates the effort of multiple individuals whom contributed to better defining this species' distribution and conservation rank. Habitat: Rich woods, river bluff forest edges, rocky slopes, and open meadows. Distr. AP, PD, RV (Allegheny, Baltimore*, Frederick*, Garrett, Montgomery). Flw: mid Jul-mid Aug; Fr: Sept-Oct.	Downy Yellow False Foxglove Appalachian Oak-leech	G5	S3		
<i>Axonopus furcatus</i> (Flügge) A.S. Hitchcock Poaceae (Grass Family) Cons/Econote: Long considered extirpated, this species has been located in unremarkable habitat. See Knapp et al. (2011) for details regarding the rediscovery of this species. Habitat: Sandy roadsides, ditches, powerlines. Distr. CP (Somerset, Worcester). Flw/Fr: late Aug-Oct.	Big Carpetgrass	G5	S2?		
<i>Bacopa innominata</i> (G. Maza) Alain Plantaginaceae (Plantain Family) Cons/Econote: Last collected in 1938. Habitat: Fresh tidal shores and mudflats. Distr. CP* (Wicomico*).	Tropical Water-hyssop	G3G5	SH	X	
<i>Bacopa monnieri</i> (Linnaeus) Wettstein Plantaginaceae (Plantain Family) Cons/Econote: A southeastern coastal species for which Knapp & Naczi (in press) located a specimen to verify a MD record that had previously been excluded. Our single historical station is based upon a specimen collected by William M. Canby in 1873 from "Salisbury, MD". Habitat: MD habitat unknown. Freshwater tidal marshes, muddy shores, streams and pools (Weakley 2020). Distr. CP* (Wicomico*).	Coastal Water-hyssop	G5?	SH		
<i>Baptisia australis</i> (Linnaeus) R. Brown Fabaceae (Legume Family) Taxnote: Maryland populations represent the poorly defined var. <i>australis</i> .	Blue Wild Indigo	G5	S2	T	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Restricted to the Potomac River in Maryland in a number of widely scattered small populations. Habitat: Prairie-like scour bars, depositional bars, rocky alluvial flats. Distr. CP^I, PD, RV (Montgomery, Prince George's*^I, Washington; widely planted outside of native range and habitat). Flw: May; Fr: late Jun-Aug.</p>					
<i>Bartonia paniculata</i> (Michaux) Muhlenberg Gentianaceae (Gentian Family)	Twining Screwstem	G5T5	S3		
<p>Taxnote: Maryland plants are ssp. <i>paniculata</i>. Habitat: Acidic seepage wetlands, in saturated, often peaty soils. Distr. AP, CP, RV* (Anne Arundel, Calvert, Cecil, Charles, Frederick*, Garrett, Kent, Prince George's, St. Mary's, Talbot, Wicomico, Worcester). Flw: Aug-Sept; Fr: Oct.</p>					
<i>Betula populifolia</i> Marshall Betulaceae (Birch Family)	Gray Birch	G5	S1?		
<p>Cons/Econote: Nativity to Maryland is arguable. As a pioneer species it may occur in habitats that have low conservation value, e.g., quarries, along railroads and other heavily disturbed sites that resemble previously glaciated habitats. However, this plant may be native in Fall Line seeps in habitats similar to those in the New Jersey Pine Barrens. Habitat: Quarries, roadsides, acidic seeps. Distr. CP, PD (Baltimore, Cecil, Howard, Prince George's).</p>					
<i>Bidens bidentoides</i> (Nuttall) Britton Asteraceae (Aster Family)	Maryland Bur-marigold	G3G4	S3.1		
<p>Syn: <i>B. mariana</i> Blake <i>B. bidentoides</i> (Nuttall) Britton var. <i>mariana</i> (S.F. Blake) Sherrf Cons/Econote: A regional endemic (New York, Pennsylvania, New Jersey and Delaware) Maryland populations in the upper Chesapeake Bay comprise the core populations. Habitat: Fresh tidal marshes. Distr. CP (Cecil, Harford). Flw: late Aug-early Sept; Fr: Sept.</p>					
<i>Bidens mitis</i> (Michaux) Sherrf Asteraceae (Aster Family)	Small-fruit Beggarticks	G4?	S1	E	
<p>Taxnote: All records need confirmation. A recent evaluation of MD and DE specimens determined that nearly all were the more common <i>E. trichosperma</i>. Cons/Econote: Endangered due to displacement by common reed (<i>Phragmites australis</i>), eutrophication and excessive sedimentation.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Fresh tidal marshes, sea level fens. Distr. CP? (Anne Arundel?, Calvert*?, Dorchester?, Harford*?, Somerset?, Wicomico?, Worcester?). Flw: late Aug-early Oct; Fr: Sept-Oct.</p>					
<i>Bidens trichosperma</i> (Michaux) Britton Asteraceae (Aster Family)	Tickseed Sunflower	G5		S3S4	
<p>Syn: <i>B. coronata</i> (Linnaeus) Britton, an invalid name Cons/Econote: Occurs extensively in the Nanticoke River marshes, more infrequent elsewhere. Habitat: Fresh to brackish tidal marshes, sea-level fens, not uncommonly ditched waterways along roadsides adjacent to marshes. Distr. CP (Anne Arundel, Baltimore, Caroline*?, Cecil, Charles, Dorchester, Harford, Kent, Montgomery*?, Queen Anne's, Somerset, Talbot, Wicomico, Worcester). Flw: late Aug-mid Sept; Fr: Sept-Oct.</p>					
<i>Blephilia ciliata</i> (Linnaeus) Bentham Lamiaceae (Mint Family)	Downy Woodmint	G5		S3S4	
<p>Cons/Econote: A frequent component of shale barren woodlands and glades. There may be several hundred individual stations on shale barrens and outcrops in Allegany County, but this species, like its shale-barren-associates, depends upon maintenance of barrens and woodland clearings. Blooms somewhat earlier than <i>B. hirsuta</i> with which it has been historically confused. Habitat: Dry to dry-mesic hardwood slopes and shale barren woodlands, glades and outcrops. Distr. AP*, PD*, RV (Allegany, Baltimore?, Frederick, Garrett*, Howard?, Montgomery*, Washington; distribution likely incomplete, vouchers present for Baltimore and Howard Counties-these Towson U. specimens not yet confirmed). Flw: mid-late May-Jun; Fr: Aug.</p>					
<i>Blephilia hirsuta</i> (Pursh) Bentham Lamiaceae (Mint Family)	Hairy Woodmint	G5		S1S2	
<p>Cons/Econote: Our knowledge of this species was previously limited to several historical vouchers but recent work by Jim Stasz, Wayne Longbottom and Jim Brighton resulted in discovering several new stations in Garrett County. This species is likely to occur more frequently on the Appalachian Plateau and may be more abundant in that physiographic province. Habitat: Rocky montane forests and clearings at higher elevations. Distr. AP, RV (Allegany, Garrett). Flw: late Jun-Jul; Fr: Sept-Oct.</p>					
<i>Borodinia dentata</i> (Rafinesque) P.J. Alexander & Windham Brassicaceae (Mustard Family)	Short's Rockcress	G5		S3	
<p>Syn: <i>Arabis shortii</i> (Fernald) Gleason <i>Arabis perstellata</i> E. Braun var. <i>shortii</i> Fernald</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Boechera dentata</i> (Rafinesque) Al-Shehbaz & Zarucchi					
Cons/Econote: Habitats for this species are fragile and subject to multiple threats; in particular, populations require monitoring to detect declines associated with competition with multiple invasive exotic species.					
Habitat: Floodplains and floodplain terraces and streambanks in sandy or silty substrates.					
Distr. PD, RV (Cecil, Frederick, Harford, Montgomery, Washington).					
Flw: late Apr-early May; Fr: Jun-Jul.					
<i>Borodinia missouriensis</i> (Greene) P.J. Alexander & Windham	Missouri Rockcress	G5	S1	E	
Brassicaceae (Mustard Family)					
Syn: <i>Arabis missouriensis</i> Greene					
<i>Boechera missouriensis</i> (Greene) Al-Shehbaz					
Cons/Econote: A single known population endangered by displacement by invasive species, particularly exotic woody honeysuckle (<i>Lonicera maackii</i>) and Asiatic bittersweet (<i>Celastrus orbiculatus</i>).					
Habitat: Ultramafic outcrop.					
Distr. PD (Baltimore).					
Flw: early-mid Apr; Fr: late Apr-May.					
<i>Boltonia asteroides</i> (Linnaeus) L'Héritier var. <i>asteroides</i>	Susquehanna Doll's-daisy	G5TNR	S1		
Asteraceae (Aster Family)					
Taxnote: Townsend (2013) re-established a more restrictive taxonomic concept for this variety that is known only from the Susquehanna River in Maryland and Pennsylvania.					
Cons/Econote: Historically collected along the Susquehanna in 1902 and 1924 from "Rocky islands on the Susquehanna", and hypothesized to have been perhaps extirpated by construction of the Conowingo Dam. Recently rediscovered by Jack Holt and Janet Ebert. This species will be the subject of intensive inventory and monitoring efforts in 2021.					
Habitat: Scour-bar prairie.					
Distr. PD (Harford).					
<i>Boltonia asteroides</i> (Linnaeus) L'Héritier var. <i>glastifolia</i> (Hill) Fernald	White Doll's-daisy Aster-like Boltonia	G5T4T5	S1	E	
Asteraceae (Aster Family)					
Cons/Econote: Endangered by altered groundwater hydrology and woody succession of habitats.					
Habitat: Delmarva Bays (Fenstermacher et al. 2014), acidic seepage swamps.					
Distr. CP (Caroline, Queen Anne's, Somerset, Worcester).					
Flw: late Jul-mid Aug; Fr: Aug-Sept.					
<i>Borrchia frutescens</i> (Linnaeus) A.P. de Candolle	Sea Oxeye	G5	SH	X	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Asteraceae (Aster Family)					
Cons/Econote: Recorded only from Assateague Island and not seen since 1984; apparently the northern terminus of the species range.					
Habitat: Salt marshes.					
Distr. CP* (Worcester*).					
<i>Botrychium multifidum</i> and <i>B. oneidense</i>	see <i>Sceptridium</i>				
<i>Botrychium lanceolatum</i> (S.G. Gmelin) Angström var. <i>angustisegmentum</i> Pease & A.H. Moore !	Lanceleaf Grapefern	G5T4	S1	X	
Ophioglossaceae (Adder's-tongue Family)					
Syn: <i>B. angustisegmentum</i> (Pease & Moore) Fernald					
Taxnote: According to Fernald (1915) this variety is typically Appalachian whereas var. <i>lanceolatum</i> is a boreal plant not reaching the eastern U.S.					
Cons/Econote: Collected by the late D.E. Redman, legal status under review pending field work.					
Habitat: Mesic northern hardwood forest.					
Distr. AP (Garrett).					
<i>Botrychium matricariifolium</i> (A. Braun ex Duwell) A. Braun ex W.D.J. Koch	Chamomile Grapefern	G5	S1?		
Ophioglossaceae (Adder's-tongue Family)					
Syn: <i>B. matricariaefolium</i> , an orthographic variant.					
Taxnote: An allopolyploid species derived from hybridization events between diploid parents, <i>B. angustisegmentum</i> and <i>B. pallidum</i> (Williams et al. 2016). Williams et al. (2016) describe morphological variability in this complex.					
Cons/Econote: Reported in Reed (1953, 1962) as being found on the Piedmont Plateau, on the Coastal Plain adjacent to the Piedmont, and in the Allegheny mountains. The cryptic nature of the species suggests rarity; however, the Service suspects a substantial decline due to the heavy urbanization of much of the species' reported within-State range.					
Habitat: Rich hardwood forests.					
Distr. AP, CP, PD (Anne Arundel, Baltimore*, Carroll?, Garrett, Howard, Montgomery*, Prince George's; distribution likely incomplete).					
<i>Botrychium simplex</i> E. Hitchcock	Least Grapefern	G5	SH	X	
Ophioglossaceae (Adder's-tongue Family)					
Syn: <i>B. simplex</i> var. <i>tenebrosum</i> (A.A. Eaton) R.T. Clausen					
<i>B. tenebrosum</i> A.A. Easton					
Taxnote: According to Wagner & Wagner (1993) the eastern <i>B. simplex</i> has a persistent juvenile form (<i>B. tenebrosum</i> A.A. Easton) corresponding to Maryland specimens.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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Cons/Econote: Last collected (as var. *tenebrosum*) in 1942. E. Hitch (1927) discusses finding this rare species in Howard County as a student in 1888.

Habitat: Woodland glades.

Distr. PD*, RV? (Frederick?, Howard*, Montgomery*).

***Bouteloua curtipendula* (Michaux) Torrey**

Side-oats Grama

G5

S2

Poaceae (Grass Family)

Cons/Econote: Known from many small to moderately large populations but very habitat restricted.

Habitat: Woodlands and glades over marble, limestone and calcareous shale.

Distr. PD, RV (Allegany, Baltimore, Montgomery, Washington).

Flw/Fr: Aug-Sept (Oct).

***Bromus ciliatus* Linnaeus**

Fringed Brome

G5

SH

Poaceae (Grass Family)

Taxnote: Maryland plants are var. *ciliatus*. Previous records showing a much larger distribution have been identified as forms of *B. pubescens* having nearly glabrous lemmas with some basal cilia.

Cons/Econote: Historically known from a single site in Maryland, now considered extirpated.

Habitat: Calcareous fen (apparently).

Distr. AP* (Garrett*).

Flw/Fr: late Jul-Aug.

***Bromus kalmii* A. Gray**

Wild Chess

G5

SH

X

Poaceae (Grass Family)

Taxnote: *B. purgans* Linnaeus, a name often used for *B. pubescens* Muhlenberg ex Willdenow is often misapplied to this species.

Cons/Econote: Historically known from a single site in Maryland, now considered extirpated.

Habitat: Calcareous fen (apparently).

Distr. AP* (Garrett*).

Flw/Fr: late Jul-Aug.

***Bromus latiglumis* (Shear) A.S. Hitchcock**

Broad-glumed Brome

G5

S1

E

Poaceae (Grass Family)

Syn: *Bromus altissimus* Pursh

Cons/Econote: Endangered by displacement by invasive species, particularly Japanese knotweed (*Reynoutria japonica*).

Habitat: Floodplain forests and river bluffs, often over calcareous (limestone, shale, shell-marl?) substrates.

Distr. AP, CP*, PD, RV (Allegany, Baltimore, Cecil, Howard, Montgomery*, Washington, Wicomico*).

Flw/Fr: late Aug-mid Sept.

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Bromus nottowayanus</i> Fernald Poaceae (Grass Family)	Nottoway Brome	G4G5	S3S4		
Cons/Econote: Surveys in Maryland have documented a patchy but broad distribution. Infrequent to frequent along medium to large river systems, particularly along the Potomac River and its tributaries.					
Habitat: Floodplain forests and river bluffs.					
Distr. AP, CP, PD, RV (Allegany, Baltimore, Garrett, Harford?, Kent, Montgomery*, Prince George's, Washington).					
Flw/Fr: late Jun-Aug.					
<i>Buchnera americana</i> Linnaeus Orobanchaceae (Broomrape Family)	Bluehearts	G5?	SH	X	
Cons/Econote: Once apparently fairly widespread in Maryland as demonstrated by collections from 1892-1938. Fire suppression likely plays a role in this species' rarity.					
Habitat: Barrens and glades including Piedmont serpentine barrens and coastal sand barrens.					
Distr. CP*, PD* (Cecil*, Harford*, Montgomery*, Prince George's*, Worcester*).					
<i>Cacalia muehlenbergii</i> (Schultz-Bipontius) Fernald	see <i>Arnoglossum reniforme</i> (Hooker) H.E. Robinson				
<i>Calamagrostis porteri</i> A. Gray Poaceae (Grass Family)	Porter's Reedgrass	G4T4	S3		
Taxnote: Maryland plants are the widespread Appalachian ssp. <i>porteri</i> .					
Cons/Econote: This species forms large patches of vegetative stems (clones?) and is locally abundant in Green Ridge State Forest but apparently rarely flowers. The lack of sexual reproduction and an unknown ramet/genet ratio recommends continued inclusion as a conservation element. Rare sexual reproduction is a recurring theme in the shale barren region occurring in several phylogenetically unrelated taxa (e.g., <i>Smilax ecirrata</i> , <i>Spiraea corymbosa</i> , <i>Veratrum hybridum</i>).					
Habitat: Dry to mesic woodlands and oak-hickory forests, typically but not always over shale substrates, in a variety of topographic positions.					
Distr. AP, RV (Allegany).					
Flw/Fr: (rarely) Aug.					
<i>Calla palustris</i> Linnaeus Araceae (Arum Family)	Wild Calla	G5	S1	E	
Cons/Econote: A circumboreal species barely entering Maryland at its southern range limit and restricted to a few montane peatlands (for historical note see Bell 1941).					
Habitat: Mountain peatland swamps.					
Distr. AP (Allegany, Garrett).					
Flw: mid May-early Jun; Fr: late Jun					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Calopogon tuberosus</i> (Linnaeus) Britton, Sterns, & Poggenburg Orchidaceae (Orchid Family)	Tuberous Grass-pink	G5	S1	E	
Taxnote: Maryland plants are the widespread var. <i>tuberosus</i> .					
Cons/Econote: Endangered by habitat loss and woody succession of bog-like habitats. Shreve (1910, p. 234) describes a location in the Catoctin Mountains of Frederick County (as <i>Limodorum tuberosum</i>) among “decayed sandstone in pockets of Sphagnum moss”.					
Habitat: Acidic seeps and peaty meadows.					
Distr. CP, RV* (Baltimore (city)*, Charles, Frederick*, Prince George’s, Queen Anne’s*, Wicomico, Worcester).					
Flw: early-mid Jun; Fr: Jul.					
<i>Calystegia spithamea</i>	see <i>Convolvulus spithameus</i> Linnaeus				
<i>Campanula divaricata</i> Michaux Campanulaceae (Bluebell Family)	Southern Harebell	G4	SH	X	
Cons/Econote: Last seen along roadside outcrops in 1983.					
Habitat: Sandstone and shale ledges.					
Distr. AP*, RV* (Allegany*, Garrett*).					
Flw: Aug; Fr: Oct.					
<i>Campanula rotundifolia</i> Linnaeus Campanulaceae (Bluebell Family)	American Harebell	G5	S2		
Cons/Econote: In Maryland, as in much of its range in the eastern U.S., this species is a habitat specialist and generally occurs in low numbers. Locally frequent in good habitat in the Ridge and Valley/Blue Ridge with disjunct occurrences over serpentine in the Piedmont.					
Habitat: Outcrops of limestone, calcareous shale and serpentine.					
Distr. PD, RV (Allegany, Cecil, Harford).					
Flw: late Jun-Sept (Nov); Fr: Sept-Nov.					
<i>Capnoides sempervirens</i> (Linnaeus) Borkhausen Fumariaceae (Fumitory Family)	Pale Corydalis	G5	S3		
Syn: <i>Corydalis sempervirens</i> (Linnaeus) Persoon					
Cons/Econote: Infrequent but may be locally abundant over outcroppings and exposures of acidic sandstones, particularly where sunlight is not limiting.					
Habitat: Sandstone glades and woodlands (Oriskany sandstone) and other outcrops of felsic rocks.					
Distr. AP, RV (Allegany, Frederick, Garrett).					
Flw: late May-Jun; Fr: Jul-Aug.					
<i>Cardamine douglassii</i> Britton	Purple Cress	G5	S3		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Brassicaceae (Mustard Family) Habitat: Nutrient rich alluvial silts and loams in floodplain or mesic hardwood forests. Distr. CP, PD, RV (Anne Arundel*, Baltimore*, Cecil, Frederick, Harford, Montgomery, Prince George's). Flw: Apr; Fr: May-Jun.</p>					
<i>Cardamine longii</i> Fernald	Long's Bittercress	G3?	S2	E	
<p>Brassicaceae (Mustard Family) Taxnote: The taxonomic status of this species is under scrutiny. One theory is that it is an ecotype of the common <i>C. pensylvanica</i>. Cons/Econote: Known from multiple stations scattered along the Chesapeake Bay tributaries, occurring irregularly and considered globally rare. Endangered by siltation, eutrophication and potentially by sea level rise increasing the salinity of occupied habitats. Habitat: Fresh tidal marshes and intertidal shores. Distr. CP (Cecil*, Charles, Dorchester, Somerset, Wicomico, Worcester). Flw: Jun-Aug; Fr: Jun-Oct.</p>					
<i>Cardamine rotundifolia</i> Michaux	American Bittercress	G4	S3		
<p>Brassicaceae (Mustard Family) Habitat: Cold-water spring seeps and clear mountain streams. Distr. AP (Garrett). Flw: Apr-May; Fr: Apr-Jun.</p>					
<i>Carex aestivalis</i> M. A. Curtis ex Gray	Summer Sedge	G4	S1	E	
<p>Cyperaceae (Sedge Family) Cons/Econote: A single known location. Habitat: Rich, mesic woodland at high elevation. Distr. AP (Garrett). Flw/Fr: mid Aug.</p>					
<i>Carex albursina</i> Sheldon	White Bear Sedge	G5	S3		
<p>Cyperaceae (Sedge Family) Cons/Econote: Rare on the Coastal Plain and Piedmont but may be locally abundant in the Ridge and Valley. Habitat: Occurs in a variety of forested habitats and in a variety of topographic positions but generally associated with basic (calcareous) substrates. Distr. AP, CP, PD, RV (Allegheny, Cecil, Charles, Frederick, Garrett, Harford, Montgomery, Prince George's, Washington). Flw/Fr: May-Jun (Jul).</p>					
<i>Carex appalachica</i> Webber and Ball	Appalachian Sedge	G4	S1?		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cyperaceae (Sedge Family) Syn: <i>C. radiata</i> (Wahlenberg) Dewey, misapplied. Taxnote: This sedge has a long history of taxonomic confusion with <i>C. radiata</i>, see Webber & Ball (1979, 1984). Habitat: Dry to mesic woodlands and forest clearings. Distr. AP, PD*, RV (Allegheny, Garrett, Montgomery*, Washington; perhaps overlooked). Flw/Fr: mid Jun-Jul.</p>					
<i>Carex argyrantha</i> Tuckerman	Hay Sedge	G5	S3		
<p>Cyperaceae (Sedge Family) Syn: <i>C. foenea</i> Willdenow, misapplied. Cons/Econote: Most Maryland collections east of Garrett County are historical. Habitat: Sandy or rocky forests and clearings, generally at high elevations. Distr. AP, PD*, RV* (Allegheny*, Baltimore*, Frederick*, Garrett, Harford*). Flw/Fr: Jun-Jul (Aug).</p>					
<i>Carex barrattii</i> Schweinitz & Torrey	Barratt's Sedge	G4	S3		
<p>Cyperaceae (Sedge Family) Cons/Econote: This species is an infrequent component of forested wetlands on the Coastal Plain and may form large non-flowering colonies. Roadside populations comprise the majority of Maryland stations. Habitat: Forested or open-canopied nontidal wetlands. Distr. CP (Anne Arundel, Caroline, Dorchester, Kent, Queen Anne's, Talbot, Wicomico, Worcester). Flw/Fr: mid Apr-May (Jun).</p>					
<i>Carex brunnescens</i> (Persoon) Poiret	Brownish Sedge	G5T5	S3		
<p>Cyperaceae (Sedge Family) Taxnote: Maryland plants are var. <i>sphaerostachya</i> (Tuckerman) Kükenthal Cons/Econote: Nearly restricted to the Appalachian Plateau but with a single known location (disjunct) in the Piedmont. Habitat: Rocky, usually montane, forests and forest clearings. Distr. AP, PD (Harford, Garrett). Flw/Fr: Jun-early Jul (Aug).</p>					
<i>Carex bullata</i> Schkuhr ex Willdenow	Button Sedge	G5	S3		
<p>Cyperaceae (Sedge Family) Habitat: Delmarva Bays, edges of forested swamps and other open-canopy nontidal wetlands. Distr. CP (Anne Arundel, Baltimore, Caroline, Cecil, Dorchester, Kent, Prince George's, Queen Anne's, St. Mary's, Somerset, Worcester).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw/Fr: mid May-Jul (Sept).					
<i>Carex buxbaumii</i> Wahlenberg Cyperaceae (Sedge Family)	Buxbaum's Sedge	G5	S2	T	
Cons/Econote: Restricted to fens and open-canopied seepage swamps and generally threatened with alterations of groundwater hydrology arising from development around isolated wetland systems.					
Habitat: Mountain peatland sedge meadows, acidic fens.					
Distr. AP, CP, PD (Carroll, Cecil, Garrett, Harford, Montgomery, Prince George's, St. Mary's).					
Flw/Fr: Jun.					
<i>Carex careyana</i> Torrey ex Dewey Cyperaceae (Sedge Family)	Carey's Sedge	G4G5	S1	E	
Cons/Econote: Generally threatened by displacement by invasive species, loss of mature forested habitat and by small population sizes.					
Habitat: Rich upland or floodplain woods, often over limestone.					
Distr. AP, PD, RV (Garrett, Montgomery, Washington).					
Flw/Fr: late Apr-May (Jun).					
<i>Carex conoidea</i> Schkuhr ex Willdenow Cyperaceae (Sedge Family)	Field Sedge	G5	S1	E	
Cons/Econote: Few, scattered locations vulnerable to loss via woody succession of open-meadow habitat and competition with invasive species.					
Habitat: Wet meadows and glades.					
Distr. AP, CP, PD (Carroll, Cecil, Frederick, Garrett, Prince George's).					
Flw/Fr: Jun.					
<i>Carex cristatella</i> Britton Cyperaceae (Sedge Family)	Crested Sedge	G5	S1?		
Habitat: Wet meadows, swamps and floodplains of medium to large rivers.					
Distr. CP, PD, RV (Allegany, Anne Arundel, Baltimore, Cecil, Harford, Montgomery).					
Flw/Fr: Jun-Jul.					
<i>Carex davisii</i> Schweinitz & Torrey Cyperaceae (Sedge Family)	Davis' Sedge	G4	S1	E	
Cons/Econote: Generally threatened by displacement by invasive species, particularly by Japanese knotweed (<i>Reynoutria japonica</i>) along the Potomac River where most populations are known.					
Habitat: Rich floodplain forests in sandy/silty alluvium.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. PD, RV (Frederick, Harford, Montgomery, Washington).					
Flw/Fr: mid-late May (Jun).					
<i>Carex decomposita</i> Muhlenberg Cyperaceae (Sedge Family)	Cypress-knee Sedge	G3	S1	E	
Cons/Econote: A single known extant location but historically more abundant as evidenced by numerous pre-1900 collections from the Potomac Gorge.					
Habitat: Potholes in bedrock scour bar.					
Distr. PD (Montgomery).					
<i>Carex diandra</i> Schrank Cyperaceae (Sedge Family)	Lesser Panicked Sedge	G5	S1	E	
Cons/Econote: One of the more striking disjuncts (from the northeastern US) in Maryland.					
Habitat: Mountain peatland sedge meadow.					
Distr. AP (Garrett).					
Flw/Fr: mid May-early Jun.					
<i>Carex digitalis</i> Willdenow var. <i>macropoda</i> Fernald Cyperaceae (Sedge Family)	Southern Slender Woodland Sedge	G5TNR	S1?		
Taxnote: Intraspecific taxa in <i>C. digitalis</i> are not often distinguished but see Fernald (1938) and Ford et al. (2006) for discussion of taxa.					
Habitat: Nutrient rich, mesic to dry forests.					
Distr. CP, PD (Montgomery, Wicomico, Worcester; distribution likely incomplete).					
Flw/Fr: May					
<i>Carex eburnea</i> F. Boott Cyperaceae (Sedge Family)	Ebony Sedge	G5	S1	E	
Cons/Econote: A single known location in Maryland.					
Habitat: Limestone outcrops.					
Distr. RV (Allegany).					
Flw/Fr: May-early Jun.					
<i>Carex echinata</i> Murray Cyperaceae (Sedge Family)	Prickly Sedge	G5T5	S3		
Syn: <i>C. angustior</i> Mackenzie					
<i>C. cephalantha</i> (Bailey) Bicknell					
<i>C. laricina</i> Mackenzie					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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Taxnote: Maryland plants are the circumboreal ssp. *echinata*. Frye and Lea (2006) discuss the taxa and history of (mis) application of names within section *Stellulatae*.

Habitat: Mountain peatland sedge meadows, open-canopied acidic seeps.

Distr. AP, CP*, PD (Carroll, Cecil, Garrett, Prince George's*).

Flw/Fr: mid May-Jun.

***Carex emoryi* Dewey**

Emory's Sedge

G5

S3

Cyperaceae (Sedge Family)

Habitat: Rocky banks and bedrock scour wetlands of large rivers; rarely riverine swamps.

Distr. AP, PD, RV (Allegany, Baltimore, Frederick, Harford, Montgomery, Prince George's, Washington).

Flw/Fr: mid-late May (Jun).

***Carex exilis* Dewey**

Coast Sedge

G5

S1

E

Cyperaceae (Sedge Family)

Cons/Econote: This species is associated with globally rare, bog and swamp habitats in Maryland.

Habitat: Atlantic white cedar (*Chaemacyparis thyoides*) swamps, peaty fens.

Distr. CP (Anne Arundel).

Flw/Fr: mid-late May (Jun).

***Carex fraseriana* Ker-Gawler**

Fraser's Sedge

G4

S1

E

Cyperaceae (Sedge Family)

Syn: *Cymophyllus fraseri* (Andrews) Mackenzie

Cons/Econote: Endemic to the southern Appalachians and at the species' northern range limit in Maryland.

Habitat: Rich, mesic, often old-growth oak forests.

Distr. AP (Garrett).

Flw/Fr: May (Jun).

***Carex gigantea* Rudge**

Giant Sedge

G4

S3

Cyperaceae (Sedge Family)

Habitat: Seasonally flooded pools, swamp forests and floodplains.

Distr. CP (Caroline, Charles, Kent, Queen Anne's, Somerset, Wicomico, Worcester).

Flw/Fr: Jun (Sept).

***Carex glaucescens* Elliott**

Southern Waxy Sedge

G4

S1

E

Cyperaceae (Sedge Family)

Cons/Econote: Maryland stations are the northernmost geographic extent of this southern species.

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Moist areas in pine flatwoods in wet, acid and/or peaty soils. Distr. CP (Dorchester, Wicomico, Worcester). Flw/Fr: mid Jul-Aug (Sept).</p>					
<i>Carex haydenii</i> Dewey Cyperaceae (Sedge Family) Syn: <i>C. stricta</i> Lamarck var. <i>decora</i> Bailey	Cloud Sedge	G5	S1	E	
<p>Cons/Econote: Occurs in scattered locations in fens and meadows at high elevations and is restricted to the Appalachian Plateau. Habitat: Minerotrophic fens and forested or open-meadow seeps. Distr. AP (Garrett). Flw/Fr: Jun.</p>					
<i>Carex hirtifolia</i> Mackenzie Cyperaceae (Sedge Family)	Pubescent Sedge	G5	S3		
<p>Habitat: Nutrient rich dry to mesic forests, often in stream valleys and often over ultramafic substrates (e.g., amphibolite, gabbro, serpentine). Distr. AP, CP, PD, RV (Allegany, Baltimore, Carroll, Cecil, Charles, Garrett, Harford, Howard, Montgomery, Prince George's, Washington). Flw/Fr: (late Apr) May-early Jun.</p>					
<i>Carex hitchcockiana</i> Dewey Cyperaceae (Sedge Family)	Hitchcock's Sedge	G5	S1	E	
<p>Cons/Econote: Restricted to mature forests in nutrient rich soils. Habitat: Upland forests over calcareous substrates (limestone, shell-marl), less commonly in rich alluvium. Distr. CP, PD, RV (Cecil, Charles, Harford, Montgomery, Prince George's, Washington). Flw/Fr: (late Apr)-May- early Jun.</p>					
<i>Carex hyalinolepis</i> Steudel Cyperaceae (Sedge Family) Syn: <i>C. lacustris</i> Willdenow var. <i>laxiflora</i> Dewey	Shoreline Sedge	G4G5	S2S3		
<p>Habitat: Fresh to slightly brackish tidal marshes and swamp forests, often in large stands along cypress (<i>Taxodium distichum</i>) forest-marsh ecotones. Distr. CP (Anne Arundel, Calvert, Dorchester, Prince George's, Somerset, Worcester). Flw/Fr: Jun (Sept).</p>					
<i>Carex hystericina</i> Muhlenberg ex Willdenow	Porcupine Sedge	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Cyperaceae (Sedge Family)					
Taxnote: <i>C. hystricina</i> , an orthographic variant occurs in some manuals.					
Cons/Econote: Occurs in highly invasible habitats, and require periodic management to maintain.					
Habitat: Wet meadows over mafic or ultramafic substrates (most commonly associated with serpentine).					
Distr. PD (Baltimore, Cecil, Montgomery).					
Flw/Fr: late May-Jun (Jul).					
<i>Carex interior</i> Bailey	Inland Sedge	G5	S1		
Cyperaceae (Sedge Family)					
Taxnote: Historically confused with the common <i>C. atlantica</i> ; see Frye & Lea (2006) for discussion.					
Cons/Econote: This species is restricted to wetlands over serpentine but may be locally abundant in those habitats. In the species' southern range it is most commonly, if not obligately, associated with mafic substrates.					
Habitat: Seeps and streambanks over serpentine.					
Distr. PD (Baltimore, Cecil).					
Flw/Fr: mid May-mid Jun.					
<i>Carex jorii</i> Bailey	Joor's Sedge	G4G5	S3		
Cyperaceae (Sedge Family)					
Cons/Econote: Although a dominant plant, at some sites this species is associated with a narrow range of hydrological conditions.					
Habitat: Cypress-swamps, swampy meadows and Delmarva Bays.					
Distr. CP (Caroline, Charles, Dorchester, Kent, Somerset, Talbot, Wicomico, Worcester).					
Flw/Fr: late Jul-Aug (Sept).					
<i>Carex lacustris</i> Willdenow	Lake-bank Sedge	G5	S2		
Cyperaceae (Sedge Family)					
Cons/Econote: Distributed as a Mountain-Coastal Plain disjunct in Maryland, occurring in both high-elevation meadows and fresh tidal swamps. Strongly colonial, often forming extensive stands.					
Habitat: Mountain peatlands shrub swamps and sedge meadows, fresh tidal marshes and fens.					
Distr. AP, CP (Calvert, Charles, Cecil, Dorchester, Harford, Kent, Garrett, Prince George's*, Talbot).					
Flw/Fr: Jun- early Jul.					
<i>Carex lasiocarpa</i> Ehrhart	Slender Sedge	G5	S1	E	
Cyperaceae (Sedge Family)					
Taxnote: Maryland plants are var. <i>americana</i> Fernald					
Cons/Econote: A circumboreal species near its southern range limit in Maryland; a single station.					
Habitat: Mountain peatland sedge meadow.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Distr. AP (Garrett). Flw/Fr: Jun.</p>					
<p><i>Carex laxiculmis</i> Schweinitz var. <i>copulata</i> (Bailey) Fernald Cyperaceae (Sedge Family) Syn: <i>C. copulata</i> (L.H.Bailey) Mackenzie Taxnote: See Manhart (1986) and Naczi et al. (2001) for discussion of nomenclature. Treated as a hybrid and as a species (see Fernald 1950); however, chromosome number and normal chromosome pairing suggests this taxon is not a hybrid (Naczi 1999). Cons/Econote: Tentatively tracked as a rare species; Maryland occurrences represent few collections, but these seem to be distinct from the common var. <i>laxiculmis</i>. Rod Simmons and Rob Naczi have recently collected this taxon from Garrett County. This species should be sought more widely in western Maryland. Habitat: Nutrient-rich, sandy alluvial forests and coniferous-oak forest. Distr. AP, PD (Garrett, Montgomery). Flw/Fr: late Apr-May (Jun).</p>	Coupled Sedge	G5T3T5	S1?		
<p><i>Carex louisianica</i> Bailey Cyperaceae (Sedge Family) Cons/Econote: Restricted to the Coastal Plain but may be locally abundant at some sites, particularly in southern Maryland on the Western Shore. Habitat: Floodplain forests, canopy gaps in swamp forests. Distr. CP (Anne Arundel*, Baltimore*, Caroline, Charles, Dorchester, Harford, Prince George's, St. Mary's, Wicomico, Worcester). Flw/Fr: late May-Jul (Sept).</p>	Louisiana Sedge	G5	S3		
<p><i>Carex lucorum</i> Willdenow ex Link Cyperaceae (Sedge Family) Taxnote: Maryland plants are var. <i>lucorum</i>. Cons/Econote: Maryland records represent few, scattered collections; however, the species may be overlooked as the common <i>C. pennsylvanica</i>. Habitat: Dry woodland clearings and barrens. Distr. PD, RV*: (Baltimore, Cecil, Washington*). Flw/Fr: May</p>	Blue Ridge Sedge	G4T4	S1		
<p><i>Carex lupuliformis</i> Sartwell Cyperaceae (Sedge Family) Cons/Econote: Populations are scattered over the Coastal Plain and (more rarely) the Piedmont in a variety of isolated wetlands. Habitat: Delmarva Bays, open-canopied swamps, vernal pools.</p>	False Hop Sedge	G4	S2		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP, PD (Anne Arundel, Caroline, Cecil, Charles, Dorchester, Montgomery, Prince George's, Queen Anne's, Worcester).					
Flw/Fr: late Jun-Aug (Sept).					
<i>Carex meadii</i> Dewey	Mead's Sedge	G4	S1	E	
Cyperaceae (Sedge Family)					
Cons/Econote: Associated with rare woodland and barrens communities in the Piedmont. Threatened by development, woody succession, and competition with exotic species.					
Habitat: Woodland clearings and barrens over ultramafic (diabase, serpentine) soils.					
Distr. PD (Baltimore, Carroll*, Montgomery).					
Flw/Fr: Jun.					
<i>Carex michauxiana</i> Boeckeler	Andre Michaux's Sedge	G5	SH		
Cyperaceae (Sedge Family)					
Cons/Econote: Documented from Maryland by a single collection as a striking disjunct from the northeastern U.S. The site of collection has been dramatically altered and the species may now be extirpated from Maryland.					
Habitat: Acidic, forested seep.					
Distr. AP* (Garrett*).					
Flw/Fr: late May					
<i>Carex mitchelliana</i> M.A. Curtis	Mitchell's Sedge	G4	S2		
Cyperaceae (Sedge Family)					
Syn: <i>C. crinita</i> Lam. var. <i>mitchelliana</i> (M.A. Curtis) Gleason					
Cons/Econote: A rarely identified species; however, Maryland collections are few, scattered, and represent few individuals.					
Habitat: Swamp forests, lake shores, floodplains, fresh tidal forest/marsh ecotones.					
Distr. CP (Anne Arundel, Dorchester, Kent, Somerset, Wicomico, Worcester).					
Flw/Fr: mid May-Jun.					
<i>Carex oxylepis</i> Torrey & Hooker	Sharp-scale Sedge	G5?TNR	S1		
Cyperaceae (Sedge Family)					
Taxnote: Maryland plants are var. <i>oxylepis</i> .					
Cons/Econote: Tentatively tracked as a rare species. A southern peripheral with a single known station in Maryland.					
Habitat: Floodplain forest.					
Distr. CP (St. Mary's).					
Flw/Fr: mid May- early Jun.					
<i>Carex pedunculata</i> Muhlenberg ex Willdenow	Long-stalked Sedge	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Cyperaceae (Sedge Family)					
Cons/Econote: Occurs in few scattered and disjunct sites in highly invasible communities. One of the few carices that appears adapted for insect (ant) dispersal, the perigynia with a basal eliasome.					
Habitat: Calcareous mesic forests and outcrops; montane alluvial forest.					
Distr. AP, CP, RV (Alleghany, Garrett, Prince George's).					
Flw/Fr: mid Apr- mid May					
<i>Carex pellita</i> Muhlenberg	Wooly Sedge	G5	S2?		
Cyperaceae (Sedge Family)					
Syn: <i>C. lanuginosa</i> Michaux, misapplied.					
Cons/Econote: Occurs in a variety of wetland communities, nearly statewide, but in a relatively small number of sites.					
Habitat: Wet meadows, ditches, pastures, forested wetlands over a variety of substrates ranging from acidic to ultramafic.					
Distr. AP, CP, PD, RV (Alleghany, Anne Arundel, Baltimore, Caroline, Carroll, Cecil, Dorchester, Frederick, Garrett, Harford, Montgomery, St. Mary's).					
Flw/Fr: mid May-Jun.					
<i>Carex planispicata</i> Naczi	Flat-spiked Sedge	G4	S1S2		
Cyperaceae (Sedge Family)					
Syn: <i>C. amphibola</i> Steudel var. <i>amphibola</i> , misapplied					
Cons/Econote: Associated with mature hardwood forests.					
Habitat: Rich, dry to mesic forests, often over mafic substrates.					
Distr. CP, PD (Baltimore, Cecil, Charles, Harford, Kent, Montgomery).					
Flw/Fr: May- early Jun.					
<i>Carex plantaginea</i> Lamarck	Plantain-leaved Sedge	G5	S1?		
Cyperaceae (Sedge Family)					
Cons/Econote: Apparently restricted to the Appalachian Plateau and tentatively tracked as a rare species. The total number of occurrences has not been determined.					
Habitat: Northern hardwood forests.					
Distr. AP (Garrett).					
Flw/Fr: May (Jun).					
<i>Carex polymorpha</i> Muhlenberg	Variable Sedge	G3	SH	X	
Cyperaceae (Sedge Family)					
Cons/Econote: Last collected in 1891 near "Leslie".					
Habitat: Dry sandy forests, woodlands and barrens.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. PD* (Cecil*).					
<i>Carex projecta</i> Mackenzie Cyperaceae (Sedge Family) Syn: <i>C. tribuloides</i> Wahl. var. <i>reducta</i> Bailey Taxnote: Historically confused with, and often included in <i>C. tribuloides</i> . Cons/Econote: Apparently restricted to the Appalachian Plateau. The total number of occurrences has not been determined. Habitat: Wet meadows and fens at high elevations. Distr. AP (Garrett). Flw/Fr: mid Jun-Jul.	Necklace Sedge	G5	S2		
<i>Carex richardsonii</i> R. Brown Cyperaceae (Sedge Family) Cons/Econote: Restricted to open meadows over ultramafic soils, threatened by fire exclusion and woody plant succession. Habitat: Serpentine barrens. Distr. PD (Baltimore, Cecil). Flw/Fr: late Apr-May.	Richardson's Sedge	G4	S1	E	
<i>Carex shortiana</i> Dewey Cyperaceae (Sedge Family) Cons/Econote: Largely restricted to floodplain forests along the Potomac River drainage but recently (and suspiciously) located along the Susquehanna River. Both rivers are heavily degraded by human activities and dramatically altered by invasives such as Japanese knotweed (<i>Reynoutria japonica</i>) and oriental bittersweet (<i>Celastrus orbiculatus</i>). However, the species has undergone a rapid expansion in geographic range and extent that is similar in some respects to rapid spread of <i>Diarrhena obovata</i> along the Potomac (see Lea 2012); the latter is now present as far east as the District of Columbia. Habitat: Rich floodplain forests, meadows and woodlands in loamy soils. Distr. AP, CP, PD, RV (Allegheny, Cecil, Charles, Frederick, Garrett, Montgomery, Prince George's, Washington). Flw/Fr: May-early Jun.	Short's Sedge	G5	S3S4		
<i>Carex silicea</i> Olney Cyperaceae (Sedge Family) Cons/Econote: A single population on the barrier island (Assateague). Habitat: Maritime woodland. Distr. CP (Worcester). Flw/Fr: early Jun.	Seabeach Sedge	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Carex sparganioides</i> Muhlenberg ex Willdenow Cyperaceae (Sedge Family)	Bur-reed Sedge	G5	S3		
Cons/Econote: A predictable component of rich floodplain and basic mesic forests, especially along large rivers, but generally occurring in low numbers. These communities are particularly threatened by invasion of multiple exotic species.					
Habitat: Rich forests, floodplains and meadows.					
Distr. AP, CP, PD, RV (Allegheny, Anne Arundel*, Baltimore, Calvert*, Carroll, Cecil, Charles, Frederick, Garrett, Kent, Montgomery, Prince George's, Washington).					
Flw/Fr: mid May-Jun (Jul). Ripe perigynia turn a deep 'golden-yellow' at maturity.					
<i>Carex straminea</i> Willdenow ex Schkuhr Cyperaceae (Sedge Family)	Eastern Straw Sedge	G5	S1S2		
Syn: <i>C. richii</i> Mackenzie					
Taxnote: A difficult group (section Ovales), see Rothrock et al. (1997) for discussion of nomenclature and morphology of similar species.					
Cons/Econote: Widespread but occurring in relatively small populations, these often in high-quality habitats and rare plant communities.					
Habitat: Seasonal pools, swamps, fresh tidal and nontidal marshes.					
Distr. CP, PD, RV (Allegheny*, Anne Arundel, Caroline, Dorchester, Harford, Montgomery, Washington).					
Flw/Fr: mid May-mid Jun.					
<i>Carex striatula</i> Michaux Cyperaceae (Sedge Family)	Lined Sedge	G5	S3		
Taxnote: Similar to and possibly not distinct from <i>C. laxiflora</i> (see Manhart 1986). However, Maryland occurrences appear to be both morphologically and ecologically distinct.					
Cons/Econote: There are many Maryland occurrences but typically in low numbers per site.					
Habitat: Associated with dry to dry-mesic hardwood forests, particularly over acidic sand and gravel deposits.					
Distr. CP, PD, RV (Allegheny, Anne Arundel, Baltimore, Caroline, Cecil, Dorchester, Harford, Howard, Montgomery, St. Mary's, Talbot, Washington, Wicomico, Worcester; distribution likely incomplete).					
Flw/Fr: late Apr-May (Jun).					
<i>Carex tenera</i> Dewey Cyperaceae (Sedge Family)	Slender Sedge	G5	SH	X	
Taxnote: Frequently misidentified and confused with <i>C. tribuloides</i> .					
Cons/Econote: Maryland records based on few, scattered collections. The species may be overlooked, alternatively the species may be very habitat restricted.					
Habitat: Floodplain forests.					
Distr. CP*, PD*: (Baltimore*, Cecil*, Prince George's*).					
Flw/Fr: late May.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Carex tetanica</i> Schkuhr Cyperaceae (Sedge Family) Taxnote: Maryland plants are var. <i>canbyi</i> Porter. Cons/Econote: Restricted to a single site in Maryland and known to be extant at fewer than ten sites globally. Native to only a small region comprising northern Delaware, northeastern Maryland, and southeastern Pennsylvania (R. Naczi <i>in</i> Knapp et al. 2011). Habitat: Calcareous meadow. Distr. PD (Cecil). Flw/Fr: late May-Jun.	Rigid Sedge	G4G5T1T2Q	S1	E	
<i>Carex trichocarpa</i> Muhlenberg ex Willdenow Cyperaceae (Sedge Family) Cons/Econote: Occurs at few sites, threatened by development and hydrological alterations. Habitat: Wet meadows and open stream banks. Distr. PD (Baltimore, Carroll, Howard*). Flw/Fr: mid May-mid Jun.	Hairy-fruited Sedge	G4	S2		
<i>Carex tuckermanii</i> F. Boott ex Dewey Cyperaceae (Sedge Family) Cons/Econote: Restricted to a few sites on the Appalachian Plateau. Habitat: Floodplain pools. Distr. AP (Garrett). Flw/Fr: mid Jun-Jul.	Tuckerman's Sedge	G4	S1	E	
<i>Carex venusta</i> Dewey Cyperaceae (Sedge Family) Taxnote: all Maryland plants are var. <i>minor</i> Boeckeler. Cons/Econote: Associated with open wetlands in acidic soils; populations respond to moderate disturbances that retard succession but these disturbances may also promote competition with exotic species. Habitat: Powerline swales, forest clearings and other open-canopied meadows in seasonally saturated sandy or peaty soils. Distr. CP, PD* (Calvert, Caroline, Charles, Montgomery*, Prince George's, St. Mary's, Talbot, Wicomico, Worcester; distribution incomplete, the species has been recently reported from additional counties on the Eastern Shore). Flw/Fr: late May-Jun (Jul).	Dark Green Sedge	G4T4	S3S4		
<i>Carex vesicaria</i> Linnaeus Cyperaceae (Sedge Family) Taxnote: Maryland plants are var. <i>monile</i> (Tuckerman) Fernald	Inflated Sedge	G5	S1	T	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Circumboreal. Previously considered to occur at a single station in Garrett County (Frye & Lea 2001), the occurrence of plants on the Delmarva Peninsula represents a southern range extension. Alternatively, these plants may represent a cryptic taxon, and that bears investigation.</p> <p>Habitat: Montane vernal pools, Delmarva Bays.</p> <p>Distr. AP, CP (Caroline, Garrett).</p> <p>Flw/Fr: mid Jun-Jul (Aug).</p>					
<i>Carex vestita</i> Willdenow Cyperaceae (Sedge Family)	Velvety Sedge	G5	S2	T	
<p>Cons/Econote: Maryland plants are represented by numerous small populations nearly all of which are on roadsides and few of which are adequately protected.</p> <p>Habitat: Open, sandy or gravelly, seasonally saturated wetlands. The species thrives on disturbance, appearing in frequently mowed roadsides, powerlines and even occasionally along recently graded sandy roadsides. The historical habitats were probably low sandy/peaty barrens surrounding Delmarva Bays.</p> <p>Distr. CP (Anne Arundel, Baltimore, Caroline, Cecil, Dorchester, Kent, Prince George's*, Talbot, Wicomico).</p> <p>Flw/Fr: (late Apr) May-Jun (Jul).</p>					
<i>Carya laciniosa</i> (Michaux f.) G. Don Juglandaceae (Walnut Family)	Big Shellbark Hickory	G5	S1	E	
<p>Cons/Econote: Maryland "populations" are often single trees; this species is exceedingly rare in the southeastern U.S.</p> <p>Habitat: Rich floodplain forests.</p> <p>Distr. PD, RV (Howard*, Montgomery, Washington).</p>					
<i>Cassia marilandica</i> Linnaeus	see <i>Senna marilandica</i> (Linnaeus) Link				
<i>Castanea dentata</i> (Marshall) Borkhausen Fagaceae (Beech Family)	American Chestnut	G3	S2S3		
<p>Cons/Econote: Occurring throughout Maryland as stump sprouts and occasionally reaching reproductive maturity only to be reduced to stump sprouts in following years. There have been several attempts at tracking individuals that produced fruit; the distribution below is based upon that data, which has not been maintained with sufficient regularity.</p> <p>Habitat: Dry upland woods.</p> <p>Distr. AP, CP, PD, RV (Allegany, Anne Arundel, Baltimore, Caroline, Charles, Garrett, Harford, Howard, Montgomery, Queen Anne's, St. Mary's, Wicomico; distribution incomplete).</p>					
<i>Castilleja coccinea</i> (Linnaeus) Sprengel Orobanchaceae (Broomrape Family)	Scarlet Indian-paintbrush	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Endangered due to habitat loss. Reduced to small, isolated fragments of habitat. Of historical interest is that Shreve et al. (1910, p. 481) state that this species was “frequent” and occurred among the flora of cut-over forests in the vicinity of Oakland (p. 285). The Carroll County station has not been observed in many years and may be extirpated.</p> <p>Habitat: Calcareous fens, meadows, and occasionally roadsides.</p> <p>Distr. AP, PD, RV* (Alleghany*, Carroll, Cecil*, Frederick*, Garrett).</p> <p>Flw: late May-Jun; Fr: Aug-Oct.</p>					
<i>Centella erecta</i> (Linnaeus f.) Fernald	Erect Coinleaf	G5	S3		
<p>Apiaceae (Carrot Family)</p> <p>Habitat: Restricted to the Atlantic drainage in fresh to brackish marshes, ditches, and roadsides; widespread on the barrier island (Assateague).</p> <p>Distr. CP (Wicomico, Worcester).</p>					
<i>Centrosema virginianum</i> (Linnaeus) Bentham	Coastal Butterfly Pea	G5	S2		
<p>Fabaceae (Legume Family)</p> <p>Cons/Econote: Although there are many populations there are few well-protected ‘core’ sites for this species. Some reported stations may reflect confusion with <i>Clitoria mariana</i>.</p> <p>Habitat: Dry sandy forests and woodlands most often in edge habitats; inland dune woodlands.</p> <p>Distr. CP (Anne Arundel, Calvert, Caroline, Charles*, Dorchester, Prince George’s, St. Mary’s, Wicomico, Worcester).</p> <p>Flw: mid-Jul-mid Sept; Fr: Aug-Sept.</p>					
<i>Centunculus minimus</i> Linnaeus	Chaffweed	G5	SU	X	
<p>Primulaceae (Primrose Family)</p> <p>False-Pimpernel</p> <p>Taxnote: Somewhat in flux, phylogenetic results suggest resurrecting <i>Centunculus</i> for this species.</p> <p>Syn: <i>Anagallis minima</i> (Linnaeus) E.H. Krause <i>Lysimachia minima</i> (L.) U. Manns & Anderb.</p> <p>Cons/Econote: An irregularly occurring but widespread (in North America) low annual plant apparently very rare in the eastern U.S. Maryland collection dates range from 1897 to 1925, perhaps overlooked.</p> <p>Habitat: Meadows, moist soils.</p> <p>Distr. CP* (Charles*, Prince George’s*).</p>					
<i>Cerastium velutinum</i> Rafinesque	Octoraro Creek Chickweed	G5T1	S1		
<p>var. villosissimum (Pennell) J.K. Morton !</p> <p>Caryophyllaceae (Pink Family)</p> <p>Syn: <i>C. arvense</i> var. <i>villosissimum</i> Pennell <i>C. arvense</i> Linnaeus ssp. <i>velutinum</i> (Rafinesque) Ugborogho var. <i>villosum</i> (Muhlenberg ex Darlington) Hollick & Britton</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Taxnote: Separable from typical <i>C. velutinum</i> by densely white-villous leaves (see key in Weakley 2015). Assessment of this qualitative character by field botanists and the subjectivity it entails is one reason that this species has been reported from several Maryland serpentine barrens but is confirmed only from a single site.</p> <p>Cons/Econote: A narrow endemic of serpentine outcrops in MD and PA. Gustafson et al. (2003) concluded, on the basis of genetic and morphological/life-history components, that this variety is globally endangered. The Service is considering this taxon a candidate for legal status in Maryland, pending investigation of outstanding taxonomic questions.</p> <p>Habitat: Serpentine barren.</p> <p>Distr. PD (Baltimore?, Cecil).</p>					
<i>Ceratophyllum echinatum</i> A. Gray in Torrey & A. Gray Ceratophyllaceae (Hornwort Family)	Prickly Hornwort	G4	S2?		
<p>Cons/Econote: Thought to be declining over much of its range (NatureServe 2015) this species was known to occur in a few isolated wetlands in Maryland. However, recent field work has demonstrated that its in-State range has rapidly expanded.</p> <p>Habitat: Floodplain pools, baymouth barrier wetlands (Sipple 1982), millponds and lakes.</p> <p>Distr. AP, CP, PD* (Caroline, Dorchester, Garrett, Harford*, Kent, Montgomery*, Queen Anne's, Wicomico).</p>					
<i>Chamaecrista fasciculata</i> (Michaux) Greene var. <i>macroserma</i> (Fernald) C. F. Reed Fabaceae (Legume Family)	Partridge Pea, Sleepingplant	G5T3	S1	E	
<p>Syn: <i>Cassia fasciculata</i> (Michaux) Greene var. <i>macroserma</i> Fernald.</p> <p>Cons/Econote: Endemic to eastern Virginia and Maryland. Weakley (2015) provides a valuable discussion of this somewhat controversial taxon.</p> <p>Habitat: Fresh tidal marshes.</p> <p>Distr. CP (Dorchester).</p> <p>Flw: Aug; Fr: Aug-Oct.</p>					
<i>Chamaecyparis thyoides</i> (Linnaeus) Britton, Sterns & Poggenburg Cupressaceae (Cypress Family)	Atlantic White Cedar	G4	S3		
<p>Cons/Econote: Highly sought by the timber industry for its rot-resistant wood in the late 1800s and early 1900s (Beaven & Oosting 1939). Now limited to remnant stands along tidal creeks and nearly extirpated from non-riverine (upland) swamps.</p> <p>Habitat: Found in irregularly tidal ecotones along upland habitats, poorly drained habitats in seasonally flooded floodplains, and in coastal plain flatwoods and depression swamps. Associated with slow-moving Blackwater Streams such as those found in the Pocomoke and Nanticoke River watersheds.</p> <p>Distr: CP (Anne Arundel, Dorchester, Somerset?, Wicomico, Worcester).</p>					
<i>Chamaedaphne calyculata</i> (Linnaeus) Moench	Leatherleaf	G5	S1	T	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Ericaceae (Heath Family)					
Cons/Econote: Restricted to a narrow zone of Fall Line fens and bogs. Threatened by sedimentation, eutrophication, and urban sprawl.					
Habitat: Acidic seepage fens, “bogs”.					
Distr. CP (Anne Arundel).					
Flw: May-early Jun; Fr: Jul.					
<i>Chamaelirium luteum</i> (Linnaeus) A. Gray	Devil’s-bit	G5	S2		
Heloniadaceae (Swamp-pink Family)					
Cons/Econote: Upgraded from the Watchlist in 2012 due to declines in both the number of populations and population sizes. Many of our records are now approaching historical dates (>30 years). Intense herbivory by white-tailed deer is suspected as one factor reducing the State’s populations. The Service requests additional information to evaluate this species’ conservation status.					
Habitat: Rich, dry to dry-mesic forests.					
Distr. AP, PD, RV* (Allegheny*, Baltimore, Cecil, Garrett, Harford, Montgomery).					
Flw: late May-Jun; Fr: Jul.					
<i>Chelone obliqua</i> Linnaeus	Red Turtlehead	G5	S2	T	
Plantaginaceae (Plantain Family)					
Cons/Econote: Threatened by habitat loss and alteration due to herbicide use, poor habitat protection and low population size.					
Habitat: Floodplain forests, ecotones of fresh tidal marshes.					
Distr. CP, RV?* (Anne Arundel, Calvert, Frederick?*, Prince George’s, St. Mary’s).					
Flw: mid Aug-mid Sept; Fr: Sept-Oct.					
<i>Chenopodium simplex</i> (Torrey) S. Fuentes, Uotila, & Borsch	Giant-seed Goosefoot	G5	S2	T	
Chenopodiaceae (Goosefoot Family)					
Syn: <i>C. gigantospermum</i> (Aellen) Fernald					
<i>C. hybridum</i> Linnaeus var. <i>gigantospermum</i> (Aellen) Rouleau					
<i>Chenopodium simplex</i> (Torrey) Rafinesque					
Cons/Econote: A common species of Midwestern prairies, the Maryland occurrences of <i>C. simplex</i> are part of the species’ fragmented eastern range. At risk due to habitat loss, and fire suppression may play a role in this species’ rarity. The addition of a core population on State wildlands in Garrett County substantially decreases the risk to this species.					
Habitat: Ridgetop forests, glades and outcrops over mafic to slightly acidic substrates.					
Distr. AP, RV (Allegheny, Garrett).					
Flw: mid Aug; Fr: Sept.					
<i>Chenopodium standleyanum</i> Aellen	Standley’s Goosefoot	G5	S2S3		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Chenopodiaceae (Goosefoot Family)					
Cons/Econote: Occurring as scattered populations in a wide variety of open, sometimes frequently disturbed habitats. However, the species is long persistent in the seed bank responding to a variety of canopy-opening events (e.g., ice damage, gypsy moth defoliation, logging). Populations on shale glades are more dependably present from year to year.					
Habitat: Dry ridgetop forests; coastal shell deposits; shale glades, often growing in shade of red cedar (<i>Juniperus virginiana</i>).					
Distr. AP, CP, PD*, RV (Allegany, Baltimore*, Calvert, Cecil*, Frederick, Garrett, Howard*, Kent?, Washington).					
Flw: Aug; Fr: late Aug-Sept.					
<i>Chimaphila umbellata</i> (Linnaeus) W. Barton	Common Wintergreen	G5T5	S3		
Ericaceae (Heath Family)					
Taxnote: Maryland plants are the widespread, northeastern var. <i>cisatlantica</i> Blake.					
Cons/Econote: Although geographically widespread, populations are often small and localized.					
Habitat: Inland sand dune and ridge forests and woodlands, sandstone glades, dry ridgetop forests.					
Distr. CP, PD, RV (Allegany, Baltimore, Calvert, Caroline, Carroll, Charles, Dorchester, Frederick, Montgomery*, Prince George's, St. Mary's, Washington, Wicomico, Worcester).					
Flw: early Jun (heavily shaded plants may not flower); Fr: Aug-Oct.					
<i>Chrysogonum virginianum</i> Linnaeus	Green-and-gold	G5T5?	S3		
Asteraceae (Aster Family)					
Taxnote: Maryland plants are the widespread var. <i>virginianum</i> .					
Habitat: Open to lightly shaded forests, forest edges and roadsides; often over limestone but not strictly associated with mafic substrates.					
Distr. AP, CP*, PD, RV (Allegany, Baltimore*, Garrett, Montgomery, Prince George's*, Washington).					
Flw: May; Fr: Jun-Jul.					
<i>Cicuta bulbifera</i> Linnaeus	Bulb-bearing Water-hemlock	G5	S1	E	
Apiaceae (Carrot Family)					
Cons/Econote: Associated with a globally rare shrub-swamp community and occurring in small, very isolated populations.					
Habitat: Baymouth barrier wetland shrub swamps (Sipple 1982).					
Distr. CP, PD (Cecil, Kent).					
Flw: late Jul-early Aug; Fr: Aug-Sept.					
<i>Cinna latifolia</i> Grisebach	Slender Wood Reedgrass	G5	S3		
Poaceae (Grass Family)					
Cons/Econote: Narrowly distributed and infrequent in Maryland, restricted to the Appalachian Plateau.					
Habitat: Mesic, northern hardwood and forested swamps.					
Distr. AP (Garrett).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw/Fr: Jul-Aug.					
<i>Cirsium horridulum</i> Michaux Asteraceae (Aster Family)	Yellow Thistle	G5	S3		
Habitat: Meadows, often but not restricted to saline habitats, perhaps spreading along roadways.					
Distr. CP, PD (Baltimore, Carroll, Cecil, Montgomery, Somerset, Talbot, Worcester).					
Flw: May; Fr: May-Jun.					
<i>Cirsium muticum</i> Michaux Asteraceae (Aster Family)	Swamp Thistle	G5	S3		
Habitat: Wet meadows, acidic seepage swamps, mountain peatlands.					
Distr. AP, PD, RV (Baltimore, Cecil, Frederick, Garrett, Harford).					
Flw: late Aug-Sept; Fr: Sept-Oct.					
<i>Claytonia caroliniana</i> Michaux Montiaceae (Montia Family)	Carolina Springbeauty	G5	S3		
Habitat: Mesic hardwood forests, montane floodplain forests.					
Distr. AP (Garrett).					
Flw: Apr; Fr: Apr-May.					
<i>Cleisteslopsis divaricata</i> (Linnaeus) Pansarin & F. Barros Orchidaceae (Orchid Family)	Spreading Pogonia	G4	S1	E	
Syn: <i>Cleistes divaricata</i> (Linnaeus) Ames					
Cons/Econote: Endangered by habitat loss long-term and woody succession of the habitat in the near-term. There are no protected sites for this species. The Service has worked with Delmarva Power to manage woody succession at the State's sole station for this species.					
Habitat: Open-canopy acidic seepage wetland in sandy/peaty soils.					
Distr. CP (Wicomico).					
Flw: early-mid Jun; Fr: late Jun-Jul.					
<i>Clematis occidentalis</i> (Hornemann) A.P. de Candolle Ranunculaceae (Buttercup Family)	Purple Clematis	G5T5	S1	E	
Taxnote: Maryland plants are the eastern var. <i>occidentalis</i> .					
Cons/Econote: Occurring in a few small populations in specific microhabitats. Endangered by habitat alteration, particularly invasion by non-native vines such as Japanese honeysuckle (<i>Lonicera japonica</i>).					
Habitat: Mafic outcrops, rich, mesic hardwood forests.					
Distr. AP, PD* (Cecil*, Garrett).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: mid May; Fr: Jun-Jul.					
<i>Clematis ochroleuca</i> Aiton Ranunculaceae (Buttercup Family)	Curly-heads	G4	SH	X	
Cons/Econote: Attributed to the Maryland flora based upon Colonial-era collections at the British Museum (see Reveal et al. 1987). Otherwise reported from the District of Columbia area by Hermann (1946) based upon specimens annotated and mapped by Erickson (1943).					
Habitat: Regionally, the species occurs in dry sandy or rocky soils of woodlands and rock outcrops.					
Distr. PD* (Montgomery*).					
<i>Clematis viorna</i> Linnaeus Ranunculaceae (Buttercup Family)	Vase-vine Leatherflower	G5	S3		
Habitat: Rich bottomland forests. Particular frequent over calcareous substrates.					
Distr. CP*, PD, RV (Allegany, Anne Arundel*, Frederick, Garrett, Montgomery, Washington, Worcester*).					
Flw: mid-late Jun; Fr: Jul-Sept.					
<i>Clintonia allegheniensis</i> Harned Liliaceae (Lily Family)	Harned's Clintonia	G1Q	S1		
Taxnote: Distinguished only by the ultramarine fruit color (versus black in <i>C. umbellulata</i> (Michaux) Morong). Blain (1997) demonstrated that this taxon was not a hybrid between <i>C. borealis</i> (2n = 2x = 16) and <i>C. umbellulata</i> (2n = 2x = 14) as was often presumed, but found no evidence of genetic divergence between <i>C. umbellulata</i> and <i>C. allegheniensis</i> (also 2n = 2x = 14). However, genetic identities (based upon allozymes) were high among all three species and no evidence has been presented to date that the variation in fruit color is not associated with other adaptive genetic variation.					
Cons/Econote: Generally lumped with the common <i>C. umbellulata</i> ; the Service prefers to recognize this variant because it is unique to a narrow zone in MD, VA and WV.					
Habitat: Rocky, mesic to poorly drained northern hardwoods, often among sandstone (Pottsville Formation) boulders.					
Distr. AP (Garrett).					
Flw: Jun; Fr: late Sept-Oct.					
<i>Clintonia borealis</i> (Aiton) Rafinesque Liliaceae (Lily Family)	Clinton Lily	G5	S2	T	
Cons/Econote: Occurring as scattered populations, generally in very low numbers. Threatened by habitat loss.					
Habitat: Forested seeps among northern hardwoods and hemlock and often among sandstone (Pottsville Formation) boulders.					
Distr. AP (Garrett).					
Flw: Jun; Fr: Jul-Aug.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Coeloglossum viride</i> (Linnaeus) Hartman	See <i>Dactylorhiza viridis</i> (Linnaeus)	R.M. Bateman, Pridgeon, and M.W. Chase			
<i>Coelorachis rugosa</i> (Nuttall) Nash Poaceae (Grass Family)	Wrinkled Jointgrass	G5	S1	E	
Cons/Econote: Occurring as small populations restricted to natural (Delmarva Bays) and rarely unnatural clearings (e.g., powerlines) in forested swamps. Endangered by habitat loss in the long-term and by woody succession of ponds in the near-term.					
Habitat: Delmarva Bays, open-canopied acidic seeps.					
Distr. CP (Dorchester, Queen Anne's, Wicomico, Worcester).					
Flw/Fr: Aug.					
<i>Commelina erecta</i> Linnaeus Commelinaceae (Dayflower Family)	Erect Dayflower	G5	S3		
Habitat: Dry, rocky or sandy woodlands and barrens.					
Distr. CP, PD, RV (Allegany, Calvert, Caroline, Charles, Dorchester, Frederick, Montgomery, Washington, Worcester).					
Flw: late Jun-early Aug; Fr: Aug-Sept.					
<i>Convolvulus spithamaeus</i> Linnaeus Pursh Convolvulaceae (Morning Glory Family)	Low Bindweed	G5T4T5	S2		
Syn: <i>Calystegia spithamaea</i> (Linnaeus) Pursh ssp. <i>spithamaea</i>					
Taxnote: Treated here as in Weakley (2020) at the rank of species, but with some authors treating within <i>Calystegia</i> as a subspecies and a variety, and additionally applying several names to the taxon restricted to central Appalachian Shale Barrens. The shale bindweed, represented by <i>Convolvulus stans</i> Michaux (<i>C. spithamaea</i> ssp. <i>stans</i> (Michaux) Brummitt), also occurs in Maryland and is frequent in the shale barren region on the barrens and along roadcuts. Several Maryland records have not been determined as to subspecies.					
Cons/Econote: Restricted to a few, very rare habitats.					
Habitat: Limestone, and other mafic glades and woodlands.					
Distr. AP*, CP*?, PD, RV (Anne Arundel*?, Allegany, Baltimore*, Frederick, Garrett*, Montgomery, Prince George's*?, Washington).					
Flw: Jun-Jul; Fr: Aug.					
<i>Coptis trifolia</i> (Linnaeus) Salisbury Ranunculaceae (Buttercup Family)	Goldthread	G5T5	S1	E	
Syn: <i>Coptis groenlandica</i> (Oeder) Fernald					
Taxnote: Maryland plants are <i>var. groenlandica</i> (Oeder) Fassett.					
Cons/Econote: Endangered by habitat loss, now largely restricted to the Appalachian Plateau.					
Habitat: Mesic northern hardwoods frequently associated with hemlock (<i>Tsuga canadensis</i>). Historically known from the "Ammendale Bog" in Prince George's County (now extirpated) and from Druid Hill Park (Baltimore).					
Distr. AP, CP*, PD*, RV (Baltimore*, Frederick, Garrett, Prince George's*).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: mid May; Fr: Jun-Jul.					
<i>Corallorhiza trifida</i> Châtelain Orchidaceae (Orchid Family)	Early Coralroot	G5	S1	E	
Cons/Econote: Occurring in Maryland as two small and perhaps remnant populations at or near the southern range limit.					
Habitat: Montane base-rich seepage swamps, black ash-hemlock and red spruce-hemlock swamps.					
Distr. AP (Garrett).					
<i>Corallorhiza wisteriana</i> Conrad Orchidaceae (Orchid Family)	Spring Coralroot	G5	S1	E	
Cons/Econote: Occurring as a few, scattered populations with low numbers; all of them co-occur with a variety of invasive weeds. The ability of orchids to remain dormant for many years is notorious and many of our records have not been seen for years. According to Wiegand (2005) this species is likely extirpated from the Catoctin Mountains.					
Habitat: Descriptions tend to the general, e.g., “rich woods” corresponding on occasion to basic mesic forests over limestone or coastal shell-marl deposits.					
Distr. CP, PD*, RV (Anne Arundel, Frederick*, Montgomery*, Prince George’s, Washington).					
Flw: late Apr-early May; Fr: Jun.					
<i>Coreopsis rosea</i> Nuttall Asteraceae (Aster Family)	Rose Coreopsis	G3	S1	E	
Cons/Econote: Endangered by extensive habitat loss, chiefly wetland drainage and conversion to agricultural uses over the last century. The Caroline County station may have been extirpated; the Queen Anne’s County station is detailed in Longbottom et al. (2016). There are no protected sites for this species.					
Habitat: Delmarva Bays.					
Distr. CP (Caroline, Dorchester*, Queen Anne’s).					
Flw: Aug; Fr: Aug-Sept.					
<i>Coreopsis tripteris</i> Linnaeus Asteraceae (Aster Family)	Tall Tickseed	G5	S1	E	
Cons/Econote: Restricted to the Potomac Gorge, but historically known from similar habitats along the Susquehanna River. Total annual population size in Maryland ranges from 500-1000 plants.					
Habitat: Bedrock scour bars and riverside prairies, in rich alluvium.					
Distr. PD (Cecil*, Harford*, Montgomery).					
Flw: late Aug-Sept; Fr: Sept-Oct.					
<i>Coreopsis verticillata</i> Linnaeus	Whorled Coreopsis	G5	S3		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Asteraceae (Aster Family)					
Habitat: Dry meadows, roadsides, dry oak-hickory forests, serpentine barrens and woodlands.					
Distr. CP, PD, RV* (Anne Arundel, Charles, Howard, Montgomery, Prince George's, Washington*).					
Flw: late Jun-Aug; Fr: Jul-Sept.					
<i>Cornus canadensis</i> Linnaeus	Dwarf Dogwood, Bunchberry	G5	S1	E	
Cornaceae (Dogwood Family)					
Cons/Econote: This common boreal species nears its southern range limit in Maryland and is known to be extant at a single unprotected station.					
Habitat: Edge of shrub swamp.					
Distr. AP (Garrett).					
<i>Cornus rugosa</i> Lamarck	Roundleaf Dogwood	G5	S1	E	
Cornaceae (Dogwood Family)					
Syn: <i>Swida rugosa</i> (Lamarck) Rydberg					
Cons/Econote: Occurring in Maryland near the southern range limit. Maryland populations are not so much populations, but rather isolated occurrences of a few stems.					
Habitat: Limestone woodlands, often on steep and rocky slopes.					
Distr. AP, RV (Alleghany, Frederick*, Garrett, Washington).					
<i>Corydalis sempervirens</i> (Linnaeus) Persoon	see <i>Capnoides sempervirens</i> (Linnaeus) Borkhausen				
<i>Corylus cornuta</i> Marshall	Beaked Hazelnut	G5	S3		
Betulaceae (Birch Family)					
Cons/Econote: Noted by Shreve et al. (1910, p. 226) as a component of "cut over areas that in certain localities form the roadside shrubbery". Restoration activities to increase this species abundance are underway at Finzel Swamp Preserve.					
Habitat: Thickets, forest edges and roadsides.					
Distr. AP, PD, RV (Baltimore, Frederick, Garrett, Howard, Washington).					
Flw: May; Fr: Jun-Oct. (the long beak on the fruit visible in early June).					
<i>Crassula aquatica</i> (Linnaeus) Schönland	Water Pygmyweed	G5	S1	E	
Crassulaceae (Stonecrop Family)					
Syn: <i>Tillaea aquatica</i> Linnaeus					
Cons/Econote: A plant of tidal marshes and shores occurring south to Maryland. Recently rediscovered after a period of 63 years in Charles County. The historical habitat (based upon multiple collections along the Wicomico River from about 1863 to 1938) in Wicomico County (near Salisbury) is greatly altered by dams and thus no longer tidal, and the areas southwest of Salisbury are strongly brackish.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Fresh tidal marshes. Distr. CP (Charles, Wicomico*). Flw: Apr; Fr: mid-late May</p>					
<p><i>Crocanthemum bicknellii</i> (Fernald) Barnhart Cistaceae (Rockrose Family) Syn: <i>Helianthemum bicknellii</i> Fernald Cons/Econote: Endangered by habitat loss and fire exclusion. The coastal stations, presumably sandy/gravelly barrens are considered extirpated. Habitat: Serpentine grasslands. Distr. CP*, PD (Anne Arundel*, Baltimore, Cecil, Harford, Prince George's*).</p>	Plains Frostweed	G5	S1	E	
<p><i>Cubelium concolor</i> (T.F. Forster) Raf. ex Britton & A. Brown Violaceae (Violet Family) Syn: <i>Hybanthus concolor</i> (T.F. Forster) Sprengel Cons/Econote: Locally abundant at some sites but generally restricted to highly calcareous soils. Habitat: Dry to mesic limestone woodlands and outcrops. Distr. PD, RV (Allegany, Cecil, Frederick, Harford, Montgomery, Washington). Flw: May; Fr: Jun-Aug.</p>	Green Violet	G5	S3		
<p><i>Cuscuta coryli</i> Engelman Convolvulaceae (Morning Glory Family) Taxnote: Spaulding (2013) provides a valuable treatment and discussion of the species. Cons/Econote: Documented by few, widely scattered collections from 1873-1939 and perhaps only an occasional vagrant species in MD spread by waterfowl (e.g., Costea et al. (2016) confirmed seed dispersal by waterfowl in dodders). Not all records have been verified, several may be the more common <i>C. indecora</i>. A recent collection from Cecil County (J. Hall, JH2014.09.28-08 MARY, TAWES) from unremarkable habitat prompted a review of rank and status. Habitat: Brackish marshes. Hosts (from NHP observations) include <i>Iva</i>, <i>Desmodium</i>, <i>Baccharis</i>, and <i>Solidago</i>. Distr. AP*, CP, PD* (Anne Arundel*, Cecil, Garrett*, Queen Anne's*, Montgomery*, St. Mary's*, Talbot*). Flw: Sept; Fr: Sept-Nov.</p>	Hazel Dodder	G5?	S1		
<p><i>Cuscuta indecora</i> Choisy Convolvulaceae (Morning Glory Family) Taxnote: Maryland plants are thus far, var. <i>neuropetala</i> (Engelmann) A. S. Hitchcock. Spaulding (2013) provides a valuable treatment and discussion of the species.</p>	Bigseed Dodder	G5T5	S2?		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: The distribution and number of <i>Cuscuta</i> species is poorly known and the species even more poorly collected. Perhaps overlooked, the species is not identifiable until late summer/early fall. Costea et al. (2016) confirmed seed dispersal by waterfowl in dodders. The historical status of some counties in the distribution is likely an artifact of survey intensity.</p> <p>Habitat: Brackish marshes, coastal sand spits, growing on a variety of substrates (<i>Iva</i>, <i>Baccharis</i>, <i>Solidago sempervirens</i>), typically along dikes, roadside edges, occasionally beach-front dunes.</p> <p>Distr. CP (Anne Arundel*, Calvert, Dorchester, Kent, Queen Anne's*, St. Mary's*; distribution is provisional).</p> <p>Flw: Aug-Sept; Fr: Sept-early Nov.</p>					
<i>Cuscuta polygonorum</i> Engelmann Convolvulaceae (Morning Glory Family)	Smartweed Dodder	G5	S1	E	
<p>Cons/Econote: Known from a couple of small populations and apparently rare regionally. Spaulding (2013) provides a valuable treatment and discussion of the species. Costea et al. (2016) confirmed seed dispersal by waterfowl in dodders. The Anne Arundel station has not been relocated in recent years.</p> <p>Habitat: Riverine marsh, oxbows.</p> <p>Distr. CP, PD* (Anne Arundel, Caroline, Harford*, Montgomery*, Wicomico?).</p>					
<i>Cuscuta rostrata</i> Shuttleworth Convolvulaceae (Morning Glory Family)	Beaked Dodder	G4	S1	E	
<p>Cons/Econote: Endemic to the Southern Appalachians and at its northern range limit in Maryland. Spaulding (2013) provides a valuable treatment and discussion of the species.</p> <p>Habitat: "Mountaintop woods", presumably a red spruce forest (<i>Picea rubens</i>) historically.</p> <p>Distr. AP (Garrett).</p>					
<i>Cyperus dentatus</i> Torrey Cyperaceae (Sedge Family)	Toothed Sedge	G4	SH	X	
<p>Cons/Econote: Last collected in 1960; the stations are thought to have been extirpated.</p> <p>Habitat: Sandy shorelines.</p> <p>Distr. CP* (Cecil*, Harford*, Wicomico*).</p>					
<i>Cyperus diandrus</i> Torrey Cyperaceae (Sedge Family)	Umbrella Flatsedge	G5	SU		
<p>Cons/Econote: Presumably rare; the Service lacks the information to establish a confident rank.</p> <p>Habitat: Interdunal swales; ponds.</p> <p>Distr. CP (Prince George's?, Worcester).</p>					
<i>Cyperus haspan</i> Linnaeus	Sheathed Flatsedge	G5	S1?		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Cyperaceae (Sedge Family)					
Cons/Econote: A pantropical species variously treated as an invasive weed and as a conservation target in the southeastern U.S. The Service is unsure of this species' conservation rank. See Bryson & Carter (2008) for discussion.					
Habitat: Fresh tidal marsh.					
Distr. CP (Worcester).					
<i>Cyperus houghtonii</i> Torrey	Houghton's Umbrella-sedge	G4?		S1	
Cyperaceae (Sedge Family)					
Cons/Econote: Apparently regionally rare (see NatureServe 2015), infrequently reported and often confused with <i>C. grayii</i> or <i>C. lupulinus</i> ; identifications of some Maryland specimens are tentative.					
Habitat: Shale barrens, rock outcrops.					
Distr. RV (Alleghany*, Washington).					
<i>Cyperus hystricinus</i> Fernald	Flatsedge	G4		S2	
Cyperaceae (Sedge Family)					
Cons/Econote: Infrequently reported but often confused with <i>C. retrofractus</i> and <i>C. lancastricensis</i> . Maryland collections require careful study to assess abundance and distribution. Responded well to prescribed fire at Chicone Woods in Dorchester County, not only in overall abundance but also in the robustness of the plants (approaching one meter in height!).					
Habitat: Open sandy soils in woodlands, meadows and barrens; sandy alluvium.					
Distr. CP, PD (Anne Arundel, Caroline, Cecil, Charles, Dorchester, Harford, Kent, Montgomery, Queen Anne's*, Wicomico*, Worcester; distribution likely incomplete).					
Flw/Fr: late Jul-Oct. (new stems are produced throughout these months and scales with seed may persist into November).					
<i>Cyperus lancastricensis</i> Porter ex A. Gray	Many-flowered Umbrella-sedge	G5		S2S3	
Cyperaceae (Sedge Family)					
Cons/Econote: Recorded from "weedy" plots along the Sassafrass River and from natural barrens this species has a broad within-State range and may be locally dominant in recently disturbed habitats. Mixed populations with <i>C. hystricinus</i> occur on the Coastal Plain. Hybrids with <i>C. refractus</i> and <i>C. strigosus</i> have been reported in MD specimens. Not all historical records have been verified.					
Habitat: Dry to mesic sandy soils, often on eroding roadbanks and bluffs, sandy woodland edges, ditches, sandy edges of vernal pools.					
Distr. CP, PD, RV (Anne Arundel, Baltimore*, Calvert, Caroline, Cecil, Charles, Dorchester, Harford, Howard*, Frederick*, Kent, Montgomery, Prince George's, Washington).					
Flw/Fr: late Jun-Sept (Oct).					
<i>Cyperus plukenetii</i> Fernald !	Plukenet's Flatsedge	G5		S1	X(PE)
Cyperaceae (Sedge Family)					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: This southeastern species, of sandy woodlands and barrens, becomes increasingly rare north of the Carolinas. Last collected in 1939 near Salisbury by Robert Tatnall, but recently rediscovered by Anthony Silva in a remnant sandy barren, also near Salisbury in 2019. Animal dispersal of achenes has been implicated for this species by Carter (1993). The area around Salisbury, MD was once (pre-settlement) apparently a large expanse of sandy and peaty barrens. Seed were collected from the few remaining plants at the extant station in order to determine seed germination requirements and for use in restoration activities at a natural area in Worcester County. The Service is reviewing a change to this species' State Status.</p> <p>Habitat: Sandy woodlands and barrens.</p> <p>Distr. CP (Wicomico, Worcester).</p> <p>Flw/Fr: late Aug-early Oct. (new stems are produced throughout these months and scales with seed may persist into November).</p>					
<i>Cyperus refractus</i> Engelman ex Böckler	Reflexed Flatsedge	G5	S2?		
<p>Cyperaceae (Sedge Family)</p> <p>Cons/Econote: Occurring in a variety of open and often disturbed habitats and perhaps overlooked.</p> <p>Habitat: Sandy or rocky open woodlands, roadsides, field edges.</p> <p>Distr. CP, PD, RV (Anne Arundel*, Caroline, Cecil*, Charles, Dorchester, Frederick, Harford*, Howard*, Montgomery, Prince George's, Wicomico*, Worcester).</p>					
<i>Cyperus retrofractus</i> (Linnaeus) Torrey	Rough Flatsedge	G5	S2		
<p>Cyperaceae (Sedge Family)</p> <p>Syn: <i>C. dipsaciformis</i> Fernald, in part.</p> <p><i>C. retrofractus</i> (Linnaeus) Torrey var. <i>dipsaciformis</i> (Fernald) Kükenthal</p> <p>Cons/Econote: There is considerable confusion regarding the identity of many unvouchered reports. Those that have been investigated have resulted in determinations of other species including <i>C. hystricinus</i>, <i>C. lancastriensis</i> and <i>C. refractus</i>. This species responded favorably to prescribed fire at one inland dune location spreading throughout a 100 acre management area and reappeared at another site after a spring burn.</p> <p>Habitat: Open, often xeric sandy soils, sandy alluvium, dry roadsides and meadows.</p> <p>Distr. CP, PD (Caroline, Dorchester, Kent?, Montgomery, Wicomico?, Worcester).</p> <p>Flw/Fr: late Aug-Oct. (new stems are produced throughout these months and scales with seed may persist into November).</p>					
<i>Cypripedium candidum</i> Muhlenberg ex Willdenow	Small White Lady's-slipper	G4	S1	E	
<p>Orchidaceae (Orchid Family)</p> <p>Cons/Econote: Extremely rare in the southeastern U.S. and declining rangewide over the last century (NatureServe 2015).</p> <p>Habitat: River-fronting bluffs and mesic forests over limestone.</p> <p>Distr. RV (Washington).</p> <p>Flw: mid-late May; Fr: Jul-Sept.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Cypripedium parviflorum</i> Salisbury var. <i>pubescens</i> (Willdenow) Knight	Large Yellow Lady's-slipper	G5T5	S3		

Syn: *C. pubescens* Willdenow

C. calceolus Linnaeus var. *pubescens* (Willdenow) Correll

Cons/Econote: The Convention on International Trade in Endangered Species of Wild Fauna and Flora (CITES) currently lists all *Cypripedium* species under CITES Appendix II. This indicates that the species are not necessarily threatened with extinction but they may become threatened unless trade is closely controlled. According to Natureserve (2015) there are very few reports of large, demonstrably secure populations anywhere in North America. There are a few verified instances of poaching from wild populations in Maryland but the Service is unsure of whether these losses are due to horticulture or the medicinal plant trade. Adding to the difficulty of assigning a conservation rank are the extreme fluctuations in demographic estimates at well-known stations over years, e.g., alternately robust and flowering to apparently absent. An additional source of demographic variability may be excessive browse by white-tailed deer. Knapp & Wiegand (2014) demonstrated an inverse relationship between deer population size and orchid population size and concluded that this species had been extirpated from most sites in the Catoctin Mountains (Frederick County) where it was once secure (17 sites and ~ 127 individuals in the highest census year). In the distribution below the Service is unsure of the number of extant populations; the putative distribution is largely that of Reed (1964) as emended by recent surveys.

Habitat: Rich hardwood forests, often along forest edges and clearings and generally over soils derived from calcareous (shell-marl?, shale, limestone) substrates.

Distr. AP, CP*, PD, RV (Alleghany, Baltimore, Cecil, Frederick, Garrett, Harford, Howard, Montgomery, Prince George's*, Talbot*).

Flw: mid May; **Fr:** Jul-Sept.

<i>Cypripedium reginae</i> Walter Orchidaceae (Orchid Family)	Showy Lady's-slipper	G4	SH	X	
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Cons/Econote: Last observed by D.E. Redman (see Redman 2002); the site has not been relocated.

Habitat: Sphagnous seep.

Distr. AP* (Garrett*).

<i>Cystopteris bulbifera</i> (Linnaeus) Bernhardt Cystopteridaceae (Brittle Fern Family)	Bulblet Fern	G5	S3		
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Cons/Econote: In Maryland an obligate calciphile, locally abundant at some sites.

Habitat: Limestone outcrops.

Distr. RV (Washington).

Phenology: bulblets and sori visible in early August.

<i>Cystopteris tennesseensis</i> Shaver Cystopteridaceae (Brittle Fern Family)	Tennessee Bladderfern	G5	S1		
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Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: A fertile tetraploid species derived from <i>C. bulbifera</i> and <i>C. protrusa</i>. Located and identified by D. E. Redman (see Redman 1995). Extirpated from a long-known Frederick County station (1938-1991) at the Catoctin Iron Furnace stack.</p> <p>Habitat: Limy crevices of stone bridge abutments.</p> <p>Distr. PD, RV* (Frederick*, Harford).</p>					
<i>Dactylorhiza viridis</i> (Linnaeus) R.M. Bateman, Pridgeon, and M.W. Chase	Long-bract Green Orchis	G5T5	S1	E	
Orchidaceae (Orchid Family)	Frog Orchid				
<p>Syn: <i>Coeloglossum viride</i> (Linnaeus) Hartman</p> <p>Taxnote: Maryland plants are the Appalachian var. <i>virescens</i> (Muhlenberg ex Willdenow) Luer.</p> <p>Cons/Econote: Undergoing a severe decline, several of our records have not been seen in decades, presumably due to intensive deer browse of small populations. Caging of plants to prevent browse has been employed by the Service to increase reproductive output.</p> <p>Habitat: Rich, deciduous forests, spring-fed headwater seep under hemlock (<i>Tsuga canadensis</i>).</p> <p>Distr. AP, PD*, RV (Baltimore*, Frederick, Garrett).</p> <p>Flw: late May-Jun; Fr: Aug-Oct.</p>					
<i>Delphinium exaltatum</i> Aiton	Tall Larkspur	G3	S1	E	
Ranunculaceae (Buttercup Family)					
<p>Cons/Econote: Occurring in Maryland in several small populations, a situation commonly reported throughout the range of this globally rare species. Deer browse has had a devastating effect on Maryland plants, essentially removing plants from the gently sloping open limestone woodlands and restricting them to steep, often vertical outcrops.</p> <p>Habitat: Limestone woodlands.</p> <p>Distr. RV (Alleghany, Washington).</p> <p>Flw: late Jul-early Aug; Fr: Sept-Oct.</p>					
<i>Delphinium tricorne</i> Michaux	Dwarf Larkspur	G5	S3		
Ranunculaceae (Buttercup Family)					
<p>Habitat: Rich woods, river bluffs and alluvial terraces, often over limestone where it may be locally abundant.</p> <p>Distr. PD, RV (Alleghany, Frederick, Montgomery, Washington).</p> <p>Flw: late Apr-mid May; Fr: Jun.</p>					
<i>Deschampsia cespitosa</i> (Linnaeus) Palisot de Beauvois	Tufted Hairgrass	G5	S1	E	
Poaceae (Grass Family)					
<p>Syn: <i>D. caespitosa</i>, an orthographic variant.</p> <p>Cons/Econote: Endangered by habitat loss, fire exclusion, and woody plant succession.</p> <p>Habitat: Thin soils of serpentine barrens.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Distr. PD (Baltimore, Cecil). Flw/Fr: mid May-early Jun.</p>					
<i>Desmodium canadense</i> (Linnaeus) A.P. de Candolle	Showy Tick-trefoil	G5	SH		
<p>Fabaceae (Legume Family) Habitat: Wet meadows, river banks, perhaps associated with calcareous soils. Native range may be obscured by planted material at mitigation sites. State rank under review. Distr. CP, PD* (Anne Arundel?, Calvert*, Cecil*, Harford*, Howard?, Montgomery, Prince George's*).</p>					
<i>Desmodium cuspidatum</i> (Muhlenberg ex Willdenow) A.P. de Candolle ex Loudon	Toothed Tick-trefoil	G5T5?	S1		
<p>Fabaceae (Legume Family) Taxnote: Maryland plants are thus far the more midwestern <i>var. longifolium</i> (Torrey & A. Gray) Schubert. The large floral bracts subtending each flower are diagnostic but are short-lived. Cons/Econote: Apparently rare (or rarely collected) but cited in several Maryland floristic works as widespread signaling either a severe decline in range or confusion with other species; the Service suspects the latter. Habitat: Shale woodland slopes, calcareous outcrops. Distr. CP*, PD*, RV (Allegany, Montgomery*, Prince George's*). Flw: late Jun-Jul; Fr: Aug-Oct.</p>					
<i>Desmodium fernaldii</i> Schubert	Fernald's Tick-trefoil	G4	S1		
<p>Fabaceae (Legume Family) Cons/Econote: Restricted to small populations along sandy roadsides. Maryland plants occupy the extreme northern end of the documented range. Fire suppression likely plays a role in this species' rarity. Habitat: Open xeric sands, roadsides through sand ridge woodlands. Distr. CP (Dorchester).</p>					
<i>Desmodium humifusum</i> (Muhlenberg ex Bigelow) Beck	Trailing Tick-trefoil	G1G2Q	SH	X	
<p>Fabaceae (Legume Family) Syn: <i>Desmodium x humifusum</i> (Muhlenberg ex Willdenow) L.C. Beck Taxnote: Raveill (2002) documented allozyme evidence of a hybrid origin (<i>D. paniculatum</i> (L.) A.P. de Candolle x <i>D. rotundifolium</i> A.P. de Candolle); however, the taxon has a unique morphology and occurs rarely, even in the presence of both parents. An independent evolutionary lineage for this species cannot be dismissed; thus the Service prefers to treat it as a species of conservation concern. Cons/Econote: Restricted to a few extant sites in the northeastern U.S., this taxon has undergone a rangewide retraction. W. Canby made a series of collections from the Salisbury, Maryland area between 1865 and 1867. Habitat: Dry sandy soil.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP* (Wicomico*).					
<i>Desmodium laevigatum</i> (Nuttall) A.P. de Candolle Fabaceae (Legume Family)	Smooth Tick-trefoil	G5	S3		
Cons/Econote: Widespread on the Coastal Plain but generally in low numbers and with few large, protected, ‘core’ populations. Responds robustly to prescribed fire, often becoming a dominant species within a few years, particularly in frequently-burned habitats.					
Habitat: Sandy roadsides, inland sand dune and ridge woodlands, field edges in dry sandy or rocky soil.					
Distr. CP, PD*, RV? (Allegany?, Anne Arundel, Baltimore*, Calvert, Caroline, Cecil, Dorchester, Howard*, Kent, Montgomery*, Prince George’s, Somerset, Talbot*, Wicomico, Worcester).					
Flw: mid Aug-early Sept; Fr: Sept-Oct.					
<i>Desmodium lineatum</i> A.P. de Candolle Fabaceae (Legume Family)	Sand Tick-trefoil Lined Tick-trefoil	G5	SH	X	
Cons/Econote: There are several specimens representing additional historical locations (nearly all pre-1900) in the counties below that have not been verified. The report habit of this species may pre-dispose it to rarity given that it may easily be shaded by other vegetation. The Service suspects that this species may be more closely tied to fire events than other <i>Desmodium</i> species. There are many other <i>Desmodium</i> that appear to do well in forest edges, powerline cuts, etc, but nearly all those species are robust erect plants. Although reported in the literature from Soldier’s Delight in Baltimore County, all specimens have thus far been other species and not <i>D. lineatum</i> .					
Habitat: Sandy barrens and woodlands.					
Distr. CP* (Charles*, Calvert*, Prince George’s?, Wicomico*, Worcester*).					
<i>Desmodium nuttallii</i> (Schindler) Schubert Fabaceae (Legume Family)	Nuttall’s Tick-trefoil	G5	S1?		
Taxnote: Often included within a broader concept of <i>D. viridiflorum</i> . This species appears to be well-segregated; however, it takes some familiarity with these species to distinguish between them in the field.					
Cons/Econote: Rarely collected and perhaps only rarely identified, but much less abundant than <i>D. viridiflorum</i> . This species has responded well to annual burns at a site in Caroline County.					
Habitat: Sandy roadsides, inland sand dunes and ridges, forest edges.					
Distr. CP, PD* (Baltimore*, Caroline, Dorchester, Montgomery?, Worcester).					
Flw: Aug; Fr: Sept-Oct.					
<i>Desmodium obtusum</i> (Muhlenberg ex Willdenow) A.P. de Candolle Fabaceae (Legume Family)	Stiff Tick-trefoil	G4G5	S1	E	
Syn: <i>D. rigidum</i> (Elliott) A.P. de Candolle					
Cons/Econote: Endangered by habitat loss and small population size; many stations contain only a few stems.					
Habitat: Dry, open sandy or rocky woodlands, roadsides, field edges.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP, PD* (Baltimore, Cecil, Calvert, Dorchester*, Harford*, Kent, Montgomery*, Prince George's*, Worcester).					

***Desmodium ochroleucum* M.A. Curtis ex Canby**

Cream Tick-trefoil

G2G3

S1

E

Fabaceae (Legume Family)

Cons/Econote: Endangered by habitat loss over the long term. Collected numerous times historically (1863-1910) and labeled in a rather casual manner, with only vague locality information, suggesting the species was not uncommonly encountered. Tyndall & Groller (2006) discuss the conservation status and restoration of this species at the Maryland site.

Habitat: Sandy barrens and open oak woodlands.

Distr. CP (Calvert*, Caroline*, Dorchester, Talbot*, Worcester*).

Flw: Aug; **Fr:** Sept.

Desmodium pauciflorum (Nuttall) A.P. de Candolle

see *Hylodesmum pauciflorum* (Nuttall) H. Ohashi & R.R. Mill

***Desmodium sessilifolium* (Torrey) Torrey & A. Gray**

Sessile-leaf Tick-trefoil

G5

SH

X

Fabaceae (Legume Family)

Cons/Econote: Extremely rare in the eastern US. Last Maryland collection dated 1965; several old specimens at Harvard U. from areas along the Sassafrass River.

Habitat: Woodlands and glades.

Distr. PD*, RV* (Baltimore*, Cecil*, Washington*).

***Desmodium strictum* (Pursh) A.P. de Candolle**

Pineland Tick-trefoil

G4

S1

E

Fabaceae (Legume Family)

Cons/Econote: Endangered by habitat loss; fire suppression very likely plays a role in this species' rarity.

Habitat: Sandy roadsides, forest edges of sand ridges, sandy fields.

Distr. CP (Anne Arundel*, Baltimore*, Dorchester, Wicomico, Worcester).

Flw: late Aug-Sept; **Fr:** Sept-Nov.

***Dicentra eximia* (Ker-Gawler) Torrey**

Wild Bleedinghearts

G4

S2

T

Fumariaceae (Fumitory Family)

Cons/Econote: An Appalachian endemic and one of our loveliest wildflowers, this species is both geographically restricted and occurs in a specialized habitat. Threatened by habitat loss and succession to closed-canopy forest. Fire suppression likely plays a role in this species' rarity.

Habitat: Sandstone outcrops, shale cliffs and glades.

Distr. AP, CP¹, PD¹, RV (Allegheny, Garrett, Montgomery¹, Prince George's¹; widely planted outside of native range).

Flw: mid May-early Jun; **Fr:** Jun-Jul.

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Dichanthelium aciculare</i> (Desvaux ex Poiret) Gould & Clark Poaceae (Grass Family) Syn: <i>Panicum aciculare</i> Desvaux ex Poiret <i>Dichanthelium filiramum</i> (Ashe) LeBlond, in part (as to Maryland plants). <i>Panicum arenicoloides</i> Ashe, in part (as to Maryland plants). Taxref: LeBlond (2016). Taxnote: The Service is presently reconciling the records for this species following LeBlond (2016). Presently our records include several specimens that are <i>D. filirameum</i> (Ashe) LeBlond (= <i>Panicum chrysopsidifolium</i> Nash) having the same within-state range as below. Our records also contain specimens matching <i>Dichanthelium</i> species 1 in Weakley (2015) (= <i>Panicum arenicoloides</i> Ashe), known from dry woodlands in the Ridge and Valley (Alleghany County) and Coastal Plain (Worcester County). Additional field and herbarium work is needed. Cons/Econote: This species has been confirmed from pine-barrens-like habitat on the Eastern Shore. There are several reports of this species from the Western Shore and the Piedmont but these have not been confirmed. Habitat: Dry sandy pinelands, meadows and clearings. Distr. CP (Wicomico, Worcester; distribution provisional). Flw/Fr: early Jun.	Needle Witchgrass	G5	S2?		
<i>Dichanthelium annulum</i> (Ashe) LeBlond Poaceae (Grass Family) Syn: <i>Panicum annulum</i> Ashe Taxnote: Often subsumed within the <i>D. dichotomum</i> group, see LeBlond (2001) for details. Cons/Econote: A component of dry, fire-prone woodlands and barrens over ultramafic soils, this species was collected in the vicinity of Chevy Chase, MD by Agnes Chase in the early 1900s and rediscovered by John Parrish in 2018. Habitat: Diabase glade. Distr. PD (Montgomery).	Ringed Witchgrass	GNR	S1	PE	
<i>Dichanthelium bicknellii</i> (Nash) LeBlond Poaceae (Grass Family) Syn: <i>Dichanthelium boreale</i> (Nash) Freckmann in part. <i>Panicum bicknellii</i> Nash Taxref: LeBlond (2016). Taxnote: Most records for <i>D. boreale</i> and additional recent discoveries by the Service are the newly circumscribed <i>D. bicknellii</i> (LeBlond 2016). Assigning a confident state rank requires investigation into stations within the historical distribution below; however, some recent specimens have proven to be <i>D. boreale</i> s.s. The rank of <i>D. boreale</i> , with uncertain distribution not only in Maryland but also within the midatlantic states has yet to be determined. Habitat: Dry shaly, rocky or sandy woodlands.	Bicknell's Witchgrass	G4?Q	SU		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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Distr. CP, PD*, RV (Allegheny, Baltimore*, Carroll*, Frederick*, Montgomery*, Prince George's, Wicomico, Worcester; distribution provisional).

Flw/Fr: late May-mid Jun.

***Dichanthelium laxiflorum* (Lamarck) Gould**

Open-flower Witchgrass

G5

S1?

Poaceae (Grass Family)

Syn: *Panicum laxiflorum* Lamarck

P. xalapense Humboldt, Bonpland, & Kunth

Cons/Econote: Maryland stations represent the northern limits of the species' range and the species is here assigned a tentative conservation rank pending additional field work.

Habitat: Riverine scour woodlands, depositional bars and glades.

Distr. CP, PD (Montgomery, Prince George's; distribution provisional).

***Dichanthelium leucothrix* (Nash) Freckmann**

Roughish Witchgrass

G4?Q

SU

Poaceae (Grass Family)

Syn: *D. acuminatum* ssp. *leucothrix* (Nash) Freckmann & Lelong

Panicum leucothrix Nash

Cons/Econote: Currently there is not enough information to establish a confident conservation rank. The species may be restricted to coastal peaty fens and seeps but this has not been sufficiently demonstrated. *D. meridionale* (Ashe) Freckmann is similar but occurs in drier soils. A previous record from Wicomico County has been annotated to *D. longiligulatum*.

Habitat: Dry to moist forests, clearings, outcrops.

Distr. CP (Allegheny*, Anne Arundel? Charles; distribution provisional).

Flw/Fr: Aug.

***Dichanthelium longiligulatum* (Nash) Freckmann**

Coastal Plain Witchgrass

G4G5Q

SU

Poaceae (Grass Family)

Syn: *Panicum longiligulatum* Nash

Dichanthelium acuminatum ssp. *longiligulatum* (Nash) Freckmann & Lelong

Cons/Econote: Added to the tracking list in 2019 based upon observations by Robert Naczi (New York Botanical Garden) that a single Maryland specimen had been located (Knapp 978 TAWES). Maryland is near the northeastern periphery of the species' range.

Habitat: Seasonally flooded coastal swamps.

Distr. CP (Wicomico; distribution provisional).

***Dichanthelium oligosanthes* (Schultes) Gould**

Few-flowered Witchgrass

G5T5?

S2S3?

var. *oligosanthes*

Poaceae (Grass Family)

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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Syn: *Panicum oligoanthes* Schultes var. *oligoanthes*

Cons/Econote: This species occurs in large populations at some stations but is otherwise infrequent. Intolerant of shade and heavy leaf litter, populations decline upon canopy closure.

Habitat: Open xeric sands of inland sand dune and ridge woodlands; sandy old fields and clearings.

Distr. CP (Caroline, Charles, Dorchester, Prince George's*, Wicomico, Worcester; expected elsewhere on the Coastal Plain).

Flw/Fr: mid May-early Jun.

***Dichantheium oligoanthes* (Schultes) Gould
var. *scribnerianum* (Nash) Gould**

Scribner's Witchgrass

G5T5

S2

Poaceae (Grass Family)

Syn: *P. oligoanthes* Schultes var. *scribnerianum* (Nash) Fernald

P. scribnerianum Nash

Cons/Econote: Occurring with a limited distribution in Maryland, threatened by fire exclusion and woody succession of habitat, particularly Virginia pine (*Pinus virginiana*).

Habitat: Serpentine barrens.

Distr. PD (Baltimore, Cecil, Montgomery*).

Flw/Fr: Jun-Jul.

***Dichantheium ravenelii* (Scribner & Merrill) Gould**

Ravenel's Witchgrass

G5

SH

Poaceae (Grass Family)

Syn: *Panicum ravenelii* Scribner & Merrill

Cons/Econote: Reports from inland sand dune and ridge forests on the Coastal Plain (Eastern Shore) were based upon misidentified specimens of *D. oligoanthes* var. *oligoanthes*. The distribution below is based upon a few, very old, herbarium specimens (1905-1911).

Habitat: Sandy or gravelly barrens and woodlands.

Distr. CP*, PD* (Montgomery*, Prince George's*, St. Mary's*; distribution provisional).

***Dichantheium scabriusculum* (Elliott) Gould & Clark**

Tall Swamp Witchgrass

G4

S1

E

Poaceae (Grass Family)

Woolly Witchgrass

Syn: *Panicum scabriusculum* Elliott

Taxnote: LeBlond determined that plants referable to *Dichantheium aculeatum* (Hitchcock & Chase) LeBlond in prep. are present (at least historically) in our area (Takoma Park, straddling the District of Columbia and Montgomery County, MD). Reveal & Broome (1981) discussed these Takoma Park specimens concluding that they were conspecific with plants collected by J.B.S. Norton from Snow Hill in Worcester County (*D. scabriusculum* s.s.). LeBlond (pers. comm.) states that *D. aculeatum* may be distinguished from *D. scabriusculum* by a combination of constant characters. Thus, in the distribution below, the Montgomery County record is *D. aculeatum*; *D. scabriusculum* is a species of the coastal plain.

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Endangered by woody succession of open wetland habitat and herbicide use (along powerlines where the species is often found).</p> <p>Habitat: Acidic seeps and open sphagnous meadows; sea level fen.</p> <p>Distr. CP, PD* (Montgomery*, Wicomico, Worcester).</p>					
<p><i>Dichanthelium wrightianum</i> (Scribner) Freckmann Poaceae (Grass Family) Syn: <i>Panicum wrightianum</i> Scribner</p>	Wright's Witchgrass	G4	S1	E	
<p>Cons/Econote: Endangered by woody succession of open boggy habitats.</p> <p>Habitat: Acidic seepage fen and saturated swales in peaty soil.</p> <p>Distr. CP (Wicomico).</p> <p>Flw/Fr: late Jun.</p>					
<p><i>Digitaria villosa</i> (Walter) Persoon Poaceae (Grass Family) Syn: <i>D. filiformis</i> Linnaeus var. <i>villosa</i> (Walter) Fernald</p>	Shaggy Crabgrass	G5T5	S1?		
<p>Taxnote: Most Maryland plants are <i>D. filiformis</i> with smaller spikelets (<2.0 mm) but these plants often have long raceme lengths (>10 cm) and hairy lower sheaths. There may be a geographic, north-south trend in spikelet size and general plant height. The taxonomic usefulness of raceme width to distinguish the species needs to be assessed. The distribution below is that of <i>D. villosa</i> in its narrow sense, a plant apparently restricted to the lower Eastern Shore.</p> <p>Cons/Econote: Plants on recently burned inland dune woodlands are robust, with culm lengths in excess of one meter.</p> <p>Habitat: Sandy fields, roadsides, inland dunes.</p> <p>Distr. CP (Worcester).</p> <p>Flw/Fr: mid Sept-early Oct.</p>					
<p><i>Diphasiastrum tristachyum</i> (Pursh) Holub Lycopodiaceae (Clubmoss Family) Syn: <i>Lycopodium tristachyum</i> Pursh</p>	Deep-root Clubmoss	G5	S3		
<p>Eco/Consnote: Frequent on the Appalachian Plateau, but rarer east of that physiographic province. This species is much more restricted in geographic extent than its congener, <i>D. digitatum</i>, although both occur in acidic, nutrient poor and often sterile soils. Historically much more abundant along the Fall Line in Prince George's County—these boggy habitats now largely extirpated due to urban sprawl and/or reduced to fragments.</p> <p>Habitat: Sandy woods and pine-oak thickets (Coastal), northern hardwood forests (Mountains).</p> <p>Distr. AP, CP, PD, RV (Anne Arundel, Baltimore*, Caroline, Cecil, Charles, Dorchester, Frederick?, Garrett, Harford, Montgomery, Prince George's, Somerset, Wicomico, Worcester).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Diplazium pycnocarpon</i> (Sprengel) M. Broun	see <i>Homalosorus pycnocarpos</i> (Sprengel)				Pichi-Sermolli
<i>Dirca palustris</i> Linnaeus Thymelaceae (Mezereum Family)	Eastern Leatherwood	G4	S2	T	
Cons/Econote: Occurring as scattered colonies. Even the largest populations appear to be restricted to small areas in what otherwise appears to be nearly continuous appropriate habitat.					
Habitat: Basic mesic forests and montane alluvial forests associated with soils derived from mafic (limestone, calcareous shale) or ultramafic (amphibolite, diabase) substrates. Often mixed with spicebush (<i>Lindera benzoin</i>), which makes it difficult to spot.					
Distr. AP, PD, RV (Allegany, Baltimore*, Cecil, Frederick, Garrett, Howard, Montgomery, Washington).					
Flw: early-mid April (late Apr-early May in Garrett); Fr: May-Jun.					
<i>Dodecatheon media</i> Linnaeus	see <i>Primula meadia</i> (Linnaeus)				A.R. Mast & Reveal
<i>Doellingeria infirma</i> (Michaux) E. Greene Asteraceae (Aster Family)	Cornel-leaf Aster	G5	S3		
Syn: <i>Aster infirmus</i> Michaux					
Habitat: Woodlands, glades, fields and upland forest edges, often, but not always over calcium-rich soils.					
Distr. AP, CP*, PD, RV (Allegany, Baltimore, Carroll?, Frederick, Garrett, Harford, Montgomery, Prince George's*).					
Flw: late Jul-early Aug; Fr: Aug-Sept.					
<i>Drosera brevifolia</i> Pursh Droseraceae (Sundew Family)	Dwarf Sundew	G5	S1		
Cons/Econote: Added to the flora by Chase Howard in 2019. Maryland is the northern-most station for this southeastern sundew. Appeared, or more likely, became more observable after restoration activities at the Nassawango Preserve.					
Habitat: Sandy peaty soil.					
Distr. CP (Worcester).					
Flw: May Fr: Aug-Sept.					
<i>Drosera capillaris</i> Poiret Droseraceae (Sundew Family)	Pink Sundew	G5	S1	E	
Cons/Econote: Endangered by habitat loss; a single station on protected lands. The extant Maryland stations are the northernmost occurrences in the U.S. and are restricted to fragments of pine barrens-like habitat under powerlines.					
Habitat: Open peaty or sandy soils.					
Distr. CP (Caroline, St. Mary's*, Wicomico, Worcester).					
Flw: Jun-Jul; Fr: Sept.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Drosera rotundifolia</i> Linnaeus Droseraceae (Sundew Family)	Roundleaf Sundew	G5	S3		
Cons/Econote: A characteristic species of high elevation wetlands and glades on the Appalachian Plateau (Garrett County) but extremely rare elsewhere.					
Habitat: Mountain peatlands, acidic seepage wetlands.					
Distr. AP, CP, PD, RV (Anne Arundel, Baltimore, Calvert, Cecil, Charles, Dorchester, Frederick, Garrett, Prince George's, Wicomico, Worcester).					
Flw: Jul; Fr: Sept.					
<i>Drymocallis arguta</i> (Pursh) Rydberg Rosaceae (Rose Family)	Tall Cinquefoil	G5	SH		
Syn: <i>Potentilla arguta</i> Pursh					
Taxnote: Ertter (2007, 2014) outlines the genetic realignments of the tribe Potentilleae and taxonomy respectively.					
Cons/Econote: Habitat for this species is now largely extirpated after more than a century of urbanization, last collected in 1957 by Eduards Baltars (1902-1972) in Baltimore County. Collected on 1936 from Plummer's Island in the Potomac River (Montgomery County).					
Habitat: Mafic or ultramafic barrens.					
Distr. PD* (Baltimore*, Montgomery*).					
Flw: Baltars' (many) collections are from 26 July.					
<i>Dryopteris campyloptera</i> Clarkson Dryopteridaceae (Wood-fern Family)	Mountain Woodfern	G5	S1	E	
Cons/Econote: Barely entering Maryland at its highest elevations. Endangered by habitat destruction.					
Habitat: Mountain summits, high-elevation rock outcrops, red spruce (<i>Picea rubens</i>) forests.					
Distr. AP (Garrett).					
<i>Dryopteris celsa</i> (W. Palmer) Knowlton Dryopteridaceae (Wood-fern Family)	Log Fern	G4	S3		
Habitat: Forested seeps					
Distr. AP, CP, PD, RV (Anne Arundel, Baltimore, Caroline, Cecil, Frederick, Harford, Howard, Queen Anne's, Somerset, Talbot, Wicomico, Worcester).					
<i>Dryopteris clintoniana</i> (D.C. Eaton) Dowell Dryopteridaceae (Wood-fern Family)	Clinton's Woodfern	G5	S1	E	
Cons/Econote: Rare south of the Wisconsinan glacial line, the Eastern Shore populations apparently mark the southern extreme for the species (McAvoy 2007). Each of the four small extant populations occurs in isolated patches of habitat and without any substantial					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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probability of founding new populations. Each population may be greatly threatened by hydrological alterations arising from increased groundwater extraction from irrigation wells and large housing developments.

Habitat: Surface water seepages along small streams.

Distr. CP (Caroline, Queen Anne's, Somerset).

***Dryopteris goldiana* (Hooker ex Goldie) A. Gray**

Goldie's Fern

G4G5

S2

Dryopteridaceae (Wood-fern Family)

Cons/Econote: Declining due to increased urbanization of forested fragments in the Piedmont. Fifteen Maryland reports are from a single source (Reed 1953). Many of Reed's records are either unsubstantiated by a voucher or have been reported (D. Redman, pers. comm.) as having been extirpated. No population data has been ascertained for many recent records and/or is not recorded on the labels from specimens located at regional herbaria.

Habitat: Rich, mature, mesic forests (including old-growth fragments), often over mafic substrates.

Distr. AP, PD (Baltimore, Cecil, Garrett, Harford, Montgomery).

***Echinodorus cordifolius* (Linnaeus) Grisebach**

Creeping Burhead

G5

S1

E

Alismataceae (Water-plantain Family)

Upright Burhead

Cons/Econote: Maryland is located at the northern periphery of the species' predominately Southeastern and Midwestern range.

Maryland stations are few, populations existing in areas of high-quality riparian habitats along the upper Choptank River and the Potomac Gorge. The below-ground root structures are fascinating, with long thin roots having a spongy-texture and fusiforme tuber-like structures along much of the root length. Flowering stems soon recline and may root at nodes to form additional plants. Plants are apparently long-persistent; at one station nearly 100 plants were located on a riverine gravel bar that is only rarely exposed (i.e., during extreme drought).

Habitat: Flood channel sloughs, floodplain pools, gravel bars exposed during low-water flows.

Distr. CP, PD (Caroline, Montgomery).

Flw: Jun-Jul; **Fr:** late Jul-Oct.

***Elatine americana* (Pursh) Arnott**

American Waterwort

G4

SU

Elatinaceae (Waterwort Family)

Taxnote: Several older specimens were initially identified as *Elatine triandra* Schkuhr (recently resurrected as a distinct species), which later became lumped into a broader concept of *E. americana*. Nearly all of the identifications reported to the Service were determined without considering *E. triandra*. Thus, our records are potentially a mix of two different taxa. However, Popiella et al. (2015) reference two environmentally-induced morphs of *E. triandra* in Europe, which may correspond to these putative "species". Field and museum work will be required to sort out the distributions and abundances.

Cons/Econote: An inconspicuous annual plant of intertidal habitats. Population size (and detectability) may vary greatly over years, which is typical of species with an annual life history. Suspected of declining due to shoreline erosion (boat wakes), physical changes in the structure of shoreline sediments, and shading/competition with mats of invasive species such as *Hydrilla*.

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Fresh to brackish intertidal shores, on a variety of substrates, exposed mud flats, fringing areas of sandy, gravelly or organic substrates exposed at low tide. Additionally, <i>E. triandra</i> has been confirmed (by Hamid Raziford) from a shoreline of Deep Creek Lake in Garrett County.</p> <p>Distr. AP, CP (Caroline, Cecil, Dorchester, Garrett, Harford*, Prince George's*, Wicomico, Worcester; distribution incomplete).</p>					
<i>Elatine minima</i> (Nuttall) Fischer & C.A. Meyer Elatinaceae (Waterwort Family)	Small Waterwort	G5		S1?	
<p>Cons/Econote: This northeastern species was thought to be extremely rare south of the glacial lakes and ponds in Pennsylvania (where common). However, recent surveys have discovered stations on lake shorelines in Garrett County and the species may be overlooked in anthropogenic habitats.</p> <p>Habitat: Fresh intertidal shores in sandy or gravelly substrates; shorelines of reservoirs and ponds. Water depths where the plant grows vary from a few centimeters to 0.6 meters (Block & Rhoads 2011).</p> <p>Distr. AP, CP, PD (Carroll?, Cecil, Dorchester, Garrett, Harford, Wicomico*).</p>					
<i>Eleocharis albida</i> Torrey Cyperaceae (Sedge Family)	White Spikerush	G4G5		S2S3	
<p>Cons/Econote: An inconspicuous and oft-overlooked component of fresh to brackish marshes along the Atlantic Coast and the Chesapeake Bay. Attrition of salt marsh habitats due to sea level rise poses a substantial threat, the severity of which can only be speculated upon.</p> <p>Habitat: Fresh to brackish salt marshes. Muddy flats or ecotones between low, e.g. black needlerush (<i>Juncus roemerianus</i>) and high, e.g., salt-marsh hay (<i>Spartina patens</i>) marsh; tidal guts.</p> <p>Distr. CP (Anne Arundel*, Charles*, Dorchester, Kent, Queen Anne's*, St. Mary's*, Somerset, Wicomico, Worcester).</p> <p>Flw: late Aug-early Sept; Fr: Sept-Oct.</p>					
<i>Eleocharis compressa</i> Sullivant Cyperaceae (Sedge Family)	Flat-stem Spikerush	G4		S1	E
<p>Taxnote: Maryland plants are <i>var. compressa</i></p> <p>Cons/Econote: Extremely rare plant in the eastern U.S. A plant of rich glades and river scour bars (Potomac and Susquehanna Rivers).</p> <p>Habitat: Pools among rocks on bedrock scour bars.</p> <p>Distr. PD (Cecil, Montgomery).</p>					
<i>Eleocharis equisetoides</i> (Elliott) Torrey Cyperaceae (Sedge Family)	Horsetail Spikerush	G4		S1	E
<p>Cons/Econote: Endangered by woody succession of bog-like habitats.</p> <p>Habitat: Acidic seepage fens, millponds.</p> <p>Distr. CP (Wicomico, Worcester).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Eleocharis erythropoda</i> Steudel Cyperaceae (Sedge Family) Syn: <i>E. calva</i> Torrey, an invalid name. Cons/Econote: Apparently rare in our region (DE, VA). The conservation status and rank for this species requires additional field and museum work. Habitat: Freshwater fens, seeps. Distr. CP, PD* (Cecil*, Dorchester, Howard*, Montgomery*).	Bald Spikerush	G5	SU		
<i>Eleocharis halophila</i> (Fernald & Brackett) Fernald Cyperaceae (Sedge Family) Cons/Econote: A single known extant population, restricted to the barrier island (Assateague). There are several additional reports from inland locations, these doubtful. Habitat: Interdunal swales behind foredunes. Distr. CP (Worcester).	Saltmarsh Spikerush	G4	S1	E	
<i>Eleocharis intermedia</i> J.A. Schultes Cyperaceae (Sedge Family) Cons/Econote: Rare in late-summer-drawdown of ponds and lakes; sometimes associated with <i>Fimbristylis autumnalis</i> . Perhaps dispersed by waterfowl. Habitat: Drawdown zones in lakes and ponds, often but not always in calcareous soils. Distr. CP, PD (Baltimore).	Matted Spikerush	G5	S1	E	
<i>Eleocharis melanocarpa</i> Torrey Cyperaceae (Sedge Family) Cons/Econote: Endangered by habitat loss and wetland conversion over the long-term and woody succession of habitats in the near-term. Habitat: Delmarva Bays and acidic seepage fens. Distr. CP (Caroline, Cecil, Dorchester, Queen Anne's, Talbot*, Wicomico, Worcester).	Black-fruit Spikerush	G4	S1	E	
<i>Eleocharis robbinsii</i> Oakes Cyperaceae (Sedge Family) Cons/Econote: Extremely rare in our region (DE, VA) and endangered in Maryland by habitat loss. Fire exclusion and other landscape-scale disturbance processes may be under-appreciated. For example, W. Knapp (NHP records) discovered thousands of stems in newly available habitat after a millpond dam was breached. All sites require periodic disturbance to maintain open-canopy wetland habitat. Habitat: Coastal Plain acidic seepage fens, Delmarva Bays, millponds. Distr. CP (Dorchester, Wicomico).	Robbins' Spikerush	G4G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Eleocharis rostellata</i> (Torrey) Torrey Cyperaceae (Sedge Family)	Beaked Spikerush	G5	S2?		
Cons/Econote: Locally abundant in brackish marshes on the barrier island (Assateague), this species is apparently tolerant of a wider range of salinities than previously considered. However, the species appears to be rare elsewhere.					
Habitat: Interdunal swales (Assateague), fresh to brackish tidal marshes and sea level fens.					
Distr. CP (Anne Arundel, Baltimore, Calvert*, Queen Anne's, Wicomico, Worcester).					
<i>Eleocharis tortilis</i> (Link) J.A. Schultes Cyperaceae (Sedge Family)	Twisted Spikerush	G5	S3		
Habitat: Acidic seepage fens and swamps in sand, gravel and muck substrates.					
Distr. CP (Baltimore, Calvert, Caroline, Charles, Prince George's, St. Mary's, Wicomico, Worcester).					
<i>Eleocharis tricostata</i> Torrey Cyperaceae (Sedge Family)	Three-angle Spikerush	G4	S1	E	
Cons/Econote: Maryland stations for this plant are threatened by encroaching stands of common reed (<i>Phragmites australis</i>) and woody succession of wetland habitat. Habitats for this species in Maryland range from fairly pristine to heavily disturbed coastal wetlands (e.g., bulldozed wetlands, borrow pits).					
Habitat: Seasonally flooded flatwoods (under <i>Nyssa biflora</i>) and depressions, sandpits.					
Distr. CP (Caroline, Dorchester).					
<i>Elephantopus tomentosus</i> Linnaeus Asteraceae (Aster Family)	Tobaccoweed	G5	S1S2	E(PT)	
Cons/Econote: Maryland (and Delaware) stations are the northern limits of the species' range but occur in habitat typical for the species in the core range in the southeastern U.S. More survey is warranted. Attributed to the Eastern Shore by Brown & Brown (1984) based upon misidentified specimens (= <i>E. nudatus</i>); however, new locations have been reported recently. The earliest collection (1862) attributed to Maryland by botanist William Canby (1831-1904) may be from the Virginia portion of Delmarva. M.A. Chrysler made a collection in 1904 but does not indicate a county of collection, but is presumably St. Mary's.					
Habitat: Dry upland forest edges, clearings, trail sides and roadsides in sandy soils.					
Distr. CP (Calvert, Dorchester, St. Mary's, Wicomico).					
Flw: Sept; Fr: Sept-Oct.					
<i>Epilobium ciliatum</i> Rafinesque Onagraceae (Evening Primrose Family)	Hairy Willowherb	G5	S3S4		
Syn: <i>E. glandulosum</i> Lehm. var. <i>adenocaulon</i> (Haussknect) Fernald					
Taxref: Fernald (1950).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Taxnote: Maryland plants are morphologically variable and may show intergradation with other species. Often confused with <i>E. coloratum</i>, reports from Baltimore County (wet old field) and Cecil County (wharves and waste ground) reflect this confusion.</p> <p>Cons/Econote: Somewhat weedy. Associated with both heavily disturbed and high-quality acidic wetlands.</p> <p>Habitat: Acidic seeps, bogs, and fens.</p> <p>Distr. AP, CP (Charles, Garrett, Worcester).</p> <p>Flw: Aug-Sept; Fr: late Sept-Nov.</p>					
<p><i>Epilobium leptophyllum</i> Rafinesque Onagraceae (Evening Primrose Family)</p>	Linear-leaf Willowherb	G5	S2S3		
<p>Cons/Econote: Confined to high-elevation wetlands in w. Maryland; scarce in the Catoctin Mountains according to Wiegand (2005).</p> <p>Habitat: Seeps, minerotrophic fens and sedge meadows.</p> <p>Distr. AP, RV (Frederick, Garrett).</p> <p>Flw: Jun-Aug; Fr: Aug-Nov.</p>					
<p><i>Epilobium strictum</i> Muhlenberg ex Sprengel Onagraceae (Evening Primrose Family)</p>	Downy Willowherb	G5?	S1	E	
<p>Cons/Econote: A single known extant station.</p> <p>Habitat: Minerotrophic fen.</p> <p>Distr. AP, PD* (Cecil*, Garrett).</p>					
<p><i>Equisetum fluviatile</i> Linnaeus Equisetaceae (Horsetail Family)</p>	Water Horsetail	G5	S1	E	
<p>Cons/Econote: Circumboreal, Occurring south to Virginia (where it occurs in montane calcareous marshes). The Maryland station is similar in habitat to sites well to our north. Apparently always rare in Maryland, known from a small area of exceptional tidal marsh shoreline habitat in the Upper Chesapeake Bay. Reported by Reed (1953) from Harford County (specimen not seen).</p> <p>Habitat: Freshwater emergent tidal marsh.</p> <p>Distr. CP/PD (Cecil, Harford?).</p>					
<p><i>Equisetum sylvaticum</i> Linnaeus Equisetaceae (Horsetail Family)</p>	Woodland Horsetail	G5	S1	E	
<p>Cons/Econote: Circumboreal, occurring south to MD and adjacent WV and scattered stations in VA. In Maryland the plant is restricted to a few small habitat patches with few stems.</p> <p>Habitat: Seepage swamps. Maryland stations hold a diverse flora and occur presumably over nutrient-rich though not calcareous substrates.</p> <p>Distr. AP, PD*, RV (Baltimore*, Frederick, Garrett).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Eragrostis refracta</i> (Muhlenberg) Scribner Poaceae (Grass Family)	Meadow Lovegrass	G5	S3S4		
Habitat: Dry, sterile sands, locally common in maritime grasslands, shrublands and woodlands on the barrier island (Assateague).					
Distr. CP (Caroline, Wicomico, Worcester).					
<i>Erigenia bulbosa</i> (Michaux) Nuttall Apiaceae (Carrot Family)	Harbinger-of-Spring	G5	S3		
Cons/Econote: Appearing in late March and early April this species has areas of local abundance but the small stature of the plant and the early flowering dates place it among those spring ephemerals that are rarely observed. However, the finely divided leaves of this species are very recognizable upon study and the species may be efficiently surveyed outside of its flowering time.					
Habitat: Rich floodplain forests and mesic upland forests, particularly in areas dominated by calcium-bearing substrates. The extensive populations near Widewater at Great Falls may be associated with sills of amphibolite.					
Distr. CP, PD, RV (Allegany, Cecil, Charles, Frederick, Harford, Montgomery, Prince George's, Washington).					
Flw: late Mar-early Apr; Fr: May-Jun.					
<i>Erigeron pulchellus</i> Michaux var. <i>brauniae</i> Fernald Asteraceae (Aster Family)	Braun's Robin's-plantain	G5T4	S1		
Taxnote: Differing from the typical and common variety by glabrous stems and leaves; the taxonomic significance of this variation has not been well studied.					
Cons/Econote: Known only from w. MD, WV, s. OH and KY.					
Habitat: Riverside scour bar.					
Distr. AP (Garrett).					
Flw: late May-early Jun; Fr: Jun.					
<i>Eriocaulon aquaticum</i> (Hill) Druce Eriocaulaceae (Pipewort Family)	Seven-angle Pipewort	G5	S1	E	
Syn: <i>E. septangulare</i> Withering, an invalid name					
Cons/Econote: A common plant in s. Canada and New England, the southern populations are insular and probably relictual occurrences from post-Wisconsinan glacial retreat.					
Habitat: Baymouth barrier wetland (Sipple 1982, historical), millponds, in floating peat mats.					
Distr. CP (Anne Arundel*, Dorchester, Wicomico*).					
<i>Eriocaulon compressum</i> Lamarck Eriocaulaceae (Pipewort Family)	Flattened Pipewort	G5	S2		
Cons/Econote: Local to a small zone of swamps and seeps. The northern stations for this species (MD, DE and NJ) are somewhat disjunct from the species primarily southeastern coastal plain range.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Habitat: Acidic seeps, Atlantic white cedar (<i>Chamaecyparis thyoides</i>) swamps.					
Distr. CP (Wicomico).					
<i>Eriocaulon decangulare</i> Linnaeus !	Ten-angle Pipewort	G5T5?	S1	(PT)	
Eriocaulaceae (Pipewort Family)					
Taxnote: Maryland plants are var. <i>decangulare</i> .					
Cons/Econote: Local in remnants of once widespread Fall Line “magnolia bogs” and in an extraordinary sea level fen in Worcester County. Shreve (1910) reported the species as infrequent and notes two stations; a “peat bog” in Anne Arundel County and a marsh along the Nanticoke River (near Vienna) in Wicomico County, neither of which is extant. The Service is currently reviewing this species’ conservation status.					
Habitat: Gravel seepage bog, “magnolia bog” sensu McAtee (1918); sea level fen.					
Distr. CP, PD* (Anne Arundel*, Montgomery*, Prince George’s, Wicomico*, Worcester).					
<i>Eriocaulon parkeri</i> B.L. Robinson	Parker’s Pipewort	G3	S2	T	
Eriocaulaceae (Pipewort Family)					
Cons/Econote: Declining rangewide (extirpated in PA and NY) and under threat in the Chesapeake Bay due to increased sedimentation, eutrophication, boat wakes, displacement by common reed (<i>Phragmites australis</i>) and shading by mats of <i>Hydrilla</i> in the intertidal zone. A re-assessment of Maryland populations and their conservation status is ongoing.					
Habitat: Gravelly and sandy intertidal zones along fresh to oligohaline marshes of the Chesapeake Bay and tributaries.					
Distr. CP (Baltimore, Caroline, Cecil, Charles*, Dorchester, Harford, Wicomico, Worcester).					
<i>Eriophorum gracile</i> W.D.J. Koch ex Roth	Slender Cottongrass	G5	S1	E	
Cyperaceae (Sedge Family)					
Cons/Econote: The Maryland station represents the southernmost population in the U.S. Endangered by woody succession of open sedge meadow habitat.					
Habitat: High elevation mountain peatlands.					
Distr. AP (Garrett).					
Flw/Fr: Jun.					
<i>Eriophorum virginicum</i> Linnaeus	Tawny Cottongrass	G5	S3		
Cyperaceae (Sedge Family)					
Cons/Econote: A characteristic species of mountain peatlands (Garrett County) and once a common species of “magnolia bogs” sensu McAtee (1918) along the Fall Line; rare elsewhere.					
Habitat: Mountain peatlands, coastal fens and acidic seepage swamps.					
Distr. AP, CP, PD*, RV (Allegheny, Anne Arundel, Garrett, Montgomery*, Prince George’s, Wicomico).					
Flw/Fr: late Aug-Nov.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Eryngium yuccifolium</i> Michaux Apiaceae (Carrot Family)	Rattlesnake-master	G5	SH	X	
Cons/Econote: Represented in the Maryland flora by a few collections along the Potomac River over the period 1904-1921.					
Habitat: Sandy depressions between rock ledges, sandy banks. Introduced into warm-season grass plantings at Chino Farms (Queen Anne's County).					
Distr. CP ^I , PD* (Montgomery*, Queen Anne's ^I).					
<i>Erythronium albidum</i> Nuttall Liliaceae (Lily Family)	White Trout Lily	G5	S2	T	
Cons/Econote: According to Wiegand (2010) the preferred habitat for this species is often heavily invaded by ground ivy (<i>Glechoma hederacea</i>), English ivy (<i>Hedera helix</i>), day lily (<i>Emmerocallis fulva</i>) and garlic mustard (<i>Alliaria petiolata</i>). Several large populations in Frederick County have declined as a result of invasion by day lily and garlic mustard.					
Habitat: Mature floodplain terrace forests in rich alluvium.					
Distr. PD, RV (Allegany, Cecil*, Frederick, Montgomery, Washington).					
Flw: late Mar-late Apr; Fr: May					
<i>Eupatorium altissimum</i> Linnaeus Asteraceae (Aster Family)	Tall Boneset	G5	S3		
Habitat: Montane alluvial forest, scoured bedrock terrace prairies and woodlands, rocky ravines and cliffs in rich alluvial sand and silt; serpentine and diabase barrens.					
Distr. CP, PD, RV (Allegany, Anne Arundel, Baltimore, Carroll, Cecil, Montgomery, Washington).					
Flw: Sept; Fr: Oct.					
<i>Eupatorium leucolepis</i> (A.P. de Candolle) Torrey & Gray Asteraceae (Aster Family)	White-bracted Boneset White-bracted Thoroughwort	G5	S2S3	T	
Cons/Econote: An early successional species, intolerant of shade. There are few truly protected populations and although some large populations exist in recently logged sites, these disappear upon canopy closure.					
Habitat: Wet pine flatwoods and graminoid-dominated swales (under powerlines and roadsides).					
Distr. CP (Baltimore*, Dorchester, Prince George's*, Wicomico, Worcester).					
Flw: (Jul) Aug-early Sept; Fr: Sept.					
<i>Euphorbia purpurea</i> (Rafinesque) Fernald Euphorbiaceae (Spurge Family)	Glade Spurge Darlington's Spurge	G3	S1	E	
Cons/Econote: Endangered by habitat loss through woody plant succession (canopy closure), excessive herbivory by white-tailed deer, and competition with invasive species. Two stations reported in 1998 have not been relocated despite intensive surveys 2016-2018. The remaining two stations have significantly declined but are being actively managed and protected from deer browse.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Circumneutral seepage swamps. Distr. PD, RV (Baltimore*, Carroll*, Cecil*, Frederick, Harford). Flw: mid-May-mid Jun; Fr: Jul-Aug.</p>					
<p><i>Euphorbia spathulata</i> Lamarck Euphorbiaceae (Spurge Family) Syn: <i>E. dictyosperma</i> Fischer & Meyer <i>Euphorbia obtusata</i> Pursh, misapplied? Taxnote: Maryland plants, of dry woodlands and barrens, are <i>S. spathulata</i> Lamarck. <i>E. obtusata</i>, a plant of rich bottomland forests may not occur in Maryland although both names are often applied. Cons/Econote: Occurring as scattered patches with few individuals. Fire suppression may play a role in this species' rarity. Habitat: Rich, dry woodlands and shale barrens. Distr. CP*, PD*, RV (Allegany, Montgomery*, Prince George's, Washington).</p>	<p>Warty Spurge Bluntleaf Spurge</p>	G5	S1	E	
<p><i>Eurybia radula</i> (Aiton) Nesom Asteraceae (Aster Family) Cons/Econote: Endangered by habitat loss, woody succession of bog-like habitat. Few Maryland stations occur on protected lands. Habitat: Acidic seepage wetlands. Distr. AP, CP, PD, RV (Cecil, Frederick, Garrett, Harford*, Montgomery*, Prince George's). Flw: Aug; Fr: Sept-Oct.</p>	<p>Low Rough Aster Rough Wood Aster</p>	G5	S1	E	
<p><i>Eurybia spectabilis</i> (Aiton) Nesom Asteraceae (Aster Family) Cons/Econote: Endangered by poor protection status and additionally, little control over management. The Service is employing clearing and prescribed burns to increase/expand populations onto State-managed lands. Habitat: Openings and clearings in sandy/peaty soils adjacent to pine flatwoods (chiefly roadsides). Distr. CP (Dorchester, Wicomico). Flw: late Aug-early Oct; Fr: Oct-Nov.</p>	<p>Low Showy Aster</p>	G5	S1	E	
<p><i>Eutrochium maculatum</i> (Linnaeus) E.E. Lamont Asteraceae (Aster Family) Syn: <i>Eupatorium maculatum</i> Linnaeus Cons/Econote: Reports from the Coastal Plain and Piedmont are doubtful considering the geographic range for this species. Reports from acidic sites are doubtful considering that the species is apparently an obligate calciphile (e.g., calcareous fens). A 1906 collection by E. Braun from a now extirpated site in Garrett County (Mtn. Lake Park) may be our only valid record. Reports of plants from high elevation</p>	<p>Spotted Joe-pye Weed</p>	G5	SU	X	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
acidic wetlands in Garrett County (Cranesville Swamp) may indicate the presence of a cryptic taxon, as suggested by Weakley (2015) for the S. Appalachians.					
Habitat: Calcareous fen (apparently).					
Distr. AP*, RV? (Garrett*, Frederick?).					
<i>Fallopia cilinodis</i> (Michaux) Holub	Fringed Black-bindweed	G5	S3		
Polygonaceae (Smartweed Family)					
Syn: <i>Polygonum cilinode</i> Michaux					
Habitat: Clearings, outcrops and woodlands at high elevations.					
Distr. AP (Garrett).					
Flw/Fr: Jun.					
<i>Festuca paradoxa</i> Desvaux	Cluster Fescue	G5	S1?		
Poaceae (Grass Family)					
Syn: <i>F. shortii</i> Kunth ex Woods					
Cons/Econote: The Service is uncertain of the distribution in Maryland. Many reports are based upon confusion with the common <i>F. subverticillata</i> . The Charles County record may indicate a wider ecological amplitude for the species which would require reconciliation with regional records.					
Habitat: Streambanks, commonly associated with mafic or ultramafic substrates.					
Distr. AP?, CP, PD*, RV? (Anne Arundel?, Allegany?, Baltimore?, Cecil*, Charles, Garrett?).					
Flw/Fr: mid-late Jun.					
<i>Filipendula rubra</i> (Hill) B.L. Robinson	Queen-of-the-prairie	G4G5	S1	E	
Rosaceae (Rose Family)					
Cons/Econote: Endangered by habitat loss and excessive browse by white-tailed deer. Very rare regionally and apparently always rare in Maryland, this species occupies significantly rare habitat types.					
Habitat: Circumneutral seepage/fen. Historical collections from a Baltimore County site (now extirpated) record the habitat as a “wet field” [associated with fringed gentian (<i>Gentianopsis crinita</i>)] suggesting that the site was underlain by serpentine.					
Distr. PD*, RV (Baltimore*, Frederick).					
Flw: mid Jun-mid Jul; Fr: ?					
<i>Fimbristylis annua</i> (Allioni) Roemer & J.A. Schultes	Annual Fimbry	G5	S3		
Cyperaceae (Sedge Family)					
Syn: <i>F. baldwiniana</i> (J.A. Schultes) Torrey					
Cons/Econote: Widespread in tropical and warm temperate regions and arguably native. Often a plant of heavily disturbed sterile soils; our populations are known mainly from serpentine grasslands.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Habitat: Serpentine barrens.					
Distr. CP*, PD (Baltimore, Carroll, Cecil, Harford, Montgomery*, Prince George's*, St. Mary's?, Wicomico*).					
<i>Fimbristylis caroliniana</i> (Lamarck) Fernald	Carolina Fimbry	G4	S1S2		
Cyperaceae (Sedge Family)					
Taxnote: Previously lumped with <i>F. puberula</i> following Fernald (1950), this species is chiefly maritime and may be distinguished by its long rhizomes, contrasted with an inland distribution and the short rhizomes of <i>F. puberula</i> .					
Cons/Econote: Largely restricted to the barrier island (Assateague).					
Habitat: Maritime grassland; brackish marshes.					
Distr. CP (Calvert*, Wicomico*, Worcester).					
Flw/Fr: late Jul-Sept.					
<i>Fimbristylis perpusilla</i> R.M. Harper ex Small & Britton	Harper's Fimbristylis	G2	S2	E	
Cyperaceae (Sedge Family)					
Cons/Econote: Within its Delmarva Bay habitat the species is restricted to the lowest depressions, often quite small (1-10 sq meters), associated with little or no other vegetation. Alterations to historical patterns of ground-water hydrology pose a severe and persistent threat. Additionally, exotic species such as the Eurasian rough-seed bulrush (<i>Schoenoplectiella mucronata</i>) and perhaps even some aggressive natives such as Walter's sedge (<i>Carex striata</i>) may invade the habitat preferred by this species.					
Habitat: Muddy soils in the central portions of Delmarva Bays (after drawdown).					
Distr. CP (Caroline, Kent, Queen Anne's).					
Flw: mid Sept. Fr: late Sept-Oct. (mature fruits needed for identification, the time varying according to drawdown).					
<i>Fraxinus caroliniana</i> P. Miller	Carolina Ash	G4G5	S2		
Oleaceae (Olive Family)					
Cons/Econote: Characteristic subcanopy trees of the southeastern Atlantic Coastal Plain; Maryland populations are the northern range extent for the species. This species and others in the family are under threat of extirpation by the emerald ash borer beetle (<i>Agrilus planipennis</i> Fairmaire).					
Habitat: Local to a narrow zone of blackwater swamps under bald cypress (<i>Taxodium distichum</i>) along the Pocomoke River.					
Distr. CP (Worcester).					
Fr: Jun-Jul.					
<i>Fraxinus nigra</i> Marshall	Black Ash	G5	S3		
Oleaceae (Olive Family)					
Cons/Econote: This northern tree species occurs near the southern periphery of its range in MD, VA and WV. Infrequent and localized, this chiefly montane species becomes increasingly rare throughout the Piedmont with outliers extending onto the Coastal Plain.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Populations are currently threatened by the emerald ash borer (<i>Agrilus planipennis</i> Fairmaire) a highly destructive non-native beetle of Asia and Eastern Russia.					
Habitat: Localized seepage swamps influenced by calcareous (e.g., calcareous shales, limestone, marine deposits) or mafic (e.g., Catoctin metabasalt, diabase, amphibolite) material.					
Distr. AP, CP, PD, RV (Allegany, Baltimore, Caroline, Cecil*, Frederick, Garrett, Harford, Montgomery, Queen Anne’s, Washington).					
<i>Fuirena pumila</i> (Torrey) Sprengel	Dwarf Umbrella-sedge	G4		S2S3	
Cyperaceae (Sedge Family)					
Cons/Econote: Occurring in a variety of wetland habitats, this species undergoes extreme fluctuations in population size. W. Knapp recorded many thousands to hundreds of thousands of individuals in a recently drained millpond bottom in Dorchester County. Sensitive to salt water intrusion, the Service could not relocate the Calvert County population after the narrow sand dike separating the fresh water marsh from the waters of the Chesapeake Bay was breached after Hurricane Isabelle in 2005.					
Habitat: Fresh tidal marshes and interdunal swales (Assateague Island), millponds, clearings, in sandy, peaty or muck soils.					
Distr. CP (Calvert, Dorchester, Wicomico, Worcester).					
Flw: Aug-Sept; Fr: Sept-Oct.					
<i>Galactia volubilis</i> (Linnaeus) Britton	Downy Milkpea	G5		S3	
Fabaceae (Legume Family)					
Cons/Econote: Although represented by many populations, and with many of those in anthropogenic habitats, this species always occurs in low numbers and may be under decline due to fire exclusion. A frequent plant associate seems to be <i>Monarda punctata</i> .					
Habitat: Dry sandy woodlands, clearings, roadsides.					
Distr. CP, PD (Anne Arundel, Calvert, Caroline, Charles*, Dorchester, Howard*, Montgomery, Prince George’s, St. Mary’s, Talbot*, Wicomico, Worcester; distribution likely incomplete).					
<i>Galax urceolata</i> (Poiret) Brummitt	Beetle-weed	G5		SX	
Diapensiaceae (Diapensia Family)					
Cons/Econote: The English naturalist, John Ray, was the first to describe native Maryland plants publishing a description of <i>Tillandsia usneoides</i> in 1688 wherein Ray discussed <i>Galax urcelolata</i> (Brown et al. 1987). Ray did not collect these plants in Maryland himself, he was sent collections and information by several colonial-era botanists and <i>G. urceolata</i> is in the catalogue of Maryland plants H.S. 91:35 BM (see Reveal et al. 1987, p. 157). According to Brown et al. (1987) “apparently the colonial naturalists collected only on the coastal plain of Maryland—in modern day Anne Arundel, Calvert, Prince George’s and St. Mary’s counties on the Western Shore and Talbot and Dorchester counties on the Eastern Shore.” Most importantly they state (p. 248) “as the geographic attributions accompanying their specimens always refer to Maryland, we can only conclude that the species known today only from southeastern Virginia must have occurred in Maryland in the past.” The attribution to Maryland of this species is thus confirmed by a Maryland specimen—from the Coastal Plain. The previous attribution to western Maryland (Brown & Brown 1984) has no basis.					
Habitat: Mesic to dry hardwood forests associated with ericads (Virginia botanical Associates), most likely <i>Kalmia latifolia</i> .					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP* (unknown county in s. MD).					
<i>Galium boreale</i> Linnaeus Rubiaceae (Madder Family)	Northern Bedstraw	G5	S1	E	
Cons/Econote: Endangered by habitat loss and displacement by invasive species.					
Habitat: Outcrops and barrens over mafic (limestone) or ultramafic (serpentine) substrates.					
Distr. AP*, PD, RV (Cecil, Garrett*, Washington).					
<i>Galium hispidulum</i> Michaux Rubiaceae (Madder Family)	Coast Bedstraw	G5	S1	E	
Cons/Econote: A small fragile population is extant on the barrier island (Assateague).					
Habitat: Maritime dune woodlands.					
Distr. CP (Worcester).					
<i>Galium latifolium</i> Michaux Rubiaceae (Madder Family)	Purple Bedstraw	G5	S3		
Cons/Econote: A Southern and Central Appalachian endemic. Nearing its northern range limit (c. PA) in Maryland.					
Habitat: Rich, mesic hardwood forests, montane alluvial forest.					
Distr. PD, RV (Allegheny, Baltimore, Cecil*, Frederick, Washington).					
<i>Gaultheria hispidula</i> (Linnaeus) Muhlenberg ex Bigelow Ericaceae (Heath Family)	Creeping Snowberry	G5	S1	E	
Cons/Econote: A single known occurrence.					
Habitat: Mountain peatland clamoring over hummocks of red spruce (<i>Picea rubens</i>).					
Distr. AP (Garrett).					
<i>Gaylussacia brachycera</i> (Michaux) A. Gray Ericaceae (Heath Family)	Box Huckleberry	G3	S1	E	
Cons/Econote: Endangered by habitat loss long-term and excessive animal browse in the near term. Known from a single site that has been extant for over 100 years (Plitt 1900). Maryland and Delaware populations form a cohesive genetic cluster (Pooler et al. 2006). The Service is working with several agencies to safeguard this species.					
Habitat: Dry sandy woods.					
Distr. CP (Anne Arundel).					
<i>Gaylussacia dumosa</i> (Andrews) Torrey & A. Gray Ericaceae (Heath Family)	Dwarf Huckleberry	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Syn: <i>G. bigeloviana</i> (Fernald) Sorrie & Weakley <i>G. dumosa</i> (Andrews) Torrey var. <i>dumosa</i> <i>G. dumosa</i> (Andrews) Torrey var. <i>bigeloviana</i> Fernald</p> <p>Taxnote: Most populations may be referable to <i>G. bigeloviana</i>; however, one collection from a historic Baltimore County station appears to be <i>G. dumosa</i> in the strict sense. Sorrie and Weakley (2007a) discuss the geographic range and habitats for these taxa.</p> <p>Cons/Econote: Endangered by habitat loss. The majority of our populations occurred historically in Fall Line seeps and stream-head fens in areas that are now heavily urbanized. Populations on the Eastern Shore are seemingly restricted to small linear zones (often less than 10 meters) of seasonally saturated soils along sandy road shoulders where sunlight is not limiting. The latter are often mixed with other coastal plain shrubs including other species of <i>Gaylussacia</i> (<i>G. baccata</i>, <i>G. frondosa</i>); species of <i>Vaccinium</i>, <i>Aronia</i> and <i>Amelanchier</i>. Very difficult to locate in these thickets; however, the glossy upper surface of the leaves aids in spotting and the stipitate-glandular hairs are confirmatory.</p> <p>Habitat: Seepage swamps and edges of swamp forests in sandy/peaty soils.</p> <p>Distr. CP (Anne Arundel*, Baltimore*, Prince George's, Wicomico, Worcester).</p> <p>Flw: mid-late May; Fr: Jun-Jul.</p>					
<i>Gentiana andrewsii</i> Grisebach	Fringe-top Bottle Gentian	G5?	S2	T	
<p>Gentianaceae (Gentian Family)</p> <p>Cons/Econote: Threatened by habitat loss primarily due to woody succession, deer browse, competition with invasive species and poor protection status.</p> <p>Habitat: Freshwater marshes, meadows, open-canopy swamps.</p> <p>Distr. AP*, CP, PD, RV (Allegany, Baltimore, Cecil*, Charles*, Frederick, Garrett*, Harford, Montgomery, Prince George's, Washington*).</p> <p>Flw: late Sept-Oct; Fr: Nov.</p>					
<i>Gentiana linearis</i> Frölich	Narrowleaf Gentian	G4G5	S3		
<p>Gentianaceae (Gentian Family)</p> <p>Cons/Econote: Occurring in Maryland in peripheral populations (relative to the North American range) but frequent in habitat.</p> <p>Habitat: Mountain peatlands and swamps.</p> <p>Distr. AP (Garrett).</p> <p>Flw: Sept; Fr: Oct-Nov.</p>					
<i>Gentiana puberulenta</i> J. Pringle	Downy Gentian	G4G5	SH	X	
<p>Gentianaceae (Gentian Family)</p> <p>Cons/Econote: A striking disjunct from the midwestern U.S., last collected in 1888.</p> <p>Habitat: No habitat description on the specimen label, presumably a prairie-like site.</p> <p>Distr. AP* (Garrett*).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Gentiana villosa</i> Linnaeus Gentianaceae (Gentian Family)	Striped Gentian	G4	S1	E	
Cons/Econote: Endangered by habitat loss. Our few extant stations comprise few plants and these are often subject to intense deer browse. Additionally, fire suppression likely plays a role in this species' rarity. The Caroline County station has not been relocated for over a decade.					
Habitat: Dry, sandy edges of pine forests, dry forest over serpentine. Plants often along rights-of-way.					
Distr. CP, PD, RV? (Anne Arundel*, Baltimore*, Caroline, Cecil*, Charles*, Montgomery, Prince George's*, Washington?).					
Flw: Sept; Fr: Oct-Nov.					
<i>Gentianella quinquefolia</i> (Linnaeus) Small Gentianaceae (Gentian Family)	Stiff Gentian	G5	S1	E	
Cons/Econote: Endangered by habitat loss and woody succession of meadow/field habitats.					
Habitat: Fields, clearings and roadbanks at high elevations.					
Distr. AP (Garrett).					
Flw: Sept; Fr: Oct-Nov.					
<i>Gentianopsis crinita</i> (Frölich) Ma Gentianaceae (Gentian Family)	Fringed Gentian	G5	S1	E	
Cons/Econote: Threatened with extinction in Maryland, our remaining population has dwindled to fewer than two hundred plants over the last two decades. Factors responsible for decline are probably a combination of demographic, genetic, biotic and abiotic stressors. The Service is investigating methods to safeguard this species.					
Habitat: Seepages and streamsides over ultramafic rocks.					
Distr. AP*, PD (Baltimore, Cecil*, Garrett*).					
Flw: late Sept-early Oct; Fr: Oct-early Nov.					
<i>Geranium robertianum</i> Linnaeus Geraniaceae (Geranium Family)	Herb-Robert	G5	S1		
Cons/Econote: Diverse and often conflicting opinions are expressed regarding the nativity of this species to the U.S. and Canada, not only among individual Heritage programs but also among basic botanical references. Considered native in the talus slopes of the Catoctin Mountains but the Service is unsure of the nativity of some stations.					
Habitat: Talus slopes, oyster shell midden.					
Distr. AP?, CP, RV (Frederick, Garrett?, Somerset; distribution likely incomplete).					
Flw: mid-Apr; Fr: early May					
<i>Geum aleppicum</i> Jacquin Rosaceae (Rose Family)	Yellow Avens	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Syn: <i>G. strictum</i> Aiton <i>G. aleppicum</i> Jacquin var. <i>strictum</i> (Aiton) Fernald					
Cons/Econote: Circumboreal, occurring south to NJ and in the Appalachians to NC. Reported from a number of Coastal and Piedmont stations in Maryland, these well outside of the known range and doubtful.					
Habitat: High elevation seepage swamps.					
Distr. AP (Garrett).					
<i>Geum laciniatum</i> Murray Rosaceae (Rose Family)	Rough Avens	G5	S3		
Taxnote: Two varieties are sometimes recognized, var. <i>laciniatum</i> (more northern) and var. <i>trichocarpum</i> Fernald.					
Habitat: Floodplain forests in rich alluvial soil, wet meadows, seeps, wet pastures, and localized rich woods “pockets” on the Coastal Plain.					
Distr. AP, CP, PD, RV (Allegany, Baltimore, Carroll, Cecil, Dorchester, Frederick, Garrett, Howard, Montgomery, Prince George’s*).					
Flw: late May-Jun (Jul); Fr: late Jun-Aug.					
<i>Geum rivale</i> Linnaeus Rosaceae (Rose Family)	Purple Avens	G5	SH		
Cons/Econote: Circumboreal, south to MD and WV. Documented from MD by a 1907 collection by Witmer Stone from Jennings in Garrett County.					
Habitat: Mountain peatland/fen.					
Distr. AP* (Garrett*).					
<i>Glaux maritima</i> Linnaeus	see <i>Lysimachia maritima</i> (Linnaeus) Galasso, Banfi, & Soldano				
<i>Glyceria acutiflora</i> Torrey Poaceae (Grass Family)	Sharp-scaled Mannagrass	G5	S1	E	
Cons/Econote: Endangered by habitat loss, chiefly woody succession of open-pond habitat. Maryland populations are similar in that all known stations are seasonal ponds but these differ greatly in terms of their geological formation and plant associates.					
Habitat: Sinkhole ponds (Ridge and Valley), Delmarva Bays (Coastal Plain).					
Distr. CP, RV (Caroline, Kent, Frederick, Queen Anne’s, Washington).					
<i>Glyceria grandis</i> S. Watson Poaceae (Grass Family)	American Mannagrass	G5	S1	E	
Cons/Econote: Maryland populations are along the southern periphery of range (extending into VA, WV). Little known, reported from few stations along the MD/WV border (Herrington Creek headwaters, Kempton).					
Habitat: Mountain peatland; montane headwater swamps.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. AP (Garrett).					
<i>Gonolobus suberosus</i> (Linnaeus) R. Brown var. <i>suberosus</i> Apocynaceae (Dogbane Family) Syn: <i>Matelea gonocarpos</i> (Walter) Shinnery <i>Gonolobus gonocarpus</i> (Walter) Perry <i>Matelea suberosa</i> (Linnaeus) Shinnery Cons/Econote: Maryland populations represent the northeastern limits of the species' range. Few populations are known and the species appears highly localized in s. MD (Western Shore). Habitat: Rich woods, shell-marl ravine forests, field edges. Distr. CP, PD (Calvert, Charles, Montgomery, St. Mary's). Flw: late Jun-mid Jul; Fr: late Sept-early Oct. (angles on the fruit are diagnostic; see photos at marylandplantatlas.org).	Angular-fruit Milkvine	G5T5	S2		
<i>Goodyera repens</i> (Linnaeus) R. Brown Orchidaceae (Orchid Family) Cons/Econote: Circumboreal, occurring in Maryland in the discontinuous part of its southern range along the Appalachian Mountains. Last collected by G. M. Perdew in Allegany County (1904), presumably on the Appalachian Plateau, and by J.B.S. Norton near Bittinger in Garrett County (1908). The basis for inclusion in the flora of the Washington-Baltimore area not known (Shetler & Orli 2000). Habitat: No mention of habitat on the labels, but presumably northern hardwood forests. Distr. AP* (Allegany*, Garrett*).	Dwarf Rattlesnake-plantain	G5	SH	X	
<i>Goodyera tessellata</i> Loddiges Orchidaceae (Orchid Family) Cons/Econote: A northeastern species reaching its historical range limit in Maryland. Last collected in 1942, the specimen as determined by D.S. Correll (1943) states "first record south of New York" (Shetler & Orli 2000). Habitat: Mixed deciduous and pine woods (Weakley 2015). Distr. PD* (Montgomery*).	Checkered Rattlesnake-plantain	G5	SH	X	
<i>Gratiola ramosa</i> Walter Plantaginaceae (Plantain Family) Cons/Econote: A species of wet pine savannas to our south and historically occurring in Maryland at the northern range limits (Pennell 1935). Collected by William Canby from "near Salisbury" ~1890. This location is a recurring theme in the historical flora of Maryland. Habitat: The area around Salisbury historically has comprised a vast area of inland sand dunes and stream-head, peaty fens dotted with large depressions (these visible on high resolution, false color aerial images). These depressions may have been nontidal Atlantic White Cedar (<i>Chaemacyparis thyoides</i>) swamps. Distr. CP* (Wicomico*).	Branched Hedge-hyssop	G4G5	SH	X	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Gratiola viscidula</i> Pennell Plantaginaceae (Plantain Family)	Short's Hedge-hyssop	G4G5	S1	E	
Cons/Econote: Extant in Maryland at the northern range limits in four small and isolated populations.					
Habitat: Pond shores in peaty soils.					
Distr. CP (Anne Arundel, Prince George's, St. Mary's).					
Flw: late Jun; Fr: Oct.					
<i>Gymnocarpium dryopteris</i> (Linnaeus) Newman Cystopteridaceae (Brittle Fern Family)	Northern Oak Fern	G5	S1	E	
Cons/Econote: Circumboreal, occurring in Maryland near the southeastern range limits and endangered by habitat loss.					
Habitat: Cool mesic ravines under northern hardwoods.					
Distr. AP, RV (Frederick, Garrett).					
<i>Gymnopogon brevifolius</i> Trinius Poaceae (Grass Family)	Shortleaf Beardgrass	G5	S1	E	
Cons/Econote: Occurring in Maryland near the northern range limits and restricted to pine barren-like remnant communities.					
Habitat: Xeric inland dunes, maritime woodlands (Assateague Island), sandy roadsides.					
Distr. CP (Calvert, Wicomico*, Worcester).					
Flw/Fr: late Jul-mid Sept (Oct).					
<i>Harperella nodosa</i> Rose Apiaceae (Carrot Family)	Harperella	G2	S1	E	LE
Syn: <i>Ptilimnium nodosum</i> (Rose) Mathias					
Taxnote: Feist et al. (2012) resurrected the genus <i>Harperella</i> from within <i>Ptilimnium</i> based on an analysis of molecular markers and morphology. Inclusive of <i>H. vivipara</i> (Rose) and <i>H. fluviatilis</i> (Rose) for which Feist et al. found only marginal taxonomic evidence.					
Cons/Econote: Endangered via landscape-level changes in stream flows and rangewide habitat loss; restricted to two streams in Maryland. Smith et al. (2015) provide a discussion of population genetic structure of MD and WV populations.					
Habitat: Riverside bedrock scour bars.					
Distr. RV (Allegany, Washington).					
Flw: Aug-Sept; Fr: Sept- Nov.					
<i>Hasteola suaveolens</i> (Linnaeus) Pojarkova	see <i>Senecio suaveolens</i> (Linnaeus) Elliott				
<i>Hierochloe odorata</i> (Linnaeus) Palisot de Beauvois	see <i>Anthoxanthum hirtum</i> (Schrank) Y. Schouten & Veldkamp				
<i>Helianthemum bicknellii</i> Fernald	see <i>Crocانthemum bicknellii</i> (Fernald) Barnhart				

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Helianthus hirsutus</i> Rafinesque Asteraceae (Aster Family)	Stiff-hair Sunflower	G5	S1		
Cons/Econote: Documented by a few old collections, the species had not been confirmed present in Maryland for more than 40 years. Rediscovered by the Service in 2014. Some previous reports were based upon confusion with the abundant and widespread <i>H. divaricatus</i> . There have been some recent reports from woodlands near Harper’s Ferry. The source of the Brown & Brown (1984) record for Prince George’s County—a conspicuous outlier—has not been determined. Flowering somewhat later than <i>H. divaricatus</i> .					
Habitat: Dry woodlands and shale slopes.					
Distr. RV (Allegany, Frederick*).					
Flw: late Aug-mid Sept; Fr: late Sept-Nov.					
<i>Helianthus laevigatus</i> Torrey & A. Gray Asteraceae (Aster Family)	Smooth Sunflower Shale Barren Sunflower	G4	S1	E	
Cons/Econote: This species occurs locally in the central Appalachians and is restricted to shale barrens in our area. Maryland plants have not been seen since the date of first collection (1984).					
Habitat: Shale barren woodland.					
Distr. RV (Allegany).					
Flw: early Sept; Fr: Sept-Oct.					
<i>Helianthus occidentalis</i> Riddell Asteraceae (Aster Family)	McDowell’s Sunflower	G5T5	S1	T	
Syn: <i>H. dowellianus</i> M.A. Curtis					
<i>H. occidentalis</i> Riddell var. <i>dowellianus</i> (M.A. Curtis) Torrey & A. Gray					
Taxnote: Maryland plants are ssp. <i>occidentalis</i> .					
Cons/Econote: Restricted to a narrow zone of islands and shorelines along the Potomac Gorge.					
Habitat: Scour bar and bedrock outcrops and rocky bluffs above the river.					
Distr. PD (Montgomery).					
Flw: Sept; Fr: Sept-Oct.					
<i>Helonias bullata</i> Linnaeus Heloniadaceae (Swamp-pink Family)	Swamp Pink	G3	S2	E	LT
Cons/Econote: Endangered by habitat loss, eutrophication and sedimentation of wetland habitats. Dramatic decline in Anne Arundel County populations since the late 1980s at all stations and little evidence of reproduction by seed. Mining threatens the remaining populations in Cecil County. The Dorchester County station is often suspected as an introduction, and has not been observed in recent years.					
Habitat: Acidic seepage swamps along the Fall Line over deep gravel deposits.					
Distr. CP (Anne Arundel, Cecil, Dorchester*?).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: Apr-May; Fr: (rarely) May-Jun.					
<i>Hemianthus micranthemoides</i> Nuttall Linderniaceae (False pimpernel Family) Syn: <i>Micranthemum micranthemoides</i> (Nuttall) Wettstein Cons/Econote: Perhaps globally extinct. Despite the putative availability of quality habitat this species has not been relocated at its historical stations in Maryland nor elsewhere (see NatureServe 2019). Habitat: Rocky, gravelly or muddy tidal shores of Bay tributaries. Distr. CP* (Caroline*, Dorchester*, Prince George's*, Wicomico*, Worcester*).	Nuttall's Micranthemum	GH	SX	X	
<i>Heracleum maximum</i> W. Bartram Apiaceae (Carrot Family) Cons/Econote: Populations are generally small but the plant, due to its large stature (1.5-3 meters), is conspicuous, supporting casual observations of a general decline in abundance; however, the plant is still reported as common within the rich bottomlands of the Potomac River in western MD. The species appears competitive in its riparian habitat but may be displaced by Japanese knotweed (<i>Reynoutria japonica</i>). Habitat: Rich floodplain forests. Distr. AP, CP, PD, RV (Allegany, Anne Arundel, Baltimore, Carroll, Cecil, Frederick, Garrett, Harford, Howard, Montgomery, Queen Anne's, Washington). Flw: mid May-Jun; Fr: Jul-Sept.	Cow-parsnip	G5	S3		
<i>Heuchera pubescens</i> Pursh Saxifragaceae (Saxifrage Family) Taxnote: Inclusive of var. <i>brachyandra</i> , which may be better treated as a distinct species, <i>Heuchera alba</i> Rydberg. Cons/Econote: Field work by Jim Brighton contributed a location for <i>H. alba</i> in Garrett County, which pending further field work, may require a separate conservation rank. Habitat: Rocky woods and outcrops over limestone and calcareous shale (<i>H. pubescens</i>) and outcrops of acidic substrates at higher elevations (<i>H. alba</i>). Distr. AP, PD, RV (Allegany, Garrett, Montgomery, Washington). Flw: late May-Jun (as late as Jul in Garrett County); Fr: Sept-Nov.	Downy Alumroot	G4?	S3		
<i>Hexalectris spicata</i> (Walter) Barnhart Orchidaceae (Orchid Family) Taxnote: Our plants are the wide-ranging southeastern var. <i>spicata</i> . Cons/Econote: At one time a single (historical) station, last collected in 1955. Rediscovered (and new to the Eastern Shore) by William McAvoy in 2017. Maryland is the northernmost extent of this species' geographic range.	Crested Coralroot	G5T4T5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Native American shell (oyster) midden, shell marl. Distr. CP (Anne Arundel*, Kent). Flw: mid to late Jul; Fr: ?</p>					
<i>Hexastylis virginica</i> (Linnaeus) Small Aristolochiaceae (Birthwort Family)	Virginia Heartleaf	G4	S1	E	
<p>Cons/Econote: Highly localized and occurring in Maryland at the northern range limit of the species. Habitat: Mesic upland forests and north slopes of deep ravines. Distr. CP (Charles). Flw: Apr-May; Fr: May-Jun.</p>					
<i>Hibiscus laevis</i> Allioni Malvaceae (Mallow Family)	Halberd-leaf Rosemallow	G5	S3		
<p>Cons/Econote: Occurring along the Susquehanna and Potomac Rivers. Much more restricted than the widespread <i>H. moscheutos</i>. Habitat: Riverine scour and depositional bars and shorelines. Distr. CP, PD, RV (Cecil, Charles, Frederick, Harford, Montgomery, Prince George's, Washington). Flw: late July-early Aug; Fr: late Aug-Nov.</p>					
<i>Homalosorus pycnocarpus</i> (Sprengel) Pichi-Sermolli Diplaziopsidaceae (Glade Fern Family)	Glade Fern	G5	S2	T	
<p>Syn: <i>Athyrium pycnocarpon</i> Sprengel <i>Diplazium pycnocarpon</i> (Sprengel) M. Broun Cons/Econote: Threatened by encroaching invasive species and heavy browse by white-tailed deer. The Coastal and Piedmont stations are highly fragmented and persist as small populations in remnant pockets of rich forest. Habitat: Rich, mesic ravines (shell-marl), steep rocky "seepy" slopes in mesic mixed forests, often over mafic substrates. Distr. AP, CP, PD, RV (Allegheny, Anne Arundel, Baltimore*, Calvert, Charles, Garrett, Harford, Howard, Montgomery, Prince George's, Washington).</p>					
<i>Honckenya peploides</i> (Linnaeus) Ehrhart Caryophyllaceae (Pink Family)	Sea Chickweed Seabeach Sandwort	G5T5	S1	E	
<p>Taxnote: Maryland plants are <i>ssp. robusta</i> (Fernald) Hultén Cons/Econote: Circumboreal, south to Virginia (historically) and restricted to saline habitats on the barrier island (Assateague). Habitat: Coastal beaches and overwash flats. Distr. CP (Worcester).</p>					
<i>Hottonia inflata</i> Elliott !	Featherfoil	G4	S1	E(PT)	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Primulaceae (Primrose Family)					
Cons/Econote: Endangered by woody succession of pond habitat. Possibly dispersed by waterfowl, not all reported stations are currently occupied and may be ephemeral or may not have survived the extended droughts of 2004-2008. However, several new, robust populations were located or relocated in 2020. The Service is reviewing a change to this species' State rank and status.					
Habitat: Delmarva Bays, bottomland hardwood swamps, seasonal ponds.					
Distr. CP, PD (Caroline, Charles, Kent, Harford, Montgomery, Queen Anne's, Talbot).					
Flw: late Apr-May; Fr: Jul. (flowering dates vary depending on amount of sunlight).					
<i>Houstonia serpyllifolia</i> Michaux	Michaux's Bluet	G4?	S3		
Rubiaceae (Madder Family)					
Syn: <i>Hedyotis michauxii</i> Fosberg					
Cons/Econote: A southern and central Appalachian endemic.					
Habitat: Locally abundant along rivers in Garrett County; in shade to partial shade in damp soil, often among or growing on rocks.					
Distr. AP (Garrett).					
Flw: mid May-Jun; Fr: Aug.					
<i>Houstonia tenuifolia</i> Nuttall	Slender-leaved Bluets	GNR	S1		
Rubiaceae (Madder Family)					
Syn: <i>Houstonia longifolia</i> var. <i>tenuifolia</i> (Nuttall) Wood					
<i>Hedyotis nuttalliana</i> Fosberg					
Taxnote: The thin-leaved morphological extreme of the more common <i>H. longifolia</i> according to Terrell (1959) and not often treated as a distinct species.					
Habitat: Dry woodlands, bedrock scour terraces and outcrops, limestone talus slopes and shale scree slopes.					
Distr. PD, RV (Montgomery, Washington).					
<i>Hudsonia ericoides</i> Linnaeus	Golden Heather	G4	S1	E	
Cistaceae (Rockrose Family)					
Cons/Econote: Added to the Maryland flora by Sipple (2002); the species occurs in a pine barrens-like remnant.					
Habitat: Sandy soils under a large powerline rights-of-way.					
Distr. CP (Anne Arundel).					
<i>Huperzia porophila</i> (Lloyd & Underwood) Holub	Rock Clubmoss	G4	SX		
Lycopodiaceae (Clubmoss Family)					
Syn: <i>Lycopodium porophilum</i> Lloyd & Underwood					
Cons/Econote: Historically known from a single station (Youghiogheny River Gorge) now extirpated. Last collected by D. D. Boone in 1982.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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Habitat: Wet outcrop at waterfall.

Distr. AP* (Garrett*).

Hybanthus concolor (T.F. Forster) Sprengel

see *Cubelium concolor* (T.F. Forster) Raf. ex Britton & A. Brown

***Hydrastis canadensis* Linnaeus**

Golden-seal

G3

S2

T

Hydrastidaceae (Golden-seal Family)

Cons/Econote: Threatened by habitat loss throughout the species' range. While Maryland populations do not appear to have suffered from collecting pressures for the medicinal plant trade, the regional declines of this species have created concern among natural resource agencies—this recently highlighted by the addition of Golden-seal to the IUCN Red List as a Vulnerable plant species (IUCN 2017). Golden-seal's rhizomes have high concentrations of medicinally-active alkaloids (berberine, hydrastine and canadine used for treating colds and upper respiratory infections). Unlike ginseng, the market does not distinguish between wild and cultivated goldenseal, additionally leaves and stems have commercial value when harvested while still green. Maryland populations are likely to suffer from illegal harvesting in the future when more abundant sources become tapped. Christensen & Gorchov (2010) provide a valuable discussion of the population dynamics of the species.

Habitat: Rich, mesic forests over mafic substrates (limestone, marble) or rich alluvium.

Distr. AP, PD, RV (Baltimore*, Cecil, Frederick, Garrett, Harford, Howard, Montgomery, Washington).

Flw: May; **Fr:** Jul-Sept.

***Hydrophyllum macrophyllum* Nuttall**

Large-leaf Waterleaf

G5

S2

T

Boraginaceae (Borage Family)

Cons/Econote: Threatened by habitat loss over the long term and competition/displacement by invasive species in the near term.

Habitat: Basic mesic forests and rich floodplain forests, chiefly over limestone.

Distr. RV (Washington).

Flw: late May; **Fr:** Jun-Jul.

***Hylodesmum pauciflorum* (Nuttall) H. Ohashi & R.R. Mill**

Few-flower Tick-trefoil

G5

S2

E

Fabaceae (Legume Family)

Syn: *Desmodium pauciflorum* (Nuttall) A.P. de Candolle

Taxnote: Three species of tick-trefoil, *Desmodium nudiflorum*, *D. glutinosum* and *D. pauciflorum* are distinct from North American *Desmodium* and have been segregated as *Hylodesmum* (Ohashi & Mill 2002).

Cons/Econote: Endangered by habitat loss and displacement by invasive species.

Habitat: Mesic floodplain forests over rich alluvium.

Distr. CP (Anne Arundel, Cecil*, Calvert, Howard, Kent, Prince George's, St. Mary's*, Talbot*).

Flw: Aug; **Fr:** Aug-Oct.

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Hypericum adpressum Rafinesque ex Barton</i> Hypericaceae (St. John's-Wort Family)	Creeping St. John's-wort	G3	S1	E	
Cons/Econote: Endangered by habitat loss and alteration of groundwater hydrology. Maryland populations have poor protection status, i.e., many stations do not occur on protected lands where monitoring may take place when needed. Historically disjunct on the Appalachian Plateau (Mt. Lake Park), the site of a calcareous fen (now extirpated).					
Habitat: Delmarva Bays and other seasonally-flooded wetlands.					
Distr. AP*, CP (Caroline, Dorchester, Garrett*, Queen Anne's, Wicomico, Somerset).					
Flw: mid-late Jul; Fr: Aug-Oct.					
<i>Hypericum denticulatum Walter</i> Hypericaceae (St. John's-Wort Family)	Coppery St. John's-wort	G5	S2	T	
Taxnote: Not including <i>H. denticulatum</i> var. <i>acutifolium</i> (<i>H. virgatum</i> , see below).					
Cons/Econote: Threatened by habitat loss. The species persists in remnant populations along ditches but these are not likely viable over the long term. Several large populations occur under transmission rights-of-way that are susceptible to herbicide damage and/or detrimental mowing patterns (during reproductive phase).					
Habitat: Delmarva Bays, wet pine flatwoods, ditches, roadsides.					
Distr. CP (Caroline, Dorchester, Wicomico, Worcester).					
Flw: mid-late Aug; Fr: Sept-Oct.					
<i>Hypericum drummondii</i> (Greville & Hooker) Torrey & A. Gray Hypericaceae (St. John's-Wort Family)	Drummond's St. John's-wort	G5	SH	X	
Cons/Econote: Last collected 1944 and documented by a single collection (Elizabeth Earle 4012 PH). Perhaps a waif as the location is substantially out of the native geographic range.					
Habitat: Dry woodlands, woodland borders, fields (Weakley 2020).					
Distr. CP* (Talbot*).					
<i>Hypericum ellipticum Hooker</i> Hypericaceae (St. John's-Wort Family)	Pale St. John's-wort	G5	SU		
Cons/Econote: The southern range of this widespread northern and midwestern species is exceptionally spotty. The species has been reported from opposite ends of the state and from very different habitats. The Service suspects that the species is present more commonly in w. Maryland but currently there is not enough information to establish a confident rank and status.					
Habitat: Mountain peatlands; streambanks; scourbar islands on the Susquehanna River.					
Distr. AP, PD* (Cecil*, Garrett).					
<i>Hypericum gymnanthum Engelmann & A. Gray</i>	Clasping-leaf St. John's-wort	G5	S3		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Hypericaceae (St. John's-Wort Family) Cons/Econote: Widely overlooked; population size and vigor is closely associated with disturbance intervals in wet meadows and pinelands. Habitat: A component of wet pine flatwoods, but also persisting in wet sandy soils under powerlines, along roadsides, and logging roads. Distr. CP (Caroline, Charles, Dorchester, Kent, Prince George's, St. Mary's*, Somerset, Wicomico, Worcester).</p>					
<i>Hypericum virgatum</i> Lamarck	Sharpleaf St. John's-wort	G4?		SH	
<p>Hypericaceae (St. John's-Wort Family) Syn: <i>H. denticulatum</i> Walter var. <i>acutifolium</i> (Elliott) Blake <i>H. denticulatum</i> ssp. <i>acutifolium</i> (Elliott) N. Robson <i>H. acutifolium</i> Elliott Cons/Econote: Webb (1980) cited a single Maryland specimen (<i>H. denticulatum</i> var. <i>acutifolium</i>, collected by Wherry) in his treatment and this was the first indication that this taxon occurred, at least historically, in Maryland. There are three historical records for this species in Maryland: one from Baltimore County (presumably serpentine meadows) and two from Prince George's County: near Laurel (Wherry 1932) and at Patuxent Wildlife Research Center (1938); these presumably pine barrens-like communities. Allison (2011) presents an analysis of the species in the <i>H. denticulatum</i> group. Habitat: Oak and pine barrens; open meadows over serpentine. Distr. CP*, PD* (Baltimore*, Prince George's*).</p>					
<i>Ilex decidua</i> Walter	Deciduous Holly	G5		S2	
<p>Aquifoliaceae (Holly Family) Cons/Econote: Occurring in a variety of rich alluvial habitats, this species may be locally frequent but is rare to infrequent at most stations. Habitat: Bottomland hardwoods, hardwood swamps, rich alluvial terrace forests and woodlands. Distr. CP, PD (Anne Arundel, Caroline, Charles, Montgomery, Prince George's, Queen Anne's, St. Mary's). Flw: mid Apr-early May; Fr: Aug-Nov.</p>					
<i>Ilex mucronata</i> (Linnaeus) M. Powell, V. Savolainen, & S. Andrews	Mountain Holly	G5		S3	
<p>Aquifoliaceae (Holly Family) Syn: <i>Nemopanthus mucronata</i> (Linnaeus) Trelease Cons/Econote: A characteristic shrub of mountain peatlands in Garrett County; restricted to that physiographic province. Habitat: Montane peatlands, sedge meadows, glades; high-elevation sandstone boulderfields. Distr. AP (Allegany, Garrett). Flw: May; Fr: Jun-Nov.</p>					
<i>Iresine rhizomatosa</i> Standley	Eastern Bloodleaf	G5		S1	E

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Amaranthaceae (Amaranthus Family)					
Cons/Econote: A plant restricted to two small populations in the Potomac Gorge and occurring in Maryland at the northern range limits.					
Habitat: Deep pockets of alluvial silt and sand along flood channels and river banks.					
Distr. PD (Montgomery).					
Flw: Aug-Sept; Fr: Sept-Dec.					
<i>Iris cristata</i> Aiton	Dwarf Crested Iris	G5	S1	E	
Iridaceae (Iris Family)					
Cons/Econote: Occurring as scattered, generally small populations at the northern range limits. Reproduction is sporadic and may be additionally impacted by browsing white-tailed deer.					
Habitat: Thin, dry acid soil of upland forests; floodplain terraces in filtered to partial shade.					
Distr. PD, RV (Allegheny, Montgomery, Washington; widely planted elsewhere).					
Flw: early May; Fr: Jun-Jul.					
<i>Iris prismatica</i> Pursh ex Ker-Gawler	Slender Blueflag	G4G5	S2	E	
Iridaceae (Iris Family)					
Cons/Econote: Endangered by habitat loss including direct losses due to herbicide use (powerlines).					
Habitat: A variety of groundwater-driven depressional wetlands including Delmarva Bays, floodplain pools, and upland depression swamps; low areas in pine flatwoods, powerline meadows.					
Distr. CP, PD (Baltimore, Caroline, Cecil, Dorchester, Harford, Kent*, Prince George's*, St. Mary's, Wicomico, Worcester).					
Flw: Apr-May; Fr: late Jul-Sept.					
<i>Iris verna</i> Linnaeus	Dwarf Iris	G5T3T5	S1	E	
Iridaceae (Iris Family)					
Taxnote: Maryland plants are var. <i>verna</i> .					
Cons/Econote: This small iris of fire-prone sandhills and woodlands in the southeast is, in Maryland, almost entirely restricted to artificially maintained habitats under powerlines and along roadsides and ditches. Persistence at these sites is precarious.					
Habitat: Rights-of-way under powerlines, roadsides and ditches in dry, sandy soils.					
Distr. CP (Anne Arundel, Charles, Prince George's*, Wicomico, Worcester).					
Flw: late Apr-early Jun; Fr: Jul.					
<i>Iris virginica</i> Linnaeus	Virginia Blueflag	G5	S3		
Iridaceae (Iris Family)					
Taxnote: Maryland plants are var. <i>shrevei</i> (Small) E. Anderson					
Habitat: River margins, flood channels, pools and pond margins.					
Distr. CP*, PD, RV (Allegheny, Calvert*, Charles, Frederick, Kent*, Montgomery, Prince George's*, Queen Anne's*, Washington).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: early May-early Jun (peaking in mid-May); Fr: Jun-Jul.					
<i>Isoetes engelmannii</i> A. Braun Isoëtaceae (Quillwort Family)	Engelmann's Quillwort	G5	S3		
Taxnote: A diploid species, Maryland plants are presumably the southern genotype (see Hoot et al. 2004).					
Cons/Econote: The most commonly occurring quillwort in our region; however, many Maryland records are now historical and the identity of many specimens need confirmation. The State rank is currently under review and the Service requests additional data.					
Habitat: Intermittent stream beds with gravel bottoms, floodplain swales and oxbow sloughs (McAvoy 2007), ponds.					
Distr. CP, PD, RV (Allegany, Caroline, Cecil, Dorchester, Frederick, Kent, Montgomery*, Prince George's, Talbot, Worcester*).					
<i>Isoetes riparia</i> Engelmann ex A. Braun Isoëtaceae (Quillwort Family)	Riverbank Quillwort	G5?	SU		
Taxnote: Hoot et al. (2004) identified Maryland accessions as of allopolyploid origin (<i>I. engelmannii</i> x <i>I. echinospora</i>). The taxonomic difficulties in the genus are driven by conserved morphology with substantial levels of allopolyploid speciation.					
Cons/Econote: The conservation status and distribution of this species needs substantial review.					
Habitat: Exposed intertidal shores of freshwater rivers and creeks; on gravel, sand and mud substrates (McAvoy 2007).					
Distr. CP (Caroline, Cecil, Dorchester, Harford*, Kent, Prince George's*, Queen Anne's*, Wicomico, Worcester).					
<i>Isotrema macrophyllum</i> (Lamarck) C.F. Reed Aristolochiaceae (Birthwort Family)	Pipevine, Dutchman's Pipe	G5	S2	T	
Syn: <i>Aristolochia macrophylla</i> Lamarck					
Cons/Econote: A southern-central Appalachian endemic that in Maryland is restricted to linear riparian habitats. Maryland is near the northern terminus of the species' range (sw. PA).					
Habitat: Montane alluvial forest and cove forests.					
Distr. AP, RV (Allegany*, Garrett, Washington).					
Flw: May-Jun; Fr: late Jun-Sept.					
<i>Isotria medeoloides</i> (Pursh) Rafinesque Orchidaceae (Orchid Family)	Small Whorled Pogonia	G2G3	SH	X	LT
Syn: <i>Pogonia affinis</i> Austin					
Cons/Econote: Presumed extirpated. Populations of this widespread (in North America) but extremely localized species are largest in the previously glaciated northeastern range. The remaining southern populations are highly differentiated and genetically depauperate (see Stone et al. 2012 for a thorough discussion). Historically known from Montgomery County and documented by a few collections 1928-1930 (Reed 1964, and Wright 1992 for historical details). The area around Chevy Chase, now heavily urbanized, was apparently well-known to botanists during the 1920s and 1930s and so many locations were found in such a small area that Edgar Wherry (1885-1982), in a letter to Jenny Jones (28 July 1929), opined that "evidently it is not rare at all, but has been overlooked."					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Mesic hardwood forests. Distr. PD* (Montgomery*). Flw: early-mid May; Fr: Jul.</p>					
<i>Juglans cinerea</i> Linnaeus	Butternut	G3		S2S3	
<p>Juglandaceae (Walnut Family) Cons/Econote: Butternut is experiencing a rapid rangewide decline due to the spread of butternut canker disease (NatureServe 2019). Additionally, extensive hybridization with the Japanese walnut (<i>Juglans ailantifolia</i> Carrière) has been shown to occur throughout the natural range of <i>J. cinerea</i> (Hoban et al. 2009) raising concerns of an undetected genetic invasion. Interestingly, and of conservation interest, is that Hoban et al. (2010) concluded that postglacial recolonization history has had a greater impact on the distribution of genetic diversity than population declines due to butternut canker, suggesting that wind-pollinated forest trees like butternut may be buffered against steep population declines. Habitat: Rich, mesic forests. Distr. AP, CP, PD, RV (Allegany, Cecil, Charles, Dorchester¹, Frederick, Garrett, Harford, Howard, Montgomery, Washington).</p>					
<i>Juncus articulatus</i> Linnaeus	Jointed Rush	G5		S1	
<p>Juncaceae (Rush Family) Syn: <i>Juncus articulatus</i> Linnaeus var. <i>obtusatus</i> Engelmann Cons/Econote: Known from only two counties and three collections in Maryland. Though seemingly an odd distribution this mostly montane species is known from coastal New Jersey and North Carolina. Easily overlooked and similar to <i>J. acuminatus</i>. Habitat: Disturbed open seasonally wet sands, ditches, interdunal swales. Distr. AP, CP (Garrett, Worcester).</p>					
<i>Juncus balticus</i> Willdenow	Baltic Rush	G5T5		SH	X
<p>Juncaceae (Rush Family) Syn: <i>Juncus arcticus</i> Willdenow var. <i>balticus</i> (Willdenow) Trautvetter <i>Juncus balticus</i> Willdenow ssp. <i>littoralis</i> (Engelmann) Snogerup Taxnote: Cosmopolitan species with varying names depending on the manual used. Maryland plants are var. <i>littoralis</i> Engelmann. Cons/Econote: Known from a single Eduards Baltars (1902-1972) collection from 1966 (4497 Cylburn). Habitat: "Border of ditch along railroad ca 3/4 mile southeast of Abingdon." Distr. CP* (Harford*).</p>					
<i>Juncus brevicaudatus</i> (Engelmann) Fernald	Narrow-panicle Rush	G5		S2	
<p>Juncaceae (Rush Family) Cons/Econote: Often confused with the more widespread and similar <i>J. subcaudatus</i>. Habitat: Seepage wetlands of higher elevations, mountain peatlands.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. AP (Garrett).					
<i>Juncus caesariensis</i> Coville Juncaceae (Rush Family)	New Jersey Rush	G2G3	S1	E	
Taxnote: Similar to the widespread <i>J. canadensis</i> , this species differs in seed morphology and obvious scabrid gray-green to blue-green culms and leaves.					
Cons/Econote: Known in Maryland from a single extant location. This species reaches its greatest abundance in New Jersey.					
Habitat: Open canopied seepage wetlands, powerline swales.					
Distr. CP (Anne Arundel*, Charles).					
Flw/Fr: Aug-Oct.					
<i>Juncus elliotii</i> Chapman Juncaceae (Rush Family)	Elliott's Rush	G4G5	S1		
Taxnote: Similar to and often confused with the common and widespread <i>J. acuminatus</i> . The darker capsules and shorter tepals readily separate <i>J. elliotii</i> . The tuberous rhizomes often mentioned in keys as diagnostic are unreliable in our range as they are very rarely present in <i>J. acuminatus</i> or can be absent in <i>J. elliotii</i> .					
Cons/Econote: Known from two locations. This species could be easily overlooked.					
Habitat: Open-canopied seasonally wet peaty sands, powerline swales.					
Distr. CP (St. Mary's, Wicomico).					
<i>Juncus longii</i> Fernald Juncaceae (Rush Family)	Long's Rush	G3Q	S1	E	
Taxnote: Often lumped with the more widespread <i>Juncus marginatus</i> or <i>Juncus biflorus</i> , Knapp & Naczi (2008) show this to be a distinct species.					
Cons/Econote: Though the global rank at NatureServe is G3, it is more appropriately G4/G5. The Montgomery County station is associated with other plants found predominantly on the Coastal Plain.					
Habitat: Open-canopied seepage wetlands, roadside seeps, powerlines.					
Distr. CP, PD (Anne Arundel, Charles, Montgomery, Prince George's, Worcester).					
<i>Juncus megacephalus</i> M.A. Curtis Juncaceae (Rush Family)	Big-head Rush	G4G5	S1?		
Cons/Econote: This species is a recent addition to the Maryland Flora (Knapp et al. 2011). Known from nearby Accomac Co., VA, apparently only recently arrived in Maryland.					
Habitat: Interdunal swales.					
Distr. CP (Worcester).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Juncus militaris</i> Bigelow Juncaceae (Rush Family)	Bayonet Rush	G5	SH	X	
Cons/Econote: Though known with some frequency in adjacent Sussex Co., Delaware, there is a single historic specimen for this plant in Maryland collected from “near Salisbury” in 1864.					
Habitat: Millponds, shallow streams.					
Distr. CP (Wicomico*).					
<i>Juncus pelocarpus</i> E. Meyer Juncaceae (Rush Family)	Brown-fruit Rush	G5	S1	E	
Syn: <i>Juncus pelocarpus</i> E. Meyer var. <i>crassicaudex</i> Engelmann					
<i>Juncus abortivus</i> Chapman					
Taxnote: Southern plants with a more erect habit and thicker rhizomes are sometimes separated as <i>J. abortivus</i> . These characters appear clinal.					
Cons/Econote: Flowers are often aborted. More common on the Western Shore than the Eastern Shore, this species can be found in great abundance in good habitat.					
Habitat: Millpond basins, sandpits, acidic seepage wetlands.					
Distr. CP (Anne Arundel, Dorchester, Wicomico).					
<i>Juncus torreyi</i> Coville ! Juncaceae (Rush Family)	Torrey’s Rush	G5	S1	E(PD)	
Cons/Econote: Given the disturbance-loving nature of this species it is plausible that it is under-reported and overlooked. However, when compared to other <i>Juncus</i> species, this species is fairly conspicuous. Newly added to the flora of a well-botanized site in the District of Columbia and a fairly recent arrival to the State of Delaware. State status is under review.					
Habitat: Open wetlands, ditches, roadsides.					
Distr. CP, PD (Baltimore, Howard, Prince George’s).					
<i>Juncus trifidus</i> Linnaeus ! Juncaceae (Rush Family)	Highland Rush	G5	S1	E	
Cons/Econote: Known from a single location; last observed in 1980 (Riefner & Hill 1983). Searched for many times since its discovery but the Service has failed to relocate the plants and the population is presumed extirpated. The species is rare throughout the southern Appalachian and Mid-Atlantic portion of its range but common in northern New England and adjacent Canada.					
Habitat: Scattered in exposed cliff crevices of Tuscarora sandstone at upper and mid-elevations. State status is under review.					
Distr. RV (Allegany).					
<i>Juniperus communis</i> Linnaeus Cupressaceae (Cypress Family)	Dwarf Juniper	G5	SH	X	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Taxnote: Maryland plants are var. <i>depressa</i> Pursh. Cons/Econote: Collected from hills along the Susquehanna River and from serpentine outcrops by Reed (1986). Historical stations have not been relocated. Habitat: Thin soils over serpentine outcrops. Distr. PD* (Baltimore*, Cecil*).</p>					
<i>Kalmia angustifolia</i> Linnaeus Ericaceae (Heath Family)	Sheep Laurel	G5	S3S4		
<p>Habitat: Inland sand dune and ridge forest and woodlands; sandy seeps and clearings. Distr. CP (Anne Arundel, Caroline, Cecil, Charles, Howard, Prince George's, Wicomico, Worcester). Flw: mid May-Jun; Fr: Aug-Oct.</p>					
<i>Krigia dandelion</i> (Linnaeus) Nuttall Asteraceae (Aster Family)	Potato Dwarf-dandelion	G5	S2S3		
<p>Cons/Econote: Maryland populations are the northernmost in the species' range that are known to be extant. Most of the remaining populations occur in a highly urbanized landscape and are isolated and severely fragmented. Habitat: Exposed mineral soils derived from nutrient-rich (ultramafic) substrates and glauconitic sands. Distr. CP, PD, RV* (Anne Arundel*, Calvert, Carroll, Charles, Frederick*, Howard, Montgomery, Prince George's, St. Mary's). Flw: early-late May; Fr: late May-June.</p>					
<i>Lachnanthes caroliniana</i> (Lamarck) Dandy Haemodoraceae (Bloodwort Family)	Red Root Carolina Redroot	G4	S1	E	
<p>Cons/Econote: Known from a single station. Habitat: Delmarva Bay. Distr. CP (Dorchester). Flw: late Jun-Jul; Fr: Jul-Sept.</p>					
<i>Lactuca hirsuta</i> Muhlenberg ex Nuttall Asteraceae (Aster Family)	Hairy Lettuce	G5	SH	X	
<p>Taxnote: Inclusive of two potentially occurring subtaxa: var. <i>hirsuta</i> and var. <i>sanguinea</i> (Bigelow) Fernald. Cons/Econote: Represented by a few pre-to-early 1900s collections mostly from the vicinity of Great Falls. The weedy nature of the genus and similar-looking species may have contributed to overlooking this species in the field. Habitat: Forest edges. Distr. PD* (Baltimore*, Montgomery*).</p>					
<i>Larix laricina</i> (Du Roi) K. Koch	American Larch	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Pinaceae (Pine Family)					
Cons/Econote: Occurring at its southern range limits in relict boreal forests in MD and adjacent WV. This species is frequently planted and available as a commercial forestry tree. Our concern regards those relictual occurrences in Garrett County peatlands that have long been noted by botanists (e.g. Bell 1941).					
Habitat: Remnant boreal subarctic swamps.					
Distr. AP (Garrett).					
<i>Lathyrus palustris</i> Linnaeus	Vetchling Peavine	G5	S1	E	
Fabaceae (Legume Family)					
Cons/Econote: A circumboreal species near its southern range limits in Maryland at a single extant station.					
Habitat: Freshwater tidal marsh on hummocks of <i>Carex stricta</i> .					
Distr. CP, PD* (Cecil, Montgomery*, Prince George's*).					
Flw: mid Jun-Jul; Fr: Aug.					
<i>Lechea maritima</i> Leggett ex Britton, Sterns, & Poggenburg	Virginian Beach Pinweed	G5T3Q	S3		
Cistaceae (Rockrose Family)					
Taxnote: Maryland plants are var. <i>virginica</i> Hodgdon; var. <i>maritima</i> is present in Delaware and potentially occurs in Maryland.					
Cons/Econote: A regional coastal endemic (Sorrie & Weakley 2007b); locally frequent on the barrier island (Assateague).					
Habitat: Xeric coastal dunes, coastal scrub woodlands with beach-heather (<i>Hudsonia tomentosa</i>).					
Distr. CP (Anne Arundel, Calvert*, Somerset, St. Mary's*, Worcester).					
<i>Lechea tenuifolia</i> Michaux	Slender Pinweed	G5	SH	X	
Cistaceae (Rockrose Family)					
Cons/Econote: Reported for stations in s. Maryland from about 1901-1960.					
Habitat: Sandy woodlands/glades in dry soil.					
Distr. CP* (Anne Arundel*, Charles*, Prince George's*).					
<i>Leersia hexandra</i> Swartz	Club-head Cutgrass	G5	S1	E	
Poaceae (Grass Family)					
Cons/Econote: Endangered by habitat loss over the long term and by woody succession of bay habitat over the short term. Known from single population that is recovering after controlling tree encroachment into the open-pond habitat.					
Habitat: Delmarva bay.					
Distr. CP (Worcester).					
Flw/Fr: Sept.					
<i>Leersia lenticularis</i> Michaux	Catchfly Cutgrass	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Poaceae (Grass Family)					
Cons/Econote: Endangered by habitat loss. A rare component of coastal swamp forests, chiefly along the Pocomoke River.					
Habitat: Riverine floodplain swamps.					
Distr. CP (Dorchester, Worcester).					
Flw/Fr: Aug.					
<i>Lemna trisulca</i> Linnaeus	Star Duckweed	G5	S1	E	
Lemnaceae (Duckweed Family)					
Cons/Econote: Occurring in Maryland in a few scattered stations; this species' habitat is very restricted in comparison to its widespread and common congener <i>L. minor</i> Linnaeus. Inventory of this species is made difficult due to the habit of the plant to float just underneath the water surface (J. Hall, pers. comm).					
Habitat: Ponds, canals, baymouth barrier wetlands (Sipple 1982).					
Distr. CP, RV (Allegany, Calvert).					
<i>Lespedeza frutescens</i> (Linnaeus) Elliott	Violet Lespedeza	G5	S3		
Fabaceae (Legume Family)					
Syn: <i>L. violacea</i> (Linnaeus) Persoon, misapplied.					
Taxnote: Known in many floras as <i>L. violacea</i> —that name misapplied to this wiry-stemmed species.					
Habitat: Dry, open woodland borders, occasionally rocky scour bars along large rivers. Usually over calcareous substrates.					
Distr. RV (Allegany, Frederick, Washington).					
Flw: mid Aug-early Sept; Fr: Sept-Nov.					
<i>Lespedeza stuevei</i> Nuttall	Silky Lespedeza	G5	S3		
Fabaceae (Legume Family)					
Cons/Econote: Fire suppression and loss of coastal-barrens habitat has relegated this species to small (and often linear) populations in clearings and along sandy trails/roadsides.					
Habitat: Inland Sand Dune and Ridge woodlands (generally restricted to trailsides and clearings with full sun); clearings and roadsides in dry sandy soils.					
Distr. CP (Anne Arundel, Baltimore*, Calvert, Caroline, Charles*, Dorchester, Prince George's, Wicomico, Worcester).					
Flw: mid Aug-mid Sept; Fr: Sept-Nov.					
<i>Liatris helleri</i> T. C. Porter	Heller's Blazing Star	GNR	SH	X	
Asteraceae (Aster Family)					
Syn: <i>L. turgida</i> Gaiser					
Taxnote: The species was long-known as <i>L. turgida</i> but now is included in a broadened concept of <i>L. helleri</i> .					
Cons/Econote: Last collected in 1968 by Eduards Baltars (1902-1972) from a single station at the northern range limit for the species.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Shale barren. Distr. RV* (Allegheny*).</p>					
<i>Liatris spicata</i> (Linnaeus) Willdenow Asteraceae (Aster Family)	Prairie Blazing Star	G5	S1		
<p>Taxnote: Maryland plants are var. <i>spicata</i>; var. <i>resinosa</i> (Nuttall) Gaiser is to be expected. Cons/Econote: Highly restricted and localized but frequent in habitat. Populations have been greatly reduced by heavy browse of white-tailed deer and fire exclusion. Habitat: Serpentine grasslands. Distr. PD (Baltimore). Flw: late Aug-Sept; Fr: Sept-Oct.</p>					
<i>Liatris squarrosa</i> (Linnaeus) Michaux Asteraceae (Aster Family)	Scaly Gayfeather	G5T5	S1	E	
<p>Taxnote: If varieties of this species are recognized, Maryland plants are var. <i>squarrosa</i>. Cons/Econote: Endangered by habitat loss and absence/suppression of natural disturbances, such as fire, that creates canopy openings. Habitat: Dry, sandy soil in open, sunny habitats. Distr. CP (Charles). Flw: Aug; Fr: Sept-Oct.</p>					
<i>Ligusticum canadense</i> (Linnaeus) Britton Apiaceae (Carrot Family)	American Lovage	G4	SH	X	
<p>Cons/Econote: One of the many species collected at Mountain Lake Park by Lucy Braun in the early 1900s, the historical site of a mafic prairie or fen. Habitat: Nutrient-rich forests and calcareous fens. Distr. AP*, RV* (Frederick*, Garrett*).</p>					
<i>Lilium philadelphicum</i> Linnaeus Liliaceae (Lily Family)	Wood Lily	G5	SH	X	
<p>Cons/Econote: Maryland records are based upon a smattering of old collections 1888-1947; last observed in 2000 (Redman 2002) and not relocated. Habitat: Prairie-like meadows and woodlands. Piedmont records are from serpentine. Distr. AP*, PD*, RV* (Allegheny*, Baltimore*, Cecil*, Garrett*, Washington*).</p>					
<i>Limnobium spongia</i> (Bosc) L.C. Richard ex Steudel ! Hydrocharitaceae (Frog's-bit Family)	American Frog's-bit	G4	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Occurring in Maryland (and Delaware) at its northern range limits and associated with nontidal wetland plant communities. In good habitat, the species may be abundant with thousands of individuals. Several new populations have been located in 2019 and 2020. State status is currently under review.</p> <p>Habitat: Baymouth barrier wetlands (Sipple 1982); nontidal shrub swamps; swamp forests.</p> <p>Distr. CP (Calvert, Cecil, Charles, Dorchester, Kent).</p> <p>Flw: Jul-Sept; Fr: Oct-Nov.</p>					
<i>Limosella australis</i> R. Brown	Mudwort	G5	S2	E	
<p>Plantaginaceae (Plantain Family)</p> <p>Cons/Econote: One of many intertidal zone plants that are suspected of being under severe decline, presumably due to sea level rise but also by eutrophication and siltation of habitats along tributaries of the Chesapeake Bay. Presumed extirpated along the Gunpowder River, and under severe decline elsewhere. Several stations along the Upper Bay could not be relocated in 2017 (J. Harrison).</p> <p>Habitat: Fresh to brackish intertidal shores along the upper Chesapeake Bay and tributaries.</p> <p>Distr. CP (Baltimore/Harford*, Cecil, Harford, Kent).</p>					
<i>Linum intercursum</i> Bicknell	Sandplain Flax	G4	S2	T	
<p>Linaceae (Flax Family)</p> <p>Cons/Econote: Threatened by habitat loss and degradation due to development of its upland habitat, and by natural succession due to suppression of natural disturbances such as fire that creates canopy openings.</p> <p>Habitat: Dry to seasonally wet clearings, powerlines, roadsides, usually in exposed sandy soils.</p> <p>Distr. CP, PD* (Baltimore, Cecil*, Charles, Kent, Prince George's, Queen Anne's*, St. Mary's, Somerset, Talbot*, Wicomico, Worcester).</p> <p>Flw: late Jun-Jul; Fr: late Jul-mid Sept.</p>					
<i>Linum sulcatum</i> Riddell	Grooved Yellow Flax	G5	S1	E	
<p>Linaceae (Flax Family)</p> <p>Cons/Econote: Restricted to ultramafic barrens and a single protected site. Threatened by fire exclusion and heavy deer browse.</p> <p>Habitat: Exposed beds of serpentine in the barrens.</p> <p>Distr. PD (Baltimore, Harford).</p> <p>Flw: late Aug-Sept; Fr: Sept-Oct.</p>					
<i>Liparis liliifolia</i> (Linnaeus) L.C. Richard ex Ker-Gawler	Large Twayblade	G5	S3		
<p>Orchidaceae (Orchid Family)</p> <p>Cons/Econote: All Frederick County stations have experienced dramatic declines (Knapp & Wiegand 2014) and declines at other locations are suspected; however, the Service does not have detailed information on population size at individual stations and annual monitoring data is sparse. The paucity of records from the Eastern Shore conflicts with statements in the Herbaceous Plants of Maryland</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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that state the species is frequent in that region. This species may be particularly limited by availability and local abundance of host fungi (McCormick et al. 2012). However, it occurs in young stands of hardwoods and in successional forest within past clearings that may indicate an ability to colonize recently disturbed habitats.

Habitat: Rich mesic forests, often over mafic (limestone, shell-marl) or ultramafic (serpentine, diabase) substrates but also occurs over more acidic substrates on the Coastal Plain.

Distr. AP, CP, PD, RV (Allegheny, Anne Arundel, Baltimore, Calvert, Carroll, Cecil* Charles*, Frederick, Garrett, Harford, Howard, Montgomery, Prince George's, Queen Anne's, St. Mary's*, Talbot*, Washington, Worcester).

Flw: Late May-Jun (peak early June in most localities); **Fr:** Jul-Aug.

***Liparis loeselii* (Linnaeus) L.C. Richard**

Loesel's Twayblade

G5

S1S2

Orchidaceae (Orchid Family)

Cons/Econote: Perhaps declining statewide, this species has few recent reports and most populations reported to contain fewer than 20 individuals. Most stations require active habitat management to control invasive species.

Habitat: Seeps from mafic or ultramafic substrates, sea level fens, shaded mesic limestone slopes.

Distr. AP, CP, PD, RV (Allegheny, Baltimore, Frederick, Garrett, Howard, Montgomery, Washington, Wicomico, Worcester).

Flw: Jun; **Fr:** Jul-Aug.

***Lipocarpa micrantha* (Vahl) G. Tucker**

Dwarf Bulrush

G5

S1

E

Cyperaceae (Sedge Family)

Syn: *Hemicarpha micrantha* (Vahl) Pax

Cons/Econote: Widespread annual of river drawdown zones and very rare regionally. Endangered by sedimentation as well as competition/displacement by invasive species.

Habitat: Riparian shorelines in muddy/sandy soil exposed (in summer months) during low-flow periods.

Distr. PD (Howard, Montgomery).

***Listera cordata* (Linnaeus) R. Brown**

Heartleaf Twayblade

G5T5

SH

X

Orchidaceae (Orchid Family)

Syn: *Neottia cordata* (Linnaeus) L.C. Richard

Taxnote: Maryland plants are var. *cordata*. This genus perhaps best included in *Neottia*.

Cons/Econote: Circumboreal, extending south to the highlands of West Virginia and historically to Garrett County (several collections 1932-1934).

Habitat: Shrubby thickets in mountain peatlands, associated with rosebay rhododendron (*Rhododendron maximum*).

Distr. AP* (Garrett*).

***Listera smallii* Wiegand**

Kidneyleaf Twayblade

G4

S1

E

Orchidaceae (Orchid Family)

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Syn: <i>Neottia smallii</i> (Wiegand) Szlachetko Cons/Econote: Endangered by habitat loss and fragmentation. A southern and central Appalachian endemic. Habitat: Acidic forested seeps and swamps often with red spruce (<i>Picea rubens</i>) and Canada hemlock (<i>Tsuga canadensis</i>). Distr. AP (Garrett). Flw: Jul; Fr: Sept.</p>					
<i>Lithospermum latifolium</i> Michaux Boraginaceae (Borage Family)	American Gromwell	G4	S1	E	
<p>Cons/Econote: Endangered by competition with exotic, invasive species. Maryland stations comprise very few individuals. Habitat: Rich woods, often over alluvial soils. Distr. PD, RV (Allegany, Cecil, Montgomery*, Washington).</p>					
<i>Lithospermum parviflorum</i> Weakley, Witsell & D. Estes Boraginaceae (Borage Family)	Hairy False Gromwell	G4G5T4	S1	E	
<p>Syn: <i>Onosmodium molle</i> Michaux ssp. <i>hispidissimum</i> (Mackenzie) Boivin <i>Onosmodium molle</i> Michaux var. <i>hispidissimum</i> (Mackenzie) Cronquist <i>Onosmodium hispidissimum</i> Mackenzie Cons/Econote: Restricted to a single station in Maryland. Endangered by deer browse, fire suppression, competition with invasive plant species and by the demographic uncertainties of small population size. Habitat: Limestone glade. Distr. RV (Allegany).</p>					
<i>Lithospermum virginianum</i> Linnaeus Boraginaceae (Borage Family)	Virginia False Gromwell Virginia Marbleseed	G4	S1	E	
<p>Syn: <i>Onosmodium virginianum</i> (Linnaeus) A.P. de Candolle Cons/Econote: Restricted in Maryland to the Potomac Gorge, our populations comprise a few scattered individuals. As discussed by Weakley (2020) this species exhibits tolerance to a wide variety of substrates but with the unifying characteristic of an open woodland habitat maintained by fire. Habitat: Riverine island uplands over well-drained to xeric, sandy substrates. Distr. CP*, PD (Montgomery, Prince George's*). Flw: mid Jun; Fr: Jul-Aug.</p>					
<i>Litsea aestivalis</i> (Linnaeus) Fernald Lauraceae (Laurel Family)	Pondspice	G3	S1	E	
<p>Cons/Econote: Restricted to a single station at the northern range limit for this species. Habitat: Delmarva Bay.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Distr. CP (Wicomico). Flw: mid Apr-early May; Fr: Jun-Oct.</p>					
<p><i>Lobelia canbyi</i> A. Gray Campanulaceae (Bluebell Family)</p>	Canby's Lobelia	G4	S2	E	
<p>Cons/Econote: The past conversion of habitats to commercial timber production has altered the surface flow of water (e.g., windrows), the subsurface or groundwater hydrology (e.g., ditches) as well as having covered large areas of critical habitat with dense loblolly pine (<i>Pinus taeda</i>) plantations. Periodic clear-cutting of harvestable timber co-occurs with population expansions. Recent progress in land protection activities and management plans has assisted in conservation of this species. State status under review. Habitat: Delmarva Bays, pine flatwoods and open pine-barren-like swales under powerlines. Distr. CP (Dorchester, Wicomico, Worcester). Flw: (late Jul) Aug-Oct; Fr: Oct-Nov.</p>					
<p><i>Lobelia elongata</i> Small Campanulaceae (Bluebell Family)</p>	Elongated Lobelia	G4G5	S3		
<p>Cons/Econote: Easily overlooked when not at peak flower. Perhaps declining due to sea level rise and increasing salinity of tidal marshes. Other threats include displacement by common reed (<i>Phragmites australis</i>). State rank under review. Habitat: Tidal marshes. Distr. CP (Dorchester, Somerset, Wicomico, Worcester). Flw: Sept; Fr: Oct-Nov.</p>					
<p><i>Lonicera canadensis</i> Bartram ex Marshall Caprifoliaceae (Honeysuckle Family)</p>	American Fly Honeysuckle	G5	S1	E	
<p>Cons/Econote: Currently extant at a single site on the Appalachian Plateau, however other potential and historic locations have been reported. Endangered by habitat loss long-term and extensive deer browse in the near-term. Habitat: Partially open northern hardwood forests dominated by spruce and hemlock; adjacent to coniferous swamps, and rocky streams. Associated with habitats underlain by the Greenbrier Formation that is rich in limestone deposits. Distr. AP, RV? (Allegany?, Garrett). Flw: May; Fr: Jun.</p>					
<p><i>Ludwigia decurrens</i> Walter Onagraceae (Evening Primrose Family)</p>	Primrose-willow	G5	S2S3		
<p>Cons/Econote: Somewhat threatened by encroaching non-native species, e.g., common reed (<i>Phragmites australis</i>) but also by expanding stands of native species e.g. water willow (<i>Decodon verticillatus</i>). Habitat: Sunny, seasonally saturated wetlands around beaver ponds, shrub swamps, emergent freshwater marshes and muddy banks of rivers. Often inhabiting drawdown zones in sandy, gravelly or mucky soils.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP, PD (Caroline, Charles, Harford, Howard, Montgomery, Prince George's).					
Flw: Aug-late Sept; Fr: Sept-early Oct. (fruits and flowers may generally be found together in Sept.).					
<i>Ludwigia glandulosa</i> Walter	Cylindric-fruit Seedbox	G5T5	S3		
Onagraceae (Evening Primrose Family)					
Taxnote: Maryland plants are ssp. <i>glandulosa</i> .					
Cons/Econote: Occurring in Maryland at its northern range limit and collected as early as 1890. Rediscovered by D. D. Boone in 1982 and later by Knapp (see Knapp et al. 2011). Locally abundant and spreading northward on the peninsula.					
Habitat: Low, open, seasonally inundated roadsides and agricultural ditches.					
Distr. CP (Somerset).					
Flw: late Jul-Aug (petals absent in this species); Fr: Aug-Oct.					
<i>Ludwigia hirtella</i> Rafinesque	Hairy Ludwigia	G5	S1	E	
Onagraceae (Evening Primrose Family)					
Cons/Econote: A species of pine savannas to our south. Maryland stations occur in artificially maintained habitats that mimic its natural habitat. Fire exclusion likely plays a role in this species' rarity.					
Habitat: Open, wet meadows (powerlines), road shoulders and other clearings in sandy/peaty soil.					
Distr. CP (Prince George's*, Wicomico, Worcester).					
<i>Lupinus perennis</i> Linnaeus	Sundial Lupine	G5	S2	T	
Fabaceae (Legume Family)					
Cons/Econote: Threatened by habitat loss and under decline at most stations with several small populations now extirpated. J. Frye (2012) demonstrated a dramatic effect of browsing white-tailed deer on fruit and seed production at the State's largest population. Additionally, Tangren & C. Frye (2020) concluded that reproduction in small populations is significantly reduced by native clover stem borers. The Service is managing and in some cases restoring connectivity between populations in Worcester County as breeding habitat for the globally rare Frosted Elfin (<i>Callophrys irus</i>).					
Habitat: Dry sandy soils of inland dunes and sand ridge woodlands, sandy powerline meadows, dry rocky slopes and outcrops.					
Distr. AP*, CP, PD, RV (Allegany, Anne Arundel, Baltimore, Caroline, Carroll, Charles, Dorchester, Garrett*, Howard, Prince George's*, Washington, Wicomico, Worcester).					
Flw: May-early Jun; Fr: late Jun-early Jul.					
<i>Lycopodiella caroliniana</i> (Linnaeus) Pichi Sermolli	see <i>Pseudolycopodiella caroliniana</i> (Linnaeus) Holub				
<i>Lycopodiella inundata</i> (Linnaeus) Holub	Bog Clubmoss	G5	S2		
Lycopodiaceae (Clubmoss Family)					
Syn: <i>Lycopodium innundatum</i> Linnaeus					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Cons/Econote: Circumboreal, ranging south along the Appalachians. Largely restricted to the Appalachian Plateau but with a few oddly disjunct occurrences.					
Habitat: Mountain peatlands, sphagnous seeps.					
Distr. AP, PD*, RV (Baltimore*, Frederick, Garrett).					
<i>Lycopodium tristachyum</i> Pursh	see <i>Diphasiastrum tristachyum</i> (Pursh) Holub				
<i>Lycopus amplexans</i> Rafinesque Lamiaceae (Mint Family)	Sessile-leaf Bugleweed	G5	S1	E	
Cons/Econote: Endangered by habitat loss, chiefly by woody succession of open, boggy habitats.					
Habitat: Sunny, sphagnous seeps and fens.					
Distr. CP (Wicomico, Worcester*).					
Flw: Sept; Fr. Oct.					
<i>Lygodium palmatum</i> (Bernhardi) Swartz Lygodiaceae (Climbing Fern Family)	Climbing Fern	G4	S2	T	
Cons/Econote: Well-documented by historical collections (pre-1900) from areas where the species is no longer extant, suggestive of a long-term decline in the range and abundance of this species. Currently comprising a few zones of local frequency but otherwise scattered, isolated, and generally with low population sizes.					
Habitat: Wet sandy thickets, low woods, streambanks and Fall Line seeps.					
Distr. CP, PD (Anne Arundel, Baltimore*, Calvert*, Cecil, Charles, Dorchester, Harford*, Howard*, Kent, Montgomery*, Prince George's, Wicomico/Worcester).					
<i>Lysimachia hybrida</i> Michaux Primulaceae (Primrose Family)	Lowland Loosestrife	G5	S2	T	
Cons/Econote: Threatened by habitat loss and displacement by invasive species. Despite this species' broad within-State range the plant occurs generally as scattered patches.					
Habitat: Mesic hardwood forests, Delmarva Bays, floodplain forests in rich alluvial soils.					
Distr. CP, PD, RV (Alleghany, Caroline, Dorchester, Kent, Harford*, Montgomery, Queen Anne's, Washington, Worcester).					
Flw: mid Jul-mid Aug; Fr: Sept-Oct.					
<i>Lysimachia lanceolata</i> Walter Primulaceae (Primrose Family)	Lanceleaf Loosestrife	G5	S3		
Habitat: Riverside prairie scour bars, moist depressions in rich woods.					
Distr. CP, PD, RV* (Anne Arundel, Cecil*, Charles, Frederick*, Harford, Kent, Montgomery, Prince George's*, Queen Anne's).					
Flw: late Jul-Aug; Fr: Sept-Oct.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Lysimachia maritima</i> (Linnaeus) Galasso, Banfi, & Soldano Primulaceae (Primrose Family) Syn: <i>Glaux maritima</i> Linnaeus Cons/Econote: Interruptedly circumboreal (Weakley 2020). A single record of this species from the Chester River documented by collections from 1903-1936. Habitat: “Between tides on both shores of the Chester River below Chestertown.” Distr. CP* (Kent*, Queen Anne’s*).	Sea Milkwort	G5	SH	X	
<i>Lysimachia thyrsoflora</i> Linnaeus Primulaceae (Primrose Family) Cons/Econote: Circumboreal, south to Maryland at a single station (see Steury et al. 1996). Habitat: Baymouth barrier wetland (Sipple 1982) in peaty soil. Distr. CP (Kent).	Water Loosestrife	G5	S1	E	
<i>Lythrum alatum</i> Pursh Lythraceae (Loosestrife Family) Cons/Econote: Maryland stations are small (~30 plants each) and their occurrence in any given year is unpredictable. Habitat: Riverside prairie scour bars along the Potomac River. Distr. AP, CP*, PD, RV (Frederick, Garrett, Montgomery, Prince George’s* Flw: late Jul-Aug; Fr: Aug-Sept.	Winged Loosestrife	G5	S1	E	
<i>Magnolia tripetala</i> (Linnaeus) Linnaeus Magnoliaceae (Magnolia Family) Cons/Econote: Occurring predominately in Piedmont forests and near the northern range limit for the species, the native within-State range is somewhat obscured by naturalized garden escapes (see also Riefner & Hill 1983). Rhoads (1994) similarly found the species to be rapidly expanding its range in the vicinity of Philadelphia, PA, presumably from planted individuals. Co-occurs with <i>M. macrophylla</i> (naturalized) along the Patapsco River in Maryland. Habitat: Mesic hardwood forests, rich ravines. Distr. AP, CP, PD (Baltimore, Calvert, Carroll, Charles, Garrett, Harford, Howard, Prince George’s). Flw: mid-late May; Fr: late Jul-Aug.	Umbrella Magnolia	G5	S3		
<i>Maianthemum stellatum</i> (Linnaeus) Link Asparagaceae (Asparagus Family) Syn: <i>Smilacina stellata</i> (Linnaeus) Desfontaines Cons/Econote: Endangered by loss of mature hardwood forests. Habitat: River banks and terrace forests in rich alluvial substrates.	Starflower Solomon’s-plume	G5	S2	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. PD, RV (Frederick, Harford, Montgomery, Washington). Flw: May; Fr: Jun-Jul (Sept).					
<i>Malaxis unifolia</i> Michaux Orchidaceae (Orchid Family)	Green Adders-mouth Orchid	G5	S2		
Cons/Econote: Perhaps declining; many Maryland records are approaching historical dates (last observed ≥ 30 years before present). The conservation rank of this species has been adjusted after locating larger, more dispersed populations in St. Mary's County. Habitat: A broad range of habitats from swamp forests and acidic seeps to sandy upland forests under pines. Distr. AP, CP, PD*, RV (Allegany*, Baltimore*, Charles, Frederick, Garrett, Montgomery*, Prince George's*, St. Mary's, Talbot*, Wicomico*, Worcester; distribution incomplete). Flw: late Jun-early Jul; Fr: Aug-Oct.					
<i>Malus angustifolia</i> (Aiton) Michaux Rosaceae (Rose Family)	Southern Crabapple	G5	S3		
Syn: <i>Pyrus angustifolia</i> Aiton Cons/Econote: Noted by Hill (1986) as widespread on Assateague Island and collected by E. Higgins from the island as var. <i>spinosa</i> (Rehder) L.H. Bailey. The species occurs sporadically and with uncertain nativity at many locations (old farmsteads, field hedgerows, etc.) but the proliferation of names on specimens, <i>Pyrus</i> and <i>Malus</i> among them, and the age of these collections recommends a more thorough investigation. Habitat: Maritime shrub thickets, field edges, old fields and farmsteads, hedgerows, roadsides. Distr. AP, CP, PD, RV (Allegany, Caroline, Carroll, Frederick, Garrett, Howard, Montgomery, Prince George's, Worcester).					
<i>Matelea carolinensis</i> (Jacquin) Woodson Apocynaceae (Dogbane Family)	Carolina Anglepod	G4	S2S3	T	
Cons/Econote: A native species of forest edges, clearings and streambank light gaps. Unfortunately, this species now contends with multiple invasive species that are aggressive competitors (e.g., <i>Ampelopsis brevipedunculata</i> , <i>Celastrus orbiculatus</i> , <i>Humulus japonicus</i> , <i>Lonicera japonica</i>). Low population sizes are reported for most stations and few are protected; however, the number of stations has steadily increased in recent years. Heavily shaded plants do not appear to flower nor set fruit and in these situations the plants may not persist. Low fruit set in small populations may be due to self-incompatibility where self and closely-related plants cannot mate. Wind-borne seed and long-distance dispersal assist with maintaining local populations. Habitat: Forest edges, riparian thickets, roadside clearings. Distr. CP, PD* (Anne Arundel, Calvert, Caroline, Cecil*, Charles, Dorchester, Kent, Montgomery*, Prince George's, Queen Anne's*, St. Mary's, Talbot, Worcester). Flw: Jun-late Aug; Fr: Oct.					
<i>Matelea gonocarpus</i> (Walter) Shinnery	see <i>Gonolobus suberosus</i> (Linnaeus) R. Brown var. <i>suberosus</i>				

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Matelea obliqua</i> (Jacquin) Woodson Apocynaceae (Dogbane Family)	Climbing Milkweed	G4?	S1S2	E	
<p>Cons/Econote: This species occurs in naturally disturbed lowlands (e.g., flood scoured) and in upland clearings (barrens, glades); these habitats are highly susceptible to invasive species. Maryland populations are invariably small and their occurrence is temporal, such that the number of occupied sites changes over years.</p> <p>Habitat: Bedrock scour and terrace woodlands in rich alluvium, upland forests, barrens, glades, clearings, and roadsides over limestone or shale substrates.</p> <p>Distr. CP*, PD, RV (Allegheny, Anne Arundel*, Baltimore*, Frederick, Montgomery, Prince George's, Washington).</p> <p>Flw: Jun-Jul; Fr: Sept.</p>					
<i>Matteuccia struthiopteris</i> (Linnaeus) Todaro Onocleaceae (Sensitive Fern Family)	Ostrich Fern	G5	S2S3		
<p>Taxnote: Maryland plants are <i>var. pennsylvanica</i> (Willdenow) C.V. Morton.</p> <p>Cons/Econote: Nearly all Maryland populations persist (often as dense colonies) in narrow corridors of floodplain forest; these are often weedy and subject to heavy sedimentation. This is particularly so in the northern Piedmont along the Patapsco and Gunpowder Rivers.</p> <p>Habitat: Rich floodplain forests along large rivers.</p> <p>Distr. AP, PD, RV (Allegheny, Baltimore, Carroll, Cecil, Garrett, Harford, Howard, Montgomery, Prince George's*, Washington).</p>					
<i>Mecardonia acuminata</i> (Walter) Small ! Plantaginaceae (Plantain Family)	Purple Mecardonia	G5T5	S2	E	
<p>Taxnote: Maryland plants are <i>var. acuminata</i>.</p> <p>Cons/Econote: A southeastern species at its northern range limit in Maryland and Delaware. Coastal populations routinely occur in anthropogenic habitats where mowing regimes mimic natural disturbances. Piedmont populations (Potomac Gorge) generally occur in habitats maintained by flood scour. State status under review.</p> <p>Habitat: Roadsides, sandpits, utility rights-of-way, rocky pools and seeps.</p> <p>Distr. CP, PD (Charles, Montgomery, Prince George's, Somerset, Wicomico, Worcester).</p> <p>Flw: late Aug-early Sept; Fr: Aug-Oct.</p>					
<i>Melanthium latifolium</i> Desrousseaux	see <i>Veratrum hybridum</i> (Walter) Zimmerman ex Zomlefer				
<i>Melanthium virginicum</i> Linnaeus	see <i>Veratrum virginicum</i> (Linnaeus) Aiton				
<i>Melica mutica</i> Walter Poaceae (Grass Family)	Narrow Melicgrass	G5	S3		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Small populations on the Western Shore with few individuals may be perceived as being restricted to rare or unusual habitats; these populations are best interpreted as remnants resulting from fragmentation. The habitat core for Maryland is along the Potomac River where the species may be locally frequent.</p> <p>Habitat: Bedrock terrace woodlands, floodplains and mesic upland forests and shell-marl ravine forests.</p> <p>Distr. CP, PD (Calvert, Charles, Montgomery, Prince George's*).</p> <p>Flw/Fr: early May-early Jun (Jul).</p>					
<i>Melica nitens</i> (Scribner) Nuttall ex Piper Poaceae (Grass Family)	Three-flower Melicgrass	G5	S2	T	
<p>Cons/Econote: Maryland populations comprise numerous small patches of individuals scattered across western Maryland. Threatened by habitat loss and likely fire suppression has played a role in this species' rarity.</p> <p>Habitat: Dry forests over calcareous shale and limestone.</p> <p>Distr. AP, RV (Allegheny, Garrett, Washington).</p> <p>Flw/Fr: mid May-Jun (Jul).</p>					
<i>Menyanthes trifoliata</i> Linnaeus Menyanthaceae (Buckbean Family)	Bog Buckbean	G5	S1	E	
<p>Cons/Econote: Maryland populations form part of the species' fragmented southeastern range (to a single station in NC). Extremely rare and occupying only a few high elevation sedge meadows.</p> <p>Habitat: Mountain peatlands.</p> <p>Distr. AP (Garrett).</p> <p>Flw: early-mid May; Fr: Jun-Jul.</p>					
<i>Micranthemum micranthemoides</i> (Nuttall) Wettstein	see <i>Hemianthus micranthemoides</i> Nuttall				
<i>Micranthes micranthidifolia</i> (Haworth) Small Saxifragaceae (Saxifrage Family)	Lettuceleaf Saxifrage	G5	S3		
<p>Syn: <i>Saxifraga micranthidifolia</i> (Haworth) Steudel</p> <p>Cons/Econote: A southern and central Appalachian endemic.</p> <p>Habitat: Spring seeps and mountain streams, generally at high elevations.</p> <p>Distr. AP, RV* (Frederick*, Garrett).</p> <p>Flw: early May; Fr: Jun-Jul.</p>					
<i>Minuartia caroliniana</i> (Walter) Mattfeld	see <i>Sabulina caroliniana</i> (Walter) Small				
<i>Minuartia glabra</i> (Michaux) Mattfeld	see <i>Mononeuria glabra</i> (Michaux) Dillenberger & Kadereit				
<i>Minuartia michauxii</i> (Fenzl) Farwell	see <i>Sabulina michauxii</i> (Fenzl) Dillenberger & Kadereit				

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Moehringia lateriflora</i> (Linnaeus) Fenzl Caryophyllaceae (Pink Family) Syn: <i>Arenaria lateriflora</i> Linnaeus Cons/Econote: Circumboreal, occurring in Maryland near its southern range limit at a few high elevation sites. Habitat: Forest and wetland ecotones. Distr. AP (Garrett). Flw: early Jun; Fr: Jul-Sept.	Grove Sandwort	G5	S1	E	
<i>Monarda clinopodia</i> Linnaeus Lamiaceae (Mint Family) Cons/Econote: Maryland stations are dominated by multiple, small populations. Threats to this species are displacement by invasive species, particularly along the Potomac River and at its Piedmont stations. Habitat: Rich alluvial soils of streams and rivers. Occasionally planted outside of its native range in roadside “meadows” as far east as the Eastern Shore. Distr. AP, PD, RV (Allegany, Baltimore, Frederick, Garrett, Howard, Montgomery, Washington; distribution likely incomplete). Flw: Jun-Jul; Fr: Jul-Sept.	Basil Beebalm	G5	S3S4		
<i>Monarda media</i> Willdenow Lamiaceae (Mint Family) Taxnote: The “species” perhaps representing a hybrid series involving as many as three other taxa: <i>M. clinopodia</i> , <i>M. didyma</i> and <i>M. fistulosa</i> (all of which occur in Maryland). This hypothesis largely based upon a study of essential oils by Scora (1967). Cons/Econote: According to Weakley (2015) a species of high-elevation Appalachian balds in the southeastern U.S. In their review of the genus McClintock & Epling (1942) cite records for Cecil (no specimen listed), Garrett (<i>Steele</i> 85) and Prince George’s (<i>Hyacinth 1654</i> US) Counties. Although confusion with the more widespread <i>M. clinopodia</i> is possible, McClintock & Epling (1942) provide a nuanced discussion of the differences between these species. The Prince George’s County specimen is possibly introduced (Shetler & Orli 2000) and the generalized distribution map for the species in McClintock & Epling (1942) shows an apparent eastern “bulge” in order to incorporate this location. NatureServe (2015) reports that the species is locally abundant in western MD; the Service is unsure of that attribution. A Washington County specimen (<i>Cress 11815</i> MARY) has characters of several taxa including <i>M. media</i> and <i>M. clinopodia</i> but is not included in the distribution below. Habitat: Mesic forests, edges and clearings, presumably at higher elevations. Distr. AP*, CP ¹ , PD?, RV? (Cecil?, Garrett*, Prince George’s ¹).	Purple Bergamot	G4?	SH		
<i>Mononeuria glabra</i> (Michaux) Dillenberger & Kadereit Caryophyllaceae (Pink Family) Syn: <i>Arenaria glabra</i> Michaux <i>Minuartia glabra</i> (Michaux) Mattfeld	Appalachian Sandwort	G4	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Maryland contributes a single station to this species' oddly discontinuous range. Habitat: Greenstone outcrop. Distr. RV (Frederick). Flw: May-mid Jun; Fr: Aug-Sept.</p>					
<i>Monotropsis odorata</i> Schweinitz ex Elliott	Sweet Pinesap	G3	S1	E	
<p>Ericaceae (Heath Family) Syn: <i>Monotropsis lehmaniae</i> Burnham Cons/Econote: Maryland populations constitute a unique disjunct from the species' primarily Appalachian range. Historically known from sandy woodlands in the Baltimore-Washington-Annapolis triangle, clearing for residential and commercial development has destroyed much suitable habitat. Inflorescences appear beginning in September and overwinter during which time the sexual organs develop (Rose & Freudenstein 2014). Flowering occurs in late March and April and is somewhat weather dependent. The strong odor of the flowers attracts bumblebee visits and surveyors often smell the plants before seeing them in the leaf litter. Emilio Concari recently discovered a new population in Carroll County, the northernmost in the species' range. Habitat: Oak forest; historic sites described as "pine woods", "pine-oak scrub." Distr. CP, PD (Anne Arundel*, Baltimore*, Calvert, Carroll, Prince George's*). Flw: Apr. 1-10, arising in early Sept; Fr: Jun.</p>					
<i>Morella caroliniensis</i> (P. Miller) Small	Evergreen Bayberry	G5	S1	E	
<p>Myricaceae (Bayberry Family) Syn: <i>Myrica heterophylla</i> Rafinesque Taxnote: The taxonomic identity of this species is controversial. Robust plants of <i>M. pennsylvanica</i> have often been reported as this species and identification of herbarium material is problematic. Cons/Econote: Restricted to a single station at a highly vulnerable site. Habitat: Fall Line seep over sand/gravel deposits. Distr. CP?, CP/PD (Calvert?, Cecil, Wicomico?, Worcester?).</p>					
<i>Muhlenbergia capillaris</i> (Lamarck) Trinius	Hair-awn Muhly	G5	S1	E	
<p>Poaceae (Grass Family) Cons/Econote: Endangered by habitat loss. Maryland plants are restricted to the Potomac Gorge. Habitat: Scour bar savanna. Distr. CP*, PD (Montgomery, Prince George's*). Flw/Fr: late Sept.</p>					
<i>Muhlenbergia glabriflora</i> Scribner	Hairgrass	G4?	SH		
<p>Poaceae (Grass Family)</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Syn: <i>M. glabrifloris</i>, an orthographic variant Cons/Econote: A species of prairie-like or savanna habitats that may be rare throughout its range. Last collected (by F.L. Scribner) in 1888. Habitat: Terrace gravel seepage bog, a “magnolia bog” (sensu McAtee 1918) at Hyattsville. Distr. CP* (Prince George’s*).</p>					
<i>Muhlenbergia glomerata</i> (Willdenow) Trinius Poaceae (Grass Family)	Marsh Muhly	G5	SH		
<p>Cons/Econote: Last collected in 1908 presumably from the historical Thayersville Bog (now extirpated) and in 1906 at Mountain Lake Park (habitat also extirpated). Habitat: Mountain peatland. Distr. AP* (Garrett*).</p>					
<i>Muhlenbergia sylvatica</i> Torrey ex A. Gray Poaceae (Grass Family)	Woodland Muhly	G5	S3		
<p>Habitat: Rocky, often steep forested slopes and river bluffs, generally over mafic substrates. Distr. AP, CP*, PD, RV (Allegany*, Baltimore*, Cecil*, Garrett, Harford, Prince George’s*, Washington). Flw/Fr: Sept.</p>					
<i>Muhlenbergia torreyana</i> (J.A. Schultes) A.S. Hitchcock Poaceae (Grass Family)	Torrey’s Dropseed	G3	S1	E	
<p>Cons/Econote: This globally rare species of fire-prone coastal depressions is extant at a single station in Maryland. Habitat: Delmarva Bay. Distr. CP (Caroline). Flw/Fr: late Aug-early Sept.</p>					
<i>Myosotis macrosperma</i> Engelman Boraginaceae (Borage Family)	Large-seed Forget-me-not	G5	S3S4		
<p>Cons/Econote: Not listed for Maryland by Shreve (1910) and once considered rare and restricted to southern Maryland (Western Shore); current trends indicate an expanding range. Habitat: Appearing over a variety of mafic to mildly acidic substrates; often over disturbed ground, e.g., cultivated ground over shell-middens, field edges, and trailsides but also in rich woodlands, e.g., shell-marl ravine forests. Distr. CP, PD, RV (Baltimore, Calvert, Cecil, Charles, Frederick, Harford, Kent, Prince George’s, Queen Anne’s, St. Mary’s). Flw: late Apr-late May; Fr: Jun.</p>					
<i>Myosotis verna</i> Nuttall	Spring Forget-me-not	G5	S3		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Boraginaceae (Borage Family)					
Cons/Econote: Reported from a variety of anthropogenic and natural habitats and perhaps overlooked.					
Habitat: Fields, forest edges, woodlands, usually in dry sandy or gravelly soils.					
Distr. CP, PD, RV (Anne Arundel*, Baltimore*, Calvert*, Caroline, Carroll, Charles, Dorchester, Frederick, Harford, Howard, Montgomery, Prince George's, Wicomico).					
Flw: early Apr-early May; Fr: May-Jun.					
<i>Myriophyllum heterophyllum</i> Michaux	Broadleaf Water-milfoil	G5	S1		
Haloragaceae (Water-milfoil Family)					
Cons/Econote: Widespread and common in the southeastern U.S.; our few records suggest rarity. Last observed by Frank Hirst in 1983 (Worcester County); however, the species has been reported from a number of reservoirs and ponds in western Maryland. Additional field work is necessary to determine the distribution, abundance and conservation rank of this species.					
Habitat: Millpond, slow-moving coastal stream; reported from lakes and ponds in western Maryland.					
Distr. AP?, CP (Charles*, Garrett?, Wicomico*, Worcester).					
<i>Myriophyllum tenellum</i> Bigelow	Slender Water-milfoil	G5	SH	X	
Haloragaceae (Water-milfoil Family)					
Cons/Econote: In Maryland near the southern end of its continuous range. Last reported for Savanna Lake (Dorchester County) by R.E. Stewart in 1954, but habitat at this location, presumably once freshwater, is now strongly brackish.					
Habitat: Natural lakes and streams.					
Distr. CP* (Dorchester*, Wicomico*).					
<i>Myriophyllum verticillatum</i> Linnaeus	Whorled Water-milfoil	G5	S1		
Haloragaceae (Water-milfoil Family)					
Cons/Econote: A circumboreal species reaching its southern range limit in Maryland. A species of circumneutral or base-influenced waters.					
Habitat: Shallow water along Susquehanna River shoreline.					
Distr. CP*, PD (Harford, Worcester*; distribution incomplete).					
<i>Nabalus autumnalis</i> (Walter) Weakley	Slender Rattlesnake-root	G4G5	S1	E	
Asteraceae (Aster Family)					
Syn: <i>Prenanthes autumnalis</i> Walter					
Cons/Econote: Endemic to the southeastern Coastal Plain and a species of pocosins and pine savannas, two fire-maintained habitats that have no close approximations in Maryland. Our populations occur in fragments of habitat where woody succession is limited by mowing, generally under powerlines and along roadsides. Endangered by not enough disturbance on the one hand and by too much management (herbicide use, mowing too frequent or ill-timed) on the other.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Open wet meadows in sandy/peaty soils. Distr. CP (Wicomico, Worcester). Flw: late Sept; Fr: Sept-Oct.</p>					
<i>Napaea dioica</i> Linnaeus Malvaceae (Mallow Family)	Glade Mallow	G4	S1	E	
<p>Cons/Econote: Once considered extirpated in Maryland, the basis for the Maryland record is a single specimen in the Oxford Herbarium (London, UK) from a garden plant grown from Maryland seed sent in the 1740s (Brown et al. 1987). Rediscovered in 1998 growing along a railroad embankment in Frederick County but the specimen was not identified until 2003. This prairie species often occupies artificially maintained habitats even in the core of its range so the Maryland habitat is not unusual (see also Wieboldt 1998). Habitat: Embankment adjacent to the Potomac River floodplain. Distr. RV (Frederick).</p>					
<i>Nemopanthus mucronatus</i> (Linnaeus) Trelease	see <i>Ilex mucronata</i> (Linnaeus) M. Powell, V. Savolainen, & S. Andrews				
<i>Nemophila aphylla</i> (Linnaeus) Brummitt Boraginaceae (Borage Family)	Small-flower Baby-blue-eyes	G5	S2		
<p>Cons/Econote: Often locally abundant although the range in Maryland is nearly restricted to a two-county area in southern Maryland on the Western Shore. Disjunct occurrences are located on limestone glades in western Maryland. Habitat: Rich alluvium along streams; rich soils of bluffs and ravines; limestone glades. Distr. CP, RV (Allegany, Charles, Prince George's, Washington). Flw: early Apr-May; Fr: Jun.</p>					
<i>Nymphoides aquatica</i> (Walter ex J.F. Gmelin) Kuntze Menyanthaceae (Buckbean Family)	Big Floatingheart	G5	S1	E	
<p>Cons/Econote: Endemic to the southeastern Coastal Plain and reaching its northern range limit in Maryland. Endangered by woody succession of pond habitat, fragmentation and isolation of remaining habitats. Habitat: Delmarva Bay, millponds. Distr. CP (Anne Arundel*, Caroline, Dorchester).</p>					
<i>Nymphoides cordata</i> (Elliott) Fernald Menyanthaceae (Buckbean Family)	Little Floatingheart	G5	S1	E	
<p>Cons/Econote: A species of cool northern climes at the southern limit of the species continuous range (disjunct occurrences in NC and MS). Endangered by woody succession of aquatic habitat, fragmentation and isolation of remaining habitats. Habitat: Ponds, shrub swamps. Distr. CP, RV (Dorchester, Frederick, Wicomico*, Worcester).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Oenothera argillicola</i> Mackenzie Onagraceae (Evening Primrose Family)	Shale Barren Evening-primrose	G3G4	S3		
Cons/Econote: Endemic to the central Appalachian Shale Barren region (sc. PA south through MD to e. WV and w. VA).					
Habitat: Shale barrens.					
Distr. RV (Alleghany, Washington).					
<i>Oldenlandia uniflora</i> Linnaeus Rubiaceae (Madder Family)	Clustered Bluets	G5	S3		
Syn: <i>Hedyotis uniflora</i> (Linnaeus) Lamarck					
Cons/Econote: A tiny annual plant associated with Delmarva Bays but not strictly tied to those habitats. The unifying characteristic is open, exposed muck, sand or peaty soils in open or lightly shaded situations.					
Habitat: Delmarva Bays and other seasonally flooded wetlands.					
Distr. CP (Anne Arundel, Calvert*, Caroline, Charles, Dorchester, Kent, Prince George's, Queen Anne's, Somerset, Wicomico, Worcester).					
Flw: Sept; Fr: Oct-Nov.					
<i>Oligoneuron rigidum</i> (Linnaeus) Small var. <i>rigidum</i>	see <i>Solidago rigida</i> Linnaeus var. <i>rigida</i>				
<i>Orbexilum psoralioides</i> (Walter) Vincent Fabaceae (Legume Family)	False Scurfpea	G4	SX		
Syn: <i>O. pedunculatum</i> (P. Miller) Rydberg var. <i>psoralioides</i> (Walter) Isley					
<i>Psoralea psoralioides</i> (Walter) Cory					
Taxnote: Maryland plants are the species of the Atlantic Coastal Plain, sometimes treated as a variety of <i>O. pedunculatum</i> .					
Cons/Econote: Appears in the Colonial Flora of Maryland before 1700 (Brown et al. 1987).					
Habitat: No habitat noted on labels; a plant of savannas and woodlands (Weakley 2015).					
Distr. CP ("southern Maryland").					
<i>Orthilia secunda</i> (Linnaeus) House Ericaceae (Heath Family)	One-sided Wintergreen	G5	SH	X	
Syn: <i>Pyrola secunda</i> Linnaeus					
Cons/Econote: The eastern U.S. populations (south of New Jersey) of this circumboreal species appear to have been extirpated although there are many historical collections from Maryland ranging from about 1895-1952. Plants reported at the Anne Arundel County station have not been observed flowering and the identity is doubtful.					
Habitat: Dry forests.					
Distr. CP*, PD*, RV* (Anne Arundel?, Calvert*, Charles*, Frederick*, Montgomery*, Prince George's*).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Oryzopsis asperifolia</i> Michaux Poaceae (Grass Family)	Mountain-ricegrass	G5	S2	T	
Cons/Econote: Confined to narrow zones of available habitat in western Maryland (where it may be locally frequent) but with a highly clumped and limited distribution.					
Habitat: Dry to mesic rich forests and woodlands, often over mafic (shale, limestone) substrates.					
Distr. AP, RV (Allegheny, Garrett).					
Flw/Fr: mid May-early Jun (Sept).					
<i>Oryzopsis racemosa</i> (Smith) Ricker ex A.S. Hitchcock	see <i>Patis racemosa</i> Romaschenko, P.M. Peterson & Soreng				
<i>Oxydendrum arboreum</i> (Linnaeus) A.P. de Candolle Ericaceae (Heath Family)	Sourwood	G5	S1	E	
Cons/Econote: A characteristic and common subcanopy tree south of Maryland, our few scattered records represent remnant populations near the northern range limit. The geography of the populations is interesting; presumably recolonizing its post-Pleistocene range via the southern tip of the Delmarva Peninsula with a marked disjunction along the high elevations of the Appalachian Plateau into adjacent Pennsylvania. Single trees are the common situation. The Eastern Shore coastal stations are presumed extirpated and other county records below are known or suspected introductions.					
Habitat: Mesic to dry acidic forests.					
Distr. AP, CP, PD? (Baltimore* ^{1?} , Charles, Garrett, Montgomery ^{1?} , Queen Anne's*, Worcester*).					
<i>Oxypolis canbyi</i> (J.M. Coulter & Rose) Fernald	see <i>Tiedemannia canbyi</i> (J.M. Coulter & Rose) Feist & S.R. Downie				
<i>Packera antennariifolia</i> (Britton) W.A. Weber & Á. Löve Asteraceae (Aster Family)	Shale-barren Ragwort Cat's-paw Ragwort	G4	S3		
Syn: <i>Senecio antennariifolius</i> Britton					
Cons/Econote: Endemic to the central Appalachian shale barren region (sc. PA south through MD to e. WV and w. VA). Frequent, but not abundant in habitat.					
Habitat: Shale barrens and woodlands.					
Distr. RV (Allegheny, Washington).					
Flw: mid Apr; Fr: May-Jun.					
<i>Packera crawfordii</i> (Britton) A.M. Mahoney & R.R. Kowal Asteraceae (Aster Family)	Bog Ragwort	G2	SH		
Syn: <i>Senecio crawfordii</i> (Britton) G.W. and G.R. Douglas					
Taxnote: Commonly included within <i>Packera paupercula</i> but with longer petioles and with clasping cauline leaves. Kowal & Mahoney (2016) discuss this species in detail and keys are provided in the latter and in Weakley (2015).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Cons/Econote: Several historical collections from Prince George's County; the species may still be extant at that location.					
Habitat: A species of bogs and fens, always completely saturated.					
Distr. CP* (Prince George's*).					
Flw: late Mar-early Apr; Fr: May.					
<i>Packera paupercula</i> (Michaux) Á. & D. Löve	Balsam Ragwort	G5	S3		
Asteraceae (Aster Family)					
Syn: <i>Senecio pauperculus</i> Michaux					
Habitat: Meadows and glades over mafic (limestone) or ultramafic (serpentine) substrates.					
Distr. PD, RV (Baltimore, Carroll, Frederick, Harford, Montgomery, Washington).					
<i>Panax quinquefolius</i> Linnaeus	American Ginseng	G3G4	S2S3		
Araliaceae (Ginseng Family)					
Cons/Econote: At one time occurring throughout Maryland. Despite international, national and state regulations to monitor trade populations have been declining via legal and illegal collecting to supply the medicinal herb trade, a situation exacerbated by intensive browse by white-tailed deer. Harvesting was banned on public lands in Maryland in 2013.					
Habitat: Dry to dry-mesic hardwood forests.					
Distr. AP, CP, PD, RV (Allegany, Baltimore, Caroline, Carroll*, Cecil, Charles*, Frederick, Garrett, Talbot*, Montgomery*, Prince George's*, Washington).					
Flw: late May-mid Jun; Fr: Jul-Sept.					
<i>Panicum flexile</i> (Gattinger) Scribner	Wiry Witch Grass	G5	S1	E	
Poaceae (Grass Family)					
Cons/Econote: Endangered by habitat loss, fire exclusion and competition with invasive species.					
Habitat: Limestone and serpentine glades.					
Distr. PD, RV (Baltimore*, Harford, Montgomery*, Washington).					
Flw/Fr: mid-Sept.					
<i>Panicum hemitomom</i> J.A. Schultes	Maidencane	G5	S3		
Poaceae (Grass Family)					
Syn: <i>Hymenachne hemitoma</i> (J.A. Schultes) C.C. Hsu					
<i>H. hemitomom</i> , an orthographic variant.					
Taxnote: According to Zuloago & Morrone (2003) this species is best treated as <i>Hymenachne hemitomom</i> (Schultes) C.C. Hsu; however, it appears that this species will move to yet another new genus (Weakley 2020).					
Cons/Econote: A characteristic component of Delmarva Bay plant communities, most visible in early summer when the ponds are full.					
Habitat: Delmarva Bays.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP (Caroline, Dorchester, Queen Anne's, Wicomico, Worcester).					
Flw/Fr: late May-Jun.					
<i>Panicum philadelphicum Bernhardi ex Trinius</i> Poaceae (Grass Family)	Philadelphia Panicgrass	G5	SU		
Syn: <i>P. tuckermanii</i> Fernald <i>P. capillare</i> Linneaus var. <i>sylvaticum</i> Torrey					
Cons/Econote: Provisionally rare, in part due to the age of the existing collections (overwhelmingly pre-1940). This may or may not be meaningful. Additional fieldwork is needed to distinguish the habitat associations and current distributions of the subspecies (ssp. <i>philadelphicum</i> and ssp. <i>gattingeri</i>). The distribution below is for ssp. <i>philadelphicum</i> .					
Habitat: Rocky or sandy woodlands and barrens, fields, roadsides.					
Distr. AP*, CP*, PD, RV* (Baltimore, Calvert*, Caroline*, Carroll*, Cecil*, Charles*, Garrett*, Montgomery, Prince George's*, Queen Anne's*, St. Mary's*, Talbot*, Washington*).					
<i>Parnassia asarifolia Ventenat</i> Parnassiaceae (Grass of Parnassus Family)	Kidneyleaf Grass-of-Parnassus	G4	S1	E	
Cons/Econote: Endangered by habitat loss. Maryland populations are disjunct from the Appalachian/Ozarkian core and are the northernmost (and likely easternmost) populations in the U.S. One of the most intricately beautiful flowers in the flora (see cover photo). Invasive species such as Japanese stiltgrass (<i>Microstegium vimineum</i>) are frequent invaders in these habitats creating tension between opening the canopy to increase flowering and controlling encroachment of invasives.					
Habitat: Sandy/gravelly seeps on the Coastal Plain (Western Shore).					
Distr. CP (Calvert, Charles).					
Flw: mid to late Sept-early Oct; Fr: Oct-Nov.					
<i>Paronychia virginica Sprengel</i> Caryophyllaceae (Pink Family)	Yellow Nailwort Virginia Whitlow-wort	G4	S1	E	
Taxnote: Maryland plants are var. <i>virginica</i> .					
Cons/Econote: Occurring in highly restricted habitats along the Potomac River, Maryland occurrences of this plant are small, none larger than 100 plants and most smaller than 20.					
Habitat: Rocky scour bars with a high frequency of flooding.					
Distr. PD, RV (Allegany, Montgomery).					
<i>Parthenium integrifolium Linnaeus</i> Asteraceae (Aster Family)	Wild Quinine American Feverfew	G5T5	S1	E	
Taxnote: Maryland plants are var. <i>integrifolium</i> .					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Some populations in Allegany County were destroyed by road widening activities in the 1990s; however, new stations have been discovered nearby.</p> <p>Habitat: Shaley roadsides, limestone and other mafic outcrops.</p> <p>Distr. CP*, PD*, RV (Allegany, Baltimore*, Prince George's*, Washington).</p> <p>Flw: Jul-Aug; Fr: Sept.</p>					
<i>Paspalum dissectum</i> (Linnaeus) Linnaeus Poaceae (Grass Family)	Walter's Paspalum	G4?	S2	T	
<p>Cons/Econote: Threatened by woody succession of coastal wetlands. This species typically grows in the mucky soils exposed after drawdown in open, sunny situations.</p> <p>Habitat: Delmarva Bays and other seasonally flooded wetlands.</p> <p>Distr. CP (Caroline, Queen Anne's, Somerset, Talbot, Wicomico, Worcester).</p> <p>Flw/Fr: Aug-Sept (Oct).</p>					
<i>Paspalum fluitans</i> (Elliott) Kunth Poaceae (Grass Family)	Horse-tail Paspalum	G5	S2	T	
<p>Cons/Econote: This species occurs at its northern range limit in Maryland in a narrow zone of habitats that generally support small populations. The number of stations and size of populations varies greatly over years.</p> <p>Habitat: Floodplain seeps and pools in muck soils; seasonally exposed rocky stream channels.</p> <p>Distr. CP, PD (Charles, Montgomery).</p> <p>Flw/Fr: late Aug-Sept (Oct).</p>					
<i>Patis racemosa</i> Romaschenko, P.M. Peterson & Soreng Poaceae (Grass Family)	Black-fruit Mountain-ricegrass	G5	S2S3		
<p>Syn: <i>Oryzopsis racemosa</i> (Smith) Ricker ex A.S. Hitchcock <i>Piptatherum racemosum</i> (Smith) Barkworth</p> <p>Cons/Econote: The Potomac River stations in Washington County are best considered one or a few highly fragmented populations although there are doubtless natural breaks between some sites (e.g., low elevation alluvial woods). Scattered elsewhere in Maryland at sites where calcium-bearing substrates are exposed (generally outcrops). The addition of a core population on State wildlands and discovery of additional populations have greatly enhanced this species long-term viability.</p> <p>Habitat: Rich, often dry forests, limestone bluffs, mafic woodlands.</p> <p>Distr. AP, RV (Allegany, Frederick, Garrett, Washington).</p> <p>Flw/Fr: Jul-Sept (Oct).</p>					
<i>Paxistima canbyi</i> A. Gray Celastraceae (Bittersweet Family)	Canby's Mountain-lover	G2	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Extant at a single station that has been severely impacted by browsing white-tailed deer. A regional endemic to the Appalachians exhibiting an enigmatic distribution comprising local zones of occurrence with large areas of unoccupied, yet apparently available habitat. Threatened by the exotic <i>Euonymus</i> scale (<i>Unaspis euonymi</i> Comstock) recently introduced into the U.S. (see discussion in Weakley et al. 2012). Habitat: Calcareous shale bluff. Distr. RV (Allegany).</p>					
<i>Pedicularis lanceolata</i> Michaux Orobanchaceae (Broomrape Family)	Swamp Lousewort	G5	S1	E	
<p>Cons/Econote: Endangered by habitat loss via succession, sedimentation of marsh habitats, and competition with exotic invasive species. Habitat: Mafic (Cockeysville marble, shell-marl) or ultramafic seeps, rich floodplain forests. Distr. AP, CP, PD (Baltimore, Cecil, Dorchester, Harford, Garrett, Prince George's, Talbot*, Wicomico*). Flw: Aug-early Sept; Fr: Oct.</p>					
<i>Pellaea glabella</i> Mettenius ex Kuhn Pteridaceae (Maidenhair Fern Family)	Smooth Cliffbrake	G5T5	S1	E	
<p>Taxnote: Maryland plants are ssp. <i>glabella</i>. Cons/Econote: Comprised of a few small populations, this species occupies a highly restricted habitat that is threatened by displacement by invasive species. Habitat: Dry limestone cliffs. Distr. PD*, RV (Frederick, Montgomery*, Washington).</p>					
<i>Penstemon laevigatus</i> Aiton Plantaginaceae (Plantain Family)	Smooth Beardtongue	G5	SU		
<p>Taxnote: Maryland records include specimens that may be referable to <i>P. calycosus</i> Small and <i>P. alluviorum</i> Pennell, e.g., collections by Eduards Baltars (1902-1972) from Baltimore County. Cons/Econote: Documented by many collections (1897-2000) from sites along the Fall Line and Piedmont, but the majority of these specimens are now very old (1897-1950) and from areas that are now heavily urbanized. The Service is reconsidering the conservation rank of this species and is requesting additional information. Habitat: Low meadows, riverside glades, field edges and other clearings. Distr. CP, PD, RV (Allegany, Baltimore*, Carroll*, Charles, Frederick*, Montgomery, Prince George's*, Washington*). Flw: Jun; Fr: Jul-Aug.</p>					
<i>Persea palustris</i> (Rafinesque) Sargent Lauraceae (Laurel Family)	Red Bay	G5	S1	E	
<p>Syn: <i>P. borbonia</i> var. <i>pubescens</i> (Pursh) Little</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Endangered by habitat loss; this species exhibits both short-term and long-term decline due to alteration of groundwater hydrology as well as saltwater intrusion into freshwater wetlands. Additionally threatened by a fungal disease spread by an Asian ambrosia beetle that is steadily moving northward from the Carolinas (NatureServe 2015).</p> <p>Habitat: Bald cypress and Atlantic white cedar swamp, maritime woods.</p> <p>Distr. CP (Somerset, Worcester).</p> <p>Flw: Jun; Fr: Aug-frost</p>					
<p><i>Persicaria robustior</i> (Small) E.P. Bicknell Polygonaceae (Smartweed Family) Syn: <i>Polygonum robustius</i> (Small) Fernald</p>	Stout Smartweed	G4G5	SU		
<p>Taxnote: The taxonomic identity of this species in Maryland is problematic. Populations of the common <i>P. punctata</i> are extremely variable regarding the distance between ocreolae, the number and length of cilia on the latter, and leaf dimensions.</p> <p>Cons/Econote: Of the many historical reports for this wide-ranging (Nova Scotia south to FL, TX and into the tropics) species, many could not be relocated in the field and several were based upon specimens that are referable to <i>P. punctata</i>, <i>P. lapathifolia</i> and <i>P. glabra</i>. Not all records have been verified. Field and herbarium inventories are needed.</p> <p>Habitat: Fresh tidal marshes and swamps.</p> <p>Distr. CP (Anne Arundel*, Cecil, Charles*, Dorchester*, Harford*, Talbot?, Wicomico).</p>					
<p><i>Persicaria setacea</i> (Baldwin) Small Polygonaceae (Smartweed Family) Syn: <i>Polygonum setaceum</i> Baldwin</p>	Swamp Smartweed	G5	SU		
<p>Cons/Econote: The Service is unsure of the rarity of this species as it is very common to the south. Maryland populations are nearing the northern periphery of the species range. Perhaps overlooked.</p> <p>Habitat: Swamp forests, pond edges.</p> <p>Distr. CP (Anne Arundel, Calvert, Carroll, Charles, Dorchester, Prince George's, Worcester).</p>					
<p><i>Phacelia covillei</i> S. Watson ex A. Gray Boraginaceae (Borage Family)</p>	Coville's Phacelia Buttercup Scorpionweed	G3	S2	T	
<p>Taxnote: Fernald (1950) provided an inclusive concept of <i>Phacelia ranunculacea</i> (Nuttall) Constance remarking upon the disjunct nature of the occurrences stating that "probably of more general range." Sewell and Vincent (2006) made a case for recognizing two species based upon different chromosome numbers, although the morphological characteristics separating them are subtle.</p> <p>Cons/Econote: Oddly distributed—Maryland populations are centered on the District of Columbia, one of the three widely disjunct areas of occurrence (also c. NC and sc. VA). Additionally, in Maryland there are two distinct zones of occurrence, the Potomac River and areas surrounding Western Branch; these best considered two large metapopulations. A somewhat characteristic spring ephemeral of rich, loamy forests and often locally abundant. However, the species is threatened by encroaching populations of the European weed, <i>Ficaria</i></p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p><i>verna</i> (<i>Ranunculus ficaria</i>). Population size varies exponentially over years, from a few hundred to perhaps a million individuals at any given location. Habitat: Rich floodplain and terrace and ravine forests, mesic upland woods. Distr. CP, PD (Montgomery, Prince George's). Flw: mid Apr-early May; Fr: May-Jun.</p>					
<i>Phacelia purshii</i> Buckley	Miami-mist	G5	S3		
<p>Boraginaceae (Borage Family) Habitat: Rich alluvial soils of floodplains, terraces and low slopes. Distr. AP, CP, PD, RV (Frederick, Garrett, Montgomery, Prince George's, Washington; distribution incomplete). Flw: May (peaking mid-May in most locales); Fr: Jun-Jul.</p>					
<i>Phaseolus polystachios</i> (Linnaeus) Britton, Sterns, & Poggenburg	Wild Kidney Bean	G5	S3		
<p>Fabaceae (Legume Family) Cons/Econote: A native vine of habitats commonly described as "thickets"; this species may be declining due to displacement by numerous invasive shrubs and vines including <i>Rosa multiflora</i>, <i>Celastrus orbiculatus</i> and <i>Lonicera japonica</i>. Habitat: Rocky ravines, scoured bedrock terrace forests, forest edges and hedgerows. Distr. CP, PD (Baltimore, Caroline, Carroll?, Cecil, Howard, Montgomery, Prince George's). Flw: late Jul-Aug; Fr: Sept-Oct.</p>					
<i>Phegopteris connectilis</i> (Michaux) Watt	Northern Beechfern	G5	S2		
<p>Thelypteridaceae (Marsh Fern Family) Cons/Econote: A circumboreal species near its southern range limit in Maryland. Habitat: Shaded cliffs and steep rocky slopes over sandstone and shaley siltstone. Distr. AP (Garrett).</p>					
<i>Phemeranthus teretifolius</i> (Pursh) Rafinesque	Roundleaf Fameflower	G4	S2	T	
<p>Montiaceae (Montia Family) Syn: <i>Talinum teretifolium</i> Pursh Cons/Econote: Threatened by woody succession of barrens habitat and fire exclusion. Habitat: Exposed beds of serpentine, gneiss, and sandstone. Distr. CP*?, PD, RV (Allegheny, Baltimore, Carroll, Cecil, Harford, Montgomery*, Prince George's*?). Flw: Jun-Sept; Fr: Aug-Oct.</p>					
<i>Phlox glaberrima</i> Linnaeus	Smooth Phlox	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Polemoniaceae (Phlox Family) Syn: <i>P. carolina</i> Linnaeus var. <i>triflora</i> (Michaux) Wherry Cons/Econote: Restricted to a single population near its range limits in the eastern U.S., and otherwise endangered due to intense deer browse. Habitat: Basic mesic forest over diabase. Distr. PD (Montgomery).					
<i>Phlox ovata</i> Linnaeus	Mountain Phlox	G4	SH	X	
Polemoniaceae (Phlox Family) Syn: <i>P. latifolia</i> Michaux Cons/Econote: A component of the historical flora of the shale barren region and now considered extirpated. The Service suspects that this species is still extant in the county. Habitat: Shale barren woodlands. Distr. RV* (Allegany*).					
<i>Phlox pilosa</i> Linnaeus	Downy Phlox	G5	S1	E	
Polemoniaceae (Phlox Family) Syn: <i>P. pilosa</i> Linnaeus ssp. <i>pilosa</i> <i>P. pilosa</i> Linnaeus var. <i>virens</i> (Michaux) Wherry Taxnote: Brown & Brown (1984) refer to the District of Columbia area collections as var. <i>virens</i> (Michaux) Wherry, which is generally included within the concept of the species. Multiple intraspecific taxa have been named and additional study is needed. Cons/Econote: A species of prairie-like openings, the Maryland station is restricted to a single outcrop. Endangered by displacement by woody shrubs and vines and deer browse. Sporadically collected from the District of Columbia and adjacent Montgomery County from about 1878-1929. Habitat: Open meadow over amphibolite. Distr. PD (Baltimore, Cecil*, Montgomery*). Flw: late May-early Jun; Fr: Jul.					
<i>Phyllanthus caroliniensis</i> Walter	Carolina Leaf-flower	G5T5?	S3		
Phyllanthaceae (Leaf-flower Family) Taxnote: Maryland plants are ssp. <i>caroliniensis</i> . Cons/Econote: A widespread plant in the southeastern U.S. and South America; the native range is not clear. Recently rediscovered on the Delmarva Peninsula (Knapp et al. 2011). Of historical interest is that E. S. Steele (1901) noted that “the species could no longer be considered rare” after finding the plant in a variety of open, disturbed habitats in the District of Columbia and vicinity, presumably following the pulse of land-clearing during that period. Habitat: Scour and depositional bars, river shorelines, sandy or gravelly wet soils.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP, PD, RV (Frederick, Montgomery, Prince George's*, Washington, Wicomico).					
<i>Physalis virginiana</i> P. Miller var. <i>virginiana</i> Solanaceae (Nightshade Family)	Virginia Ground-cherry	G5	S3		
Taxnote: Many MD records in collections are <i>P. virginiana</i> P. Miller var. <i>subglabrata</i> (Mackenzie & Bush) Waterfall = <i>P. longifolia</i> Nuttall var. <i>subglabrata</i> (Mackenzie & Bush) Cronquist, a common species of dry woods, fields, gardens and waste places.					
Cons/Econote: This species may have been overlooked because this genus is so often associated with weedy old-field and pasture species. Determining the correct rank and distribution of this species requires substantial field and herbarium work.					
Habitat: Dry woods and clearings.					
Distr. CP*, PD (Baltimore, Wicomico*; distribution incomplete, expected throughout MD).					
<i>Picea rubens</i> Sargent Pinaceae (Pine Family)	Red Spruce	G5	S3		
Cons/Econote: Highly sought by the timber industry in the late 1800s and early 1900s. <i>P. rubens</i> is now absent from many forest situations where it once was a component, especially in upland forests. Most current sites are confined to the fens and swamps of Garrett County where competition from hardwoods is less intense. This species has been the subject of restoration efforts through mass planting of seedlings at several large wetland complexes, and one upland situation. Western MD stands are climatically and genetically isolated from the core of the species range in the central Appalachians (Keller & Trott 2017).					
Habitat: High elevation swamp forests and mountain peatlands.					
Distr. AP (Allegany, Garrett).					
<i>Pilea fontana</i> (Lunell) Rydberg Urticaceae (Nettle Family)	Springs Clearweed	G5	S3		
Cons/Econote: Infrequent to locally common but not often identified as fruits are required to distinguish this species from the common <i>P. pumila</i> . Conservation status needs clarification and more field work is required.					
Habitat: Tidal forests, shrub swamps and marsh fringes.					
Distr. CP (Anne Arundel, Baltimore, Calvert, Cecil, Dorchester, Kent, Prince George's, St. Mary's*, Talbot, Wicomico; distribution likely incomplete).					
<i>Piptatherum racemosum</i> (Smith) Barkworth	see <i>Patis racemosa</i> Romaschenko, P.M. Peterson & Soreng				
<i>Plantago cordata</i> Lamarck Plantaginaceae (Plantain Family)	Heartleaf Plantain	G4	SH	X	
Cons/Econote: Historically present along the Anacostia River and attributed to Maryland by an 1881 collection by C. S. Sheldon. The MD and District of Columbia historical stations are striking disjuncts from the species' core range in the upper Midwestern U.S.					
Habitat: Sandy shoreline, "often growing in water".					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP* (Prince George's*).					
<i>Platanthera blephariglottis</i> (Willdenow) Lindley var. <i>blephariglottis</i> (Nash) Luer	White Fringed Orchid	G4G5T4T5	S2	T	
Orchidaceae (Orchid Family)					
Syn: <i>Habenaria blephariglottis</i> (Willdenow) Hooker					
Cons/Econote: Nineteen extant populations ranging from one to more than 100 individuals. Roughly half of these populations are known from artificial maintained habitats such as powerline rights-of-way and roadsides. The Service has employed prescribed fire to restore habitat at one location.					
Habitat: Open, acidic wetlands; forested seepage swamps, Atlantic white cedar swamps, usually associated with Sphagnum mosses.					
Distr. CP (Anne Arundel, Baltimore*, Baltimore City*, Caroline, Charles*, Prince George's, Wicomico, Worcester).					
Flw: late Jun-early Jul; Fr: Aug-Sept.					
<i>Platanthera ciliaris</i> (Linnaeus) Lindley	Yellow Fringed Orchid	G5	S2	T	
Orchidaceae (Orchid Family)					
Syn: <i>Habenaria ciliaris</i> (Linnaeus) R. Brown ex Aiton f.					
<i>Blephariglottis ciliaris</i> (Linnaeus) Rydberg					
Cons/Econote: This fire-dependent species is known from five small extant populations with an estimated fair viability due to woody plant succession and deer browsing. Historically, collections of this species are documented in Reed (1964) at 19 different locations throughout Maryland from 1860-1955. The Eastern Shore populations are believed extirpated.					
Habitat: Open, acidic wetlands, boggy wetlands, usually associated with peaty substrates.					
Distr. AP*, CP, PD*, RV (Anne Arundel, Baltimore, Baltimore City*, Frederick, Garrett*, Howard*, Prince George's*, Washington*, Wicomico*, Worcester*).					
Flw: mid-Jul to mid-Aug; Fr: Sept.					
<i>Platanthera cristata</i> (Michaux) Lindley	Crested Yellow Orchid	G5	S3		
Orchidaceae (Orchid Family)					
Syn: <i>Habenaria cristata</i> (Michaux) R. Brown ex Aiton f.					
<i>Blephariglottis cristata</i> (Michaux) Rafinesque					
Cons/Econotes: The outlook for this species viability has improved due to the State ownership of a network of potential supporting habitat, but population sizes (or our ability to detect individuals) have exhibited some downward trends. These trends may be temporal but detectability is greatly affected by roadside mowing.					
Habitat: Open, acidic wetlands, boggy wetlands, forested seepage swamps.					
Distr. CP, PD, RV (Anne Arundel, Calvert, Caroline, Cecil, Dorchester, Frederick, Howard, Prince George's, Somerset, St. Mary's, Wicomico, Worcester).					
Flw: mid-late Jul-early Aug; Fr: Aug-Oct.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Platanthera flava</i> (Linnaeus) Lindley Orchidaceae (Orchid Family) Syn: <i>P. flava</i> (Linnaeus) Lindley var. <i>flava</i> <i>P. flava</i> (Linnaeus) Lindley var. <i>herbiola</i> (R. Brown ex Aiton) Luer <i>Habenaria flava</i> (Linnaeus) R. Brown var. <i>herbiola</i> (R. Brown ex Aiton) Ames & Correll] Taxnote: Recognition of varieties within <i>P. flava</i> is problematic. If recognized, both varieties are found in Maryland, with var. <i>flava</i> presumably restricted to the Eastern Shore. Cons/Econote: Extant populations widely ranging in size from five to 350 individuals. Some long-monitored populations are extremely variable over years in both the number of visible plants and the number of plants flowering. Habitat: Rich bottomland forests, forested seepage swamps, fringing ecotonal forest along tidal marshes, acidic and circumneutral seeps. Distr. AP, CP, PD, RV (Allegany, Anne Arundel, Baltimore, Caroline, Charles, Frederick, Garrett, Montgomery, Prince George's, Saint Mary's, Washington, Wicomico*, Worcester). Flw: late Jun-early Jul; Fr: Aug-Sept.	Pale Green Orchid	G4	S2S3		
<i>Platanthera grandiflora</i> (Bigelow) Lindley Orchidaceae (Orchid Family) Taxnote: Not including <i>P. shriveri</i> . Cons/Econote: Fifteen extant populations, three historical; populations range in size from one to 84 plants. Populations have been on a steep decline throughout Maryland for the past several decades, most likely due to herbivory by white-tailed deer. The Service has employed exclosures in some locations to protect from deer browse and enhance reproduction. Habitat: Minerotrophic forested seepage swamps and streamside seeps. Distr. AP, PD*, RV (Baltimore*, Frederick, Garrett, Howard). Flw: Jun-early Jul (peaking mid June in most locales); Fr: Aug-Sept.	Large Purple Fringed Orchid	G5	S2	T	
<i>Platanthera peramoena</i> (Gray) Gray Orchidaceae (Orchid Family) Syn: <i>Platanthera fissa</i> (Muhl. Ex Willd.) Lindley <i>Habenaria peramoena</i> Gray <i>Blephariglotis peramoena</i> (Gray) Rydberg Taxnote: Recently, some authors have recognized this species as <i>P. fissa</i> ; however <i>P. peramoena</i> is the proper name. Cons/Econote: Extant populations all relatively small, ranging from one to 30 individuals. This state threatened species has been in decline since first collected by J.D. Smith in 1878. Currently, there are 21 populations having fair to poor long-term viability. Habitat: Fens, wet meadows, clearings, and ditches, sometimes in base-rich soils. Distr. AP, CP*, PD, RV (Allegany*, Baltimore, Carroll, Cecil, Frederick, Garrett, Howard, Montgomery, Prince George's*). Flw: mid-late Jul; Fr: Aug-Sept.	Purple Fringeless Orchid	G5	S1S2	T	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Platanthera psycodes</i> (Linnaeus) Lindley ! Orchidaceae (Orchid Family)	Small Purple Fringed Orchid	G5	S1	X (PE)	
Taxnote: Historically, this plant has been confused with <i>P. peramoena</i> in floras and keys.					
Cons/Econote: Sixteen historical populations, of which six were last seen in the 1980s. Some of these locations are unconfirmed observations and may represent <i>P. peramoena</i> or <i>P. shriveri</i> . State status is currently under review pending more extensive field work in the area of Frederick County where a single plant was identified in 2020.					
Habitat: Northern hardwood forests, other moist forests, seepages, and wet meadows.					
Distr. AP*, PD*, RV (Baltimore*, Cecil*, Frederick, Garrett*, Montgomery*).					
<i>Platanthera shriveri</i> P.M. Brown Orchidaceae (Orchid Family)	Shriver's Frilly Orchis	G1	S1		
Taxnote: Recently separated as a distinct species by Brown et al. (2008). Closely resembling <i>P. grandiflora</i> and sometimes recognized as a hybrid between <i>P. grandiflora</i> and <i>P. lacera</i> . The long ascending nectar spur is unique among the purple-flowered orchids (NAOCC 2017). However, there are unresolved taxonomic issues that need to be addressed before listing this taxon as a conservation priority.					
Cons/Econote: Known from several locations, this species is identified by its late flowering period and more open inflorescence when compared to <i>P. grandiflora</i> , although the flowering period for the latter overlaps considerably with putative <i>P. shriveri</i> .					
Habitat: Forested seepage swamps and stream banks.					
Distr. RV (Frederick).					
Flw: mid-late Jul; Fr: Aug-Oct.					
<i>Pleopeltis polypodioides</i> (Linnaeus) E.G. Andrews & Windham <i>ssp. michauxiana</i> (Weatherby) E.G. Andrews & Windham Polypodiaceae (Polypody Family)	Resurrection Fern	G5T5	S3		
Syn: <i>Polypodium polypodioides</i> (Linnaeus) Watt <i>Polypodium polypodioides</i> (Linnaeus) Watt var. <i>michauxianum</i> Weatherby					
Habitat: Epiphyte on tree trunks, local to the Pocomoke River drainage.					
Distr. CP (Wicomico, Worcester).					
<i>Pluchea camphorata</i> (Linnaeus) A.P. de Candolle ! Asteraceae (Aster Family)	Marsh Fleabane	G5	S2	E(PT)	
Cons/Econote: Maryland stations occur at the northern extent of the species' range comprising small populations along small streams and rivers. Recently added to the flora of the Eastern Shore along the upper Choptank River and the Pocomoke River. Several older reports from salt marsh habitats are the common <i>Pluchea odorata</i> . State status is under review.					
Habitat: Bottomland and swamp forests, often in canopy openings in mucky soils; riparian gravel bars and bottomland forests.					
Distr. CP (Anne Arundel, Baltimore*, Calvert*, Caroline, Charles, Prince George's, Talbot*, Worcester).					
Flw: late Aug-Oct; Fr: Sept-Nov.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Poa palustris</i> Linnaeus Poaceae (Grass Family)	Fowl Bluegrass	G5	S1		
Cons/Econote: A circumboreal species occurring in Maryland near the southern range limits and confirmed by Rob Soreng from stations along the Youghiogheny and Casselman Rivers in Garrett County in 2016. Previous reports from Baltimore County (Monteferrante 076 BALT in 1973) and from Prince George's County (Suitland Bog, based upon F.G. Meyer 9233 NA in 1965) were in error. However, the species is a component of some commercial seed mixtures used for wet meadows and riparian site restoration and introductions outside of the native range are likely.					
Habitat: Banks of rocky, high-gradient montane rivers.					
Distr. AP (Garrett).					
Flw/Fr: late Jun-early Jul.					
<i>Poa saltuensis</i> Fernald & Wiegand Poaceae (Grass Family)	Drooping Bluegrass	G5	S1	E	
Cons/Econote: Endangered by habitat loss and displacement by invasive species. Maryland stations contain few plants.					
Habitat: Northern hardwood and rich cove forests at higher elevations; rich dry forests over mafic substrates; disjunct in the Piedmont on serpentine outcrops (historical).					
Distr. AP, PD*, RV (Allegheny, Baltimore*, Garrett).					
Flw/Fr: late May-Jun.					
<i>Podostemum ceratophyllum</i> Michaux Podostemaceae (Riverweed Family)	Threadfoot	G5	S3		
Cons/Econote: Rarely collected and even more rarely identified, the distribution and conservation status of this aquatic species requires substantial field work.					
Habitat: Swiftly-flowing reaches of clear, rocky-bottomed streams.					
Distr. CP, PD, RV (Allegheny, Cecil, Garrett, Harford, Howard, Montgomery*, Prince George's, Washington, Wicomico*).					
<i>Pogonia ophioglossoides</i> (Linnaeus) Ker-Gawler Orchidaceae (Orchid Family)	Rose Pogonia	G5	S3		
Taxnote: A white-flowered variant has been documented by Jim Stasz in Wicomico County.					
Cons/Econote: Occurs in Maryland on the Coastal Plain and in high elevation wetlands on the Appalachian Plateau. Sensitive to hydrological alterations and populations may decline upon succession to shrubby thickets (e.g., <i>Ilex glabra</i> , <i>Alnus spp.</i>). The Service actively manages several locations to maintain open-canopy and wet meadow conditions.					
Habitat: Acidic seeps and sphagnous fens in permanently saturated soils.					
Distr. AP, CP, RV* (Allegheny*, Anne Arundel, Baltimore*, Caroline, Charles, Dorchester, Garrett, Prince George's, Queen Anne's*, Wicomico, Worcester).					
Flw: early-late Jun; Fr: Jul-Aug.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Polanisia dodecandra</i> (Linnaeus) A.P. de Candolle Cleomaceae (Cleome Family)	Common Clammyweed	G5T5	S1	E	
Taxnote: Native plants are var. <i>dodecandra</i> ; var. <i>trachysperma</i> (Torrey & A. Gray) Iltis is introduced from the western U.S. A few records (from RR tracks) have not have been determined to variety but both varieties may have been introduced into these habitats as waifs (see also Weakley 2015).					
Cons/Econote: Two extant populations. Steury et al. (1996) discuss the habitat and plant associates.					
Habitat: Sand spits and beaches.					
Distr. CP, PD* (Anne Arundel?, Baltimore?, Cecil, Harford*, Kent).					
<i>Polemonium vanbruntiae</i> Britton Polemoniaceae (Phlox Family)	Bog Jacob's Ladder	G3G4	S2	T	
Cons/Econote: Threatened by habitat loss. This species responds well to some types of disturbance; unfortunately, these same disturbances often introduce non-native weeds. Bermingham & Brody (2011) discuss ecological and genetic factors affecting populations in the northeast.					
Habitat: Minerotrophic fens, spring seeps; presumably circumneutral but this has not been sufficiently demonstrated.					
Distr. AP (Garrett).					
Flw: late Jun; Fr: Jul-Aug.					
<i>Polygala cruciata</i> Linnaeus Polygalaceae (Milkwort Family)	Crossleaf Milkwort	G5	S2	T	
Cons/Econote: Threatened by habitat loss, chiefly woody succession of habitat. Maryland stations are often small, isolated and feeble populations.					
Habitat: Open-canopied, acidic seepage wetlands in sandy/peaty or gravelly substrates with seasonal saturation.					
Distr. CP (Caroline*, Prince George's, Somerset, Wicomico, Worcester).					
Flw: Aug-early Sept; Fr: Sept-Oct.					
<i>Polygala incarnata</i> Linnaeus Polygalaceae (Milkwort Family)	Pink Milkwort	G5	S2S3		
Cons/Econote: One of the many components in our flora requiring intermittent disturbance to retard succession and maintain graminoid-dominated communities.					
Habitat: Dry to mesic open "prairie-like" grasslands, generally along roadsides or under powerlines.					
Distr. CP, PD (Anne Arundel*, Calvert, Caroline*, Cecil, Charles, Howard, Montgomery, Prince George's, St. Mary's*, Wicomico, Worcester).					
Flw: Jul-Aug; Fr: Aug-Sept.					
<i>Polygala polygama</i> Walter	Racemed Milkwort	G5	S1	T	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Polygalaceae (Milkwort Family)					
Cons/Econote: Threatened by habitat loss, low population size and displacement by invasive species. Maryland stations are scattered and represented by very small (1-75 plants) populations.					
Habitat: Dry, rocky or gravelly barrens, bedrock scour bars and woodlands.					
Distr. CP, PD, RV (Allegany, Charles, Montgomery, Prince George's, Washington).					
Flw: mid Jun; Fr: Jul.					
<i>Polygala senega</i> Linnaeus	Seneca Snakeroot	G4G5	S2	T	
Polygalaceae (Milkwort Family)					
Cons/Econote: Threatened by habitat loss, competition or displacement by invasive species and woody succession of barrens habitat. Many of our stations are roadside outcrops and persistence in these habitats is always precarious.					
Habitat: Sunny to lightly shaded outcrops of mafic and ultramafic substrates; limestone glades and shale woodlands.					
Distr. AP, PD, RV (Allegany, Baltimore, Cecil*, Garrett, Harford, Howard*, Montgomery*, Washington).					
Flw: early-mid May; Fr: Jun.					
<i>Polygonum cilinode</i> Michaux	see <i>Fallopia cilinodis</i> (Michaux) Holub				
<i>Polygonum robustius</i> , <i>P. setaceum</i>	see <i>Persicaria</i>				
<i>Polygonum glaucum</i> Nuttall	Seabeach Knotweed	G3	S1	E	
Polygonaceae (Smartweed Family)					
Cons/Econote: An annual plant of overwash flats; population size estimates for this species are extremely variable. Lea et al. (2000) report 5-10,000 plants in wash flats on the north end of Assateague Island in 1997 but following two significant storms in 1998 no plants were seen at that location but rather in scattered locations on the island in 1998-1999.					
Habitat: Overwash zones along foredunes (Atlantic shoreline) actively eroding dunes and overwash zones on Bay islands.					
Distr. CP (Somerset, St. Mary's, Worcester).					
<i>Polygonum ramosissimum</i> Michaux	Bushy Knotweed	G5	SH	X	
Polygonaceae (Smartweed Family)					
Cons/Econote: A rare annual of dynamic maritime habitats that was last collected in 1928.					
Habitat: Beach.					
Distr. CP* (Anne Arundel*, Calvert*, St. Mary's*).					
<i>Potamogeton amplifolius</i> Tuckerman	Largeleaf Pondweed	G5	S1S2		
Potamogetonaceae (Pondweed Family)					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Known from deep clear water of reservoirs and high-quality streams in western MD. Two coastal stations (Talbot and Wicomico) are almost certainly extirpated signaling perhaps a contracting range, but this remains speculative. The conservation rank for this species reflects both the natural habitats (lower rank) and the anthropogenic habitats (upper rank) where the species is sometimes locally abundant.</p> <p>Habitat: Ponds, lakes, and rivers.</p> <p>Distr. AP, CP*, PD*, RV (Allegany, Cecil*, Garrett, Harford?, Prince George's?, Talbot*, Wicomico*; distribution likely incomplete).</p>					
<i>Potamogeton foliosus Rafinesque</i>	Leafy Pondweed	G5	S2		
<p>Potamogetonaceae (Pondweed Family)</p> <p>Cons/Econote: Recent surveys have discovered several additional stations and the species has been found to occupy a variety of aquatic habitats.</p> <p>Habitat: Ponds and coastal streams in tidal and nontidal reaches, freshwater streams in w. MD.</p> <p>Distr. CP, PD, RV (Allegany, Anne Arundel?, Calvert?, Howard?, Montgomery, Prince George's, Somerset?; distribution incomplete).</p>					
<i>Potamogeton illinoensis Morong</i>	Illinois Pondweed	G5	S2		
<p>Potamogetonaceae (Pondweed Family)</p> <p>Cons/Econote: Currently known only from Town Creek and Sideling Hill Creek in western Maryland. Some historical locations may now be extirpated.</p> <p>Habitat: Freshwater streams having higher pH waters influenced by limestone and calcareous shales.</p> <p>Distr. PD*, RV (Allegany, Baltimore*, Harford*, Washington*).</p>					
<i>Potamogeton perfoliatus Linnaeus</i>	Claspingleaf Pondweed	G5	S3		
<p>Potamogetonaceae (Pondweed Family)</p> <p>Cons/Econote: Few new collections of this species but this may be an artifact of local taxonomic interest. Possibly declining along with other "Bay grasses" however, this has not been demonstrated.</p> <p>Habitat: Tidal oligohaline to mesohaline waters within the Chesapeake Bay and its tributaries.</p> <p>Distr. CP (Anne Arundel, Baltimore, Cecil, Charles, Dorchester, Harford, Kent, Prince George's, Queen Anne's, St. Mary's).</p>					
<i>Potamogeton pusillus Linnaeus</i>	Slender Pondweed	G5	S2S4		
<p>Potamogetonaceae (Pondweed Family)</p> <p>Syn: <i>P. berchtoldii</i> Fieber</p> <p><i>P. pusillus</i> ssp. <i>tenuissimus</i> (Mertens & Koch) R.R. Haynes & C.B. Hellquist</p> <p>Taxnote: Occurring in Maryland as both var. <i>pusillus</i> and as var. <i>tenuissimus</i> F.K. Mertens & W.D.J. Koch; the distributions of these taxa have not been determined.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Possibly declining due to heavy siltation of bay tributaries and competition/displacement by exotic species; however, species in this genus in general are rarely identified to variety and as such the distribution and abundance of these taxa remain poorly defined.</p> <p>Habitat: Millponds and other impounded waters, fresh non-tidal and oligohaline tidal streams.</p> <p>Distr. AP, CP, PD, RV (Allegany, Anne Arundel, Caroline*, Carroll, Cecil, Charles, Garrett, Harford, Prince George's, Queen Anne's, Washington*, Wicomico, Worcester*).</p>					
<i>Potamogeton robbinsii</i> Oakes Potamogetonaceae (Pondweed Family)	Flatleaf Pondweed Robbins' Pondweed	G5	S1?		
<p>Cons/Econote: Apparently rare (or historical) in the southeast, this species was documented by few collections from the early 1900s. However, the species has recently been inventoried in three reservoirs, these presumably founded via dispersal by waterfowl.</p> <p>Habitat: Tidal freshwater aquatic vegetation beds, reservoirs.</p> <p>Distr. AP, CP (Cecil*, Garrett, Prince George's*, Queen Anne's).</p>					
<i>Potamogeton spirillus</i> Tuckerman Potamogetonaceae (Pondweed Family)	Spiral Pondweed	G5	SU		
<p>Cons/Econote: The identities of several specimen-based records are uncertain and several previous reports have been re-identified as the more common <i>P. diversifolius</i>. There may in fact be no Maryland stations for this species.</p> <p>Habitat: Reservoirs, ponds.</p> <p>Distr. CP?, PD? (Baltimore?, Calvert?).</p>					
<i>Potamogeton zosteriformis</i> Fernald Potamogetonaceae (Pondweed Family)	Flatstem Pondweed	G5	S1	E	
<p>Cons/Econote: Rare in the southeast and near the southern range limit (Virginia). Endangered by heavy siltation of Bay tributaries and perhaps competition/displacement by exotic species such as <i>Hydrilla</i>.</p> <p>Habitat: Tidal freshwater aquatic beds, millpond on the Sassafras River.</p> <p>Distr. CP, PD* (Cecil, Montgomery*).</p>					
<i>Potentilla arguta</i> Pursh	see <i>Drymocallis arguta</i> (Pursh) Rydberg				
<i>Prenanthes autumnalis</i> Walter	see <i>Nabalus autumnalis</i> (Walter) Weakley				
<i>Primula meadia</i> (Linnaeus) A.R. Mast & Reveal Primulaceae (Primrose Family)	Common Shootingstar	G5	S3		
<p>Syn: <i>Dodecatheon meadia</i> Linnaeus</p> <p>Taxnote: White-flowered forms occur sporadically in some populations and flower color varies from pink to blue hues.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Calcareous seeps, upland woodlands over mafic (limestone, calcareous shale) substrates. Distr. CP*, PD, RV (Alleghany, Baltimore*, Carroll*, Frederick*, Montgomery, Prince George's*, Washington). Flw: mid Apr-mid May; Fr: Jun.</p>					
<i>Prunus alleghaniensis</i> Porter	Allegheny Plum	G4T4	S2	T	
<p>Rosaceae (Rose Family) Syn: <i>Prunus umbellata</i> Elliott Taxnote: Maryland plants are the Appalachian var. <i>alleghaniensis</i>. Treated broadly as <i>P. umbellata</i> by Rohrer (2014, FNA, v. 9). Cons/Econote: Broadly Appalachian species, most frequent over the shale substrates of w. Washington and Alleghany Counties in the Ridge and Valley. Once considered more or less a shale barren-restricted species; this concept supported by the distribution in Maryland but not regionally. Historical from a few stations in Cecil County (Piedmont) and apparently introduced at one location at Patuxent Wildlife Refuge in Anne Arundel County (Coastal Plain). Habitat: Shale barrens and woodlands, shale outcrops along roadcuts and in clearings, often in habitats that have previously experienced heavy disturbance. Occurs over several shale formations but populations have also been found over Pocono sandstone and limestone. The unifying characteristic is open, sunny exposures where sunlight is not limiting. Distr. CP^l, PD*, RV (Alleghany, Anne Arundel^l, Cecil*, Washington). Flw: late Apr-mid May; Fr: late May-Jun.</p>					
<i>Prunus maritima</i> Marshall	Beach Plum	G4	S1	E	
<p>Rosaceae (Rose Family) Cons/Econote: Endangered by habitat loss over the long term; many of our populations are doubtfully self-sustaining, these being small (often single shrubs) and isolated from other plants. Habitat: Maritime dunes, beaches, sand spits. Distr. CP (Anne Arundel, Calvert, Kent, St. Mary's, Worcester). Flw: May; Fr: Jun-Jul (ripe by late July).</p>					
<i>Prunus susquehanae</i> Willdenow	Susquehanna Sandcherry Appalachian Dwarf Cherry	G4	SH		
<p>Rosaceae (Rose Family) Syn: <i>P. pumila</i> Linnaeus var. <i>susquehanae</i> (Willdenow) H. Jaeger Taxnote: The taxonomic identity of several Maryland collections is uncertain. Cons/Econote: Reported and/or collected rarely over the period 1895-1973. Habitat: Reported generally as sandy and rocky barrens; in Maryland this encompasses bedrock scour bar terraces at Great Falls, pine barrens-like habitats along the Fall Line and according to Monteferrante (1973) serpentine barrens. Distr. CP*, PD* (Baltimore*, Montgomery*, Prince George's*).</p>					
<i>Pseudolycopodiella caroliniana</i> (Linnaeus) Holub	Carolina Clubmoss	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Lycopodiaceae (Clubmoss Family)					
Syn: <i>Lycopodium carolinianum</i> Linnaeus					
<i>Lycopodiella caroliniana</i> (Linnaeus) Pichi Sermolli					
Cons/Econote: A single extant station. Historical stations in the vicinity of the District of Columbia, e.g., “magnolia bogs” sensu McAtee (1918) are presumed extirpated. McAvoy (2007) dismisses the oft-cited record from the Outer Coastal Plain (Worcester County).					
Habitat: Sphagnous seeps.					
Distr. CP (Harford, Prince George’s*).					
<i>Psoralea psoralioides</i> (Walter) Cory	see <i>Orbexilum psoralioides</i> (Walter) Vincent				
<i>Ptelea trifoliata</i> Linnaeus	Common Hoptree	G5	S3		
Rutaceae (Citrus Family)					
Taxnote: Occurring in Maryland as both var. <i>trifoliata</i> and var. <i>mollis</i> Torrey and A. Gray. The latter requires more study and is not mapped separately by the Service.					
Cons/Econote: An uncommon small tree/tall shrub. Its association with calcareous substrates is characteristic but the species also occurs in rich alluvium along the Potomac River as far east as Charles County (shell-marl).					
Habitat: Rich woods, river bluffs and limestone woodlands.					
Distr. CP, PD, RV (Allegany, Charles, Montgomery, Prince George’s, Washington).					
Flw: Mid-May to mid-Jun; Fr: May-Sept (Jan).					
<i>Ptilimnium nodosum</i> (Rose) Mathias	see <i>Harperella nodosa</i> Rose				
<i>Pycnanthemum clinopodioides</i> Torrey & A. Gray	Basil Mountainmint	G1G2	SH		
Lamiaceae (Mint Family)					
Taxnote: A tetraploid species ($2n = 4x = 38$). <i>Pycnanthemum</i> species are very difficult to identify; hybridization, polyploidy and aneuploidy contribute to taxonomic complexity in this genus.					
Cons/Econote: This species prefers dry or moist rocky ground frequently over limestone or mafic substrates. These latter habitats are highly invasible, particularly by garlic mustard (<i>Alliaria petiolata</i>), Japanese honeysuckle (<i>Lonicera japonica</i>) and exotic woody honeysuckle (<i>L. maackii</i>).					
Habitat: Historical specimens do not specify habitats.					
Distr. PD*, RV* (Montgomery*, Washington*).					
<i>Pycnanthemum pycnanthemoides</i> (Leavenworth) Fernald	Southern Mountainmint	G5	SH	X	
Lamiaceae (Mint Family)					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
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Taxnote: A tetraploid species ($2n = 4x = 36$). *Pycnanthemum* species are very difficult to identify; hybridization, polyploidy and aneuploidy contribute to taxonomic complexity in this genus. This species and its varieties have generally been lumped with *P. incanum* and *P. loomisii* and its status and distribution relative to these congeners is unknown.

Cons/Econote: Represented by few Maryland collections, none of which have been confirmed.

Habitat: Rocky woodlands.

Distr. CP?, PD?*, RV?* (Baltimore?, Frederick?*, Prince George's?).

<i>Pycnanthemum torreyi</i> Bentham	Torrey's Mountainmint	G2	S1	E
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Lamiaceae (Mint Family)

Syn: *P. torrei*, an orthographic variant.

Taxnote: A polyploid species with tetraploid ($2n = 4x = 40$) and hexaploid ($2n = 6x = 60$) numbers. *Pycnanthemum* species are very difficult to identify; hybridization, polyploidy, and aneuploidy contribute to taxonomic complexity in this genus.

Cons/Econote: Endangered by habitat loss and now globally rare. Most populations in the northeastern U.S. are considered extirpated; thus Maryland's two extant populations are of rangewide significance. Block & Rhoads (2013) provide a valuable discussion of this species in the northeastern U.S.

Habitat: Open meadows and woodlands over ultramafic substrates.

Distr. PD, RV (Baltimore, Cecil?, Frederick, Howard*, Montgomery*).

Flw: early-mid Aug; **Fr:** Sept-Nov.

<i>Pycnanthemum verticillatum</i> (Michaux) Persoon	Whorled Mountainmint	G5	S2	T
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Lamiaceae (Mint Family)

Taxnote: A tetraploid species ($2n = 4x = 39-40$). One population in Baltimore County matches var. *pilosum* (Nuttall) Cooperrider and may warrant separate conservation rank. *Pycnanthemum* species are very difficult to identify; hybridization, polyploidy and aneuploidy contribute to taxonomic complexity in this genus.

Cons/Econote: Endangered by habitat loss, wetland conversion and displacement by invasive species. Plants occur in small isolated patches, frequently in or near seepage wetlands underlain by calcareous or mafic geological substrates including serpentine. However, the range of habitat types that may be adequate is unknown. Plants from the Patuxent Refuge have many intermediate characters and may represent hybrids with *P. virginianum* or *P. setosum*.

Habitat: Circumneutral seepage wetlands, dry to mesic calcareous meadows and glades.

Distr. AP*, CP, PD, RV (Baltimore, Caroline, Carroll, Cecil, Dorchester, Frederick, Garrett*, Harford*, Howard?, Montgomery*, Prince George's, Queen Anne's).

Flw: late Jun-Jul (early Aug); **Fr:** Sept-Nov.

<i>Pycnanthemum virginianum</i> (Linnaeus) T. Durand & B.D. Jackson ex B.L. Robinson & Fernald	Virginia Mountainmint	G5	S2
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Lamiaceae (Mint Family)

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Taxnote: A tetraploid species ($2n = 4x = 40$). <i>Pycnanthemum</i> species are very difficult to identify; hybridization, polyploidy and aneuploidy contribute to taxonomic complexity in this genus.</p> <p>Cons/Econote: Most populations are small (<50 stems) and are often restricted to narrow bands of habitat with the exception of fields managed by periodic mowing. Persistence is disturbance-dependent. Apparently extremely rare east of the Piedmont; the species occurs with highest frequency in the limestone-rich area of Allegany and Washington Counties.</p> <p>Habitat: A variety of open, meadow-like habitats over a wide variety of geological substrates ranging from calcareous to mildly acidic.</p> <p>Distr. AP, CP*, PD, RV (Allegany, Baltimore, Carroll, Cecil, Garrett, Harford, Howard*, Montgomery, Queen Anne's*, Washington).</p> <p>Flw: Jul-early Aug; Fr: Sept-Nov.</p>					
<i>Pyrola chlorantha</i> Swartz	Green-flower Wintergreen	G5	SH	X	
<p>Ericaceae (Heath Family)</p> <p>Syn: <i>P. virens</i> Schreb.</p> <p>Cons/Econote: Circumboreal, historically collected from 1895-1940 from a narrow zone of pine barrens-like habitats.</p> <p>Habitat: "pine woods"</p> <p>Distr. CP*, PD* (Montgomery*, Prince George's*).</p>					
<i>Quercus macrocarpa</i> Michaux	Bur Oak, Mossycup Oak	G5	S1S2		
<p>Fagaceae (Beech Family)</p> <p>Taxnote: Hybridizes locally with <i>Q. bicolor</i> forming morphologically complex stands. Hybridization with <i>Q. alba</i> is also expected as a highly variable hybrid complex, with frequent backcrossing, occurs in the northeastern US and Canada (Whittimore & Schall 1991).</p> <p>Cons/Econote: Natural Maryland populations are comprised of small stands (often as single trees) as a consequence of long-term habitat loss and extensive habitat fragmentation. Pure stands of this species may not occur due to frequent hybridization. May occur as planted "specimen-trees" in some locations and the introduced distribution is very likely incomplete at the county level. The source of Shreve's (1910) report from Queen Anne's county—a conspicuous outlier—cannot be confirmed. The native range appears to be nw Carroll County west to Allegany County.</p> <p>Habitat: Rich bottomland forests over calcareous shale and limestone; flood-scoured islands and bedrock terraces of the Potomac.</p> <p>Distr. CP^I, PD, RV (Allegany, Anne Arundel^I, Baltimore^I, Carroll*, Frederick, Harford^I, Montgomery, Prince George's^I, Queen Anne's?, Washington; widely planted, introduced distribution incomplete).</p>					
<i>Quercus shumardii</i> Buckley	Shumard Oak	G5	S2	T	
<p>Fagaceae (Beech Family)</p> <p>Cons/Econote: Threatened by loss of bottomland hardwood forests, one of the most fragmented and heavily altered natural communities in Maryland.</p> <p>Habitat: Rich bottomland forests, shell-marl ravine forests.</p> <p>Distr. CP, PD, RV (Calvert, Charles, Frederick, Montgomery, Washington).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Ranunculus allegheniensis</i> Britton Ranunculaceae (Buttercup Family)	Allegheny Mountains Buttercup	G4G5	S3		
Habitat: Mesic hardwood slopes and coves, usually in base-rich soils.					
Distr. AP (Garrett).					
<i>Ranunculus ambigens</i> S. Watson Ranunculaceae (Buttercup Family)	Water-plantain Spearwort	G4	S1		
Cons/Econote: Numerous historical collections from the late 1890s to the early 1960s but now apparently scarce. Recent collections from Hunting Quarter Swamp in Montgomery County and a roadside wetland in Caroline County. Perhaps overlooked and the historical status of some counties in the distribution is likely due to lack of survey.					
Habitat: Floodplain mudbars and pools, tidal marshes.					
Distr. CP, PD (Anne Arundel*, Caroline, Cecil*, Charles, Harford*, Howard*, Montgomery, Prince George's*, Queen Anne's*).					
Flw: mid-late Jul; Fr: Jul-Aug.					
<i>Ranunculus carolinianus</i> A.P. de Candolle	see <i>R. septentrionalis</i> Poiret in Lamarck				
<i>Ranunculus fascicularis</i> Muhlenberg ex Bigelow Ranunculaceae (Buttercup Family)	Early Buttercup	G5	S1	E	
Taxnote: Several collections labeled as this species appear to be <i>R. acris</i> and some specimens have not been confirmed.					
Cons/Econote: Endangered by habitat loss.					
Habitat: Thin, rocky soil of calcareous seeps and rich glades.					
Distr. AP?, PD, RV* (Howard, Garrett?, Washington*).					
<i>Ranunculus flabellaris</i> Rafinesque Ranunculaceae (Buttercup Family)	Yellow Water Crowfoot	G5	S1	E	
Cons/Econote: Maryland stations scattered along the larger, more intact tracts of swamp and floodplain forest.					
Habitat: Swamp forests, floodplain forests, in slow-moving water, e.g., pools, sloughs, canal bed (C&O).					
Distr. CP, PD, RV (Anne Arundel, Frederick, Kent*, Montgomery, Prince George's, Worcester*).					
Flw: early May; Fr: May-Jun.					
<i>Ranunculus hederaceus</i> Linnaeus Ranunculaceae (Buttercup Family)	Long-stalked Crowfoot	G5	S1	E	
Cons/Econote: An oddly distributed circumboreal species with occurrences in North America and in Europe first recorded in North America (Carolina) by Bosc in 1821. The collection record from the Chesapeake Bay region documents the species at over 20 sites from the late 1800s to the late 1900s. Rediscovered by amateur botanist David Francis in 2006.					
Habitat: Spring-fed seep.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Distr. CP*, PD (Cecil, Charles*, Prince George's*). Flw: Apr; Fr: May-Jun.</p>					
<i>Ranunculus laxicaulis</i> (Torrey & A. Gray) Darby Ranunculaceae (Buttercup Family)	Mississippi Buttercup	G5?	S1		
<p>Cons/Econote: Before its rediscovery in 2006 this species was last documented in Maryland by Robert Tatnall in 1939. The current location (see below) is believed to be identical to Tatnall's collection site (Knapp et al. 2011). This species is widespread in the area and more exhaustive surveys could uncover additional populations. Habitat: Exposed muddy tidal shores of the upper Pocomoke River and tributaries. Distr. CP (Worcester).</p>					
<i>Ranunculus pensylvanicus</i> Linnaeus f. Ranunculaceae (Buttercup Family)	Bristly Crowfoot	G5	SH	X	
<p>Cons/Econote: Collected by W. R. Jones at Druid Hill Park according to Shreve et al. (1910). This site is the basis of several striking within-state disjuncts, particularly northern species (see <i>Coptis trifolia</i>). Habitat: Wet meadows and floodplains (Weakley 2015). Distr. PD* (Baltimore*).</p>					
<i>Ranunculus pusillus</i> Poiret Ranunculaceae (Buttercup Family)	Pursh's Buttercup	G5	SU		
<p>Cons/Econote: According to Tatnall (1946) the range of the species on the Delmarva Peninsula is from the Susquehanna south to Talbot County. More records are expected and the species has "weedy" tendencies according to some reports. Habitat: Floodplain swamps, pools, ditches. Distr. CP, PD (Anne Arundel, Calvert, Caroline, Charles*, Harford/Baltimore, Montgomery, Prince George's, Talbot*). Flw: late Apr-May; Fr. late May-Jun.</p>					
<i>Ranunculus septentrionalis</i> Poiret in Lamarck Ranunculaceae (Buttercup Family)	Hispid Buttercup Carolina Buttercup	G5	S1?		
<p>Syn: <i>R. carolinianus</i> A.P. de Candolle <i>R. hispidus</i> Michaux var. <i>nitidus</i> (Chapman) T. Duncan Taxnote: According to Whittemore (1997b) <i>R. septentrionalis</i> is often used as a synonym for <i>R. hispidus</i> var. <i>caricetorum</i> but the type specimen belongs to var. <i>nitidus</i>. Nesom (1993) makes the case for recognition of <i>Ranunculus hispidus</i> var. <i>nitidus</i> at species rank, followed here as <i>R. septentrionalis</i> (see Haines 2007), and consistent with keys in Weakley (2020). Cons/Econote: Reported from numerous stations, most reflected confusion with <i>R. caricetorum</i>. A comparison of recently collected material resulted in four collections from Allegany, Frederick, and Garrett Counties, but the species may be expected in other rich sites on the Piedmont and Coastal Plain. Recently located in a large forested seep where the species was abundant.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Minerotrophic seeps, montane floodplain forests in rich soils. Distr. AP, CP?, PD?, RV (Allegany, Baltimore?, Cecil?, Charles?, Frederick, Garrett). Flw: mid May-early Jun; Fr: Jun (fruit are necessary for confident identification).</p>					
<p><i>Ranunculus trichophyllus</i> Chaix Ranunculaceae (Buttercup Family)</p>	<p>Threadleaf Water Crowfoot Northeastern White Water Crowfoot</p>	G5T5	S1	E	
<p>Taxnote: Maryland plants are var. <i>trichophyllus</i>. Cons/Econote: The species is circumboreal, occurring at its southern range limits in Maryland. Habitat: Baymouth Barrier Wetland, freshwater marsh in peaty soil. Distr. CP (Kent).</p>					
<p><i>Rhamnus alnifolia</i> L'Héritier Rhamnaceae (Buckthorn Family)</p>	<p>Alderleaf Buckthorn</p>	G5	S1		
<p>Cons/Econote: New to the flora in 2009 (see Knapp et al. 2011). Discovered by accident and with few confirmed details, this species abundance and conservation status has yet to be confidently established. Interestingly, this species is enumerated in Aikin's (1837) catalogue of plants from the vicinity of Baltimore but the only species listed by Shreve (1910), who apparently studied this catalogue, was the European <i>R. alnus</i> (<i>frangula</i>). Habitat: Mountain peatland. Distr. AP (Garrett).</p>					
<p><i>Rhododendron arborescens</i> (Pursh) Torrey Ericaceae (Heath Family)</p>	<p>Smooth Azalea</p>	G4G5	S3		
<p>Cons/Econote: Chiefly Appalachian and occurring in Maryland near its northern range limit. Habitat: Montane hardwood forests, often along riparian zones. Distr. AP, RV* (Allegany*, Garrett). Flw: mid-late Jun-early Jul; Fr: Aug-Nov.</p>					
<p><i>Rhynchosia tomentosa</i> (Linnaeus) Hooker & Arnott Fabaceae (Legume Family)</p>	<p>Hairy Snoutbean</p>	G5	S2	T	
<p>Cons/Econote: Threatened by habitat loss, poor protection status, low population size and lack of appropriate management. Interestingly, this species quickly responded to prescribed fire management at one site, appearing robustly in the new habitat (apparently from the seed bed). Habitat: Inland sand dune and ridge forests, in dry sandy soils. Distr. CP (Anne Arundel, Caroline, Calvert, Dorchester, Wicomico, Worcester). Flw: mid Jul-early Sept; Fr: Sept-Oct.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Rhynchospora alba</i> (Linnaeus) Vahl Cyperaceae (Sedge Family)	White Beakrush	G5	S3		
Cons/Econote: A characteristic species of sphagnum wetlands, locally abundant in mountain peatlands, scattered and isolated on the Coastal Plain.					
Habitat: Mountain peatlands, coastal “bogs” and acidic seepage wetlands in peaty soils.					
Distr. AP, CP (Anne Arundel, Baltimore, Cecil, Charles, Prince George’s, Wicomico, Worcester).					
<i>Rhynchospora cephalantha</i> A. Gray Cyperaceae (Sedge Family)	Capitate Beakrush	G5	S1	E	
Taxnote: Maryland records may contain specimens referable to <i>R. cephalantha</i> var. <i>attenuata</i> Gale.					
Cons/Econote: Endangered by habitat loss, fire exclusion, and woody succession of open meadow-like habitat.					
Habitat: Delmarva Bays and other seasonally flooded depressional wetlands, wet pine flatwoods.					
Distr. CP (Anne Arundel?, Baltimore?, Dorchester, Prince George’s, Worcester).					
Flw/Fr: mature achenes reported from mid-july through early October.					
<i>Rhynchospora fusca</i> (Linnaeus) W.T. Aiton Cyperaceae (Sedge Family)	Brown Beakrush	G4G5	SH		
Cons/Econote: Regionally rare species for which we have verified a historical location. Collected by R.E. Riefner in 1980.					
Habitat: Low ground along Dundee Creek, Gunpowder Estuary.					
Distr. CP* (Baltimore*).					
<i>Rhynchospora globularis</i> (Chapman) Small Cyperaceae (Sedge Family)	Globe Beakrush	G5?T5?	S1	E	
Cons/Econote: Maryland stations for this plant occur near the northern limits of the species’ range. An early successional species, intolerant of shade, all sites require management to maintain open habitat. Fire suppression may play a role in this species’ rarity.					
Habitat: Seasonally saturated open meadows and swales in sandy or peaty soils, often under powerlines or along roadsides.					
Distr. CP (Anne Arundel?, Wicomico, Worcester).					
<i>Rhynchospora glomerata</i> (Linnaeus) Vahl Cyperaceae (Sedge Family)	Clustered Beakrush	G5T5?	S3		
Taxnote: Maryland plants are var. <i>glomerata</i> .					
Habitat: Pine flatwoods, powerline and roadside swales and meadows, in seasonally saturated sandy soils.					
Distr. CP (Calvert, Prince George’s*, Somerset, St. Mary’s, Wicomico, Worcester).					
<i>Rhynchospora harperi</i> Small Cyperaceae (Sedge Family)	Harper’s Beakrush	G4?	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Cons/Econote: Endangered by habitat loss, fire exclusion, and woody succession of open meadow habitat.					
Habitat: Sandy/peaty soils in flatwoods depressions that are at least seasonally saturated and additionally restricted to open canopy wetlands.					
Distr. CP (Dorchester, Wicomico, Worcester).					
<i>Rhynchospora inundata</i> (Oakes) Fernald	Drowned Hornrush	G4?	S1	E	
Cyperaceae (Sedge Family)					
Cons/Econote: The few Maryland stations occur in Delmarva Bays (Fenstermacher et al. 2014) that are some of the largest in the State, presumably having a longer hydroperiod.					
Habitat: Delmarva Bays and acidic seepage fens.					
Distr. CP (Dorchester, Wicomico).					
<i>Rhynchospora microcephala</i> (Britton) Britton ex Small	Small-headed Beakrush	G5	S2		
Cyperaceae (Sedge Family)					
Syn: <i>R. cephalantha</i> A. Gray var. <i>microcephala</i> (Britton) Kükenthal					
Cons/Econote: Declining. Nearly all Maryland stations are located in early successional openings in an otherwise forested landscape. This may be attributable to a spate of harvesting on former Chesapeake Forest Products lands (now largely state-owned) during the 1990s. As these harvest areas have been replanted or have succeeded into forest/shrub lands and habitat for this species has become more limited.					
Habitat: Open sandy meadows and powerline swales.					
Distr. CP (Caroline, Prince George's, Wicomico, Worcester).					
<i>Rhynchospora nitens</i> (Vahl) A. Gray	Short-beaked Baldrush	G4?	S1	E	
Cyperaceae (Sedge Family)					
Syn: <i>Psilocarya nitens</i> (Vahl) Wood					
Cons/Econote: Maryland stations constitute a few small populations scattered across the Eastern Shore. Occurrences may be ephemeral, disappearing upon canopy closure but perhaps persisting in the seed bank.					
Habitat: Permanently saturated coastal wetlands including millponds (floating sphagnous mats), flooded sandpits, Delmarva Bays and acidic seeps.					
Distr. CP (Dorchester, Wicomico).					
<i>Rhynchospora oligantha</i> A. Gray	Feather-bristle Beaksedge Few-flowered Beakrush	G4	SH	X	
Cyperaceae (Sedge Family)					
Cons/Econote: Historical collections from Suitland Bog made in the early 1950s.					
Habitat: Open, gravelly seepage bog; a "magnolia bog" sensu McAtee (1918). Presumed extirpated (Strong & Simmons 2002).					
Distr. CP* (Prince George's*).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Rhynchospora pallida</i> M.A. Curtis Cyperaceae (Sedge Family)	Pale Beakrush	G3	SH	X	
Cons/Econote: Collected by W. Canby from “near Salisbury” in 1880 (Gale 1944). This location is a recurring theme in the historical flora of Maryland. Presumably a pine barrens-like site, now extirpated.					
Habitat: The area around Salisbury historically comprised a vast area of inland sand dunes and stream-head peaty fens dotted with large depressions (visible on high resolution, false color aerial images). These depressions may have been nontidal Atlantic White Cedar (<i>Chaemacyparis thyoides</i>) swamps.					
Distr. CP* (Wicomico*).					
<i>Rhynchospora rariflora</i> (Michaux) Elliott ! Cyperaceae (Sedge Family)	Few-flowered Beakrush	G5	SU	X	
Cons/Econote: Prior to Knapp locating this species at Suitland Bog the species was known from a single collection by J.B.S. Norton from a “sphagnum bog” in Wicomico County from 1940. The Suitland Bog station is possibly an introduction, see Knapp et al. (2011) for discussion. Conservation rank and legal status under review.					
Habitat: “Sphagnum bog” (Norton), gravelly seepage bog (Knapp).					
Distr. CP (Prince George’s, Wicomico*).					
<i>Rhynchospora recognita</i> (Gale) Kral Cyperaceae (Sedge Family)	Cymose Beakrush	G5?	S2		
Syn: <i>R. globularis</i> (Chapman) Small var. <i>recognita</i> Gale					
Cons/Econote: A species historically confused with <i>R. glomerata</i> but occurring in a wider variety of open habitats. Its rarity is likely due to absence of recurrent fire.					
Habitat: Clearings and edges of pine flatwoods, open sandy swales, dry glades and riverside scour bar glades.					
Distr. CP, PD (Cecil, Dorchester, Harford, Montgomery, Prince George’s*, Worcester).					
<i>Rhynchospora scirpoides</i> (Torrey) Grisebach Cyperaceae (Sedge Family)	Long-beaked Baldrush	G4	S2	T	
Syn: <i>Psilocarya scirpoides</i> Torrey					
Cons/Econote: Alterations to historical patterns of groundwater hydrology pose a severe and persistent threat. Additionally, exotic species such as the Eurasian rough-seed bulrush (<i>Schoenoplectiella mucronata</i>) and perhaps even some aggressive natives such as Walter’s sedge (<i>Carex striata</i>) and red maple (<i>Acer rubrum</i>) may invade the habitat preferred by this species in Delmarva Bays.					
Habitat: Delmarva Bays and acidic seepage fens.					
Distr. CP (Caroline, Dorchester, Kent, Wicomico).					
<i>Rhynchospora torreyana</i> A. Gray Cyperaceae (Sedge Family)	Torrey’s Beakrush	G4	S2	T	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Threatened by woody succession of open habitats and suburban sprawl. Habitat: Pine flatwoods, open meadows, powerline swales and road verges in seasonally saturated sandy or peaty soils. Distr. CP (Caroline, Dorchester, Wicomico, Worcester).</p>					
<i>Ribes americanum</i> P. Miller ! Grossulariaceae (Currant Family)	Wild Black Currant	G5	S1	X	
<p>Cons/Econote: Near its southern range limit (VA); the species was last collected by J.B.S. Norton in 1902 until rediscovered by Coleman Minnie at a site in Frederick County. For details see Minney & Landsman (2018). Riefner & Hill (1983) discuss this species in a regional context. The Service is reviewing this species' State Status, but have not formulated a proposal for listing. Habitat: Rich woods. Distr. PD*, RV (Carroll*, Frederick). Flw: mid-late Apr; Fr:</p>					
<i>Ribes cynosbati</i> Linnaeus Grossulariaceae (Currant Family)	Prickly Gooseberry	G5	S3		
<p>Cons/Econote: According to Shreve (1910, p. 282) this species was a characteristic shrub of mountain forests dominated by chestnut (<i>Castanea dentata</i>) and chestnut oak (<i>Quercus montana</i>). Habitat: Rich woods, often over calcareous (limestone) substrates and at least historically, sandstone boulderfields at high elevations. Distr. AP, CP, RV (Allegany, Frederick, Garrett, Prince George's, Washington).</p>					
<i>Ribes glandulosum</i> Grauer Grossulariaceae (Currant Family)	Skunk Currant	G5	S3		
<p>Habitat: Montane (high elevation) seeps in northern hardwoods. Distr. AP, RV (Frederick, Garrett).</p>					
Ripariosida hermaphrodita (Linnaeus) Weakley & D.B. Poindexter					
Malvaceae (Mallow Family)	Virginia Mallow Virginia Fanpetals	G3	S1	E	
<p>Syn: <i>Sida hermaphrodita</i> (Linnaeus) Rusby Taxnote: Weakley et al. (2017) clearly provide the taxonomic rationale to establish a new genus, <i>Ripariodisa</i>, as <i>Sida</i> is not closely related to the core of the genus. Cons/Econote: Endangered by landscape-level habitat loss and alteration of riparian habitat. The remaining populations are small, isolated and subject to multiple threats including competition with invasive species. Habitat: Frequently scoured gravel bars and river island shorelines. Distr. PD, RV (Allegany, Cecil, Frederick?, Montgomery, Washington). Flw: Jul; Fr: Aug-Sept.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Rosa blanda</i> Aiton Rosaceae (Rose Family)	Smooth Rose	G5	S1	E	
Cons/Econote: A rare species of mountain forests near its southern range limit (WV); presumably a single Maryland station.					
Habitat: Riverside scour bar.					
Distr. AP (Garrett).					
<i>Rubus pubescens</i> Rafinesque Rosaceae (Rose Family)	Dwarf Red Raspberry	G5	S1?		
Cons/Econote: A species of bogs, fens and swamps in the northern tier of the U.S., added to the flora by M.J. Baranski in 2020. Distribution is uncertain as the species is fairly cryptic when not in flower but is otherwise easily identifiable. Should be sought throughout western MD in appropriate habitat.					
Habitat: Montane (circumneutral) seepage swamp dominated by <i>Quercus bicolor</i> and with <i>Fraxinus nigra</i> (formerly).					
Distr: RV (Frederick).					
Flw: mid May; Fr: Jun-Jul.					
<i>Rudbeckia fulgida</i> Aiton Asteraceae (Aster Family)	Orange Coneflower	G5	S3		
Taxnote: A complex group of geographic and habitat-defined varieties, five of which occur in adjacent states. Only var. <i>fulgida</i> is reported from Maryland in Flora North America (v. 21).					
Cons/Econote: Herbarium and field study is needed to revise the State rank.					
Habitat: Meadows, forest edges in dry to moist soil.					
Distr. AP, CP*, PD, RV (Allegany, Baltimore, Frederick, Garrett, Montgomery, Prince George's*).					
<i>Rudbeckia triloba</i> Linnaeus Asteraceae (Aster Family)	Brown-eyed Susan	G5T4T5	S3		
Taxnote: Maryland plants are var. <i>triloba</i> .					
Cons/Econote: The original range may be obscured by planted material; several populations persist around old homesites and plants regarded as “garden escapes” by collectors and from roadsides (Talbot) may in fact be introductions. The State rank needs a thorough review.					
Habitat: Fields, rich floodplains, roadsides and other clearings.					
Distr. AP, CP, PD, RV (Allegany, Baltimore, Frederick, Garrett, Harford, Montgomery, Talbot, Washington).					
<i>Ruellia humilis</i> Nuttall Acanthaceae (Acanthus Family)	Hairy Wild Petunia	G5	S1	E	
Cons/Econote: Maryland stations comprising a few small populations (10-30 plants on average) along the Potomac River. Endangered by habitat loss and competition with exotic species.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Bedrock terrace woodland and flatrock scour in sandy alluvium. Distr. PD, RV (Montgomery, Washington). Flw: Jul-Aug.; Fr: Aug-Sept.</p>					
<i>Ruellia purshiana</i> Fernald Acanthaceae (Acanthus Family)	Pursh's Wild Petunia	G3	S1	E	
<p>Cons/Econote: A single station, endangered by encroaching exotic woody shrubs and vines (e.g., <i>Lonicera maackii</i>, <i>L. japonica</i>, <i>Rosa multiflora</i>). Habitat: Calcareous shale/siltstone outcrops (along roadside). Distr. PD (Montgomery). Flw: June; Fr: Jul-Aug.</p>					
<i>Ruellia strepens</i> Linnaeus Acanthaceae (Acanthus Family)	Limestone Wild Petunia	G4G5	S2S3		
<p>Cons/Econote: The major threat to this species is invasion of floodplain forest communities along the Potomac River by Japanese knotweed (<i>Reynoutria japonica</i>). For example, <i>R. japonica</i> anchors the sediments that would normally be re-sorted and distributed during flood events and forms a dense understory canopy, typically excluding any other herbaceous species. Additional threats may be posed by western beakgrass (<i>Diarrhena obovata</i>), a species capable of forming a dense ground layer and that is extremely competitive. Habitat: <i>R. strepens</i> occurs in rich bottomland forests with the majority of records from areas with limestone; however, the species does not seem particularly restricted to limestone, rather rich alluvial soils. Distr. CP*, PD, RV (Allegany, Baltimore/Howard, Cecil*, Frederick, Kent*, Montgomery, Washington). Flw: mid Jun-mid Jul.; Fr: Aug-Sept.</p>					
<i>Rumex altissimus</i> A. Wood Polygonaceae (Smartweed Family)	Tall Dock	G5	S1	E	
<p>Cons/Econote: Stations for this plant are scattered along major rivers in Maryland. Its demography is extremely variable because the riparian habitats are not stable or long-persisting. Habitat: Frequently flooded zones along rivers in sandy/gravelly alluvium; also forested wetlands in muck soils. Distr. CP, PD, RV (Cecil, Charles*, Frederick*, Kent, Montgomery, Washington). Flw: May-Jun (July); Fr: Aug.</p>					
<i>Sabatia campanulata</i> (Linnaeus) Torrey Gentianaceae (Gentian Family)	Slender Marsh Pink	G5	S1	E	
<p>Cons/Econote: Endangered by habitat loss and fire exclusion; a species of pine savannas and bogs in the southern U.S.; Maryland stations represent remnant populations in a highly altered ecosystem. Habitat: Delmarva Bays and other wet meadow or barrens-like openings (often powerlines).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP (Dorchester, Wicomico, Worcester). Flw: mid Jul-Aug; Fr: Sept.					
<i>Sabatia difformis</i> (Linnaeus) Druce Gentianaceae (Gentian Family)	Two-formed Pink	G4G5	S1	E	
Cons/Econote: Endangered by woody succession of bay habitat, alteration of groundwater hydrology and to some extent by illegal off-road vehicle use. Habitat: Delmarva Bays. Distr. CP (Dorchester, Worcester). Flw: mid Jul-early Aug.; Fr: Sept.					
<i>Sabatia dodecandra</i> (Linnaeus) Britton, Sterns, & Poggenburg Gentianaceae (Gentian Family)	Large Marsh Pink	G5?	S3		
Habitat: Fresh tidal to brackish marshes, marsh/maritime shrub and forest ecotones. Distr. CP (Anne Arundel, Baltimore, Cecil, Charles*, Dorchester, Harford, Wicomico, Worcester). Flw: mid-late Jul-Sept. Fr: Oct.					
<i>Sabulina caroliniana</i> (Walter) Small Caryophyllaceae (Pink Family)	Carolina Sandwort	G5	S1	E	
Syn: <i>Arenaria caroliniana</i> Walter <i>Minuartia caroliniana</i> (Walter) Mattfeld Cons/Econote: Single station in Wicomico County (Harrison 2002). Requires open, fire-prone habitats, susceptible to invading graminoids and successional hardwoods. The Service is employing prescribed fire to manage this population. Habitat: Dry, white sands associated with openings in pine-oak woodland. Distr. CP (Wicomico). Flw: late Jun-Jul; Fr: Aug-Sept.					
<i>Sabulina michauxii</i> (Fenzl) Dillenberger & Kadereit Caryophyllaceae (Pink Family)	Michaux's Stitchwort	G5T5	S2	T	
Syn: <i>Arenaria stricta</i> Michaux <i>Minuartia michauxii</i> (Fenzl) Farwell Taxnote: Maryland plants are var. <i>michauxii</i> . Cons/Econote: Threatened by woody succession of open habitats, fire suppression, and to an unknown extent, fragmentation and isolation. Habitat: Sunny to partly shaded outcrops over a variety of mildly acid (shale), mafic (shale, limestone) and ultramafic (serpentine) substrates.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Distr. PD, RV (Allegheny, Cecil, Washington). Flw: late May-mid Jun; Fr: Jul.</p>					
<p><i>Saccharum alopecuroides</i> (Linnaeus) Nuttall Poaceae (Grass Family) Syn: <i>Erianthus alopecuroides</i> (L.) Elliott Taxnote: Several orthographic variants of the specific epithet are in the taxonomic literature including “<i>alopecuroides</i>” and “<i>alopecuroidum</i>”. Welker et al. (2015) found no molecular support for segregating the genus <i>Erianthus</i>. Cons/Econote: Maryland populations are near the northern range limit for this narrowly distributed southeastern species; the conservation rank lacks precision due to the limited amount of field work on the genus. Habitat: Meadows and roadsides. Distr. CP, PD (Calvert, Howard).</p>	Silver Plume Grass	G5	S1?		
<p><i>Saccharum baldwinii</i> Sprengel Poaceae (Grass Family) Syn: <i>Erianthus strictus</i> Elliott Cons/Econote: Maryland populations are the northernmost in the range of this narrowly distributed southeastern species. There are two relictual populations on the Eastern Shore. Welker et al. (2015) found no molecular support for segregating the genus <i>Erianthus</i>. Habitat: Wet meadows and powerline swales. Distr. CP (Wicomico, Worcester). Flw/Fr: mid Sept-early Oct.</p>	Slender Plume Grass	G5	S1	E	
<p><i>Saccharum contortum</i> (Elliott) Nuttall Poaceae (Grass Family) Syn: <i>S. brevibarbe</i> (Michx.) Persoon var. <i>contortum</i> (Elliott) R. Webster <i>Erianthus brevibarbis</i> Michaux var. <i>contortus</i> (Elliott) D.B. Ward <i>Erianthus contortus</i> Elliott Taxnote: Maryland records for <i>S. brevibarbe</i> (Michaux) Persoon derives from nomenclatural confusion and this southern species does not occur in Maryland. Welker et al. (2015) found no molecular support for segregating the genus <i>Erianthus</i>. Habitat: Sandy roadsides, inland sand dunes, railroad verges, powerlines and field edges. Distr. CP (Caroline, Charles, Dorchester, Somerset, Wicomico, Worcester). Flw/Fr: late Aug-early Oct.</p>	Bent-awn Plume Grass	G5	S3S4		
<p><i>Sacciolepis striata</i> (Linnaeus) Nash Poaceae (Grass Family)</p>	Gibbous Panic-grass	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Restricted to narrow zones or ecotones of emergent marsh and endangered by habitat loss. Many populations will be affected by increases in salinity from sea level rise.</p> <p>Habitat: Fresh to oligohaline marshes.</p> <p>Distr. CP (Charles, Wicomico, Worcester).</p> <p>Flw/Fr: mid Aug-late Sept.</p>					
<i>Sagittaria calycina</i> Engelman	see <i>Sagittaria spatulata</i> (J.G. Smith) Buchenau				
<p><i>Sagittaria engelmanniana</i> J.G.Smith Alismataceae (Water-plantain Family)</p> <p>Cons/Econote: Threatened by alteration of groundwater hydrology, herbicide use and woody succession of open wetland habitat.</p> <p>Habitat: Delmarva Bays; lake shorelines in the mountains; acidic seepage swamps and boggy areas, often under powerlines.</p> <p>Distr. AP, CP, PD* (Calvert, Caroline, Charles, Garrett, Montgomery*, Prince George's*, Queen Anne's, Somerset, Wicomico, Worcester).</p> <p>Flw: (late Jun) mid-late Aug; Fr: ?</p>	Engelmann's Arrowhead	G5?	S2	T	
<p><i>Sagittaria graminea</i> Michaux Alismataceae (Water-plantain Family)</p> <p>Cons/Econote: The distribution and conservation rank for this species has not been confidently established. Our few records suggest rarity; however, the distribution is provisional and many specimen records need confirmation.</p> <p>Habitat: Delmarva Bays, ditches, beaver ponds, intertidal marshes and mudflats.</p> <p>Distr. AP, CP (Caroline, Cecil, Charles, Dorchester, Garrett, Kent, Queen Anne's, Wicomico, Worcester).</p> <p>Flw: Aug; Fr: Sept-Oct.</p>	Grassleaf Arrowhead	G5	SU		
<p><i>Sagittaria rigida</i> Pursh Alismataceae (Water-plantain Family)</p> <p>Cons/Econote: Regionally rare and with a primarily Appalachian distribution south of Maryland, the coastal station is a disjunct and our historical records are presumed extirpated.</p> <p>Habitat: Delmarva Bays; spring-fed seepage ponds in the mountains; historical habitats may have included vernal pools in the Piedmont and Ridge and Valley.</p> <p>Distr. CP, PD*, RV (Alleghany, Frederick*, Montgomery*, Prince George's*, Queen Anne's, Washington, Worcester).</p> <p>Flw: Jul-Sept; Fr: Sept-Oct.</p>	Sessile-fruit Arrowhead	G5	S1	E	
<p><i>Sagittaria spatulata</i> (J.G. Smith) Buchenau Alismataceae (Water-plantain Family)</p> <p>Syn: <i>S. spathulata</i>, an orthographic variant.</p>	Spongy Arrowhead Tidal Arrowhead	G5T4	S2		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>S. calycina</i> var. <i>spongiosa</i> Engelm					
<i>S. montevidensis</i> Chamisso & Schlechtendal ssp. <i>spongiosa</i> (Engelmann) Bogin					
<i>Lophotocarpus spongiosus</i> (Engelmann) J.G. Smith					
Taxnote: Historically the Service has listed <i>S. calycina</i> , in the broad sense, comprised of both var. <i>spongiosa</i> and var. <i>calycina</i> . Some Maryland material may be referable to <i>S. calycina</i> Engelm (= <i>S. calycina</i> var. <i>calycina</i>) in the strict sense; distributions of these taxa have yet to be determined.					
Cons/Econote: One of many intertidal zone plants that are suspected of being under decline, presumably due to sea level rise but also by eutrophication and siltation of habitats along tributaries of the Chesapeake Bay.					
Habitat: Sandy/gravelly intertidal zones.					
Distr. CP (Anne Arundel, Baltimore, Cecil, Charles, Dorchester, Harford, Kent, Wicomico).					
Flw: Jun-Aug (Sept); Fr: Aug-Oct.					
<i>Sagittaria subulata</i> (Linnaeus) Buchenau	Strap-leaf Arrowhead	G4		SU	
Alismataceae (Water-plantain Family)					
Cons/Econote: One of many intertidal zone plants that were suspected of being under decline, presumably due to sea level rise but also by boat wakes, eutrophication and siltation of intertidal habitats along tributaries of the Chesapeake Bay. Recent surveys suggest that this species may be one of the more resilient intertidal species (J. Harrison).					
Habitat: Sandy or gravelly intertidal zones, tidal mudflats and rarely (?) exposed gravel bars along streambanks.					
Distr. CP, RV (Allegany, Baltimore*, Caroline, Cecil, Charles*, Harford*, Washington, Wicomico, Worcester).					
Flw: Aug-Sept (Nov); Fr: Sept-Nov.					
<i>Salix bebbiana</i> Sargent	Bebb's Willow	G5		SH	X
Salicaceae (Willow Family)					
Cons/Econote: Barely entering the southeast in Maryland (occurs in the southwestern U.S.). Documented for the flora by two historical collections (see Argus 1986).					
Habitat: Upland thickets and barrens.					
Distr. PD* (Baltimore*, Cecil*).					
<i>Salix discolor</i> Muhlenberg	Pussy Willow	G5		SH	
Salicaceae (Willow Family)					
Cons/Econote: At its southern range limits in Maryland this species is documented in the flora by two historical collections (Argus 1986). Additional collections from Cecil County cited by Tatnall (1946) were not noted by Argus (1986); these seem likely (given the extent of serpentine and ultramafic barrens and woodlands) but are unconfirmed.					
Habitat: Calcareous wetlands; the Service is uncertain of the Maryland-specific habitats.					
Distr. AP*, PD* (Baltimore*, Cecil?, Garrett*).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Salix interior</i> Rowlee Salicaceae (Willow Family) Syn: <i>S. exigua</i> Nuttall ssp. <i>interior</i> (Rowlee) Cronquist Taxnote: Maryland plants are the eastern, var. <i>sericans</i> (Nees) G.L. Nesom Cons/Econote: Occurring in Maryland in diffuse populations, these generally small, often just a few individuals. Capable of forming nearly continuous colonies in good habitat. Some Chesapeake Bay stations have been locally extirpated due to shoreline erosion, whereas others have expanded. There are multiple reports (see Distr. below) but few confirmed extant stations. Habitat: Beaches, shorelines, and sand spits along the Chesapeake Bay and larger tributaries that are infrequently inundated by tides. Rocky scour bars and scrub-woodlands along the Potomac River. Distr. AP?, CP, PD*, RV* (Allegany?, Cecil, Charles?, Frederick*, Garrett?, Kent, Montgomery*, Prince George's).	Narrowleaf Willow	G5	S1	E	
<i>Salix lucida</i> Muhlenberg Salicaceae (Willow Family) Cons/Econote: A northern species occurring mainly in previously glaciated regions and occurring regionally (DE, MD, WV) as peripheral disjuncts. Our records represented relictual occurrences of a Pleistocene distribution. Habitat: Streambanks and low ground. Distr. AP*, PD* (Cecil*, Garrett*).	Shining Willow	G5	SH	X	
<i>Salix occidentalis</i> Walter Salicaceae (Willow Family) Syn: <i>S. humilis</i> Marshall var. <i>tristis</i> (Aiton) Griggs <i>S. humilis</i> Marshall var. <i>microphylla</i> (Andersson) Fernald <i>S. tristis</i> Aiton Taxnote: Often treated as a variety of the widespread <i>S. humilis</i> , and fully sympatric with that species; some Maryland records are likely <i>S. humilis</i> s.s. Cons/Econote: Within Maryland there are two centers of occurrence; the Piedmont stations occur in areas having ultramafic substrates and serpentine barrens, whereas the Coastal Plain stations appear clustered in southern Maryland, roughly corresponding to the Aquia formation—a zone of glauconitic sands (greensands) containing higher levels of calcium and magnesium (Chapelle & Knobel 1983). Habitat: Meadows, woodlands and barrens (savannas). Distr. AP?, CP*, PD, RV (Allegany, Anne Arundel*, Baltimore*, Cecil, Charles*, Garrett?, Harford*, Howard*, Montgomery*, Prince George's*).	Dwarf Prairie Willow	G5	S2		
<i>Salvia urticifolia</i> Linnaeus Lamiaceae (Mint Family) Cons/Econote: Known only from the colonial-era (Maryland) collections of Vernon & Krieg circa 1698 (see Brown et al. 1987). Habitat: Woodlands and glades, usually over mafic or calcareous rocks (Weakley 2015).	Nettleleaf Sage	G5	SX	X	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. Unknown, a southeastern species (FL, GA, NC, SC, VA).					
<i>Sanguisorba canadensis</i> Linnaeus Rosaceae (Rose Family)	Canada Burnet	G5	S2	T	
Cons/Econote: Threatened over the long term by extensive habitat loss and in the near term primarily by woody succession of open-meadow habitat and additionally by several invasive shrubs, particularly encroaching <i>Rosa multiflora</i> . Maryland populations have poor protection status but agreements with private landowners for management have been successful at several locations.					
Habitat: Open wet meadows, seepage slopes, often (but not always) over mafic or ultramafic substrates.					
Distr. AP, CP*, PD, RV (Baltimore, Carroll, Cecil, Frederick, Garrett, Harford, Montgomery, Prince George's*).					
Flw: late Aug-Sept; Fr: Oct.					
<i>Sanicula marilandica</i> Linnaeus Apiaceae (Carrot Family)	Maryland Black-snakeroot	G5	S3		
Habitat: Mesic to dry forests and woodlands, usually in soils weathered from mafic or calcareous rocks, or from shell deposits on the Coastal Plain (coastal populations perhaps var. <i>petiolutata</i> Fernald?).					
Distr. AP, CP, PD, RV (Allegany, Baltimore, Charles, Dorchester, Frederick *, Garrett, Harford, Howard, Kent, Washington, Wicomico*, Worcester).					
Flw: mid Jun-early Jul; Fr: Aug-Sept.					
<i>Sanicula trifoliata</i> Bicknell Apiaceae (Carrot Family)	Large-fruited Sanicle	G4	S3		
Habitat: Rich, mesic cove and slope forests, dry-mesic oak-hickory forests on mafic or calcareous substrates, rich northern hardwood forests.					
Distr. PD, RV (Cecil, Frederick, Harford, Washington).					
Flw: May (?); Fr: mid Jun.					
<i>Sarracenia purpurea</i> Linnaeus Sarraceniaceae (Pitcherplant Family)	Northern Pitcherplant	G5	S2	T	
Cons/Econote: Threatened by habitat loss with some populations observed to have heavy deer browse of flowers, which severely limits reproduction. Declines are noted for some populations due to beaver activity whereas other populations are threatened by encroaching woody vegetation. The Wicomico County millpond photographs of A.V. P. Smith (1938) are striking in that the habitat area was expansive (Salisbury Pond, 40 acres; Sharptown Pond, 15 acres) as was the area occupied by <i>Sarracenia</i> at the latter two ponds ("abundant" at Salisbury Pond, "common" at Sharptown Pond). The native range in Maryland is obscured by a number of known or suspected introductions. The Service has recently (2018-2020) worked with a local utility company to restore habitat at one location.					
Habitat: Streamside fens, acidic seepage wetlands, millponds.					
Distr. AP ¹ , CP, RV (Anne Arundel, Charles, Dorchester, Frederick, Garrett ¹ , Prince George's, St. Mary's ¹ , Wicomico, Worcester).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: mid May-Jun; Fr: Aug-Sept.					
<i>Saxifraga micranthidifolia</i> (Haworth) Steudel	see <i>Micranthes micranthidifolia</i> (Haworth) Small				
<i>Sceptridium multifidum</i> (S.G. Gmelin) M. Nishida Ophioglossaceae (Adder's-tongue Family) Syn: <i>Botrychium multifidum</i> (S.G. Gmelin) Treviranus <i>B. multifidum</i> var. <i>intermedium</i> (D.C. Eaton) Farwell Cons/Econote: Redman (1991) reported a single station in Baltimore County that has been apparently extirpated. Habitat: Mesic forests. Distr. PD* (Baltimore*).	Leathery Grapefern	G5	SH	X	
<i>Sceptridium oneidense</i> (Gilbert) Holub Ophioglossaceae (Adder's-tongue Family) Syn: <i>Botrychium oneidense</i> (Gilbert) House Cons/Econote: Endangered by habitat loss. Habitat: Headwater seeps and swampy floodplain forests. Distr. AP, CP*, RV? (Dorchester*, Frederick?, Garrett, St. Mary's*, Worcester).	Blunt-lobe Grapefern	G4	S1	E	
<i>Schizachne purpurascens</i> (Torrey) Swallen Poaceae (Grass Family) Cons/Econote: Geographically restricted and nearing the southern range limit (VA), Maryland populations are small and vulnerable to local extirpation under a variety of scenarios. Habitat: Mesic northern hardwood forests, often rocky or among sandstone boulders. Distr. AP (Garrett). Flw/Fr: early Jun.	Purple Oat	G5	S1	E	
<i>Schoenoplectiella smithii</i> (Fernald) Shiels & Monfils Cyperaceae (Sedge Family) Syn: <i>Scirpus smithii</i> A. Gray, <i>Schoenoplectus smithii</i> (A. Gray) Soják Taxnote: Subspecific taxa include var. <i>smithii</i> , var. <i>setosus</i> (Fernald) S.G. Smith and var. <i>levisetus</i> (Fernald) S.G. Smith; however the taxonomic status of the three varieties is uncertain. Our only confirmed records are var. <i>setosus</i> . Often misattributed due to taxonomic confusion with <i>Sch. purshii</i> . Cons/Econote: The Service can only speculate that the reason the species has not been collected in recent decades is that the species occupies both natural and anthropogenic habitats, the latter of which are under-surveyed. Our current record, from unremarkable habitat, collected by Wayne Longbottom.	Smith's Bulrush	G5?	S1?		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Habitat: Coastal ponds and gravelly stream margins, sediment retention pond.					
Distr. CP, PD? (Baltimore?, Montgomery?, Prince George's*, Wicomico).					
<i>Schoenoplectus etuberculatus</i> (Steudel) Soják	Canby's Bulrush	G3G4	SH	X	
Cyperaceae (Sedge Family)					
Syn: <i>Scirpus etuberculatus</i> (Steudel) Kuntze					
Cons/Econote: Historically collected in the vicinity of Salisbury from 1863-1906. The last known population has not been seen since 1982.					
Habitat: Slow-moving blackwater streams, peaty streamhead depressions.					
Distr. CP* (Wicomico*).					
<i>Schoenoplectus novae-angliae</i> (Britton) M.T. Strong	Salt-marsh Bulrush	G5	S2		
Cyperaceae (Sedge Family)					
Syn: <i>Bolboschoenus novae-angliae</i> (Britton) S.G. Smith					
<i>Bolboschoenus</i> x <i>novae-angliae</i> (Britton) S.G. Smith					
<i>Scirpus cylindricus</i> (Torrey) Britton					
<i>S. novae-angliae</i> Britton					
<i>S. subterminalis</i> var. <i>cylindricus</i> (Torrey) T. Koyama					
Taxnote: Treated in some manuals as a hybrid (<i>Sch. fluviatilis</i> x <i>Sch. robustus</i>). Taxonomy is uncertain; some authors place the species in the genus <i>Bolboschoenus</i> Palla.					
Habitat: Fresh to brackish tidal marshes, often locally abundant.					
Distr. CP (Anne Arundel, Caroline, Cecil, Dorchester?, Harford, Kent, Prince George's, Talbot, Worcester; distribution likely incomplete).					
<i>Schoenoplectus subterminalis</i> (Torrey) Soják	Water Bulrush	G4G5	S1	E	
Cyperaceae (Sedge Family)					
Syn: <i>Scirpus subterminalis</i> Torrey					
Cons/Econote: Available habitat for this species has been historically heavily altered by stream sedimentation, channelization and eutrophication.					
Habitat: Ponds and blackwater streams.					
Distr. CP, RV (Anne Arundel*, Dorchester, Frederick, Wicomico).					
<i>Schoenoplectus torreyi</i> (Olney) Palla	Torrey's Bulrush	G5	S1		
Cyperaceae (Sedge Family)					
Syn: <i>Scirpus torreyi</i> Olney					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Reported from Cecil County by Witman (1954) but without a corresponding specimen and otherwise doubtful. The first extant record for this species was discovered (at the opposite end of the state) by W. Knapp in 2013.</p> <p>Habitat: Pond edge within a mountain peatland.</p> <p>Distr. AP (Garrett).</p>					
<i>Schwalbea americana</i> Linnaeus Orobanchaceae (Broomrape Family)	Chaffseed	G2	SH	X	LE
<p>Syn: <i>S. australis</i> Pennell</p> <p><i>S. americana</i> L. var. <i>australis</i> (Pennell) Reveal & C.R. Broome</p> <p>Cons/Econote: The species is a component of fire-dependent coastal ecosystems (Norden and Kirkman 2004), which are no longer present in Maryland. Probably extirpated by development of Fenwick Island beginning in the 1870s (Dolan et al. 1980). Maryland specimens from the 1690s are present at the British Museum (Reveal et al. 1987, p. 222). This species is now extirpated over much of its historic range in the eastern U.S. Misattributed to Wicomico County by Brown & Brown (1984).</p> <p>Habitat: Sandy barrens and savannas in moist soil.</p> <p>Distr. CP* (Worcester*).</p>					
<i>Scirpus ancistrochaetus</i> Schulyer (Cyperaceae (Sedge Family))	Northeastern Bulrush	G3	S1	E	LE(PD)
<p>Cons/Econote: Restricted in Maryland to a single station. See Bartgis (1992) for information on Maryland occurrences and Cipollini & Cipollini (2011) and Cipollini et al. (2013) for rangewide perspectives. Although this species no longer meets the definitions of Threatened nor Endangered under the Federal ESA (USFWS 2019) the State status in Maryland remains. A delisting proposal is expected from the U.S. Fish and Wildlife Service in 2021.</p> <p>Habitat: Limestone sinkhole ponds.</p> <p>Distr. RV (Washington).</p> <p>Flw/Fr: mid Jun-Jul.</p>					
<i>Scirpus expansus</i> Fernald Cyperaceae (Sedge Family)	Woodland Bulrush	G4	S3		
<p>Habitat: Rocky streambanks and gravel bars.</p> <p>Distr. AP, CP?, PD, RV (Alleghany, Baltimore, Cecil, Garrett, Prince George's?, Washington).</p> <p>Flw/Fr: mid Jul-Aug.</p>					
<i>Scirpus hattorianus</i> Makino Cyperaceae (Sedge Family)	Mosquito Bulrush	G5	SU		
<p>Cons/Econote: Rare in adjacent states and likely narrowly distributed in central and western Maryland. There is not enough information to confidently assign a conservation rank.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Wet meadows and acidic seeps. Distr. AP, PD? (Baltimore?, Carroll?, Garrett). Flw/Fr: Jul.</p>					
<i>Scleria minor</i> W. Stone Cyperaceae (Sedge Family)	Slender Nutrush	G4	S1	E	
<p>Cons/Econote: Occurring in few and generally very small populations. Endangered by habitat loss and woody succession. Habitat: Meadows and clearings in seasonally saturated sandy and peaty soils. Distr. CP (Caroline, Wicomico, Worcester). Flw/Fr: late Jul-Aug.</p>					
<i>Scleria muehlenbergii</i> Steudel Cyperaceae (Sedge Family)	Muehlenberg's Nutrush	G5	S1S2		
<p>Syn: <i>S. muehlenbergii</i> Steudel, an orthographic variant <i>S. reticularis</i> Michaux var. <i>pubescens</i> Britton Cons/Econote: Occurring in few and generally very small populations that are now heavily fragmented. Rod Simmons (pers. comm.) notes that several now isolated stations along the Fall Line were likely a continuous edge of peaty fens that were divided by the construction of Interstate 95. Few stations are on protected lands. Habitat: Seepage slopes, peaty fens, and wet meadows often over soils derived from ultramafic substrates. Distr. CP, PD (Anne Arundel, Baltimore, Cecil, Charles, Prince George's). Flw/Fr: late Aug-Sept (mid Oct).</p>					
<i>Scleria oligantha</i> Michaux Cyperaceae (Sedge Family)	Little-head Nutrush	G5	S1		
<p>Cons/Econote: An interesting addition to the state's flora; known to occur at a single station in what appears to be the northern range limit (collected in the District of Columbia in 1874). Habitat: Rich mesic forest. Distr. PD (Montgomery). Flw/Fr: late Jun- mid Jul.</p>					
<i>Scleria reticularis</i> Michaux Cyperaceae (Sedge Family)	Reticulated Nutrush	G4	S2S3		
<p>Cons/Econote: Nearly confined to seasonal wetlands that require management to control woody growth. Habitat: Delmarva Bays, Fall Line seeps/fens. Distr. CP, PD* (Caroline, Carroll*, Dorchester, Montgomery*, Prince George's*, Queen Anne's, Somerset, Wicomico, Worcester). Flw/Fr: Aug-Sept.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Scleria triglomerata</i> Michaux Cyperaceae (Sedge Family) Syn: <i>S. nitida</i> Willdenow Cons/Econote: Infrequent throughout but with some ‘core’ populations on the lower Eastern Shore. Plants of dry to xeric sands that have previously been recorded as <i>S. nitida</i> are included here (see Appendix II). Habitat: Wet meadows, clearings, road verges in sandy/peaty soils; occasionally found in drier soils of inland dune woodlands and barrens. Distr. CP (Anne Arundel, Baltimore, Caroline, Dorchester, Prince George’s, St. Mary’s, Wicomico, Worcester). Flw: late Jul; Fr: Sept-Oct.	Whip Nutrush	G5	S3		
<i>Scleria verticillata</i> Muhlenberg ex Willdenow Cyperaceae (Sedge Family) Cons/Econote: Endangered by sea level rise and salt-water intrusion into fragile plant communities. Habitat: Freshwater seeps and interdunal swales on the barrier island (Assateague). Distr. CP (Worcester). Flw/Fr: Sept-Oct.	Low Nutrush	G5	S1	E	
<i>Sclerolepis uniflora</i> (Walter) Britton, Sterns, & Poggenburg Asteraceae (Aster Family) Cons/Econote: Threatened by habitat loss and alteration of site hydrology. Habitat: Delmarva Bays and seepage wetlands in sandy/peaty soils. Distr. CP (Caroline?, Dorchester, Queen Anne’s, Wicomico, Worcester). Flw: late Jun-Jul; Fr: Jul-Aug.	One-flower Sclerolepis	G4	S2	T	
<i>Scrophularia lanceolata</i> Pursh Scrophulariaceae (Figwort Family) Cons/Econote: Frequent but generally in low numbers; rare on the Coastal Plain. Habitat: Rich woods, floodplains. Distr. AP, CP, PD, RV (Allegheny, Anne Arundel, Baltimore, Calvert, Cecil, Frederick, Garrett, Harford, Montgomery, Washington; distribution likely incomplete). Flw: mid-late May (Jun); Fr: late Jun-Jul.	Hare Figwort	G5	S3		
<i>Scutellaria galericulata</i> Linnaeus Lamiaceae (Mint Family) Cons/Econote: This northern species occurs near its southern range extent in a variety of wetland types but generally in low numbers. Habitat: Seepage wetlands, freshwater marshes, baymouth barrier swamps (Sipple 1982), riverine scour bars.	Hooded Skullcap	G5	S2		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. AP, CP, PD (Baltimore, Calvert, Cecil, Garrett, Harford, Howard?, Kent, Montgomery). Flw: Jul; Fr: Aug-Sept.					
<i>Scutellaria incana</i> Biehler Lamiaceae (Mint Family)	Hoary Skullcap	G5T5	S3		
Taxnote: Maryland plants are the widespread var. <i>incana</i> . Cons/Econote: A habitat specialist; populations occur in low numbers. Habitat: Rich woods, often over limestone. Distr. AP, PD, RV (Alleghany, Cecil, Frederick, Garrett, Harford, Montgomery*, Washington). Flw: Jul-Aug; Fr: late Aug-Sept.					
<i>Scutellaria leonardii</i> Epling Lamiaceae (Mint Family)	Leonard's Skullcap Shale Barren Scullcap	G4	S2	T	
Syn: <i>S. parvula</i> Michaux var. <i>missouriensis</i> (Torrey) Goodman & Lawson <i>S. parvula</i> var. <i>leonardii</i> (Epling) Fernald Taxnote: Often treated as a variety of <i>S. parvula</i> , which has led to much taxonomic confusion regarding the identity of Maryland populations. <i>S. parvula</i> does not occur in Maryland as all Maryland collections discovered to date are <i>S. leonardii</i> . The closely related <i>S. australis</i> (Fassett) Epling has been collected in the District of Columbia. Cons/Econote: Threatened by woody succession of barrens habitat, fire suppression, and competition with exotic species. Habitat: Shale barrens and rocky woods or glades over mafic and ultramafic (serpentine) substrates. Distr. PD, RV (Alleghany, Baltimore, Cecil, Frederick*, Harford, Howard?, Montgomery, Washington*). Flw: mid May-Jun; Fr: Jul-Oct.					
<i>Scutellaria nervosa</i> Pursh Lamiaceae (Mint Family)	Veined Skullcap	G5	S1S2	T	
Cons/Econote: Threatened by loss and degradation of mature, mesic hardwood forests by encroaching exotic, invasive species. Recently located in montane alluvial forests along tributaries to Town Creek (Alleghany) and should be sought elsewhere in the area. Habitat: Shell-marl ravine forests, coastal shell middens and floodplain terrace forests over rich alluvium. Distr. CP, PD, RV (Alleghany, Cecil, Charles, Frederick, Kent, Montgomery, Prince George's, Washington). Flw: May; Fr: Jun.					
<i>Scutellaria ovata</i> Hill Lamiaceae (Mint Family)	Heartleaf Skullcap	G5TNR	S3		
Syn: <i>S. versicolor</i> <i>S. ovata</i> Hill ssp. <i>virginiana</i> Epling Taxnote: Maryland plants are ssp. <i>rugosa</i> (Wood) Epling.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Dry forests, woodlands, glades. Distr. PD, RV (Allegany, Frederick, Montgomery, Washington). Flw: late Jun-early Jul; Fr. Jul-Oct.</p>					
<i>Scutellaria saxatilis</i> Riddell	Rock Skullcap	G3G4	S1	E	
<p>Lamiaceae (Mint Family) Cons/Econote: Endangered by competition with exotic, invasive species and habitat loss. Narrowly distributed and habitat-restricted in Maryland to fragments of mature forests. Habitat: Rich mesic mixed forests. Distr. AP, PD, RV (Frederick, Garrett, Montgomery). Flw: (Jun) Jul-early Aug; Fr: Jul-Aug.</p>					
<i>Scutellaria serrata</i> Andrzedowski	Showy Skullcap	G4G5	S3		
<p>Lamiaceae (Mint Family) Habitat: Rich woods, infrequent. Distr. AP, CP*, PD, RV (Baltimore*, Carroll, Cecil*, Frederick, Garrett, Howard, Montgomery, Prince George's*). Flw: early-mid Jul (Garrett); Fr: Jul-Aug.</p>					
<i>Sedum glaucophyllum</i> Clausen	Cliff Stonecrop	G4	S2	T	
<p>Crassulaceae (Stonecrop Family) Cons/Econote: Threatened by competition and displacement by invasive species. Habitat: Forested, generally rocky slopes, over limestone, calcareous shales, or other mafic substrates. Distr. AP, RV (Allegany, Garrett).</p>					
<i>Senecio suaveolens</i> (Linnaeus) Elliott	Sweet-scented Indian-plantain	G4	S1	E	
<p>Asteraceae (Aster Family) Syn: <i>Cacalia suaveolens</i> Linnaeus <i>Hasteola suaveolens</i> (Linnaeus) Pojarkova <i>Synosma suaveolens</i> (Linnaeus) Rafinesque ex Britton Cons/Econote: A declining species in the eastern U.S. due to habitat degradation from heavy siltation, alteration of flooding regimes and competition with invasive species (NatureServe 2015). According to Wiegand (2010) the species appears and disappears from sites along the Potomac River as light gaps open and close in the forest canopy. Habitat: A variety of open to lightly-shaded habitats along river banks, light-gaps on the floodplain, side channels and pond and pool margins. Distr. AP*, PD, RV (Allegany, Cecil*, Frederick, Garrett*, Harford, Montgomery, Washington). Flw: Aug; Fr: Sept-Oct.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Senna marilandica</i> (Linnaeus) Link Fabaceae (Legume Family) Syn: <i>Cassia marilandica</i> Linnaeus Habitat: Streamside cobble bars and riverside prairies. Distr. PD, RV (Allegany, Frederick, Montgomery, Washington). Flw: Jul; Fr: Aug-Sept.	Maryland Wild Senna	G5	S3		
<i>Sesuvium maritimum</i> (Walter) Britton, Sterns, & Poggenburg Aizoaceae (Fig-marigold Family) Cons/Econote: Endangered by habitat loss and alteration. Sea level rise may pose additional threats. Habitat: Sandy shorelines, foredunes and overwash zones (generally actively eroding) on the Atlantic coast and Chesapeake Bay. Distr. CP (Calvert, Somerset, Worcester).	Puerto Rico Sea-Purslane	G5	S1	E	
<i>Sida hermaphrodita</i> (Linnaeus) Rusby	see <i>Ripariosida hermaphrodita</i> (Linnaeus) Weakley & D.B. Poindexter				
<i>Silene nivea</i> (Nuttall) Muhlenberg ex Otth Caryophyllaceae (Pink Family) Syn: <i>Silene alba</i> Muhlenberg, misapplied Cons/Econote: Endangered by habitat loss, displacement by invasive species and demographic factors associated with small population size. Regionally rare and declining, recent surveys have not relocated many of the Potomac River populations. Habitat: Mature floodplain and terrace forests over rich alluvial soils. Distr. CP*, PD*, RV (Allegany*, Baltimore*, Carroll?, Frederick, Harford*, Howard*, Montgomery*, Prince George's*, Washington).	Snowy Campion	G4?	S1	E	
<i>Silphium asteriscus</i> Linnaeus var. <i>trifoliatum</i> (Linnaeus) J.A. Clevinger Asteraceae (Aster Family) Syn: <i>Silphium trifoliatum</i> Linnaeus Cons/Econote: Locally frequent over base-rich soils, particularly limestone. Habitat: Limestone glades, mafic woodlands and meadows. Distr. PD, RV (Allegany, Baltimore*, Frederick, Harford, Howard*, Montgomery, Washington). Flw: mid Jul-Aug; Fr: Aug-Sept.	Threeleaf Rosinweed	G4?T4?	S3		
<i>Sisyrinchium arenicola</i> E. P. Bicknell Iridaceae (Iris Family) Syn: <i>S. fuscatum</i> E. P. Bicknell, in part.	Sandyland Blue-eyed Grass	GNR	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Taxnote: Treated here as an endemic species of coastal sand plains distributed from eastern Massachusetts south to eastern Maryland (Sorrie & Weakley 2001; see also Ward 1999).</p> <p>Cons/Econote: Two known stations. Reported from the Snow Hill area in Worcester County by Moldenke (1945, specimen not seen) an area where inland sand dunes occur frequently over the landscape.</p> <p>Habitat: Inland sand dune and ridge woodlands.</p> <p>Distr. CP (Caroline, Dorchester, Worcester?).</p> <p>Flw: late May-early Jun; Fr: Jul.</p>					
<i>Smilacina stellata</i> (Linnaeus) Desfontaines	see Maianthemum stellatum (L.) Link				
<p><i>Smilax bona-nox</i> Linnaeus</p> <p>Smilacaceae (Greenbrier Family)</p> <p>Habitat: Typically maritime dunes and woodlands and scrub/thickets.</p> <p>Distr. CP (Calvert, Charles?, Dorchester, Prince George's, Saint Mary's, Wicomico, Worcester).</p>	Saw Greenbrier	G5	S3		
<p><i>Smilax ecirrata</i> (Engelmann ex Kunth) S. Watson</p> <p>Smilacaceae (Greenbrier Family)</p> <p>Syn: <i>S. ecirrhata</i>, an orthographic variant</p> <p>Taxnote: Sexual reproduction in Maryland plants has not been observed and this appears typical of the species. One historical specimen was collected in flower/early fruit and was easily identified. Perhaps overlooked as <i>Smilax herbacea</i> with which it co-occurs; they are similar in appearance, especially in early growth. Rare sexual reproduction is a recurring theme in the shale barren region, occurring in several phylogenetically unrelated taxa (e.g., <i>Calamagrostis porteri</i>, <i>Spiraea corymbosa</i>, <i>Veratrum hybridum</i>).</p> <p>Cons/Econote: Disjunct from the core range in the Midwest, this species is infrequent in Green Ridge State Forest (Allegany County).</p> <p>Habitat: Dry to mesic mixed hardwood forests and woodlands.</p> <p>Distr. PD, RV (Allegany, Cecil, Frederick*, Washington).</p> <p>Flw: not observed; Fr: early Sept.</p>	Upright Greenbrier	G5?	S1S3		
<p><i>Smilax pseudochina</i> Linnaeus</p> <p>Smilacaceae (Greenbrier Family)</p> <p>Cons/Econote: Threatened by wetland succession and invasion of edge habitats by invasive species. Endemic to the southern Coastal Plain, this species occurs as widely dispersed populations and often as single individuals.</p> <p>Habitat: Edge habitats in tidal and nontidal swamp forests and shrub swamps; coastal acidic seeps.</p> <p>Distr. CP, PD (Anne Arundel*, Calvert, Caroline, Cecil, Charles, Dorchester, Kent, Montgomery, Prince George's, St. Mary's, Worcester).</p> <p>Flw: mid Jun; Fr: mid Aug.</p>	Long-stalk Greenbrier	G4G5	S2	T	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Solidago arguta</i> Aiton var. <i>arguta</i> Asteraceae (Aster Family)	Late Goldenrod	G5T4T5	S1?		
Taxnote: <i>S. arguta</i> is comprised of var. <i>arguta</i> and var. <i>caroliniana</i> ; confident distributions for both varieties are largely undetermined.					
Cons/Econote: There are few collections (see Kolb 1991); however, the <i>S. arguta</i> complex is generally poorly inventoried in Maryland.					
Habitat: Thin soils of steep rocky slopes. Serpentine outcrops.					
Distr. AP*, PD, RV*? (Allegheny*, Cecil, Frederick?, Garrett*, Harford; distribution likely incomplete).					
<i>Solidago arguta</i> Aiton var. <i>caroliniana</i> A. Gray	Atlantic Goldenrod Vasey's Goldenrod	G5T4	S1?		
Syn: <i>S. arguta</i> ssp. <i>caroliniana</i> (A. Gray) G.H. Morton var. <i>caroliniana</i> <i>S. arguta</i> Aiton ssp. <i>caroliniana</i> (A. Gray) G.H. Morton					
Taxnote: Kolb (1991) suggests that the treatment in Brown & Brown (1984) of <i>Solidago boottii</i> (treated in Weakley 2015 as <i>S. arguta</i> var. <i>boottii</i>) is this variety; however, he only states that var. <i>caroliniana</i> should be sought in Garrett County.					
Cons/Econote: Discovered by the Service at two stations. Apparently overlooked as either var. <i>arguta</i> , or in the shale barren region, as <i>S. harrisii</i> .					
Habitat: Shale barren outcrops.					
Distr. RV (Allegheny).					
Flw: late Aug-Sept; Fr: Oct-Nov.					
<i>Solidago harrisii</i> Steele Asteraceae (Aster Family)	Shale barren Goldenrod	G5T4	S3		
Syn: <i>S. arguta</i> Aiton var. <i>harrisii</i> (Steele) Cronquist					
Cons/Econote: Endemic to the mid-Appalachian shale barren region of MD, KY, VA, and WV but with a much broader occurrence than previously thought. Not abundant but regularly occurring in habitat.					
Habitat: Shale barrens and limestone glades.					
Distr. RV (Allegheny, Washington).					
Flw: mid June-Aug (Sept); Fr: Sept-Oct.					
<i>Solidago hispida</i> Muhlenberg ex Willdenow Asteraceae (Aster Family)	Hairy Goldenrod	G5T5	S3		
Syn: <i>S. bicolor</i> Linnaeus var. <i>concolor</i> Torrey & A. Gray <i>S. bicolor</i> Linnaeus var. <i>hispida</i> (Muhlenberg ex Willdenow) BSP					
Taxnote: Maryland plants are the widespread var. <i>hispida</i> .					
Cons/Econote: Restricted to western Maryland and infrequent east of Allegheny County. Known from numerous small, patchy, and generally linear populations.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Habitat: Forest edges and meadows along roadcuts and powerline rights-of-way, chiefly occurs on shale substrates but not restricted to shale.					
Distr. RV (Allegheny, Frederick, Washington).					
Flw: mid-late Sept; Fr: Sept-Oct.					
<i>Solidago latissimifolia</i> Miller	Elliott's Goldenrod	G5	S3		
Asteraceae (Aster Family)					
Syn: <i>S. elliotii</i> Torrey & A. Gray					
Habitat: Sunny low meadows, marshes, and forest edges in saturated, sandy/peaty soil.					
Cons/Econote: Local and perhaps declining.					
Distr. CP (Caroline*, Dorchester, Prince George's*, Wicomico, Worcester; distribution likely incomplete).					
<i>Solidago patula</i> Muhlenberg ex Willdenow	Sharp-leaved Goldenrod	G5T5	S3		
Asteraceae (Aster Family)					
Taxnote: Maryland plants are subspecies <i>patula</i> .					
Habitat: Wet meadows and upland marshes over mafic and ultramafic substrates.					
Cons/Econote: The associations with permanently saturated and base-rich soils combine to limit this species to small-patch habitats.					
Distr. CP, PD, RV (Allegheny, Baltimore, Carroll, Frederick, Harford, Prince George's, Washington; distribution likely incomplete).					
Flw: mid Aug-early Sept; Fr: Sept-Nov.					
<i>Solidago racemosa</i> Greene	Racemose Goldenrod	G3	S1	T	
Asteraceae (Aster Family)					
Syn: <i>Solidago simplex</i> Kunth var. <i>racemosa</i> (Greene) G.S. Ringius					
<i>S. spathulata</i> DC var. <i>racemosa</i> (Greene) Cronq. ex Gleason					
Taxref: Semple, J.A. and J. A. Peirson (2013).					
Taxnote: Semple (2013) revised the nomenclature for the <i>S. simplex</i> complex after Pierson et al. (2012) showed that polyploid <i>S. simplex</i> ssp. <i>rاندii</i> and its varieties were likely not a single lineage.					
Cons/Econote: Narrowly distributed and uncommon in North America; there is a single Maryland station.					
Habitat: Cliff faces and crevices with shell deposits (Davis 2011).					
Distr. PD (Montgomery).					
Flw: early-mid Jun; Fr: Jul-Aug.					
<i>Solidago rigida</i> Linnaeus	Prairie Goldenrod	G5	S1	E	
Asteraceae (Aster Family)					
Syn: <i>Oligoneuron rigida</i> (Linnaeus) Small					
Cons/Econote: Recently rediscovered after a period of 63 years by Jim Stasz at a single station.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Mafic outcrops and meadows. Distr. AP*, PD*, RV (Cecil*, Frederick*, Garrett*, Montgomery*, Washington). Flw: mid-late Sept; Fr: Oct.</p>					
<i>Solidago roanensis</i> Porter	Roan Mountain Goldenrod	G4G5	S3		
<p>Asteraceae (Aster Family) Syn: <i>S. roanensis</i> var. <i>monticola</i> (Torrey & Gray) Fernald <i>S. monticola</i> Torrey & Gray Cons/Econote: Restricted to the Appalachian Plateau from Dan's Mountain westward but occurs frequently in open habitats. Long confused with <i>S. puberula</i>. Museum work has uncovered a number of historical collections that had been misidentified, and recent field work has discovered/rediscovered multiple populations. Habitat: High elevation meadows and forest edges in rocky, gravelly or clayey soils. Distr. AP (Allegheny, Garrett). Flw: Aug-Sept; Fr: Sept-Oct.</p>					
<i>Solidago rupestris</i> Rafinesque	Rock Goldenrod	G4	S1		
<p>Asteraceae (Aster Family) Syn: <i>S. canadensis</i> L. var. <i>rupestris</i> (Rafinesque) Porter Taxnote: Historically confused with <i>S. racemosa</i> in the Potomac Gorge, and very closely resembling the common <i>S. canadensis</i>. Cons/Econote: Historical at several sites along the Potomac River Gorge, and recently rediscovered at a single station near Carderock by Wes Knapp and colleagues. The Allegheny County record based upon an 1894 collection by Cumberland area teacher and botanist Howard Shriver (1824-1901) was actually from Mineral County, WV (see Semple & Frye 2017). Finally, Stephen Hill made a collection from atypical habitat in Garrett County (Little Meadows) in 1980, which suggests the species may be overlooked as <i>S. canadensis</i> and that the species should be further sought in that county. Habitat: Riverside bedrock scour bars, outcrops and rocky slopes. Distr. AP, PD (Garrett, Montgomery). Flw: early-late Sept; Fr: Oct-Nov.</p>					
<i>Solidago speciosa</i> Nuttall	Showy Goldenrod	G5T5?	S2	T	
<p>Asteraceae (Aster Family) Taxnote: Maryland plants are the widespread ssp. <i>speciosa</i> Nutt. var. <i>speciosa</i>. Cons/Econote: Nearly restricted to southern Maryland (Western Shore) our populations are perhaps remnants of historical prairie-like habitats that are persisting in artificially maintained rights-of-way. Disjunct on the Eastern Shore shell middens (McAvoy & Harrison 2012). Habitat: Sandy barrens and shell middens. Distr. CP (Anne Arundel*, Baltimore*, Calvert, Kent, Prince George's*).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: Sept; Fr: Sept-Oct.					
<i>Solidago tarda</i> Mackenzie ex Small Asteraceae (Aster Family)	Coastal Goldenrod	G4?Q	S1		
Syn: <i>S. arguta</i> Aiton, misapplied					
Taxref: Semple, J.C. and R.E. Cook. 2006.					
Taxnote: Plants referable to <i>S. tarda</i> have long been subsumed under <i>S. arguta</i> . <i>Solidago tarda</i> differs in having larger involucre and elongate rhizomes. The large, thick and glabrous basal leaves aid in identification.					
Cons/Econote: The few known Maryland populations are associated with xeric sand ridge habitats. Fire exclusion may play a role in this species' rarity.					
Habitat: Xeric sands of inland sand dune and ridge woodlands.					
Distr. CP (Dorchester, Wicomico, Worcester).					
Flw: Oct; Fr: Oct-Nov.					
<i>Solidago tortifolia</i> Elliott Asteraceae (Aster Family)	Twistleaf Goldenrod	G4G5	SH		
Taxnote: Superficially similar to the common <i>S. odora</i> .					
Cons/Econote: A species of sandhills and dry pinelands (Weakley 2020). The historical habitat in Maryland was likely dry, sandy barrens that were probably fire-maintained. Known from Maryland by a few historical collections, only one of which that can confidently be assigned to a Maryland locality.					
Habitat: Sandy barrens.					
Distr. CP* (Prince George's*).					
Flw: late Aug-Sept; Fr: Sept-Nov.					
<i>Solidago uliginosa</i> Nuttall Asteraceae (Aster Family)	Bog Goldenrod	G4G5	S3		
Cons/Econote: Chiefly occurring in Garrett County peatlands; not abundant but frequent in habitat. Some, or all, Piedmont stations may be based upon confusion with <i>S. patula</i> .					
Habitat: More commonly occurring in peatlands, fens and wet meadows in the mountains, rare in Fall Line seeps ("magnolia bogs", sensu McAtee 1918).					
Distr. AP, CP, PD (Allegany, Baltimore*, Charles, Garrett, Montgomery, Prince George's).					
Flw: Sept; Fr: Sept-Oct.					
<i>Sorbus americana</i> Marshall Rosaceae (Rose Family)	American Mountain Ash	G5	S3		
Cons/Econote: Infrequent and restricted to Allegany and Garrett Counties.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: High elevation forests, boulderfields, and outcrops. Distr. AP, RV (Allegheny, Garrett). Flw: Jun; Fr: Aug-Dec.</p>					
<i>Sorghastrum elliottii</i> (C. Mohr) Nash Poaceae (Grass Family)	Long-bristle Indian Grass	G5	S1	E	
<p>Cons/Econote: Remaining populations are small, isolated and require habitat management to persist. Maryland is the northern terminus of the species' southeastern range. Habitat: Clearings and edges of inland sand dune and ridge forests. Distr. CP (Dorchester, Wicomico*, Worcester). Flw/Fr: mid Aug-mid Sept.</p>					
<i>Sparganium androcladum</i> (Engelm.) Morong Typhaceae (Cattail Family)	Branching Bur-reed	G4G5	SU		
<p>Cons/Econote: The North American range is oddly discontinuous with several localized geographic population centers (Flora North America v. 22). In Maryland, most reports are from Charles County but several records have not been confirmed. Habitat: River swamps. Distr. CP, PD?, RV (Anne Arundel?, Caroline, Charles, Montgomery?, Washington).</p>					
<i>Sparganium emersum</i> Rehmman Typhaceae (Cattail Family)	Greenfruit Bur-reed	G5	S3		
<p>Syn: <i>S. chlorocarpum</i> Rydberg <i>S. angustifolium</i> Michaux ssp. <i>emersum</i> (Rehmann) Brayshaw Taxnote: Gross leaf morphology differs greatly between the thin, flaccid submersed leaves and the thicker, greener and more erect emersed leaves (in appearance an upright herb). Cons/Econote: Narrowly distributed in Maryland and associated with high quality montane wetlands. Habitat: Fens and seepage wetlands. Distr. AP (Garrett).</p>					
<i>Sparganium eurycarpum</i> Engelm. ex A. Gray Typhaceae (Cattail Family)	Giant Bur-reed	G5	S3		
<p>Syn: <i>S. erectum</i> L. ssp. <i>stoloniferum</i> (Graebner) C.D.K. Cook & M.S. Nichols Cons/Econote: Reported as common by Brown & Brown (1984); the Service is unsure of this attribution. Habitat: Freshwater marshes, seepage wetlands and sphagnous fens. Distr. AP, CP, RV (Allegheny, Calvert, Cecil, Charles, Frederick, Garrett, Prince George's, Washington).</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Spermacoce glabra</i> Michaux Rubiaceae (Madder Family)	Smooth False Buttonweed	G4G5	S1	E	
Cons/Econote: Restricted to the Potomac River Gorge in Maryland, the northern terminus of the species' range. Reed (1964) reported this species as a waif in the Port of Baltimore (specimens not seen).					
Habitat: Rocky, riverside scour bars.					
Distr. PD (Baltimore*?, Montgomery).					
<i>Sphenopholis pensylvanica</i> (L.) A.S. Hitchcock Poaceae (Grass Family)	Swamp Oats Swamp Wedgescale	G4	S2	T	
Cons/Econote: Generally occurs in small populations threatened by woody succession of open meadow habitat and loss or alteration of fresh tidal marsh via sea-level rise.					
Habitat: Fens, seepage wetlands, pond shores, fresh tidal marshes.					
Distr. AP, CP, PD (Baltimore, Caroline, Carroll, Cecil, Dorchester, Garrett, Montgomery, Prince George's, Talbot, Worcester).					
Flw/Fr: mid-late May (Jun).					
<i>Spiraea betulifolia</i> Pallas var. corymbosa (Rafinesque) Maximowicz Rosaceae (Rose Family)	Corymbed Spiraea Dwarf Spiraea	G5T4?	S3		
Syn: <i>S. betulifolia</i> Pallas ssp. <i>corymbosa</i> (Rafinesque) Taylor & McBryde <i>S. corymbosa</i> Rafinesque					
Taxnote: Plants treated variously as varieties of <i>S. betulifolia</i> (nomenclature discussed by Hess 1976) or as a complex of related species under <i>S. corymbosa</i> . The multiple disjunct natures of the populations in North America and the lack of flowering individuals in many populations create taxonomic uncertainty.					
Cons/Econote: Narrowly distributed but locally frequent. Flowering, rarely observed, has occurred after heavy disturbances to the canopy. Presumably reproduction in natural habitat is stimulated by fire. Rare sexual reproduction is a recurring theme in the shale barren region occurring in several phylogenetically unrelated taxa (e.g. <i>Smilax ecirrata</i> , <i>Calamagrostis porteri</i> , <i>Veratrum hybridum</i>).					
Habitat: Dry forests over shale.					
Distr. RV (Allegany, Washington).					
Flw: mid Jun-Jul; Fr: Aug-Sept.					
<i>Spiranthes lucida</i> (H.H. Eaton) Ames Orchidaceae (Orchid Family)	Shining Ladies'-tresses	G4	S1	E	
Syn: <i>Ibidium plantagineum</i> (Rafinesque) House					
Cons/Econote: Only two known stations with a few plants. The historical records are presumed extirpated.					
Habitat: Wet meadows, seeps, pond shore.					
Distr. AP, CP*, PD (Baltimore*, Cecil, Dorchester*, Garrett, Montgomery*, Wicomico*).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: Jun; Fr: Aug-Sept.					
<i>Spiranthes ochroleuca</i> (Rydberg) Rydberg Orchidaceae (Orchid Family)	Yellow Nodding Ladies'-tresses	G4	S1	E	
Syn: <i>S. cernua</i> (L.) L.C. Richard var. <i>ochroleuca</i> (Rydberg) Ames					
Cons/Econote: The prairie-like sites where this species grows are threatened by woody succession and invading woody honeysuckles (<i>Lonicera maackii</i>).					
Habitat: Shale barrens and grassy meadows.					
Distr. AP*, PD*, RV (Allegany, Baltimore*, Frederick, Garrett*, Montgomery*, Washington).					
Flw: Sept; Fr: Oct-Nov.					
<i>Spiranthes odorata</i> (Nutt.) Lindley Orchidaceae (Orchid Family)	Fragrant Ladies'-tresses Sweetscent Ladies'-tresses	G5	SH	X	
Syn: <i>S. cernua</i> (L.) L.C. Richard var. <i>odorata</i> (Nutt.) Correll					
Taxnote: Relative plant size is often used as a taxonomic character, which may not be reliable. Not all Maryland records have been confirmed.					
Cons/Econote: Endemic to the southeastern Coastal Plain (Weakley 2015); Maryland populations are near the northern range limit for this species.					
Habitat: Fresh to oligohaline tidal marshes.					
Distr. CP* (Dorchester*, Wicomico*, Worcester*).					
<i>Spiranthes praecox</i> (Walter) S. Watson Orchidaceae (Orchid Family)	Grass-leaved Ladies'-tresses	G5	SH		
Cons/Econote: An endemic to the southern Coastal Plain; the species has been collected from Assateague Island.					
Habitat: Damp sandy soils of the barrier island (Assateague).					
Distr. CP* (Worcester*).					
<i>Spiranthes tuberosa</i> Rafinesque Orchidaceae (Orchid Family)	Little Ladies'-tresses	G5	S1?		
Syn: <i>S. grayi</i> Ames					
Cons/Econote: Rarely observed and generally found in low numbers.					
Habitat: Dry, sandy soils.					
Distr. CP, PD* (Cecil*, Kent*, Montgomery*, Prince George's, Wicomico*, Worcester).					
Flw: late Aug-Sept; Fr: Sept-Oct.					
<i>Sporobolus clandestinus</i> (Biehler) A. S. Hitchcock	Rough Dropseed	G5	S2		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Poaceae (Grass Family)					
Cons/Econote: <i>S. clandestinus</i> appears to be a very poor competitor with typical old-field grasses or forbs (such as <i>Andropogon</i> spp., <i>Tridens flavus</i> , <i>Solidago</i> spp.) and is apparently not tolerant of even moderate shade. These latter conditions may restrict the species to the most extreme edaphic conditions where sunlight is not limiting and other species tolerant of these habitats are scarce. Self-sustaining populations, that is, populations that experience disturbances dependent upon natural, recurring events are limited to the Potomac River islands where intermittent flooding maintains open meadow and woodland habitat. All other populations require human-mediated management and at present that management is entirely dependent upon mowing.					
Habitat: Inland sand dunes, sandy or rocky barrens and bedrock scour bars.					
Distr. CP, PD, RV (Alleghany, Calvert*, Caroline, Cecil*, Dorchester, Montgomery, Queen Anne's*, Wicomico, Worcester).					
Flw/Fr: Sept-Oct. (best sought during late fall and winter when the unique pale-yellow color is evident).					
<i>Sporobolus heterolepis</i> (A. Gray) A. Gray	Northern Dropseed	G5	S1	E	
Poaceae (Grass Family)					
Cons/Econote: A species of the Great Plains; Maryland populations are geographic outliers and are extremely habitat limited. Threatened by fire exclusion, woody succession of barrens habitat and fragmentation due to extensive habitat loss.					
Habitat: Serpentine barrens.					
Distr. PD (Cecil, Harford).					
Flw/Fr: Sept.					
<i>Stachys aspera</i> Michaux	Gritty Hedge-nettle	G4?	S1	E	
Lamiaceae (Mint Family)					
Syn: <i>S. hyssopifolia</i> Michaux var. <i>ambigua</i> A. Gray.					
Taxnote: Maryland plants have long confounded botanists but have been recently confirmed by taxonomic experts in the genus.					
Cons/Econote: Endangered by small population size and habitat loss and alteration.					
Habitat: Fresh tidal swamp forests, rich bottomland forests; prefers open, sunny habitats.					
Distr. CP, PD*? (Caroline, Cecil*?, Dorchester, Montgomery*?, Wicomico, Somerset*).					
Flw: Jul; Fr: Aug-Sept.					
<i>Stachys eplingii</i> J.B. Nelson	Epling's Hedge-nettle	G1G2	S1		
Lamiaceae (Mint Family)					
Syn: <i>S. nuttallii</i> Shuttleworth ex Bentham					
Taxnote: Excellent key to the southeastern species is available in Nelson (2008). The recognition of this species has been clouded by nomenclatural confusion with <i>S. nuttallii</i> and <i>S. cordata</i> (see Nelson & Fairey 1979). The identification of this species by the Service from herbarium specimens labeled as <i>E. cordata</i> resolves long-lasting phytogeographic uncertainties, i.e., records that were hundreds of kilometers distant from the known range of the southern Appalachian species, <i>S. cordata</i> and <i>S. nuttallii</i> . Taxonomic confusion with <i>S.</i>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p><i>eplingii</i> and may also account for reports of <i>S. clingmannii</i> (narrow endemic of the s. Appalachian Mountains) from Maryland. See also notes in the description of <i>S. iltisii</i> J. Nelson in Nelson (2008)</p> <p>Cons/Econote: Apparently regionally rare; most states within the range consider this species a conservation target. Distribution is not certain in Maryland and not all records have been verified.</p> <p>Habitat: Open-canopy marsh. Other records for this species appear associated with rich or calcareous fen-like marshes.</p> <p>Distr: AP*, PD, RV* (Allegheny*, Garrett*, Harford?, Montgomery).</p> <p>Flw: Jun-early Jul; Fr: Jul-Sept.</p>					
<i>Stachys hyssopifolia</i> Michaux	Hyssopleaf Hedge-nettle	G4G5	S1		
<p>Lamiaceae (Mint Family)</p> <p>Taxnote: Maryland plants are the widespread var. <i>hyssopifolia</i>. Morphologically complex with some forms grading into the common <i>S. hispida</i>.</p> <p>Cons/Econote: Scattered occurrences across the State; several records need confirmation.</p> <p>Habitat: Stream borders and meadows.</p> <p>Distr. CP, PD*, RV* (Anne Arundel, Baltimore*, Frederick*, Queen Anne's*, Prince George's*).</p> <p>Flw: Aug; Fr: Sept-Oct.</p>					
<i>Stellaria alsine</i> Grimm	Trailing Stitchwort	G5	S1	E	
<p>Caryophyllaceae (Pink Family)</p> <p>Cons/Econote: Circumboreal, perhaps a relictual species persisting in scattered small populations in MD and DE. The invasive Japanese stiltgrass (<i>Microstegium vimineum</i>) may form a dense cover over these small plants and is an obnoxious threat at nearly all sites.</p> <p>Habitat: Spring seeps and gravel bars along small streams; temporarily saturated soils in mesic woods.</p> <p>Distr. CP, PD, RV (Allegheny, Cecil, Harford, Howard, Montgomery, Prince George's, Washington?).</p> <p>Flw: May-Jun (petals may be tiny and hidden behind sepals or absent); Fr: late Jun-Jul.</p>					
<i>Stenanthium gramineum</i> (Ker-Gawler) Morong	Eastern Featherbells	G4G5T3T5	S1	T	
<p>Melanthiaceae (Bunchflower Family)</p> <p>Taxnote: Maryland plants are var. <i>gramineum</i>.</p> <p>Cons/Econote: Threatened by habitat loss and fragmentation and with few protected populations.</p> <p>Habitat: Minerotrophic seepage wetlands, often over serpentine or ultramafic rocks.</p> <p>Distr. CP, PD, RV (Anne Arundel, Cecil, Frederick, Harford, Montgomery, Prince George's*).</p> <p>Flw: early Jul-mid Aug; Fr: Sept-Oct.</p>					
<i>Stenanthium leimanthoides</i> (A. Gray) Zomlefer & Judd	Pine Barren Deathcamas Death-camas	G4Q	S1	E	
<p>Melanthiaceae (Bunchflower Family)</p> <p>Syn: <i>Zigadenus leimanthoides</i> A. Gray</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Z. densus</i> (Desrousseau) Fernald					
Cons/Econote: Endangered by habitat conversion (surface mining). Narrowly confined in Maryland to a highly threatened zone of spring-fed seepage slopes (Knapp et al. 2011).					
Habitat: Acidic gravel groundwater seeps.					
Distr. PD (Cecil; the attribution to the Maryland mountains by Brown & Brown 1984 appears erroneous).					
Flw: mid Jul; Fr: Sept.					
<i>Streptopus lanceolatus</i> (Aiton) Reveal	Rosy Twisted-stalk	G5	S1S2	T	
Liliaceae (Lily Family)					
Syn: <i>S. roseus</i> Aiton					
<i>S. lanceolatus</i> (Aiton) Reveal var. <i>roseus</i> (Michaux) Reveal					
Cons/Econote: Threatened by habitat loss; the species is both geographically and habitat restricted in Maryland.					
Habitat: Hemlock (<i>Tsuga canadensis</i>) and northern hardwood forest slopes and ravines.					
Distr. AP (Garrett).					
Flw: May; Fr: Jun-Jul.					
<i>Suaeda linearis</i> (Elliott) Moquin	Narrowleaf Seepweed	G5	S3		
Chenopodiaceae (Goosefoot Family)					
Habitat: Salt marsh flats and overwash zones.					
Distr. CP (Calvert, Somerset, Worcester).					
<i>Symphoricarpos albus</i> (L.) Blake	Common Snowberry Snowberry	G5T5	S1	T	
Caprifoliaceae (Honeysuckle Family)					
Taxnote: Native Maryland plants are var. <i>albus</i> ; the western var. <i>leavigatus</i> (Fernald) Blake is commonly planted and both taxa may appear in the nursery trade.					
Cons/Econote: Threatened by competition with exotic woody honeysuckles (<i>Lonicera</i> spp.) and woody succession of barrens habitats.					
Habitat: Shale barrens and limestone glades.					
Distr. RV (Alleghany, Washington).					
Flw: mid May- mid Jun; Fr: Jul-Aug.					
<i>Symphyotrichum concolor</i> (L.) Nesom	Eastern Silvery Aster	G5	S1	E	
Asteraceae (Aster Family)					
Syn: <i>Aster concolor</i> L.					
Cons/Econote: Endangered by habitat loss, few protected populations and population declines at extant stations; most Maryland collections are pre-1950.					
Habitat: Sandy barrens on the Coastal Plain.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP (Anne Arundel*, Calvert, Charles*, Prince George's*, St. Mary's*, Worcester*).					
Flw: mid-late Sept; Fr: Oct.					
<i>Symphotrichum depauperatum</i> (Fernald) Nesom Asteraceae (Aster Family)	Serpentine Aster	G2	S1	E	
Syn: <i>Aster depauperatus</i> Fernald					
Cons/Econote: A habitat specialist endangered by habitat loss and fragmentation resulting from development, fire suppression and woody succession of barrens. Tyndall (2020) discusses the severe effect of white-tailed deer herbivory on this species at Soldiers Delight.					
Habitat: Serpentine barrens.					
Distr. PD (Baltimore, Cecil).					
Flw: late Aug-Sept; Fr: Sept-Oct.					
<i>Symphotrichum drummondii</i> (Lindley) Nesom Asteraceae (Aster Family)	Drummond's Aster	G4G5T4T5	S1		
Syn: <i>Aster drummondii</i> Lindley					
<i>Aster sagittifolius</i> var. <i>drummondii</i> (Lindley) Shinnars					
Taxnote: Maryland plants are var. <i>drummondii</i>					
Cons/Econote: A rare peripheral from the Midwest; Maryland records constitute the eastern-most stations in the geographic range of the species.					
Habitat: Dry upland woods and meadows.					
Distr. AP, PD*, RV (Garrett, Montgomery*, Washington).					
Flw: Oct; Fr: Oct-Nov.					
<i>Symphotrichum laeve</i> (Linnaeus) Löve & Löve var. <i>concinnum</i> (Willdenow) Nesom Asteraceae (Aster Family)	Smooth Blue Aster	G5T4	S1?		
Syn: <i>Aster steeleorum</i> Shinnars					
<i>Aster concinnus</i> Willdenow					
<i>A. laevis</i> Linnaeus var. <i>concinnum</i> (Willdenow) House					
<i>S. laeve</i> ssp. <i>concinnum</i> (Willdenow) Semple & Brouillet					
Taxnote: <i>S. laeve</i> is common but this taxon at any rank is regionally rare.					
Cons/Econote: Habitat restricted with few, scattered occurrences. Several Maryland specimens appear intermediate and require confirmation.					
Habitat: Dry rocky woods over mafic or calcareous rocks; disjunct on coastal shell middens.					
Distr. AP, PD*, RV* (Allegany, Cecil*, Garrett, Kent, Washington; distribution likely incomplete).					
Flw: Sept-early Oct; Fr: Oct.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Symphotrichum praealtum</i> (Poiret) Nesom Asteraceae (Aster Family) Syn: <i>Aster praealtus</i> Poiret Taxnote: Potentially occurring in Maryland as either var. <i>praealtus</i> or var. <i>angustior</i> (Wiegand) Nesom, or both. Several records need to be determined and false reports exist. Habitat: Alluvial soils and mesic forests over mafic substrates. Distr. AP, RV? (Allegany?, Garrett). Flw: Sept; Fr: Sept-Oct.	Willow Aster	G5	S1		
<i>Symphotrichum shortii</i> (Lindley) Nesom Asteraceae (Aster Family) Syn: <i>Aster shortii</i> Lindley Cons/Econote: Narrowly distributed along the Potomac River (and tributaries) in w. MD but often locally abundant. Habitat: Rich mesic forests; generally restricted to limestone and less frequently rich alluvium. Distr. PD, RV (Allegany, Frederick, Montgomery, Washington). Flw: late Sept-Oct; Fr: Oct-Nov.	Short's Aster	G5	S3S4		
<i>Symplocos tinctoria</i> (Linnaeus) L'Heritier Symplocaceae (Sweetleaf Family) Cons/Econote: Locally abundant in the Pocomoke River drainage. Habitat: Pine flatwoods and edges of inland dunes in seasonally saturated sandy/peaty soils. Distr. CP (Wicomico, Worcester). Flw: early May; Fr: Jun-Jul.	Horsesugar	G5	S3		
<i>Taenidia montana</i> (Mackenzie) Cronquist Apiaceae (Carrot Family) Syn: <i>Pseudotaenidia montana</i> Mackenzie Cons/Econote: A central Appalachian endemic threatened by habitat loss, woody succession of barrens habitat and heavy herbivory by white-tailed deer. Habitat: Barrens and outcrops over limestone and calcareous shales. Distr. RV (Allegany, Washington). Flw: Jun; Fr: Aug-Sept.	Mountain Parsley	G3	S2	T	
<i>Taxus canadensis</i> Marshall Taxaceae (Yew Family) Cons/Econote: Threatened by habitat alteration and severe herbivory by white-tailed deer.	Canada Yew	G5	S2	T	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Northern hardwood and hemlock ravines and swamps. Distr. AP (Garrett). Fr: Jul.</p>					
<i>Tephrosia spicata</i> (Walter) Torrey & A. Gray Fabaceae (Legume Family)	Spiked Hoary-pea	G4G5	S1S2	E	
<p>Cons/Econote: Endangered by habitat loss. Fire suppression certainly plays a role in this species' rarity; the species appeared at a new station after a second prescribed burn (e.g, in the 'black line') in sand ridge habitat in Caroline County and the population has responded vigorously to subsequent burns. The northernmost extant populations in the U.S. occur on Maryland's Eastern Shore. Habitat: Inland sand dunes and ridges, roadsides and railroad embankments. Distr. CP (Caroline, Dorchester, Wicomico, Worcester). Flw: mid Jun-mid Jul; Fr: Jul-Sept.</p>					
<i>Thaspium trifoliatum</i> (L.) A. Gray Apiaceae (Carrot Family)	Purple Meadow-parsnip	G5	S1	E	
<p>Taxnote: Inclusive of var. <i>trifoliatum</i> and var. <i>aureum</i> (L.) Britton; the taxonomic status of these varieties is not clear. Cons/Econote: Apparently restricted to mafic seeps and rich woods although the distribution of this species in Maryland is not well documented. Habitat: Rich, mesic forests and meadows. Distr. AP*, CP?, PD, RV (Anne Arundel?, Baltimore*, Cecil*, Frederick, Garrett*, Howard).</p>					
<i>Thelypteris simulata</i> (Davenport) Nieuwland Thelypteridaceae (Marsh Fern Family)	Bog Fern	G4	S2	T	
<p>Cons/Econote: Threatened by alteration of groundwater hydrology. Most of our coastal stations exist in highly fragmented habitats. Habitat: Acidic seepage fens and swamps. Distr. AP, CP, PD* (Anne Arundel, Caroline, Charles, Garrett, Howard, Montgomery*, Prince George's, Worcester).</p>					
<i>Thuja occidentalis</i> (Linnaeus) Linnaeus Cupressaceae (Cypress Family)	American Arborvitae Northern White Cedar	G5	S1	T	
<p>Cons/Econote: A nearly ubiquitous species in New England occurring in a variety of acidic habitats, this species is an obligate calciphile in its southern range. In Maryland it is both range and habitat restricted. Habitat: Limestone cliffs. Distr. RV (Allegheny, Washington; planted elsewhere).</p>					
<i>Thyrsanthella difformis</i> (Walter) Pichon Apocynaceae (Dogbane Family)	Climbing Dogbane	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Syn: <i>Trachelospermum difforme</i> (Walter) A. Gray Cons/Econote: Endangered by loss and alteration of nontidal wetland habitats. Habitat: Upland depression swamps, swamp forests, floodplains, railroad rights-of-way. Distr. CP, PD (Anne Arundel*, Caroline, Dorchester, Montgomery, St. Mary's, Worcester). Flw: Jun; Fr: Sept.</p>					
<i>Tiedemannia canbyi</i> (J.M. Coulter & Rose) Feist & S.R. Downie	Canby's Dropwort	G2	S1	E	LE
<p>Apiaceae (Carrot Family) Syn: <i>Oxypolis canbyi</i> (J.M. Coulter & Rose) Fernald Cons/Econote: Rediscovered in Maryland in 1984 (Boone et al. 1984) and federally listed as Endangered since 1986, this species is endangered rangewide due to habitat loss and alteration of groundwater hydrology. Extant at a single location in Maryland some ~600 km north of the nearest population in the se US. The Maryland population has low genetic diversity presumably as the result of a long-distance founder event (Hamrick et al. 2019). This species exhibited a dramatic response to prescribed fire with exponential population growth (D. Landau, pers.comm. 2019) lending hope that this population may be self-sustaining and viable over the long-term. Habitat: Delmarva bay. Distr. CP (Queen Anne's). Flw: Jul-Aug; Fr: Sept.</p>					
<i>Tillandsia usneoides</i> (Linnaeus) Linnaeus	Spanish Moss	G5	SX		
<p>Bromeliaceae (Pineapple Family) Cons/Econote: First described by John Ray in 1688, presumably from populations occurring in southern Maryland, now extirpated. Brown et al. (1987) provide a valuable discussion of Maryland's colonial flora. Habitat: In tree branches, especially on hardwoods, in mesic bluff forests (Weakley 2015). Distr. (unknown county).</p>					
<i>Torreyochloa pallida</i> (Torrey) Church var. <i>fernaldii</i> (A.S. Hitchcock) Dore ex Koyama & Koyama	Fernald's Mannagrass	G5T5Q	S1		
<p>Poaceae (Grass Family) Syn: <i>Glyceria fernaldii</i> (A. S. Hitchcock) St. John <i>Glyceria pallida</i> (Torrey) Trinius var. <i>fernaldii</i> A.S. Hitchcock Cons/Econote: Restricted in Maryland to boreal habitats but is cryptic and easily overlooked. Habitat: Seepage swamps and fens at high elevations. Distr. AP (Garrett). Flw/Fr: late Jul-Aug.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Torreyochloa pallida</i> (Torrey) Church var. <i>pallida</i> Poaceae (Grass Family) Syn: <i>Glyceria pallida</i> (Torrey) Trinius <i>Puccinellia pallida</i> (Torrey) Clausen Habitat: Fresh tidal swamp forests, Delmarva Bays, ditches. Disjunct in limestone sinkhole ponds in the Ridge and Valley. Distr. CP, RV (Anne Arundel*, Caroline, Dorchester, Kent, Prince George's, Queen Anne's, St. Mary's, Washington, Worcester). Flw/Fr: late May-Jun.	Pale Mannagrass	G5T5?	S3		
<i>Trachelospermum difforme</i> (Walter) A. Gray	see <i>Thyrsanthella difformis</i> (Walter) Pichon				
<i>Trautvettaria caroliniensis</i> (Walter) Vail Ranunculaceae (Buttercup Family) Cons/Econote: Nearly restricted to high quality streams in Garrett County; the Piedmont occurrence is a notable disjunct. Habitat: Spring seeps, floodplain scour bars and seeps. Distr. AP, PD (Garrett, Montgomery). Flw: Jun (Jul); Fr: Aug-Sept.	Tassel-rue	G5	S3		
<i>Triantha racemosa</i> (Walter) Small Tofieldiaceae (False Asphodel Family) Syn: <i>Tofieldia racemosa</i> (Walter) BSP Taxnote: Often treated in a broadly circumscribed Liliaceae (Lily Family). The taxonomy of the genus is not resolved. Cons/Econote: Extirpated by urban development along the Fall Line but collected over the period 1809-1951. Known from the "magnolia bogs" (McAtee 1918) and collected by Dr. John Ott around 1809 in the District of Columbia area (which may have also included Prince George's and/or Montgomery Counties). Ott sent plants from the "Columbia area" to Heinrich Muhlenberg in 1809; these included also <i>Arethusa bulbosa</i> (McAtee 1922). Habitat: Fall line seeps. Distr. CP*, PD* (Baltimore*, Montgomery*, Prince George's*).	Coastal False Asphodel	G5	SX	X	
<i>Trichophorum planifolium</i> (Sprengel) Pala Cyperaceae (Sedge Family) Syn: <i>Scirpus verecundus</i> Fernald <i>Scirpus planifolius</i> Muhlenberg Cons/Econote: Scattered locations and generally small populations, some coastal records date to the late 1800s and are presumed extirpated. Habitat: Dry to mesic, often rocky, forests and woodlands.	Bashful Sedge	G5	S2		

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Distr. AP, CP*, PD, RV* (Allegheny, Anne Arundel*, Baltimore, Calvert*, Carroll*, Cecil, Harford, Howard*, Frederick*, Montgomery, Prince George's*).</p> <p>Flw: mid Apr-early May (at higher elevations); Fr: Jun.</p>					
<i>Trichostema brachiatum</i> Linnaeus	Glade Bluecurls	G5	S3		
<p>Lamiaceae (Mint Family)</p> <p>Syn: <i>Isanthus brachiatus</i> (Linnaeus) Britton, Sterns, & Poggenburg</p> <p>Habitat: Shale barrens, limestone, and greenstone glades.</p> <p>Distr. RV (Allegheny, Frederick, Washington).</p> <p>Flw: Aug-Sept; Fr: Oct.</p>					
<i>Trichostema setaceum</i> Houttuyn	Narrowleaf Bluecurls	G5	S1		
<p>Lamiaceae (Mint Family)</p> <p>Syn: <i>T. dichotomum</i> Linnaeus var. <i>lineare</i> (Walter) Pursh</p> <p>Cons/Econote: Narrowly distributed and habitat restricted. At one coastal station this species co-occurs (sometimes growing side-by-side) with the more widespread <i>T. dichotomum</i> but the plants were easily differentiated.</p> <p>Habitat: Shale barrens and woodlands (mountains); inland dune barrens and woodlands in xeric sandy soils (coastal plain).</p> <p>Distr. CP, RV (Allegheny, Worcester).</p> <p>Flw: early-mid Sept; Fr: Sept-Oct.</p>					
<i>Tridens chapmanii</i> (Small) Chase	Chapman's Redtop	G3	S1		
<p>Poaceae (Grass Family)</p> <p>Syn: <i>Tridens flavus</i> (Linnaeus) A.S. Hitchcock var. <i>chapmanii</i> (Small) Shinnery.</p> <p>Cons/Econote: Scattered as a rare and perhaps relictual element of coastal barrens.</p> <p>Habitat: Calcareous shell woodlands (see McAvoy & Harrison 2012) and rich "pockets" embedded in sand ridge woodlands.</p> <p>Distr. CP (Dorchester, Kent).</p> <p>Flw/Fr: Sept.</p>					
<i>Trifolium reflexum</i> Linnaeus	Buffalo Clover	G3G4	SH	X	
<p>Fabaceae (Legume Family)</p> <p>Cons/Econote: Extirpated throughout much of its U.S. range this species was last collected in Maryland in 1902 in the Potomac Gorge.</p> <p>Habitat: Bedrock scour bar floodplain terraces.</p> <p>Distr. PD* (Montgomery*).</p>					
<i>Trifolium virginicum</i> Small	Kate's Mountain Clover	G3	S2S3	T	
<p>Fabaceae (Legume Family)</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Endemic to the Central Appalachian Shale Barrens (sc. PA south through MD to e. WV and w. VA). Threatened due to small population sizes, woody succession of shale barren habitat (see Tyndall 2015), and to an unknown extent fragmentation and isolation of the remaining habitat patches (see Frye & Neel 2016).</p> <p>Habitat: Shale barrens.</p> <p>Distr. RV (Allegheny, Washington).</p> <p>Flw: mid-Apr-early May; Fr: late Jun-Aug.</p>					
<p><i>Triglochin striata</i> Ruiz & Pavón Juncaginaceae (Arrowgrass Family) Syn: <i>T. striatum</i>, an orthographic variant Cons/Econote: Maryland populations form the northernmost extant stations in this species' extensive global range. Habitat: Brackish to freshwater marshes in heads of tidal creeks. Distr. CP (Dorchester, Somerset, Worcester). Flw: late Jul-Aug; Fr: Sept.</p>	Three-ribbed Arrow-grass	G5	S1	E	
<p><i>Trillium cernuum</i> Linnaeus Trilliaceae (Trillium Family) Habitat: Rich woods and edges of forested swamps. Distr. PD, RV (Baltimore, Carroll, Frederick, Harford, Howard, Montgomery, Washington). Flw: mid May; Fr: Jun.</p>	Northern Nodding Trillium	G5	S3		
<p><i>Trillium flexipes</i> Rafinesque Trilliaceae (Trillium Family) Cons/Econote: Endangered by competition with invasive species and intensive browse by white-tailed deer. Habitat: Shady ravines in rich mesic hardwood forest. Distr. PD (Baltimore*, Cecil/Harford?, Howard). Flw: mid May; Fr: Jun.</p>	Nodding Trillium	G5	S1	E	
<p><i>Trillium nivale</i> Riddell Trilliaceae (Trillium Family) Cons/Econote: An apparent calciphile primarily distributed within the limits of previously glaciated regions. In Maryland, there is a single station. Some surveyors have suggested some of the plants were a persistent clone; however, Nesom & La Duke (1985) concluded that clonal growth was of limited importance. Seeds (having an eliasome) are dispersed by ants. Shreve (1910, p. 418) lists a Garrett County location (Oakland), as related by Joseph E. Harned. Habitat: Dry limestone woodland. Distr. AP?, RV (Garrett?, Washington).</p>	Snow Trillium	G4	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Flw: late Mar-early Apr; Fr: May					
<i>Trillium pusillum</i> Michaux var. <i>virginianum</i> Fernald Trilliaceae (Trillium Family)	Virginia Least Trillium	G3T2	S2	T	
Taxnote: <i>T. pusillum</i> var. 5 in Weakley (2020). Additional study is underway.					
Cons/Econote: Threatened by habitat loss. This globally rare variant within Least Trillium occupies a narrow zone of available habitat in Maryland.					
Habitat: Narrowly confined to mesic forests, forested seepage swamps and spring seeps often very near the ecotone with fresh tidal marsh.					
Distr. CP (Worcester).					
Flw: Apr; Fr: May-Jun.					
<i>Triosteum angustifolium</i> Linnaeus Caprifoliaceae (Honeysuckle Family)	Yellowleaf Tinker's-weed	G5	S1	E	
Taxnote: Weakley (2015) recognizes two varieties in this species, var. <i>angustifolium</i> and var. <i>eamsii</i> Wiegand based upon leaf dimensions and pubescence of the lower leaf surface. These taxonomic splits have not been investigated with Maryland plants.					
Cons/Econote: Endangered by habitat loss, excessive deer browse and competition with invasive species.					
Habitat: Rich upland woods, river bluff forests, floodplain terraces over rich alluvial soils.					
Distr. AP*, CP*, PD, RV (Allegheny, Anne Arundel*, Baltimore*, Cecil, Frederick, Garrett*, Howard, Montgomery).					
<i>Triphora trianthophoros</i> (Swartz) Rydberg Orchidaceae (Orchid Family)	Nodding Pogonia Three Birds Orchid	G4?	S1	E	
Syn. <i>T. trianthophora</i> , an orthographic variant.					
Taxnote: Our plants are the eastern var. <i>trianthophoros</i> .					
Cons/Econote: Endangered by habitat loss and competition with invasive species. Presumably extirpated from the Gold Mine Tract (Great Falls) by browsing white-tailed deer, and under threat by the same at the extant station in Queen Anne's County. A cryptic species notoriously difficult to locate due to its small stature and its propensity to flower in sheltered spaces (where somewhat protected from browse) such as crevice-like spaces between surface roots at the base of trees.					
Habitat: Rich, humid hardwood forests.					
Distr. CP, PD* (Cecil*, Queen Anne's, Montgomery*).					
Flw: mid-late Aug-early Sept; Fr: late Aug-Oct.					
<i>Typha domingensis</i> Persoon Typhaceae (Cattail Family)	Southern Cattail	G4G5	S3		
Habitat: Fresh to oligohaline tidal marshes.					
Distr. CP (Anne Arundel, Calvert, Howard, St. Mary's).					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<i>Utricularia cornuta</i> Michaux Lentibulariaceae (Bladderwort Family)	Horned Bladderwort	G5	S1		
Cons/Econote: Few Maryland records for this wide-ranging species and a single extant site. Population size fluctuates over years and long periods may pass before re-emergence and flowering. Often confused with the more common <i>U. juncea</i> that has a similar habit and some coastal records for this species may reflect this confusion.					
Habitat: Acidic seepage fens.					
Distr. AP, CP* (Anne Arundel*, Garrett, Wicomico*).					
<i>Utricularia inflata</i> Walter Lentibulariaceae (Bladderwort Family)	Swollen Bladderwort	G5	S2		
Taxnote: Often confused with <i>U. radiata</i> Small (<i>U. inflata</i> var. <i>minor</i> Chapman) some Maryland records may reflect confusion with the latter species.					
Cons/Econote: Restricted to open, acidic waters. This southern species has undergone a rapid range expansion into New England and has been recently located at several new stations in MD.					
Habitat: Delmarva Bays, millponds, oxbow wetlands, beaver ponds, sandpits, lakes and ponds.					
Distr. CP (Anne Arundel, Calvert, Charles, Dorchester, Queen Anne's*, St. Mary's, Worcester).					
Flw: late Apr-May (Jul); Fr: Jun-Sept.					
<i>Utricularia intermedia</i> Hayne Lentibulariaceae (Bladderwort Family)	Flatleaf Bladderwort	G5	S1		
Cons/Econote: A single location in a globally rare plant community (baymouth barrier wetland, Sipple 1982) at the extreme southeastern range limit (Steury et al. 1996).					
Habitat: Shallow waters over peaty muck soils.					
Distr. CP (Kent).					
<i>Utricularia purpurea</i> Walter Lentibulariaceae (Bladderwort Family)	Purple Bladderwort	G5	S1	T	
Cons/Econote: Threatened by habitat loss, wetland eutrophication and woody succession in Delmarva Bays (see also Fenstermacher et al. 2014).					
Habitat: Delmarva Bays, acidic seepage wetlands.					
Distr. CP (Caroline, Dorchester, Wicomico).					
Flw/Fr: Jul-Aug.					
<i>Utricularia resupinata</i> B.D. Greene ex Bigelow Lentibulariaceae (Bladderwort Family)	Northeastern Bladderwort	G4	S1	E	
Cons/Econote: Endangered by habitat loss and habitat degradation due to eutrophication, sedimentation and hydrologic alterations.					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Habitat: Millponds, wetland pools and depressions over sandy substrates. Distr. CP (Dorchester, Wicomico, Worcester). Flw/Fr: Jul-Aug.</p>					
<i>Utricularia striata</i> Le Conte ex Torrey Lentibulariaceae (Bladderwort Family)	Fibrous Bladderwort	G4G5	S1	E	
<p>Syn: <i>U. fibrosa</i> Walter Cons/Econote: Endangered by habitat loss and habitat degradation due to eutrophication, sedimentation and hydrologic changes. Habitat: Ponds, acidic seepage wetlands. Distr. CP (Anne Arundel?, Caroline, Prince George's, Wicomico, Worcester).</p>					
<i>Utricularia subulata</i> Linnaeus Lentibulariaceae (Bladderwort Family)	Zigzag Bladderwort	G5	S3		
<p>Cons/Econote: Tiny, inconspicuous, semi-terrestrial bladderwort that occurs in a variety of habitats. Nearly impossible to locate unless flowering, which appears sporadic and unpredictable. Habitat: Damp sands of pond shores and sandpits, inner-dune wetland/swales, acidic seepage wetlands. Distr. CP, PD* (Anne Arundel, Calvert, Caroline, Charles, Dorchester, Montgomery*, Prince George's, St. Mary's, Wicomico, Worcester). Flw: late May-Aug (Oct) ; Fr: Jul-Nov.</p>					
<i>Uvularia grandiflora</i> J.E. Smith Colchiaceae (Meadow Saffron Family)	Large-flower Bellwort	G5	S1		
<p>Taxnote: Traditionally treated in the lily family. Vinnersten and Manning (2007) determined the genus belongs in the Colchiaceae. Cons/Econote: Rare because of habitat loss, fragmentation of mature cove forests and competition with invasive species. Habitat: Mesic hardwoods, occasionally with hemlock (<i>Tsuga canadensis</i>) but often over rich soils. Distr. AP (Garrett). Flw: mid May-Jun; Fr: Jun-Jul (Aug).</p>					
<i>Vaccinium macrocarpon</i> Aiton Ericaceae (Heath Family)	Large Cranberry	G4	S3		
<p>Cons/Econote: A habitat specialist secure only in its western Maryland stations. Coastal occurrences have been heavily impacted by development, sedimentation and hydrological alterations. The relictual Wicomico County occurrence (Eastern Shore) is likely extirpated (last seen in 2000). Perhaps introduced in some areas, e.g., the large clone southeast of the boardwalk at Suitland Bog in Prince George's County is considered to have been introduced in the early-to-mid 20th century; however, historical specimens document the species from that county. Habitat: Mountains and Coastal Plain; sphagnum, high elevation fens, mountain pond edges, and acidic seepage wetlands.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. AP, CP, RV* (Allegheny*, Anne Arundel, Garrett, Prince George's*, Wicomico*, Worcester). Flw: Jun; Fr: Jul-Oct.					
<i>Vaccinium myrtilloides</i> Michaux Ericaceae (Heath Family)	Velvetleaf Blueberry	G5	S3		
Cons/Econote: A dwarf, colonial shrub characteristic of boreal glades, bogs, and forest with densely white-pubescent (velvety) twigs and leaves. Habitat: Hemlock (<i>Tsuga canadensis</i>), red spruce (<i>Picea rubens</i>) and northern hardwood forests around high elevation fens, mountain pond edges, and acidic seepage wetlands. Distr. AP (Garrett). Flw: mid May; Fr: late May-Jun.					
<i>Vaccinium oxycoccos</i> L. Ericaceae (Heath Family)	Small Cranberry	G5	S2	T	
Taxnote: This tetraploid species may be distinguished from diploid <i>Vaccinium macrocarpon</i> by its smaller size; leaves that are strongly revolute and whitish on the undersides; and the situation of pedicellar bracts below the middle of the pedicel (see Uttal 1987). Cons/Econote: A habitat specialist threatened by eutrophication and alteration of groundwater hydrology. Habitat: Sphagnum, high elevation fens, mountain pond edges, and acidic seepage wetlands. Distr. AP (Garrett). Flw: early-mid Jul; Fr: Aug-Nov.					
<i>Valeriana pauciflora</i> Michaux Valerianaceae (Valerian Family)	Valerian	G4	S1	E	
Cons/Econote: Endangered by habitat loss and competition with invasive species, particularly garlic mustard (<i>Alliaria petiolata</i>) and Japanese knotweed (<i>Reynoutria japonica</i>). Habitat: Rich alluvial soils of mature mesic mixed or bottomland hardwood forests. Distr. PD, RV (Cecil, Frederick, Harford, Montgomery, Washington). Flw: late Apr-mid May; Fr: ?					
<i>Valerianella chenopodiifolia</i> (Pursh) A.P. de Candolle Valerianaceae (Valerian Family)	Goosefoot Cornsalad	G5	S1	E	
Cons/Econote: Endangered by habitat loss and competition with invasive species. Habitat: Rich soils of mesic hardwood and bottomland forests. Distr. AP, PD, RV (Allegheny, Garrett, Montgomery, Washington).					
<i>Valerianella umbilicata</i> (Sullivant) Wood	Navel-shaped Cornsalad	G3G5	SH	X	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Valerianaceae (Valerian Family)</p> <p>Cons/Econote: Attributed to Maryland by a few collections made from 1875-1955, otherwise little known. Suspected to be newly arrived in many northern states (from the Midwest), occurring mainly in anthropogenic habitats.</p> <p>Habitat: Moist soil of low fields, clearings and in alluvium along rivers.</p> <p>Distr. AP, PD*, RV? (Frederick?, Garrett, Montgomery*).</p>					
<p><i>Veratrum hybridum</i> (Walter) Zimmerman ex Zomlefer</p> <p>Melanthiaceae (Bunchflower Family)</p> <p>Syn: <i>Melanthium hybridum</i> Walter</p> <p><i>Melanthium latifolium</i> Desrousseaux</p> <p>Cons/Econote: An Appalachian endemic, occurring in Maryland at few stations and only two stations show evidence of reproduction.</p> <p>Habitat: Meadows (powerlines) and forests over rich soils derived from mafic substrates (calcareous shale, diabase, metabasalt).</p> <p>Distr. PD, RV (Allegany, Baltimore*, Cecil, Frederick, Montgomery*, Washington).</p> <p>Flw: late Jun-early Jul; Fr: Sept.</p>	Broadleaf Bunchflower	G5	S1	E	
<p><i>Veratrum virginicum</i> (Linnaeus) Aiton</p> <p>Melanthiaceae (Bunchflower Family)</p> <p>Syn: <i>Melanthium virginicum</i> Linnaeus</p> <p>Habitat: Fresh tidal marshes, acidic seepage swamps, fens.</p> <p>Distr. AP*, CP, PD, RV (Calvert, Caroline, Cecil, Dorchester, Frederick, Garrett*, Howard, Prince George's, Wicomico, Worcester; distribution likely incomplete).</p> <p>Flw: Jul; Fr: Sept.</p>	Virginia Bunchflower	G5	S3		
<p><i>Vernonia gigantea</i> (Walter) Trelease</p> <p>Asteraceae (Aster Family)</p> <p>Syn: <i>V. altissima</i> Nuttall</p> <p>Taxnote: Maryland plants are var. <i>gigantea</i>.</p> <p>Cons/Econote: Reported from seepage swamps in the Catoctins; these plants not seen for many decades. The Service is not certain of the distribution and rarity of this species and the plant was first collected, as far as the Service can determine, by Liz McDowell in Garrett County in 2019. Reported at a few stations elsewhere and likely overlooked as the common Ironweed (<i>V. noveboracensis</i>).</p> <p>Habitat: Acidic seepage swamps, high-elevation meadows.</p> <p>Distr. AP, PD?, RV* (Baltimore?, Frederick*, Garrett; distribution likely incomplete; should be sought in Montgomery and Washington Counties).</p>	Giant Ironweed	G5	SU		
<p><i>Veronica scutellata</i> Linnaeus</p> <p>Plantaginaceae (Plantain Family)</p>	Marsh Speedwell	G5	S1	E	

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Cons/Econote: Endangered by woody succession in open wetland habitats and competition with invasive species.					
Habitat: Marshes, oxbow wetlands, seepage slopes in muck soils.					
Distr. PD, RV (Allegany*, Frederick, Montgomery, Washington).					
<i>Viburnum lentago</i> Linnaeus	Nannyberry	G5	S1		
Adoxaceae (Moschatel Family)					
Taxnote: Reports of this species from other counties are frequently misidentifications of <i>V. cassinoides</i> .					
Cons/Econote: Restricted to Garrett County (AP). However, historical specimens exist from Baltimore County (1907) of unknown provenance and Prince George's County (1947) from cultivated plants.					
Habitat: Montane seepage wetlands.					
Distr. AP, CP ^I *, PD? (Baltimore?*, Garrett, Prince George's ^I *).					
Flw: mid-May-early Jun; Fr: Sept-Oct.					
<i>Vicia americana</i> Willdenow	American Purple Vetch	G5T5	SH	X	
Fabaceae (Bean Family)					
Taxnote: Maryland plants are the eastern ssp. <i>americana</i> .					
Cons/Econote: Reported from a single location (W. Longbottom); these plants have not been found at that location.					
Habitat: Roadside outcrop of calcareous rock.					
Distr. RV* (Washington*).					
<i>Viola appalachiensis</i> L.K. Henry	Appalachian Blue Violet	G4	S3		
Violaceae (Violet Family)					
Syn: <i>Viola walteri</i> House var. <i>appalachiensis</i> (L.K. Henry) L.E. McKinney					
Taxnote: The taxonomic rank varies among authors; however, Ballard and Wujek (1994) provide substantive evidence for the recognition of <i>V. appalachiensis</i> sensu stricto.					
Cons/Econote: This species is a regional endemic to MD, PA and WV with disjunct occurrences in NC (NatureServe 2015). Maryland stations and those in neighboring Somerset County, PA form a core population where the species occurs at relatively high frequency.					
Habitat: Floodplains, mesic and northern hardwood slopes, meadows.					
Distr. AP (Garrett).					
Flw: late Apr-early May; Fr: Jun-Jul.					
<i>Viola esculenta</i> Elliott ex Greene	Salad Violet	G4G5	S2		
Violaceae (Violet Family)					
Taxnote: Maryland plants require additional study; see remarks under <i>V. edulis</i> in Weakley (2020).					
Syn: <i>V. edulis</i> Spach, <i>V. palmata</i> Linnaeus var. <i>esculenta</i> Elliott ex D.B. Ward					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
<p>Cons/Econote: Maryland populations are a northern range extension for this southeastern species, which is likely much rarer globally than the current rank suggests.</p> <p>Habitat: Bottomland levee forest along fresh tidal reach of the Pocomoke (where locally abundant) and recently, bottomland forest along the Marshyhope River (John Hall).</p> <p>Distr. CP (Caroline, Worcester).</p>					
<i>Viola rostrata</i> Pursh Violaceae (Violet Family)	Long-spur Violet	G5	S3		
<p>Cons/Econote: Local but frequent in habitat.</p> <p>Habitat: Montane alluvial forest, mesic northern hardwoods/hemlock.</p> <p>Distr. AP, RV (Allegany, Garrett).</p> <p>Flw: mid Apr-early May; Fr: Jun-Jul.</p>					
<i>Vitis rupestris</i> Scheel Vitaceae (Grape Family)	Rock Grape	G3	S1		
<p>Taxnote: Most Maryland records are doubtful. The population along the Potomac River in Maryland is well-documented and has persisted in the Potomac Gorge; first collected by E. S. Steele in 1896.</p> <p>Cons/Econote: According to NatureServe (2015) the principal threat to <i>V. rupestris</i> is a change in the hydrology of its riverbank habitats, away from the natural flooding regime and periodic scouring of the riverbank. Pavek et al. (2003) suggested that MD, PA and WV populations comprise a unique genotype with a unique morphology; however, the authors noted that this may be due to introgression with <i>V. riparia</i>.</p> <p>Habitat: Riverside scour bars.</p> <p>Distr. CP*, PD (Montgomery, Prince George's*,).</p>					
<i>Woodsia ilvensis</i> (Linnaeus) R. Brown Woodsiaceae (Woodsia Family)	Rusty Woodsia	G5	S2	T	
<p>Cons/Econote: Narrowly distributed in Maryland and generally restricted to small populations on lightly to moderately shaded outcrops. Threats include displacement by invasive species and fire suppression.</p> <p>Habitat: Shale barrens, outcrops of calcareous shales.</p> <p>Distr. RV (Allegany, Washington).</p> <p>Phenology: best viewed in mid April through May.</p>					
<i>Xyris fimbriata</i> Elliott Xyridaceae (Yellow-eyed Grass Family)	Fringed Yellow-eyed-grass	G5	S1	E	
<p>Cons/Econote: Endangered by habitat loss. Occurring in few, small populations; several are poorly protected or have been extirpated.</p> <p>Habitat: Delmarva Bays, acidic seepage wetlands.</p>					

Scientific Name	Common Name	Global Rank	State Rank	State Status	Federal Status
Distr. CP (Dorchester, Prince George's, Wicomico).					
<i>Xyris smalliana</i> Nash Xyridaceae (Yellow-eyed Grass Family)	Small's Yellow-eyed-grass	G5	S1	E	
Cons/Econote: Endangered by habitat loss, hydrological alteration and woody succession of bog-like habitats.					
Habitat: Delmarva Bays, acidic seepage wetlands.					
Distr. CP (Caroline, Dorchester, Wicomico, Worcester*).					
Flw: late Jun-Jul; Fr: Jul-Sept.					
<i>Zanthoxylum americanum</i> P. Miller Rutaceae (Citrus Family)	Northern Prickly-ash	G5	S1S2	E	
Syn: <i>Xanthoxylum americanum</i> , an orthographic variant.					
Cons/Econote: Endangered by habitat loss and displacement by invasive species.					
Habitat: Cliffs, outcrops and glades over limestone and calcareous shale formations.					
Distr. PD, RV (Allegany, Baltimore (city), Frederick*, Montgomery, Washington).					
Flw: May; Fr: Jun-Aug.					
<i>Zephyranthes atamasca</i> (Linnaeus) Herbert Amaryllidaceae (Amaryllis Family)	Atamasco Lily	G4G5	S1	E	
Cons/Econote: A single, unprotected population and the northern-most population in the eastern U.S.					
Habitat: Headwater stream in rich, alluvial soil.					
Distr. CP (Worcester).					
Flw: early May; Fr: Jun-Jul.					
<i>Zizaniopsis miliacea</i> (Michaux) Döll & Ascherson Poaceae (Grass Family)	Southern Wild Rice	G5	S1	E	
Cons/Econote: Endangered by habitat loss, conversion and displacement by common reed (<i>Phragmites australis</i>).					
Habitat: Fresh to oligohaline marshes.					
Distr. CP (Calvert, Worcester).					
Flw/Fr: Jul-Sept.					
<i>Zizia aurea</i> (Linnaeus) W.D.J. Koch Apiaceae (Carrot Family)	Golden Alexanders	G5	S3		
Habitat: Mesic mixed deciduous forests, floodplain forests in rich loamy soils.					
Distr. AP, PD, RV (Allegany, Frederick, Garrett, Harford, Howard, Montgomery, Washington).					
Flw: May-Jun; Fr: Aug-Sept					

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<i>Asplenium bradleyi</i>	Bradley's Spleenwort	S1	S1	X	E
<i>Asplenium resiliens</i>	Black-stem Spleenwort	S1	S1	delisted	
<i>Aureolaria levigata</i>	Downy Yellow False Foxglove	S3	SU		
<i>Berberis canadensis</i>	American Barberry	SRF	SRF	delisted	
<i>Bidens trichosperma</i>	Tickseed Sunflower	S3S4	S2S3		
<i>Blephilia hirsuta</i>	Hairy Woodmint	S1S2	SH		
<i>Callicarpa americana</i>	French Mulberry	SNA	SH	delisted	
<i>Carex aquatilis</i>	Water Sedge	SRF	S1		
<i>Carex shortiana</i>	Short's Sedge	S3S4	S3S4	delisted	
<i>Ceratophyllum echinatum</i>	Prickly Hornwort	S2?	S2?	delisted	
<i>Chenopodium simplex</i>	Giant-seed Goosefoot	S2	S2	T	
<i>Chenopodium standleyanum</i>	Standley's Goosefoot	S2S3	S2S3	delisted	
<i>Crassula aquatica</i>	Water Pygmyweed	S1	S1	E	
<i>Cuscuta coryli</i>	Hazel Dodder	S1	S1	delisted	
<i>Cyperus plukenetii</i>	Plukenet's Flatsedge	S1	SH	X	E
<i>Dichanthelium annulum</i>	Ringed Witchgrass	S1	SH		E
<i>Dichanthelium boreale</i>	Northern Witchgrass	SRF	SRF	delisted	
<i>Dichanthelium longiligulatum</i>	Coastal Plain Witchgrass	SU	SNR		
<i>Digitaria villosa</i>	Shaggy Crabgrass	S1?	S1?	delisted	
<i>Drosera brevifolia</i>	Dwarf Sundew	S1	SNR		
<i>Elatine minima</i>	Small Waterwort	S1?	S1?	delisted	
<i>Eleocharis engelmannii</i>	Engelmann's Spikerush	S4	S3		
<i>Elephantopus tomentosus</i>	Tobaccoweed	S1S2	S1	E	T
<i>Epilobium ciliatum</i>	Northern Willowherb	S3S4	S3S4	delisted	
<i>Fimbristylis puberula</i>	Hairy Fimbray	SRF	SU		
<i>Gillenia stipulata</i>	American Ipecac	SRF	SRF	delisted	
<i>Helianthus microcephalus</i>	Small Woodland Sunflower	SR	SR	delisted	
<i>Hemianthus micranthemoides</i>	Nuttall's Micranthemum	SX	SH	X	
<i>Heuchera villosa</i>	Hairy Alumroot	SR	SR	delisted	
<i>Hexalectris spicata</i>	Crested Coral Root	S1	S1	E	
<i>Hypericum ascyron</i>	Great St. John's Wort	SR	SR	delisted	
<i>Juncus brachycarpus</i>	Short-fruited Rush	S4	SNA		

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SCIENTIFIC NAME	COMMON NAME	CURRENT RANK	FORMER RANK	STATE STATUS	PROPOSED STATUS
<i>Juncus brachycephalus</i>	Small-head Rush	SRF	SRF	delisted	
<i>Leptochloa fusca</i> ssp. <i>fascicularis</i>	Long-awned Diplachne	SNR	SU		
<i>Linnaea borealis</i>	Twinflower	SRF	SRF	delisted	
<i>Linum floridanum</i>	Florida Yellow Flax	SRF	SRF	delisted	
<i>Liparis liliifolia</i>	Large Twayblade	S3	S2S3		
<i>Listera australis</i>	Southern Twayblade	S4	S3		
<i>Ludwigia glandulosa</i>	Cylindric-fruit Seedbox	S3	S1	delisted	
<i>Malaxis unifolia</i>	Green Adder's-mouth Orchid	S2	S1S3		
<i>Marshallia pulchra</i> (<i>grandiflora</i>)	Barbara's Buttons	SR	SR	delisted	
<i>Matelea carolinensis</i>	Carolina Anglepod	S2S3	S2	T	
<i>Matelea decipiens</i>	Old-field Milkvine	SRF	SRF	delisted	
<i>Melothria pendula</i>	Guadelope Cucumber	SNA	SNA	delisted	
<i>Najas gracillima</i>	Thread-like Naiad	SNA	SNA	delisted	
<i>Packera crawfordii</i>	Crawford's Ragwort	SH	SNR		
<i>Paspalum fluitans</i>	Horse-tail Paspalum	S2	S2	T	
<i>Patis racemosa</i>	Mountain Rice-grass	S2S3	S2S3	delisted	
<i>Persicaria robustior</i>	Stout Smartweed	SU	SU	delisted	
<i>Phacelia covillei</i>	Coville's Phacelia	S2	S2	T	
<i>Phalaris caroliniana</i>	May Grass	SNA	SNA	delisted	
<i>Plantago pusilla</i>	Dwarf Plantain	SNA	SNA	delisted	
<i>Platanthera flava</i>	Pale Green Orchid	S2S3	S2		
<i>Platanthera psycodes</i>	Small Purple Fringed Orchid	S1	SH	X	E
<i>Pluchea camphorata</i>	Marsh Fleabane	S2	S1	E	T
<i>Potamogeton foliosus</i>	Leafy Pondweed	S2	S2	delisted	
<i>Potamogeton richardsonii</i>	Richardson's Pondweed	SRF	SRF	delisted	
<i>Potamogeton robbinsii</i>	Flatleaf Pondweed	S1?	S1?	delisted	
<i>Pycnanthemum verticillatum</i>	Whorled Mountainmint	S2	S1	T	
<i>Ranunculus ambiguus</i>	Water-plantain Spearwort	S1	S1	delisted	
<i>Ranunculus carolinianus</i>	Carolina Buttercup	S1?	S1S3	delisted	
<i>Rubus pubescens</i>	Dwarf Raspberry	S1?	SNR		
<i>Salix caroliniana</i>	Carolina Willow	S4	S3		
<i>Shoenoplectiella smithii</i>	Smith's Bulrush	S1?	S1?	delisted	

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SCIENTIFIC NAME	COMMON NAME	CURRENT RANK	FORMER RANK	STATE STATUS	PROPOSED STATUS
<i>Scleria nitida</i>	Shining Nutrush	SNA	S1	E	delist
<i>Scutellaria nervosa</i>	Veined Skullcap	S1S2	S1S2	T	
<i>Scutellaria parvula</i>	Small Skullcap	SRF	SRF	delisted	
<i>Solidago rigida</i>	Prairie Goldenrod	S1	S1	E	
<i>Solidago roanensis</i>	Roan Mountain Goldenrod	S3	S3	delisted	
<i>Solidago rupestris</i>	Rock Goldenrod	S1	S1	delisted	
<i>Solidago tortifolia</i>	Twistleaf Goldenrod	SH	SNR		
<i>Symphotrichum concinnum</i>	Smooth Blue Aster	S1?	S1?	delisted	
<i>Utricularia inflata</i>	Swollen Bladderwort	S2	S2	delisted	
<i>Vitis novae-angliae</i>	New England Grape	SNA	SNA	delisted	
<i>Wolffiella gladiata</i>	Sword Bogmat	SNA	SNA	delisted	

APPENDIX II. PLANT SPECIES REPORTED, FALSELY REPORTED, OR ARE NO LONGER CONSERVATION TARGETS IN MARYLAND.

The following species do not occur in Maryland or are no longer targets for conservation (SNA) based upon currently available information. This is not an exhaustive treatment of the excluded flora but is included to provide clarification for those species whose previous rank has substantially changed. For those species with a rank of SR, only unverified reports exist or there is no evidence that the species occurs as a native component of the flora. Species with a rank of SRF have been falsely reported and errors may persist in the literature. Species with legal status that have recently been identified as reported falsely are included here and in Appendix I; however, these species will require processing regulatory changes. For a complete treatment of the excluded flora see Knapp & Naczi (in press).

Scientific Name	Common Name	State Rank	State Legal Status
<i>Berberis canadensis</i> P. Miller	American Barberry	SRF	

Brown & Brown (1972) state that this species [occurs] “only in the Mountain zone of Maryland” but no place-name or collectors name was provided and there are no specimens in the Norton-Brown Herbarium (MARY, University of Maryland-College Park). Interestingly, the species was not listed in the earlier Catalogue of Maryland plants by Norton & Brown (1946). The long-standing report by Reed (1986) from Soldier’s Delight in Baltimore County is often cited but this record was never confirmed by the Service. The specimen vouching for the latter record (Reed 74540), located at the Missouri Botanical Garden (MO) recently became available and is clearly the Asian *B. thunbergii*. Whittemore (1997, FNA, v. 3, p. 278) included Maryland in the distribution of *B. canadensis* but there was no specific record for the species, only the report in Brown & Brown (1972). This record has become embedded in the literature and will prove difficult to correct. This rare species occurs at its northern-most extant stations in the southern Appalachian mountains of Virginia in Alleghany, Bedford, Botetourt, and Pittsylvania Counties (Virginia Botanical Associates 2020). The species has been excluded from the flora.

<i>Callicarpa americana</i> Linnaeus G	French Mulberry	SH/SNA	
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An (arguably) native population once occurred in Wicomico County “near Salisbury” as documented by a collection made by William Canby and W. Coulter Rose in 1894. Stations for this species are scattered across the state but all are thought to be escapes from cultivation as the plant is widely available in the nursery trade and is frequently used as a ‘wildlife-friendly-plant’ in garden settings. Dispersal by birds to numerous locations makes listing the species as a conservation target untenable.

<i>Carex aquatilis</i> Wahlenberg	Water Sedge	SRF	
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The long-standing record from Prince George's County near the old Beltsville Airport has recently been annotated to *Carex emoryi*. *Carex aquatilis* is now excluded from the flora.

Carex cephaloidea (Dewey) Dewey Thin-leaved Sedge SRF

The Maryland records, based upon historical collections from Allegany County have been determined to be other species and not *C. cephaloidea*.

Carex sartwellii Dewey Sartwell's Sedge SRF

The Maryland record, based upon a collection from Garrett County by F. Hermann in 1938 has been determined to be the European *Carex divisa* Hudson.

Dichanthelium boreale (Nash) Freckmann Northern Witchgrass SRF

For many years there was a single record of *D. boreale* from Piscataway Park in Prince George's County, MD that was once thought to represent a striking disjunct. However, Maryland plants are the newly circumscribed *D. bicknellii* (Nash) LeBlond (species no. 19 in Weakley 2015) and *D. boreale* is not known to occur in Maryland.

Fimbristylis puberula (Michaux) Vahl Hairy Fimbristylis SRF

Although there are numerous collections labeled as this species all were the more frequent *F. caroliniana*. Following Fernald (1950) both species would have been identified as *F. puberula*. There are no substantive records for this species in Maryland and it has been excluded from the flora.

Gillenia stipulata (Muhlenberg ex Willdenow) Nuttall American Ipecac SRF
[*Porteranthus stipulatus* (Muhlenberg ex Willdenow) Britton]

Attribution to Maryland based upon a 1938 collection by G. Reynard from Mountain Lake Park in Garrett County. The specimen has been determined to be the common *Gillenia trifoliata*.

Gymnocladus dioicus (Linnaeus) K. Koch Kentucky Coffeetree SNA

A common species in the midwestern US; the eastern occurrences are a mix of native and introduced trees. Nativity to Maryland is uncertain and the introduced distribution covers a substantial geography of the State. Brown & Brown (1972) state that the species "seems" to be native along the Savage River in Garrett County; however, this is not at all clear. Some plantings date back more than a century and naturalized occurrences from nearby planted specimen trees are known and otherwise expected throughout the State. The

species is not a focus for conservation until an unquestionably native station can be located.

Helianthus microcephalus Torrey & A. Gray Small Woodland Sunflower SR

Reported by Brown & Brown (1984) as occurring in Frederick County; this based upon a specimen collected by Eduards Baltars (1902-1972) in 1967 (specimen not found). Reported by the Service from a site in Howard County; however, specimens from this site have been determined to be the common *H. divaricatus*. Inventory from the historical station in Frederick County were similarly the common *H. divaricatus*. Additionally, both records are phytogeographically unlikely, the range of the species barely enters Maryland in the far western part of the state. Currently, there are no stations for this species and it has been excluded from the Maryland flora.

Heuchera villosa Michaux Hairy Alumroot SR

Reported by Brown & Brown (1984) as occurring on “rocky outcrops, Allegany County”. This record cannot be substantiated. The species has been excluded from the flora but is present in neighboring West Virginia and might be expected to occur in w. MD.

Hypericum ascyron L. Great St. John’s-wort SR
[*H. pyramidatum* Aiton]

Reported in Brown & Brown (1984) as occurring in Cecil County; this apparently based upon a personal communication “Reveal & Broome”. Broome et al. (1979) cite a collection made from “islands of the Susquehanna”, which is apparently based upon information in Tatnall (1946, p. 175). Tatnall (1946) cites a J. Crawford collection made in 1924 but the Service has determined that there is no specimen collected by Crawford as this species. Weakley (2015) cites Robson (2000) as the source for Maryland but Robson cites only Brown & Brown (1984) as the source. The attribution to the Maryland flora is based upon a series of literature errors and the species has been excluded from the Maryland flora.

Juncus brachycephalus (Engelmann) Buchenau Small-head Rush SRF

Attribution to Maryland based upon misidentified specimens of *J. subcaudatus*. This species has been excluded from the flora.

Linnaea borealis Linnaeus Twinflower SRF

Recorded for Maryland in Norton & Brown (1946, p. 39) citing Britton & Brown (1913), the latter stating the species is found [in] “mountains of Maryland”. The revised Britton & Brown by H.A. Gleason (1952) seems to have corrected this error, citing West Virginia instead. Brown & Brown (1972) cited Fernald (1950, p 1336) as their source for the Maryland record. The base source is most likely Shreve (1910), who had mentioned this species but only in the context of declines due to the logging of virgin forests in the southern Appalachians, and importantly he does not include it in his species lists for Maryland. The record may have been based on a pre-1900 observation or collection in Maryland (e.g., Shreve or earlier botanists), but this seems unlikely as no one attributes a collector’s name,

place name or even a county of location. Alternatively, the author(s) may have attributed the species to Maryland given that the species occurs ~48 km south at Ice Mountain, Hampshire County, West Virginia (which is an extraordinary disjunct location). There are no Maryland specimens based upon searching local, regional, national, and international herbaria. The record appears to be a long-repeated error that appeared in the early floristic literature. The species has been excluded from the Maryland flora.

Linum floridanum (Planchon) Trelease

Florida Yellow Flax

SRF

Reported in Brown & Brown (1984) as “infrequent; coastal and W-B area”. The common citation of “in W-B flora” refers to Hitchcock & Standley’s (1919) Flora of the District of Columbia and Vicinity and/or latter checklists of the Washington-Baltimore geographic area (e.g., Hermann 1946). The only verified record for this species is from the District of Columbia (G. Vasey, USDC); the rest of the treatment in Brown & Brown (1984) was merely speculative. Additionally, the District of Columbia record is so far removed from the natural range of the species (ne NC south to TX) that some consider it to be the result of a labeling mistake. Other Maryland records were based upon misidentifications of other *Linum* species. The species has been excluded from the Maryland flora.

Marshallia pulchra W.M Knapp, D.B. Poind. & Weakley Beautiful Barbara's Buttons SR

Marshallia grandiflora Beadle & F.E. Boynton, misapplied.

Knapp et al. (2020) determined that the species occurring in the Appalachian Plateaus region is *M. pulchra* and that *M. grandiflora*, a narrow endemic, is now extinct. Reported in Brown & Brown (1984) citing a communication from Reveal & Broome. Broome et al. (1979, p. 48) list a station for Garrett County along the Youghiogheny River but this report has never been substantiated and no populations, specimens, photographs or other documentation have been located by the Service. This species should be excluded from the flora; however, the species is extant in the Pennsylvania portion of the Youghiogheny River.

Matelea decipiens (Alexander) Woodson

Old-field Milkvine

SRF

Brown & Brown (1984) cite this species as occurring in the “W-B flora “. The common citation of “in W-B flora” refers to Hitchcock & Standley’s (1919) Flora of the District of Columbia and Vicinity; however, the species name does not occur in that document. The earlier flora by Ward (1881) does not include the species under any synonym nor does the name appear in Hermann’s (1941) Washington/Baltimore Checklist. This record is clarified in the updated W-B flora by Shetler & Orli (2000); the latter authors state “this species not in Washington area, according to D.J. Drapalik's annotation, 1970”. Drapalik (1969) states that *M. decipiens* [is] “infrequent: throughout various provinces in MD, TENN, NC, SC, GA, LA, TX, OKLA, Ark and MO”. However, Drapalik cites no Maryland specimen and studied no populations of *M. decipiens* in the State. Brown & Brown (1984) do not cite Drapalik (1969) although they certainly might have had access to this dissertation. Instead, Brown & Brown (1984) additionally cite Gray’s Manual “in Maryland (Grays Manual)” [i.e., Fernald 1950]. Fernald (1950, p. 1177) states the following distribution “S.C. to La., n. to (?) Md, Mo. and Okla.” Presumably, Fernald was considering a report from Maryland but the Service cannot substantiate the record. (Note also that Perry (1938) stated that the specimens at Fernald’s home institution, the Gray Herbarium of Harvard University, documented only Missouri, Arkansas

and Louisiana.) All references to this species in the Maryland flora point to the Washington-Baltimore area but there are no records. Thus, this species has been excluded from the Maryland flora.

Melothria pendula Linnaeus Guadeloupe Cucumber SNA

Occurring in Maryland as scattered and generally small populations in edge/ruderal habitats. Recent evidence suggests the species is expanding its range northward, thus the more recently discovered stations occupying unremarkable habitat may represent newly founded adventive populations (see also Knapp et al. 2011).

Najas gracillima (A. Braun ex Englemann) Magnus Thread-like Naiad SNA

Recent surveys have located this species in a variety of anthropogenic habitats (ponds and reservoirs) as well as native (riverine) habitats. The consensus of the SAV working group (2016) was that the species has been overlooked, and finally, is not an appropriate conservation target.

Phalaris caroliniana Walter May Grass SNA

Reported in Brown & Brown (1984) as occurring [on the] “Coastal Plain; rare.” This attribution to Maryland is presumably based upon Shreve (1910) who cited a Robert K. Miller specimen from “near Towson” and/or upon Norton (1930) who mentioned “a southern grass in cultivation.” The species is widely planted as a forage crop but no specimen has been found to substantiate the record. Additionally, Maryland is not within the natural range of the species, which according to Weakley (2015) is “NC west to OR, south into Mexico, the original distribution now obscured.” The Maryland station, doubtlessly planted as an experimental crop, is located ~ 500 km north of the northernmost station in NC. The species is not a conservation target and has been excluded from the native Maryland flora.

Plantago pusilla Nuttall Dwarf Plantain SNA

Reported as infrequent on the Coastal Plain and Piedmont by Brown & Brown (1984); the Service is uncertain of the basis of that attribution. The native range for this species is unclear; Weakley (2015) suggests the species is native to the south-central U.S. Recently collected in a lawn and perhaps only a waif or infrequently occurring weed in our range. The species is not a conservation target.

Potamogeton richardsonii (Bennett) Rydberg Richardson’s Pondweed SRF

Reported as occurring in Cecil County, Maryland by Brown & Brown (1984) based upon a collection listed in Tatnall (1946). Other historical records, based upon old collections (US) from Anne Arundel, Charles and Harford Counties, have been determined to be other species. The species has been excluded from the Maryland flora.

Rhododendron calendulaceum (Michaux) Torrey Flame Azalea SR

Wolffiella gladiata (Hegelmaier) Hegelmaier
[*Wolffiella floridana* (Donnell-Smith) C. Thompson]

Sword Bogmat

SNA

A species of quiet waters of ditches, ponds, and tidal aquatic beds that occurs sporadically in Maryland depending on the severity of winters. Doubtless spread by waterfowl. The species is not a conservation target.

Appendix III. The following list includes 69 ecological community groups recognized by the Maryland Natural Heritage Program. It is organized hierarchically reflecting the structure of Maryland's Natural Community Classification and meant to serve as a reference. Additional information including the full classification, descriptions, fact sheets, and vegetation studies may be accessed at the following link (http://dnr2.maryland.gov/wildlife/Pages/plants_wildlife/nhpnatcomm.aspx).

TERRESTRIAL SYSTEM										MARITIME FORESTS, WOODLANDS, AND DUNES									
MESIC FORESTS										Maritime Dune Grassland									
Northern Hardwood Forest										Maritime Dune Scrub									
Acidic Cove Forest										Maritime Dune Woodland									
Rich Cove Forest										Maritime Forest									
Eastern Hemlock - Hardwood Forest																			
Mesic Mixed Hardwood Forest										PALUSTRINE SYSTEM									
Basic Mesic Forest										ALLUVIAL WETLANDS									
										Bald Cypress - Gum Swamp									
DRY-MESIC FORESTS AND WOODLANDS										Semipermanent Impoundment									
Dry - Mesic Calcareous Forest										Floodplain Pool									
Basic Oak - Hickory Forest										Coastal Plain - Piedmont Bottomland Forest									
Acidic Oak - Hickory Forest										Montane - Piedmont Bottomland Forest									
Eastern White Pine - Hardwood Forest										Montane - Piedmont Small- Stream Forest									
Oak - Heath Forest										Depositional Bar and Shore									
Coastal Plain Oak - Beech Heath Forest										River-Scour Woodland									
Boulderfield Forest and Woodland										Riverside Prairie									
DRY FORESTS AND WOODLANDS										NON-ALLUVIAL WETLANDS									
Montane Pine - Oak Woodland										High-Elevation Seepage Swamp									
Montane - Piedmont Acidic Woodland										Montane - Piedmont Acidic Seepage Swamp									
Montane - Piedmont Basic Woodland										Montane - Piedmont Basic Seepage Swamp									

	Montane Dry Calcareous Forest and Woodland		Coastal Plain - Piedmont Acidic Seepage Swamp									
	Coastal Plain Dry Calcareous Forest and Woodland		Coastal Plain - Piedmont Basic Seepage Swamp									
	Coastal Plain Pine - Oak Woodland		Coastal Plain - Piedmont Acidic Seepage Bog/Fen									
	Inland Sand Dune and Ridge Woodland		Montane Peatland									
			Montane - Piedmont Wet Meadow/Fen									
	GLADES, BARRENS, AND ROCK OUTCROPS		Montane - Piedmont Seep									
	Limestone Glade		Upland Depression Swamp									
	Sandstone Glade		Coastal Plain Non-Riverine Hardwood Swamp									
	Serpentine Barren		Baymouth Barrier Wetland									
	Shale Barren		Atlantic White Cedar Swamp									
	Basic Outcrop Barren		Delmarva Bay									
	Riverside Outcrop Barren											
	Acidic Cliff and Bluff											
	Basic Cliff											
	NON-TIDAL MARITIME WETLANDS											
	Interdunal Swale											
	Maritime Swamp											
	Sea-Level Fen											
	ESTUARINE SYSTEM											
	TIDAL WETLANDS											
	Intertidal Shore											
	Tidal Freshwater / Oligohaline Aquatic Bed											
	Tidal Freshwater Marsh and Shrubland											

		Tidal Hardwood Swamp												
		Tidal Bald Cypress Swamp												
		Tidal Oligohaline Marsh and Shrubland												
		Tidal Mesohaline / Polyhaline Aquatic Bed												
		Tidal Mesohaline Marsh and Shrubland												
		Salt Pannes												
		RIVERINE SYSTEM												
		Riverine Aquatic Bed												
		MARINE SYSTEM												
		MARINE INTERTIDAL												
		Coastal Beach												

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Glossary of Terms

Term	Definition
Allopolyploid	Having two or more complete sets of chromosomes derived from different species.
Allozyme	Molecular markers from protein electrophoresis. These markers are variants of enzymes arising from mutations in structural genes.
Alluvial	Relating to, composed of, or found in alluvium.
Alluvium	Sediments deposited by or in conjunction with running water in rivers, streams, or sheetwash.
Amphibolite	Medium- to coarse-grained metamorphic rocks that are composed of amphibole minerals such as hornblende and plagioclase. These are the diagnostic rocks of the amphibolite facies of regional metamorphism and may be derived from premetamorphic rocks of various types. Mafic igneous rocks (e.g., basalts and gabbros) and sedimentary dolomite can be the parent rocks of amphibolite.
Anthropogenic	Created, caused or induced by human actions.
Apogamous	Development of a sporophyte from a gametophyte without fertilization.
Basic	Minerals such as calcium and magnesium that produce soils with high pH values.
Boreal	Relating to, or growing in higher latitude, northern regions.
Brackish	A general term describing somewhat salty tidal waters with a mix of salt and fresh water.
Calcareous	Consisting of or containing calcium carbonate.
Calciphile	A plant restricted to calcium-rich substrates.
Circumboreal	Of or occurring in the boreal region, i.e., the high northern latitudes of the northern hemisphere.
Congener	A member of the same taxonomic genus as another plant or animal.
Cryptic	Difficult to discern or identify. Often used to refer to organisms whose taxonomic identity may be obscure or hidden.
Diabase	An igneous, medium to fine-grained mafic rock.
Diploid	Having two full chromosome complements per cell.
Disjunct	Marked by separation from a usually contiguous geographic range.
Ecotone	A transition area between two plant communities.
Endemic	Restricted or peculiar to a particular geographic region.
Epiphyte	A plant deriving its moisture and nutrients from the air and growing upon another plant (especially a tree).
Eutrophication	A process in which bodies of water become rich in dissolved nutrients (nitrogen, phosphates, etc.) but often are seasonally deficient in oxygen.
Extirpated	Destroyed or removed, generally referring to a particular geographic region, e.g., extirpated from Maryland but secure in other regions of the U.S. as opposed to extinct, which means destroyed completely.

Fall Line	A narrow zone demarcating the geological intersection of upland consolidated rock (bedrock) of the Piedmont and unconsolidated coastal plain sediments.
Felsic	Silicate minerals that contain elements such as aluminum, potassium, sodium, produce soils with low pH values.
Fen	Wetland fed by a flowing mineral-rich surface or groundwater.
Fresh tidal	Referring to tidal waters with 0-0.5 parts-per-thousand (ppt) salinity.
Glauconitic	Referring to a mineral soils consisting of a dull green earthy iron and potassium phosphates occurring abundantly in greensand.
Gneiss	A metamorphic rock with visible grains, highly metamorphosed and often color banded with layers of different minerals.
Infraspecific	Within (infra) a species, referring (generally) to varieties or subspecies within a single species.
Intertidal	Referring to the portion of the shoreline that is underwater during an average high tide and exposed at an average low tide.
Invasible	Referring to the potential of some natural communities to be invaded by non-native invasive species.
Limestone	A sedimentary rock containing calcite that generally has high levels of plant-available calcium.
Mafic	Referring to silicate minerals containing magnesium and iron and that produce soils with high pH values.
Mesic	Relating to an environment containing a moderate amount of soil moisture.
Mesohaline	Referring to estuarine water having salinity between 5-18 parts per thousand.
Millpond	A pond produced by damming a stream to produce a head of water for operating a mill.
Minerotrophic	Referring to soil (usually a wetland) characterized by nutrients carried by groundwater through mineral soils.
Montane	Of or relating to mountainous regions.
Nontidal	Not influenced by tidal action.
Oligohaline	Referring to estuarine waters with 0.5-5 parts-per-thousand (ppt) salinity.
Orthographic	Referring to a variant spelling.
Pleistocene	The first epoch of the Quaternary Period, usually associated with the most recent glacial advance (the Wisconsinan).
Polyploid	An organism having more than twice the number of haploid chromosomes, i.e., which typically arises from sexual reproduction.
Pyrogenic	Producing or produced by wildfire as a natural process.
Relict	A persistent remnant of an otherwise extinct (or extirpated) flora or fauna.
Relictual	Of or relating to a relict.
Riparian	Related to or living or located on the bank of a natural watercourse such as a river.
Saline	Containing salt, referring to tidal waters with measurable salinity.
Scour bar	A feature of natural river courses where the action of moving currents removes and/or deposits alluvium.
Seep	Referring to groundwater flow at the soil surface.
Serpentine	Underlain by or composed of serpentinite, a green or black group of mafic minerals that as a group are called serpentine.

Shell-marl	A limy (calcium carbonate) earthy mixture of fine sediments containing deposits of snail or bivalve shells.
Shell-midden	Deep layers of oyster shell deposited by native Americans.
Sphagnous	Related to an abundance of Sphagnum moss.
Swale	A low lying, depressed, and often wet stretch of land, often dominated by herbaceous plant growth.
Taxa	Plural of taxon, a taxonomic group in a formal system of classification.
Taxon	A name applied to a taxonomic group in a formal system of classification.
Tetraploid	Having four times the haploid number of chromosomes arising via sexual reproduction (e.g. eggs and sperm) or more often apomixis.
Tidal	Influenced by the action of tides.
Triploid	Having three full chromosome complements per cell.
Ultramafic	Referring to metamorphic or igneous rocks composed of all or nearly all mafic minerals.
Xeric	Characterized by only a small amount of soil moisture.



Threadleaf Gerardia (*Agalinis setacea*), an endangered species in Maryland.
(Photo credit, Christopher Frye)