

Asters of Yesteryear (Updated April 2018)

About this Update:

The document was originally posted in a shorter version, to accompany the brief article "Where Have all our Asters Gone?" in the Fall 2017 issue of *Sego Lily*. In that version it consisted simply of photos of a number of plants that had at some time been included in *Aster* but that no longer are, as per *Flora of North America*.

In this version I have added names to the photos to indicate how they have changed since their original publication:

Date and original name as published (Basionym)
IF name used in *Intermountain Flora* (1994)
UF name used in *A Utah Flora* (1983-2016)
FNA name used in *Flora of North America* (2006)

I have also added tables to show the renaming of two groups of species in the Astereae tribe as organized in *Intermountain Flora*. Color coding shows how splitting of the major genera largely follows fault lines already in place

No color	Renamed
Bright Green	Conserved
Various	Natural groupings
\$	Plant not in Utah

It is noteworthy how few species retain the names used in 1994, but also how the renaming often follows patterns already observed.

Asters of Yesteryear (Updated April 2018)

Here are larger photos (16 inches wide or tall at normal screen resolution of 72 dpi) of the plants shown in *Sego Lily* of Fall 2017, arranged by date of original publication. None of them (except *Aster amellus* on this page) are now regarded as true asters – but they all were at one stage in their history. Now all are in different genera, most of them using names that were published over 100 years ago. All but one occur in Utah and many of them are quite common and familiar plants in our area. However, not all the photos have enough detail to permit direct recognition of key characters.



Fig. 1. *Aster amellus* 'King George' cultivar, used with permission.

<http://www.oldcourt nurseries.co.uk>

How many can you place in the correct genus, choosing from the following (there is one of each):

<i>Almutaster</i>	<i>Dieteria</i>	<i>Erigeron</i>	<i>Eucephalus</i>
<i>Eurybia</i>	<i>Herrickia</i>	<i>Machaeranthera</i>	<i>Oreostemma</i>
<i>Symphyotrichum</i>	<i>Xylorhiza</i>		

This is not an easy proposition, but you may enjoy a bit of sleuthing. Take the UFO Challenge!

Plants are now named: yyyy Original; IF (1994); FNA (2006); UF (2016)

An internet resource that could be of help and that is quite user friendly :

Intermountain Biota <http://intermountainbiota.org/portal/sitemap.php>

The link to "Image Library" allows you to search by genus and see what photos are available.

1804 *Aster canescens*; IF, UF *Machaeranthera canescens*; FNA *Dieteria canescens*



Salt Lake County, Albion Basin

1814 *Aster peregrinus*; IF, UF *Erigeron peregrinus*; FNA *Erigeron peregrinus*



Salt Lake County, Brighton

1818 *Aster pauciflorus*; IF, UF *Aster pauciflorus*; FNA *Almutaster pauciflorus*



Beaver County, Thermo Hot Springs

1820 *Aster tanacetifolius*; IF, UF , FNA *Machaeranthera tanacetifolia*



Emery County, Highway 24

1834 Aster ascendens; IF, UF Aster ascendens; FNA Symphyotrichum ascendens



Millard County, Snake Valley

1841a *Aster integrifolius*; IF, UF *Aster integrifolius*; FNA *Eurybia integrifolia*



Near Teton NP, Wyoming

1841b *Eucephalus glaucus*; IF, UF *Aster glaucodes*; FNA *Herrickia glauca*



Salt Lake County, Albion Basin

1841c *Aplopappus alpinus*; IF *Aster alpinus*; FNA *Oreostemma alpinus*



Near Teton NP, Wyoming

1841d *Eucephalus elegans*; IF, UF *Aster perelegans*; FNA *Eucephalus elegans*



Lamoille Canyon, Ruby Mountains, Nevada

1891 *Aster venustus*; IF *Machaeranthera venusta*; FNA, UF *Xylorhiza venusta*



Emery County, San Rafael Swell

Renaming of "Aster Group" Part 1

Scientific Name IF	No.	Page	Scientific Name UF	Scientific Name FNA	Original (Basionym)	Published
<i>Machaeranthera grindeloides</i>	01	265	<i>Machaeranthera grindeloides</i>	<i>Xanthisma grindeloides</i>	<i>Eriocarpum grindeloides</i>	1841 Nutt.
<i>Machaeranthera shastensis</i>	02	265	\$	<i>Dieteria canescens</i> var. <i>shastensis</i>	<i>Machaeranthera shastensis</i>	1865 Gray
<i>Machaeranthera canescens</i>	03	265	<i>Machaeranthera canescens</i>	<i>Dieteria canescens</i>	<i>Aster canescens</i>	1804 Nutt.
<i>Machaeranthera linearis</i>	04	268	<i>Machaeranthera canescens</i> var. <i>aristata</i>	<i>Dieteria canescens</i> var. <i>glabra</i>	<i>Machaeranthera canescens</i> var. <i>glabra</i>	1852 Gray
<i>Machaeranthera rigida</i>	05	268	<i>Machaeranthera canescens</i> var. <i>aristata</i>	<i>Dieteria canescens</i> var. <i>aristata</i>	<i>Aster canescens</i> var. <i>aristatus</i>	1896 Eastwood
<i>Machaeranthera commixta</i>	06	268	<i>Machaeranthera commixta</i>	<i>Dieteria bigelovii</i> var. <i>commixta</i>	<i>Machaeranthera commixta</i>	1899 Greene
<i>Machaeranthera tanacetifolia</i>	09	268	<i>Machaeranthera tanacetifolia</i>	<i>Machaeranthera tanacetifolia</i>	<i>Aster tanacetifolius</i>	1820 Humboldt
<i>Machaeranthera mucronata</i>	07	270	\$	<i>Dieteria bigelovii</i> var. <i>mucronata</i>	<i>Machaeranthera mucronata</i>	1899 Greene
<i>Machaeranthera asteroides</i>	08	270	<i>Machaeranthera asteroides</i>	<i>Dieteria asteroides</i>	<i>Dieteria asteroides</i>	1848 Torrey
<i>Machaeranthera parviflora</i>	10	272	<i>Machaeranthera parviflora</i>	<i>Arida parviflora</i>	<i>Machaeranthera parviflora</i>	1852 Gray
<i>Machaeranthera kingii</i>	11	272	<i>Aster kingii</i>	<i>Herrickia kingii</i>	<i>Aster kingii</i>	1871 Eaton
<i>Machaeranthera venusta</i>	12	272	<i>Xylorhiza venusta</i>	<i>Xylorhiza venusta</i>	<i>Aster venustus</i>	1891 Jones
<i>Machaeranthera glabriuscula</i>	13	274	<i>Xylorhiza glabriuscula</i>	<i>Xylorhiza glabriuscula</i>	<i>Xylorhiza glabriuscula</i>	1841 Nuttall
<i>Machaeranthera linearifolia</i>	14	274	<i>Xylorhiza glabriuscula</i> var. <i>linearifolia</i>	<i>Xylorhiza linearifolia</i>	<i>Xylorhiza linearifolia</i>	1977 T.J. Watson
<i>Machaeranthera confertifolia</i>	15	274	<i>Xylorhiza confertifolia</i>	<i>Xylorhiza confertifolia</i>	<i>Machaeranthera confertifolia</i>	1963 Cronquist
<i>Machaeranthera cronquistii</i>	16	275	<i>Xylorhiza cronquistii</i>	<i>Xylorhiza cronquistii</i>	<i>Xylorhiza cronquistii</i>	1981 Welsh
<i>Machaeranthera tortifolia</i>	17	275	<i>Xylorhiza tortifolia</i>	<i>Xylorhiza tortifolia</i>	<i>Aplopappus tortifolius</i>	1845 Torrey & Gray
<i>Lessingia lemmontii</i>	01	276	\$	<i>Lessingia glandulifera</i> var. <i>glandulifera</i>	<i>Lessingia lemmontii</i>	1886 Gray
<i>Townsendia condensata</i>	01	279	<i>Townsendia condensata</i>	<i>Townsendia condensata</i>	<i>Townsendia condensata</i>	1874 Parry
<i>Townsendia parryi</i>	02	279	\$	<i>Townsendia parryi</i>	<i>Townsendia parryi</i>	1874 Eaton
<i>Townsendia florifer</i>	03	279	<i>Townsendia florifer</i>	<i>Townsendia florifer</i>	<i>Erigeron florifer</i>	1834 Hooker
<i>Townsendia scapigera</i>	04	280	<i>Townsendia scapigera</i>	<i>Townsendia scapigera</i>	<i>Townsendia scapigera</i>	1871 Eaton
<i>Townsendia strigosa</i>	05	280	<i>Townsendia strigosa</i>	<i>Townsendia strigosa</i>	<i>Townsendia strigosa</i>	1841 Nuttall
<i>Townsendia annua</i>	06	280	<i>Townsendia annua</i>	<i>Townsendia annua</i>	<i>Townsendia annua</i>	1957 Beaman
<i>Townsendia incana</i>	07	280	<i>Townsendia incana</i>	<i>Townsendia incana</i>	<i>Townsendia incana</i>	1841 Nuttall
<i>Townsendia montana</i>	08	282	<i>Townsendia montana</i>	<i>Townsendia montana</i>	<i>Townsendia montana</i>	1893 Jones
<i>Townsendia minima</i>	09	282	<i>Townsendia montana</i> var. <i>minima</i>	<i>Townsendia minima</i>	<i>Townsendia minima</i>	1936 Eastwood
<i>Townsendia leptotes</i>	10	282	<i>Townsendia leptotes</i>	<i>Townsendia leptotes</i>	<i>Townsendia sericea</i> var. <i>leptotes</i>	1880 Gray
<i>Townsendia exscapa</i>	11	284	<i>Townsendia exscapa</i>	<i>Townsendia exscapa</i>	<i>Aster exscapus</i>	1823 Richardson
<i>Townsendia hookeri</i>	12	284	<i>Townsendia hookeri</i>	<i>Townsendia hookeri</i>	<i>Townsendia sericea</i>	1834 Hooker
<i>Townsendia mensana</i>	13	284	<i>Townsendia mensana</i>	<i>Townsendia mensana</i>	<i>Townsendia mensana</i>	1910 Jones
<i>Townsendia jonesii</i>	14	284	<i>Townsendia jonesii</i>	<i>Townsendia jonesii</i>	<i>Townsendia mensana</i> var. <i>jonesii</i>	1957 Beaman
<i>Townsendia aprica</i>	15	286	<i>Townsendia aprica</i>	<i>Townsendia aprica</i>	<i>Townsendia aprica</i>	1968 Welsh
<i>Monoptilon bellidiforme</i>	01	286	<i>Monoptilon bellidiforme</i>	<i>Monoptilon bellidiforme</i>	<i>Monoptilon bellidiformis</i>	1845 Torrey
<i>Bellis perennis</i>	01	288	<i>Bellis perennis</i>	<i>Bellis perennis</i>	<i>Bellis perennis</i>	1753 Linnaeus
<i>Chloracantha spinosa</i>	01	288	<i>Aster spinosus</i>	<i>Chloracantha spinosa</i>	<i>Aster spinosus</i>	1836 Bentham

Renaming of "Aster Group" Part 2

Scientific Name IF	No.	Page	Scientific Name UF	Scientific Name FNA	Original (Basionym)	Published
Aster laevis	01	291	Aster laevis	Sympyotrichum laeve	Aster laevis	1753 Linnaeus
Aster hesperius	02	291	Aster hesperius	Sympyotrichum lanceolatum var. hesperi	Aster hesperius	1884 Gray
Aster welshii	03	291	Aster welshii	Sympyotrichum welshii	Aster welshii	1994 Cronquist
Aster eatonii	04	292	Aster eatonii	Sympyotrichum eatonii	Aster bracteolatus	1841 Nuttall
Aster foliaceus	05	292	Aster foliaceus	Sympyotrichum foliaceum	Aster foliaceous	1836 Lindley
Aster spathulatus	06	292	Aster spathulatus	Sympyotrichum spathulatum	Aster spathulatus	1834 Lindley
Aster ascendens	07	294	Aster ascendens	Sympyotrichum ascendens	Aster ascendens	1834 Lindley
Aster falcatus	08	296	Aster falcatus	Sympyotrichum falcatum	Aster falcatus	1834 Lindley
Aster pansus	09	298	Aster pansus	Sympyotrichum ericoides var. pansum	Aster multiflorus var. pansus	1928 Blake
Aster campestris	10	298	Aster campestris	Sympyotrichum campestre	Aster campestris	1841 Nuttall
Aster pauciflorus	11	298	Aster pauciflorus	Almutaster pauciflorus	Aster pauciflorus	1818 Nuttall
Aster integrifolius	12	298	Aster integrifolius	Eurybia integrifolia	Aster integrifolius	1841 Nuttall
Aster wasatchensis	13	300	Aster wasatchensis	Herrickia wasatchensis	Aster glaucus var. wasatchensis	1895 Jones
Aster glaucodes	14	300	Aster glaucodes	Herrickia glauca	Eucephalus glaucus	1841 Blake
Aster engelmannii	15	300	Aster engelmannii	Eucephalus engelmannii	Aster elegans var. engelmannii	1871 Eaton
Aster perelegans	16	300	Aster perelegans	Eucephalus elegans	Eucephalus elegans	1841 Nuttall
Aster sibiricus	17	302	Aster sibiricus	Eurybia merita	Aster sibiricus	1753 Linnaeus
Aster alpinus	18	302	\$	Oreostemma alpinum	Aplopappus alpinus	1841 Torrey
Aster scopolorum	19	302	Aster scopolorum	Ionactis alpina	Chrysopsis alpina	1834 Nuttall
Aster frondosus	20	304	Aster frondosus	Sympyotrichum frondosum	Tripolium frondosum	1841 Nuttall
Aster brachyactis	21	304	Aster brachyactis	Sympyotrichum ciliatum	Tripolium angustum	1834 Lindley

Renaming of *Haplopappus* and *Chrysanthemum*

<u>SciName IF</u>	<u>No.</u>	<u>Page</u>	<u>SciName UF</u>	<u>SciName FNA</u>	<u>Original (Basionym)</u>	<u>Published</u>
<i>Haplopappus spinulosus</i>	1	199	<i>Haplopappus spinulosus</i>	<i>Xanthisma spinulosum</i>	<i>Amellus spinosus</i>	1814 Pursh
<i>Haplopappus gracilis</i>	2	200	<i>Haplopappus gracilis</i>	<i>Xanthisma gracile</i>	<i>Dieteria gracilis</i>	1848 Nuttall
<i>Haplopappus lyallii</i>	3	200	\$	<i>Tonestus lyallii</i>	<i>Aplopappus lyallii</i>	1864 Kuntze
<i>Haplopappus peirsonii</i>	4	202	\$	<i>Lorandersonia peirsonii</i>	<i>Haplopappus eximius</i> var. <i>peirsonii</i>	1940 Keck
<i>Haplopappus alpinus</i>	5	202	\$	<i>Toiyabea alpina</i>	<i>Haplopappus alpinus</i>	1980 Anderson
<i>Haplopappus graniticus</i>	6	202	\$	<i>Tonestus graniticus</i>	<i>Haplopappus graniticus</i>	1985 Tiehm
<i>Haplopappus lanuginosus</i>	7	202	\$	<i>Stenotus lanuginosus</i>	<i>Aplopappus lanuginosus</i>	1874 Gray
<i>Haplopappus stenophyllus</i>	8	204	\$	<i>Nestotus stenophyllus</i>	<i>Aplopappus stenophyllus</i>	1874 Gray
<i>Haplopappus acaulis</i>	9	204	<i>Haplopappus acaulis</i>	<i>Stenotus acaulis</i>	<i>Chrysopsis acaulis</i>	1834 Nuttall
<i>Haplopappus armerioides</i>	10	204	<i>Haplopappus armerioides</i>	<i>Stenotus armerioides</i>	<i>Stenotus armerioides</i>	1841 Nuttall
<i>Haplopappus carthamoides</i>	11	205	\$	<i>Pyrrocoma carthamoides</i>	<i>Pyrrocoma carthamoides</i>	1833 Hooker
<i>Haplopappus radiatus</i>	12	205	\$	<i>Pyrrocoma radiata</i>	<i>Pyrrocoma radiata</i>	1841 Nuttall
<i>Haplopappus croceus</i>	13	205	<i>Haplopappus croceus</i>	<i>Pyrrocoma crocea</i>	<i>Aplopappus croceus</i>	1864 Gray
<i>Haplopappus insecticurus</i>	14	205	\$	<i>Pyrrocoma insecticurus</i>	<i>Aplopappus insecticurus</i>	1900 Henderson
<i>Haplopappus apargioides</i>	15	206	\$	<i>Pyrrocoma apargioides</i>	<i>Aplopappus apargioides</i>	1868 Gray
<i>Haplopappus clementis</i>	16	206	<i>Haplopappus clementis</i>	<i>Pyrrocoma clementis</i>	<i>Pyrrocoma clementis</i>	1900 Rydberg
<i>Haplopappus uniflorus</i>	17	206	<i>Haplopappus lanceolatus</i>	<i>Pyrrocoma uniflora</i>	<i>Donia uniflorus</i>	1834 Hooker
<i>Haplopappus lanceolatus</i>	18	208	<i>Haplopappus lanceolatus</i>	<i>Pyrrocoma lanceolata</i>	<i>Donia lanceolata</i>	1834 Hooker
<i>Haplopappus hirtus</i>	19	210	<i>Haplopappus hirtus</i>	<i>Pyrrocoma hirta</i>	<i>Asplopappus hirtus</i>	1884 Gray
<i>Haplopappus racemosus</i>	20	210	<i>Haplopappus racemosus</i>	<i>Pyrrocoma racemosa</i>	<i>Homopappus racemosus</i>	1841 Nuttall
<i>Haplopappus rusbyi</i>	21	212	<i>Haplopappus rusbyi</i>	<i>Isocoma rusbyi</i>	<i>Isocoma rusbyi</i>	1906 Greene
<i>Haplopappus leverichii</i>	22	212	<i>Haplopappus leverichii</i>	<i>Isocoma humilis</i>	<i>Isocoma humilis</i>	1991 Nesom
<i>Haplopappus scopulorum</i>	23	214	<i>Haplopappus scopulorum</i>	<i>Chrysanthemus scopulorum</i>	<i>Bigelovia menziesii</i> var. <i>scopulorum</i>	1895 Jones
<i>Haplopappus linearifolius</i>	24	214	<i>Haplopappus linearifolius</i>	<i>Ericameria linearifolia</i>	<i>Aplopappus linearifolius</i>	1836 de Candolle
<i>Haplopappus cooperi</i>	25	214	\$	<i>Ericameria cooperi</i>	<i>Bigelovia cooperi</i>	1873 Gray
<i>Haplopappus laricifolius</i>	26	216	<i>Haplopappus laricifolius</i>	<i>Ericameria laricifolia</i>	<i>Aplopappus laricifolius</i>	1853 Gray
<i>Haplopappus cuneatus</i>	27	216	\$	<i>Ericameria cuneata</i>	<i>Aplopappus cuneatus</i>	1873 Gray
<i>Haplopappus watsonii</i>	28	216	<i>Haplopappus watsonii</i>	<i>Ericameria watsonii</i>	<i>Aplopappus watsonii</i>	1880 Gray
<i>Haplopappus cervinus</i>	29	216	<i>Haplopappus cervinus</i>	<i>Ericameria cervina</i>	<i>Haplopappus cervinus</i>	1873 Watson
<i>Haplopappus nanus</i>	30	218	<i>Haplopappus nanus</i>	<i>Ericameria nana</i>	<i>Ericameria nana</i>	1841 Nuttall
<i>Haplopappus macronema</i>	31	218	<i>Haplopappus macronema</i>	<i>Ericameria discoidea</i>	<i>Macronema discoidea</i>	1841 Nuttall
<i>Haplopappus suffruticosus</i>	32	218	\$	<i>Ericameria suffruticosa</i>	<i>Macronema suffruticosas</i>	1841 Nuttall
<i>Haplopappus bloomeri</i>	33	220	\$	<i>Ericameria bloomeri</i>	<i>Aplopappus bloomeri</i>	1865 Gray
<i>Haplopappus crispus</i>	34	220	<i>Haplopappus crispus</i>	<i>Ericameria crispa</i>	<i>Haplopappus crispus</i>	1983 Anderson
<i>Haplopappus zionis</i>	35	220	<i>Haplopappus zionis</i>	<i>Ericameria zionis</i>	<i>Haplopappus zionis</i>	1983 Anderson
<i>Chrysanthemus parryi</i>	1	36	<i>Chrysanthemus parryi</i>	<i>Ericameria parryi</i>	<i>Linosyris parryi</i>	1863 Gray
<i>Chrysanthemus nauseosus</i>	2	37	<i>Chrysanthemus nauseosus</i>	<i>Ericameria nauseosa</i>	<i>Chrysocoma nauseosa</i>	1814 Pallas
<i>Chrysanthemus paniculatus</i>	3	38	<i>Chrysanthemus paniculatus</i>	<i>Ericameria paniculata</i>	<i>Bigelovia paniculata</i>	1873 Gray
<i>Chrysanthemus teretifolius</i>	4	39	\$	<i>Ericameria teretifolia</i>	<i>Linosyris teretifolia</i>	1857 Durand
<i>Chrysanthemus albidus</i>	5	40	<i>Chrysanthemus albidus</i>	<i>Ericameria albida</i>	<i>Bigelovia albida</i>	1882 Jones
<i>Chrysanthemus greenei</i>	6	41	<i>Chrysanthemus greenei</i>	<i>Chrysanthemus greenei</i>	<i>Bigelovia greenei</i>	1876 Gray
<i>Chrysanthemus humilis</i>	7	42	\$	<i>Chrysanthemus humilis</i>	<i>Chrysanthemus humilis</i>	1896 Greene
<i>Chrysanthemus viscidiflorus</i>	8	43	<i>Chrysanthemus viscidiflorus</i>	<i>Chrysanthemus viscidiflorus</i>	<i>Chrysanthemus viscidiflorus</i>	1834 Hooker
<i>Chrysanthemus linifolius</i>	9	44	<i>Chrysanthemus linifolius</i>	<i>Lorandersonia linifolia</i>	<i>Chrysanthemus linifolius</i>	1896 Greene
<i>Chrysanthemus vaseyi</i>	10	45	<i>Chrysanthemus vaseyi</i>	<i>Chrysanthemus vaseyi</i>	<i>Bigelovia vaseyi</i>	1876 Gray
<i>Chrysanthemus depressus</i>	11	46	<i>Chrysanthemus depressus</i>	<i>Chrysanthemus depressus</i>	<i>Chrysanthemus depressus</i>	1848 Nuttall
<i>Chrysanthemus pulchellus</i>	12	47	<i>Chrysanthemus pulchellus</i>	<i>Lorandersonia pulchella</i>	<i>Linosyris pulchella</i>	1852 Gray
<i>Chrysanthemus gramineus</i>	13	48	\$	<i>Cuniculotinus gramineus</i>	<i>Chrysanthemus gramineus</i>	1916 Hall
<i>Chrysanthemus eremobius</i>	14	49	\$	<i>Chrysanthemus eremobius</i>	<i>Chrysanthemus eremobius</i>	1983 Anderson