



Synthyris oblongifolia

**Annual Report 2011:
Progress Toward a New
Flora of New Mexico**

by

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SUMMARY

The following New Mexico counties were surveyed in 2011 for additions to the Flora of New Mexico: Chaves, Doña Ana, Eddy, Lea, Lincoln, and Otero. Within White Sands Missile Range, collections were also made in the following counties: Doña Ana, Lincoln, Otero, and Socorro. A total of 828 specimens were collected throughout the state and numerous high quality photographs of endemic and rare species were acquired. Most of New Mexico, especially the southeast, experienced extremely low precipitation in the fall, winter, and spring. Precipitation for the remainder of the collecting season was average or below average. Consequently, much of the flora never bloomed and what did bloom was often in bloom at atypical times, spring or early summer flowers in the late summer or fall.

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FIELD BASED ACTIVITIES

2011 Fieldwork

The field season began 11 April 2011 and was completed 16 November 2011. The White Sands Missile Range Herbarium was visited on November 14-16, 2011 to search for additional records. 828 specimens were collected and pressed by Ken Heil and Steve O'Kane. Other collectors that participated in the New Mexico Flora Project included: Dave Anderson (White Sands Missile Range), Patrick Alexander (NMSU), Greg Selby (White Sands Missile Range), Gregory Penn (NMSU), J. Mark Porter (Rancho Santa Ana Botanic Garden, Gene Jercinovic (Deming), Arnold Clifford (Navajo Nation), Ilyse Gold (Carson National Forest), and Ken Stabinsky (Ft. Bliss). Several locations were visited two to three times (number of visits in parentheses). If no number is given then the site was visited once.

Catron County: Gila National Forest: 22 miles north of Apache Creek; 7.5 miles south of Apache Creek on F.S. Road 94; Negrito Creek Bridge.

Chaves County: Bottomless Lakes State Park (3); Bitter Lakes National Wildlife Refuge (2); Guádaupe Mountains: F.S. Road 67 (2), Bullis Canyon, Bear Canyon (2), Sargent Canyon (private, BLM, Forest Service); Roswell (3); Mescalero Dunes (2); Railroad Mountain Road north of Roswell; Dunken Road in north Roswell.

Cibola County: Zuni Mountains, Cibola National Forest.

Doña Anna County: White Sands Missile Range: Coker Site, Main Post, Lake Lucero, Bennett Mountain, Lewis Mining Camp, Rock House Spring, Stinking Spring; San Andres National Wildlife Area (Upper Ash Spring; Frenger Park, Las

Cruces; Organ Mountains (Pine Tree Trail); Fort Bliss (Long Canyon).

Eddy County: Artesia; Plaza de San Jose, Carlsbad (2); Carlsbad pond along the Pecos River; Brantley Lake State Park; limestone hills 3 miles north of Carlsbad; Yeso Hill south of White City.

Grant County: Piños Altos Range (Myer Canyon).

Lea County: Tatum (3); Lovington (2) (Chaparral Lake); Dunes near Jal (2); Highway 18 north of Jal; Laguna Playa; Eunice; US Highway 62/180 near Hobbs; Hobbs at entrance to Ocotillo Golf Course.

Lincoln County: Bonito Lake (3); White Sands Missile Range (Oscura Mountains, Jim Peak Road and Mound Spring); Carrizozo (2); White Oaks and Jicarilla Mountains, Hoecradle Canyon; Gallinas Mountains; Sierra Blanca Mountains: Forest Service Road 532, Lookout Mount, Eagle Creek Trail, Buck Mountain Road (2); Ruidoso (2); Fort Stanton; F.S. Road 443 east of Ruidoso; Capitan Mountains (Pierce Canyon Lincoln National Forest).

Otero County: White Sands Missile Range (between Main Post and Oro Grande Hackleberry Reservoir; Alamogordo (2); Guadalupe Mountains: F.S. Road 265, F.S. Road 67; foothills of Guadalupe Mountains near Pup Canyon and Six Shooter Canyon (2); Brokeoff Mountains-Tank Canyon (2); Sacramento Mountains: James Canyon along Highway 82, 3 miles west of junction of Highway 82 and F.S. Road 6563, Bailey Canyon Road (2), Silver Canyon, F.S. Road 640 (2); Hughes Canyon, Rogers Ruins Road, Peck Canyon, "S Trestle Trail, Rio Peñasco Road (017) (2), Scott Able Canyon Road, La Luz Canyon Road, Russia Canyon, Aqua Chiquita Road, Woody Logging Area (F.S. Road 5583).

McKinley County: Zuni Indian Reservation near Goat Hill, Zuni Mountains.

Rio Arriba County: Carson National Forest (Jicarilla District) at Caracas Canyon.

San Juan County: Navajo Nation near Crystal (1).

Socorro County: White Sands Missile Range: Chupadera Mesa, Sand Mountain, Ozanne Spring Draw, Garden Spring Canyon.

Taos County: Chevron Questa Mine (3).

NEW COUNTY RECORDS.

In total, 282 new county records were discovered. These are listed below by county.

Chaves County

- Abutilon fruticosum* Guillemin & Perrottet Shrubby Indian-mallow
Acalypha neomexicana Müller Argoviensis New Mexico copper-leaf
Acleisanthes lanceolata (Wooton) R.A. Levin Lance-leaf moonpod
Acourtia thurberi (A. Gray) Reveal & King Fluff-root
Ailanthus altissima (Miller) Swingle Tree-of-heaven
Aloysia wrightii (A. Gray) Heller ex Abrams Wright's bee-bush
Alternanthera caracasana Kunth Khaki-weed
Ambrosia confertiflora A.P. de Candolle Mexican ragweed
Andropogon gerardii Vitmann var. *gerardii* Big bluestem
Argyrosma microphylla (Mettenius ex Kuhn) Windham Little-leaf cliffbrake
Asclepias asperula (Decaisne) Woodson subsp. *asperula* Spider milkweed
Astrolepis sinuata subsp. *sinuata* (Lagasca ex Swartz) D.M. Bentham & Windham Wavy cloakfern
Berberis haematocarpa Wooton Red Oregon-grape
Brickellia rusbyi A. Gray Rusby's brickelbush
Bromus porteri (Coulter) Nash Porter's brome
Castilleja integra A. Gray Southwestern paintbrush
Ceanothus greggii A. Gray var. *greggii* Mojave buckbrush
Cercocarpus breviflorus A. Gray var. *breviflorus* Desert mountain mahogany
Cheilanthes feei Moore Santa Fe lipfern
Chloracantha spinosa (Bentham) Nesom Mexican devilweed
Descurainia californica (A. Gray) O.E. Schulz Sierran tansy-mustard
Dieteria canescens (Pursh) Nuttall var. *aristata* (Eastwood) Morgan & Hartman Sandy-daisy
Echinocereus triglochidiatus Engelman Claret-cup cactus
Echinocereus viridiflorus Engelman var. *chloranthus* (Engelman) Backeberg Nylon hedgehog cactus
Elaeagnus angustifolia L. Russian olive
Engelmannia peristenia (Rafinesque) Goodman & Lawson Engelman's daisy
Eragrostis curvula (Schrader) Nees Weeping lovegrass
Eragrostis pectinacea (Michaux) Nees ex Steudel var. *pectinacea* Carolina lovegrass
Eriochloa contracta A.S. Hitchcock Prairie cupgrass
Erodium cicutarium (L.) L'Heretier ex Aiton Filaree
Galium microphyllum A. Gray Bract-leaf bedstraw
Galium multiflorum Kellogg var. *multiflorum* Shrubby bedstraw
Galium trifidum L. var. *subbiflorum* Wiegand Three-petal bedstraw
Gleditsia triacanthos L. Honey locust
Gymnosperma glutinosum (Sprengel) Lessing Gumhead
Hedeoma reverchonii A. Gray var. *serpyllifolia* (Small) Irving
Juglans microcarpa Berlandier var. *microcarpa* Little walnut
Lamium amplexicaule L. Henbit
Krascheninnikovia lanata (Pursh) Meeuse & Smits Winterfat
Lepidium crenatum (Greene) Rydberg Alkali pepperweed
Lepidium lasiocarpum Nuttall var. *lasiocarpum* Shaggy-fruit pepperweed

Lorandersonia baileyi (Wooton & Standley) Urbatsch, Roberts & Neubig Bailey's rabbitbrush
Mammillaria meiacantha Engelman Little nipple cactus
Maurandya antirrhiniflora Humboldt & Bonpland ex Willdenow Roving sailor
Medicago lupulina L. Black medic
Melilotus albus Medikus White sweet-clover
Mentzelia perennis Wooton Wooton's stickleaf
Morus alba L. White mulberry
Nama xylopodum (Wooton & Standley) C.L. Hitchcock
Oenothera hexandra (Ortega) W.L. Wagner & Hoch subsp. *gracilis* (Wooton & Standley) W.L. Wagner & Hoch Harlequin-bush
Oenothera lavandulifolia Torrey & A. Gray Lavender-leaf sundrops
Oenothera villosa Thunberg subsp. *strigosa* (Rydberg) W. Dietrich & P.H. Raven Hairy evening-primrose
Opuntia engelmannii Salm-Dyck ex Engelman Engelman's prickly pear
Pellaea glabella Mettenius ex Kuhn subsp. *simplex* (Butters) A. Löve & D. Löve Smooth cliffbrake
Perityle quinqueflora (Steyermark) Shinners Five-flower rock-daisy
Petrophyton caespitosum (Nuttall) Rydberg Rocky Mountain rockmat
Phlox triovulata Thurber ex Torrey Three-seeded phlox
Phoradendron juniperinum Engelman ex A. Gray var. *juniperinum* Juniper mistletoe
Pinus edulis Engelman Piñon pine
Poa annua L. Annual bluegrass
Polygala scoparioides Chodat Broom milkwort
Populus deltoides Bartram ex H. Marshall subsp. *wislizeni* (S. Watson) Dorn Rio Grande cottonwood
Portulaca oleracea L. var. *oleracea* Garden purslane
Prunus serotina Ehrhart var. *virgens* (Wooton & Standley) Black cherry
Prunus virginiana L. var. *melanocarpa* (A. Nelson) Sargent Choke cherry
Salvia summa A. Nelson Great sage
Sarcocornia utahensis (Tidestrom) A.J. Scott Utah glasswort
Schoenoplectus americanus (Persoon) Volkart ex Schinz & R. Keller Chairmaker's bulrush
Scorzonera laciniata L. Cutleaf vipergrass
Sida abutifolia Miller Spreading fan-petal
Sporobolus airoides (Torrey) Torrey Alkali sacaton
Taraxacum officinale G.H. Weber ex F.H. Wiggins Common dandelion
Yucca treculeana Carrière Torrey's yucca

Total = 73

Doña Ana County

Berberis haematocarpa Wooton Red Oregon-grape
Brickellia floribunda A. Gray Chihuahuan brickelbush
Celtis sp. Elm
Cercocarpus breviflorus A. Gray var. *breviflorus* Desert mountain mahogany
Comandra umbellata (L.) Nuttall subsp. *pallida* (A.P. de Candolle) Piehl Bastard-toadflax
Convolvulus equitans Bentham Texas bindweed
Conyza ramosissima Cronquist Dwarf horseweed

Dichondra brachypoda Wooton & Standley New Mexico pony's-foot
Euphorbia antisiphilitica Zuccarini Candelilla
Ficus carica L. Edible fig
Fraxinus velutina Torrey Arizona ash
Hedeoma hyssopifolium A. Gray Aromatic false-pennyroyal
Ipomoea costellata Torrey Crested money-glory
Kallstroemia parviflora Norton Warty caltrop
Menodora scabra A. Gray Rough menodora
Mimulus guttatus A.P. de Candolle Seep monkey-flower
Morus microphylla Buckley Texas mulberry
Oenothera serrulata Nutt. Yellow sundrops
Paronychia jamesii Torrey & A. Gray Hanes's nailwort
Peganum harmala L. African-rue
Phoradendron hawksworthii Wiens Hawksworth's mistletoe
Phoradendron juniperinum Engelmann ex A. Gray var. *juniperinum* Juniper mistletoe
Populus deltoides Bartram ex H. Marshall subsp. *wislizeni* (S. Watson) Dorn Rio Grande
cottonwood
Pseudognaphalium leucocephalum (A. Gray) A. Anderberg White rabbit-tobacco
Sicyos parviflorus Willdenow Small-bur cucumber
Sonchus asper (L.) Hill Spiny-leaf sow-thistle
Ptelea trifoliata L. Hoptree
Solanum stoloniferum Schlectendal Fendler's nightshade
Tamarix parviflora A.P. de Candolle Small-flowered tamarisk
Vitis arizonica Engelmann Arizona grape
Ungnadia speciosa Endlicher Mexican buckeye
Veronica anagallis-aquatica L. Blue speedwell
Veronica arvensis L. Corn speedwell
Veronica peregrina L. var. *xalapensis* (Humboldt, Bonpland, & Kunth) Pennell Neckweed
purslane speedwell
Xanthisma spinulosum (Pursh) Morgan & Hartman var. *chihuahuanum* (Turner & Hartman)
Morgan & Hartman Lacy sleep-daisy

Total = 35

Eddy County

Ailanthus altissima (Miller) Swingle Tree-of-heaven
Chenopodium glaucum L. var. *salinum* (Standley) B. Boivin Rocky Mountain goosefoot
Cryptantha barbiger (A. Gray) Greene Bearded cat's-eye
Echinochloa crus-galli (L.) Beauvois Barn yard grass
Eleocharis acicularis (L.) Roemer & Schultes Needle spike-rush
Krameria grayi Rose & Painter White ratany
Lactuca serriola L. Prickly lettuce
Lepidium eastwoodiae Wooton Eastwood's pepperweed
Lepidium lasiocarpum Nuttall var. *lasiocarpum* Shaggy-fruit pepperweed
Nama stevensii C.L. Hitchcock Steven's fiddle-leaf
Polygonum aviculare L. Knotweed
Portulaca umbraticola Kunth subsp. *lanceolata* (Engelmann) Matthews Chinese hats

Solidago wrightii A. Gray var. *wrightii* Wright's goldenrod
Symphotrichum subulatum (Michaux) Nesom var. *parviflorum* (Nees) S.D. Sundberg Lawn
aster
Taraxacum officinale G.H. Weber ex F.H. Wiggins Common dandelion

Total = 15

Grant County

Ditaxis cyanophylla Wooton & Standley Silverbush
Ipomopsis macombii (Torrey ex A. Gray) V. Grant Maccomb's skyrocket
Rynchosia senna Gillies ex Hooker var. *texana* (Torrey & A. Gray) M.C. Johnston Texas
snout-bean

Total = 3

Lea County

Ailanthus altissima (Miller) Swingle Tree-of-heaven
Allium kunthii G. Don Kunth's onion
Alternanthera caracasana Kunth Khaki-weed
Ambrosia confertiflora A.P. de Candolle Mexican ragweed
Aristida arizonica Vasey Arizona threeawn
Asclepias emoryi (Greene) Vail Emory's comet
Baileya multiradiata Harvey & A. Gray ex A. Gray Desert marigold
Calamovilfa gigantgea (Nuttall) Scribner & Merrill Big sandreed
Campsis radicans (L.) Seem. Ex Bureau Red trumpet flower
Chamaesyce serpyllifolia (Persoon) Small Thyme-leaf spurge
Chenopodium album L. var. *album* Lamb's quarter
Chilopsis linearis (Cavanilles) Sweet subsp. *linearis* Desert-willow
Cirsium ochrocentrum A. Gray subsp. *ochrocentrum* Yellow-spine thistle
Conyza canadensis (L.) Cronquist var. *canadensis* Canadian horseweed
Cylindropuntia imbricata ((Haworth) F.M. Knuth Cane cholla
Cyperus odoratus L. var. *squarrosus* (Britton) Jones Rusty flat-sedge
Dalea candida Muhlenberg ex Willdenow var. *candida* White prairie-clover
Dalea purpurea Ventenat var. *purpurea* Purple prairie-clover Purple prairie-clover
Datura wrightii Regel Sacred thorn-apple
Descurainia incisa (Engelmann) ex A. Gray Britton subsp. *incisa* Cut-leaf tansy-mustard
Descurainia pinnata (Walter) Britton subsp. *ochroleuca* (Wooton) Detling Western tansy-
mustard
Dieteria asteroides Torrey var. *glandulosa* (B.L. Turner) Morgan & Hartman Starry spineaster
Dimorphocarpa wislizeni (Engelmann) Rollins Spectacle-pod
Elaeagnus angustifolia L. Russian olive
Eragrostis pectinacea (Michaux) Nees ex Steudel var. *miserrima* (Fournier) J. Reeder Desert
lovegrass
Erigeron divergens Torrey & A. Gray Spreading fleabane
Erigeron flagellaris A. Gray Whiplash fleabane
Erodium cicutarium (L.) L'Heretier ex Aiton Filaree
Euphorbia davidii Subils David's spurge

Gleditsia triacanthos L. Honey locust
Helianthus annuus L. Common sunflower
Heterotheca canescens (A.P. de Candolle) Shinners Gray camphorweed
Heterotheca villosa (Pursh) Shinners var. *angustifolia* (Rydberg) Harms Hairy golden-aster
Isocoma pluriflora (Torrey & A. Gray) Greene
Kochia scoparia (L.) Roth Kochia
Lactuca serriola L. Prickly lettuce
Laennecia coulteri (A. Gray) Nesom Coulter's woolwort
Lepidium lasiocarpum Nuttall var. *lasiocarpum* Shaggy-fruit pepperweed
Lepidium montanum Nuttall Mesa pepperweed
Lonicera tatarica L. Twin sisters
Malva neglecta Wallroth Dwarf cheeseweed
Medicago lupulina L. Black medic
Medicago sativa L. Alfalfa
Melilotus albus Medikus White sweet-clover
Mentzelia strictissima (Wooton & Standley) J. Darlington Grassland blazingstar
Oenothera berlandieri (Spach) Steudel subsp. *berlandieri* Berlandier's sundrops
Oenothera coloradoensis (Rydb.) W.L. Wagner & Hoch subsp. *neomexicana* (Wooton) W.L. Wagner & Hoch New Mexico bee-blossom
Oenothera curtiflora W.L. Wagner & Hoch Velvet-weed
Oenothera hartwegii Bentham subsp. *fendleri* (A. Gray) W.L. Wagner & Hoch Hartweg's sundrops
Oenothera lavandulifolia Torrey & A. Gray Lavender-leaf sundrops
Oxalis corniculata L. var. *wrightii* (A. Gray) B.L. Turner Wright's yellow wood-sorrel
Pennisetum villosum R. Brown ex Fresenius Feathertop
Physalis hederifolia A. Gray var. *comata* (Rydberg) Waterfall Ivy-leaf ground-cherry
Phytolacca americana L. var. *americana* American pokeweed
Plantago major L. Great plantain
Poa pratensis L. subsp. *pratensis* Kentucky bluegrass
Polygonum erectum L. Erect knotweed
Populus alba L. White poplar
Psoraleidum tenuiflorum (Pursh) Rydberg Slimflower scurfpea
Salvia xsylvestris L. Woodland sage
Schoenoplectus tabernaemontani (C.C. Gmelin) Palla Softstem bulrush
Scorzonera laciniata L. Cutleaf vipergrass
Sisymbrium irio L. London rocket
Sisymbrium officinale (L.) Scopoli
Solanum dimidiatum Rafinesque Western horse-nettle
Sorghum halepense (L.) Persoon Johnson grass
Spermolepis divaricata (T. Walter) Rafinesque ex Seringe Spreading scaleseed
Spermolepis inermis (Nuttall ex A.P. de Candolle) Matthias & Constance Red River scaleseed
Stephanomeria tenuifolia (Rafinesque) Hall Lesser wire-lettuce
Symphotrichum subulatum (Michaux) Nesom var. *parviflorum* (Nees) S.D. Sundberg Lawn aster
Tamarix chinensis Loureiro Salt-cedar
Taraxacum officinale G.H. Weber ex F.H. Wiggins Common dandelion
Teucrium cubense Jacquin var. *densum* Jepson Coastal germander
Tetranuris acaulis (Pursh) Greene var. *caespitosa* A. Nelson Stemless rubberweed

Tribulus terrestris L. Puncture-vine
Typha angustifolia L. Narrowleaf cattail
Ulmus pumila L. Siberian elm
Xanthisma spinulosum (Pursh) Morgan & Hartman var. *chihuahuanum* (Turner & Hartman)
Morgan & Hartman Lacy sleep-daisy

Total = 78

Lincoln County

Agoseris aurantiaca (Hooker) Greene var. *aurantiaca* Orange-flowered agoseris
Ailanthus altissima (Miller) Swingle Tree-of-heaven
Alopecurus geniculatus L. Water foxtail
Angelica pinnata S. Watson Small-leaf angelica
Asplenium trichomanes L. Maidenhair spleenwort
Astragalus mollissimus Torr. Var. *earlei* (Greene ex Rydberg) Tidestrom
Brickellia simplex A. Gray Sonoran brickelbush
Chamaesyce hirta L. Pill-pod spurge
Chamaesyce hyssopifolia (L.) Small Hyssop-leaf spurge
Cheilanthes tomentosa Link Woolly lipfern
Convolvulus arvensis L. Bindweed
Conyza canadensis (L.) Cronquist var. *glabrata* (A. Gray) Cronquist Western horseweed
Corydalis aurea Willdenow subsp. *occidentalis* (Engelmann ex A. Gray) G. Ownbey
Descurainia incisa (Engelmann ex A. Gray) Britton subsp. *paysonii* (Detling) Rollins
Descurainia longepedicellata (Fournier) O.E. Schulz
Draba helleriana Greene var. *blumeri* C.L. Hitchcock Lumer's whitlow-grass
Elymus trachycaulus (Link) Gould subsp. *violaceus* (Hornemann) A. & D. Löve Purple
wheatgrass
Erysimum capitatum var. *nivale* (Greene) N.H. Holmgren Wallflower
Galium pilosum Aiton Hairy bedstraw
Hordeum murinum L. Wall barley
Hymenothrix wislizenii A. Gray Trans-Pecos thimblehead
Ipomoea hederacea Jacquin Ivy-leaf morning-glory
Lathyrus lanzwertii Kellogg var. *lanzwertii* Lanzwert's sweet-pea
Limosella aquatica L. Mudwort
Mirabilis glabra (S. Watson) Standley Smooth four-o'clock
Muhlenbergia fragilis Swallen Delicate muhly
Oenothera brachycarpa A. Gray Short-fruit evening primrose
Oenothera caespitosa Nuttall ex Fraser subsp. *macroglottis* (Rydberg) W.L. Wagner,
Stockhouse, & Klein Tufted evening-primrose
Oenothera flava (A. Nelson) Garrett subsp. *taraxacoides* (Wooton & Standley) W.L. Wagner
Yellow evening primrose
Pellaea glabella Mettenius ex Kuhn subsp. *simplex* (Butters) A. Löve & D. Löve Smooth
cliffbrake
Phacelia integrifolia Torrey var. *integrifolia* Gypsum scorpionweed
Phaseolous angustissimus A. Gray Narrow-leaf bean
Phemeranthus validulus (Greene) Kiger Stalked fameflower
Populus alba L. White poplar

Prunus emarginata (Douglas ex Hooker) D. Dietrich Bitter cherry
Salix monticola Bebb Park willow
Scorzonera laciniata L. Cutleaf vipergrass
Sphaeralcea digitata (Greene) Rydberg var. *digitata* Juniper globe-mallow
Sphaeralcea incana Torr. ex A. Gray Gray globe-mallow
Tamarix parviflora A.P. de Candolle Small-flowered tamarisk

Total = 40

Otero County

Ailanthus altissima (Miller) Swingle Tree-of-heaven
Condalia warnockii M.C. Johnston var. *warnockii* Crucillo
Cyperus schweinitzii Torrey Sand flat-sedge
Digetaria sanguinalis (L.) Scop Hairy crabgrass
Eriogonum wootonii (Reveal) Reveal Wooton's wild buckwheat
Gleditsia triacanthos L. Honey locust
Gutierrezia longifolia Greene Sacramento Mountain snakeweed
Hesperidanthus linearifolius (A. Gray) Rydberg Plains mustard
Kochia scoparia (L.) Roth Kochia
Leptochloa fusca (L.) Kunth subsp. *fascicularis* (Lamarck) N. Snow Bearded sprangletop
Oenothera suffulta (Engelmann) W.L. Wagner & Hoch subsp. *nealleyi* (Coulter) W.L. Wagner
& Hoch Nealley's bee-blossom
Pennellia longifolia (Bentham) Rollins Long-leaf thelypody
Prosopis pubescens Bentham Screwbean mesquite
Salix gooddingii Ball Gooding's willow
Schismus barbatus (Loefling ex L.) Thellung Bearded Mediterranean grass
Scorzonera laciniata L. Cutleaf vipergrass
Silene scouleri Hooker var. *hallii* (S. Watson) C.L. Hitchcock & Maguire Scouler's catchfly
Solidago wrightii A. Gray var. *adenophora* (Blake) Nesom Wright's goldenrod
Spermolepis divaricata (T. Walter) Rafinesque ex Seringe Spreading scaleseed
Veronica arvensis L. Corn speedwell
Veronica persica Poiret Bird's-eye speedwell

Total = 21

Rio Arriba County

Townsendia gypsophila Lowrey & Knight Gyp townsend-daisy

Total = 1

Socorro County

Artemisia filifolia Torrey Sand sage
Ayenia pilosa Cristobal Hairy ayenia
Baccharis wrightii A. Gray Wright's seep-willow
Brickellia eupatorioides (L.) Shinnars var. *chlorolepis* (Wooton & Standley) B. Turner False

boneset

Brickellia simplex A. Gray Sonoran brickelbush
Echinocactus horizontalis Lemaire Eagle-claw cactus
Geranium carolinianum L. Carolina geranium
Lathyrus eucosmus Butters & St. John Bush sweet-pea
Oenothera brachycarpa A. Gray Short-fruit evening primrose
Sedum wrightii A. Gray subsp. *priscum* R.T. Clausen Wright's stonecrop
Sonchus arvensis L. Field sow-thistle

Total = 11

Taos County

Centaurea diffusa Lamarck Diffuse knapweed
Centaurea stoebe L. Spotted knapweed
Laennecia schiedeana (Lessing) Nesom Pineland wool-wort
Tetraneris ivesiana Greene Ives rubberweed
Typha angustifolia L. Narrowleaf cattail

Total = 5

In total, 54 photographs of endemic, and/or rare plants were obtained.

Agalinis calycina Pennell Leoncita false foxglove
Agastache pallidiflora (Heller) Rydberg subsp. *neomexicana* (Briquet) R. Sanders New Mexico
giant-hyssop
Amsonia tharpi Woodson Tharp's bluestar
Anulocaulis leisolenus (Torrey) Standley var. *gypsogenus* (Waterfall) Spellenberg & Wooten
Gypsum ringstem
Anulocaulis leisolenus (Torrey) Standley var. *howardii* Spellenberg & Wooten
Aquilegia chaplinei Standley ex Payson Chapline's columbine
Argemone pinnatisecta (G.B. Ownbey) S.D. Cervantes & C.D. Bailey Sacramento prickly
poppy
Astragalus altus Wooton & Standley Tall milkvetch
Astragalus gypsodes Barneby Gypsum milkvetch
Astragalus kentrophyta A. Gray var. *neomexicanum* (Barneby) Barneby
Astragalus kerrii Knight & Cully Kerr's milkvetch
Astragalus missouriensis Nuttall var. *humistratus* Isley Pagosa milkvetch
Astragalus mollisimus Torr. var. *matthewsii* (S. Watson) Barneby Matthew's milkvetch
Astragalus neomexicanus Wooton & Standley New Mexico milkvetch
Chaetopappa hersheyi Blake Hershey's daisy
Cirsium inornatum Wooton & Standley Cloudcroft thistle
Cirsium vinaceum Wooton & Standley Sacramento Mountain thistle
Delphinium novomexicanum Wooton White Mountain larkspur
Desmodium metcalfei (Rose & Painter) Kearney & Peebles Metcalfe's ticktrefoil
Erigeron rybius G.L. Nesom Royal fleabane
Eriogonum gypsophilum Wooton & Standley Gypsum wild buckwheat

Eriogonum lachnogynum Torrey ex Bentham var. *sarahiae* (N.D. Atwood & A. Clifford)
 Reveal

Eriogonum wootonii (Reveal) Reveal

Escobaria villardii Castetter, Pierce & Schwerin Villard's pincushion cactus

Hedeoma pulcherrima Wooton & Standley Mescalero pennyroyal

Heterotheca villosa (Pursh) Shinnery var. *sierraeblandensis* Semple Sierra Blanca golden-aster

Heuchera wootonii Rydberg Wooton's alumroot

Hymenoxys vaseyi (A. Gray) Cockerell

Ionactis elegans (Soreng & Spellenberg) Nesom Sierra Blanca cliff daisy

Lupinus sierra-blancae Wooton & Standley Sierra Blanca lupine

Mentzelia filifolia J.J. Schenk & L. Hufford Threadleaf stickleaf

Mentzelia humilis (A. Gray) J. Darlington var. *guadalupensis* Spellenberg Guadalupe stickleaf

Monarda humilis (Torrey) Prather & Keith Low beebalm

Nama xylopodum (Wooton & Standley) C.L. Hitchcock Cliff nama

Packera sanguisorboides (Rydberg) W.A. Weber & A. Löve Burnet ragwort

Penstemon alamosensis Pennell & Nisbet Alamo beardtongue

Penstemon cardinalis Wooton & Standley subsp. *cardinalis* Scarlet penstemon

Penstemon cardinalis Wooton & Standley subsp. *regalis* (A. Nelson) Nisbet & R.C. Jackson
 Guadalupe penstemon

Penstemon neomexicanus Wooton & Standley New Mexico beardtongue

Perityle cernua (Greene) Shinnery Nodding cliff daisy

Perityle quinqueflora (Steyermark) Shinnery Five-flowered rock daisy

Phacelia cloudcroftensis N.D. Atwood Cloudcroft scorpionweed

Philadelphus microphyllus A. Gray var. *argyrocalyx* (Wooton) Henrickson Silvercup
 philadelphus

Physaria aurea (Wooton) O'Kane & Al-Shehbaz

Physaria lata (Wooton & Standley) O'Kane & Al-Shehbaz

Potentilla sierra-blancae Wooton & Rydberg Sierra cinquefoil

Salvia summa A. Nelson Supreme sage

Sedum integrifolium (Rafinesque) A. Nelson subsp. *neomexicanum* (Britton) Clausen New
 Mexico stone crop

Senecio sacramentanus Wooton & Standley Sacramento groundsel

Solidago wrightii A. Gray var. *guadalupensis* G.L. Nesom Guadalupe Mountain goldenrod

Sophora gypsophila Turner & Powell var. *guadalupensis* Turner Guadalupe mesquite bean

Synthyris oblongifolia (Pennell) Hufford & McMahon Sierra Blanca kittentails

Valeriana texana Steyermark Texas tobacco root

Yucca baileyi Wooton & Standley var. *intermedia* (McKelvey) Reveal Bailey's yucca

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Thanks and gratitude is given to the following individuals.

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San Juan College: Laurie Gruel, Merrill Adams, Sher Hruska, and Lisa Jennings.

White Sands Missile Range: Dr. David Anderson, Greg Selsby, and Junior Kerns.

Lincoln National Forest: Larry Cordova.

Bitter Lakes National Wildlife Refuge: Jeff Sanchez.

San Andreas National Wildlife Refuge: Kevin Cobble and Mara Weisenberger.

Collections from San Andreas National Wildlife Refuge (Housed at San Juan College)

- 33,387 *Vitis arizonica* Engelmann Arizona grape
33,388 *Oenothera suffrutescens* (Seringe) W.L. Wagner & Hoch Scarlet bee-blossom
33,389 *Ptelea trifoliata* L. Hoptree
33,390 *Aquilegia chrysantha* A. Gray (small flowered form) Yellow columbine
33,391 *Aquilegia chrysantha* A. Gray (normal size flowered form) Yellow columbine
33,392 *Cercocarpus breviflorus* A. Gray var. *breviflorus* Desert mountain mahogany
33,393 *Carex hystricina* Muhl. Ex Willd. Bottlebrush sedge
33,394 *Phoradendron hawksworthii* (Wiens) Wiens Hawksworth's mistletoe
33,395 *Fraxinus velutina* Torr. Velvet ash
33,396 *Comandra umbellata* (L.) Nutt. subsp. *pallida* (A. DC.) Piehl Pale bastard toadflax

2012 Proposed Fieldwork

There are 219 Rare, threatened and endemic plants found in New Mexico. Photographs have been taken for 190. 29 photographs are needed for the following plants.

- Anticlea mogollonensis* (Hess & Sivinski) Zomlefer & Judd Mogollon death camas. Gila region. Late July-August.
- Arida blepharophylla* (A. Gray) D.R. Morgan & R.L. Hartman La Playa Springs spine-aster. Not seen in New Mexico since 1851. Must acquire the photograph from near Presidio, Texas.
- Astragalus missouriensis* Nuttall var. *mimetes* Barneby Mimic milkvetch. Zuni Mountains. May-June.
- Astragalus siliceus* Barneby Flint Mountains milkvetch. Grows near Encino. We have a fair photo that needs to be replaced with a better one. Blooms in May.
- Brickellia chenopodina* (Greene) Robinson Gila brickellbush. Not seen since the early 1900's and is a questionable taxon. Drop from photograph list.
- Cirsium gilense* Wooton & Standley Gila thistle McKnight Canyon north of Mimbres. July-September
- Cuscuta fasciculata* Yuncker Santa Fe dodder Now a synonym of *Cuscuta umbellata* Kunth. Drop from photo list.
- Cuscuta warneri* Yuncker Warner's dodder. Need to acquire photograph from M. Costea.
- Ericameria nauseosa* (Pallas ex Pursh) Nesom & Baird var. *texensis* (L.C. Anderson) Nesom & Baird Guadalupe rabbitbrush. Blooms in late September to early October. Six-shooter canyon in Guadalupe Mountains. Existing photograph needs to be improved.
- Erigeron hessii* Nesom Hess' fleabane. Gila Wilderness, Whitewater Baldy. August-September. A 6 mile hike to the site.
- Helianthus praetermissus* E.E. Watson Lost sunflower. Not seen since 1851 and may not be a valid taxon. Drop from photograph list.
- Heuchera woodsiaephila* P.J. Alexander Capitan Peak alumroot. Capitan Wilderness Area near Capitan Peak. Blooms June-September.
- Hexalectris revoluta* Correll Curly crested coral-root. Only observed once in New Mexico, Guadalupe Mountains. Known from the Chisos Mountains, Texas. May-August.
- Hieracium brevipilum* Greene Mogollon hawkweed. Gila, Apache Cabin. August-September.
- Justicia wrightii* A. Gray Wright's justicia. This species is found approximately 3 miles north of Carlsbad. It did not bloom last year due to the drought. April-June.
- Lepidospartum burgessii* B.L. Turner Gypsum scalebroom. Found in Crow Flats north of Dell City Texas. A fair photograph needs to be replaced by a better one. August-September.

- Linum allredii* Sivinski & M.O. Howard Allred's flax. Yeso Hills south of White City. May-September.
- Microthelys rubrocallosa* (Robinson & Greenman) Garay Green medusa orchid. Known from one location in New Mexico. Searched for but not found. Acquire photograph from Ron Coleman.
- Muhlenbergia villiflora* A.S. Hitchcock var. *villosa* (Swallen) Morden Hairy muhly. Known from one location on Otero Mesa, Fort Bliss. Flowers after monsoons. We will attempt to acquire photograph with Kelly Allred.
- Packera cynthioides* (Greene) W.A. Weber & A. Löve Black Range groundsel. Found near Kingston and in the San Mateo Mountains. August-September.
- Penstemon linarioides* A. Gray subsp. *maguirei* Keck Maguire's beardtongue. Not seen in New Mexico for over 100 years. Populations may exist in Arizona. We plan to work with John Anderson, Arizona State Botanist to acquire a photograph. June-September.
- Phlox vermejoensis* B. Legger Vermejo phlox. Rio Costilla Ranch (private). Permission has been obtained for access. August.
- Physaria newberryi* A. Gray var. *yesicola* Sivinski Yeso twinpod. Found on Lucero Mesa, Isleta Indian Reservation. Attempt permission to acquire a photograph. April-May.
- Polygala rimulicola* Steyermark var. *mescalerorum* Wendt & Todsén Mescalero milkwort. White Sands Missile Range. Permission has been obtained for photographing. May.
- Rubus aliciae* Bailey Santa Fe raspberry. Probably not a good taxon. Drop from list.
- Rumex tomentellus* K.H. Rechinger Mogollon dock. Not seen since 1928. Drop from photograph list.
- Sclerocactus cloveriae* K.D. Heil & J. M. Porter subsp. *brackii* K.D. Heil & J.M. Porter Brack hardwall cactus. Nacimiento hills near Bloomfield. Late April-May.
- Solidago capulinensis* Cockerell & D. M. Anderson Capulin goldenrod. Capulin Mountain. September.
- Sphaeralcea wrightii* A. Gray Wright's globemallow. Scattered distribution. Use a Patrick Alexander photograph. April and after the monsoons.

Proposed 2012 Fieldwork To Acquire Photographs and Collect Plants

Late April: Bloomfield.

May: Zuni Mountains, Encino, White Sands Missile Range, Carlsbad

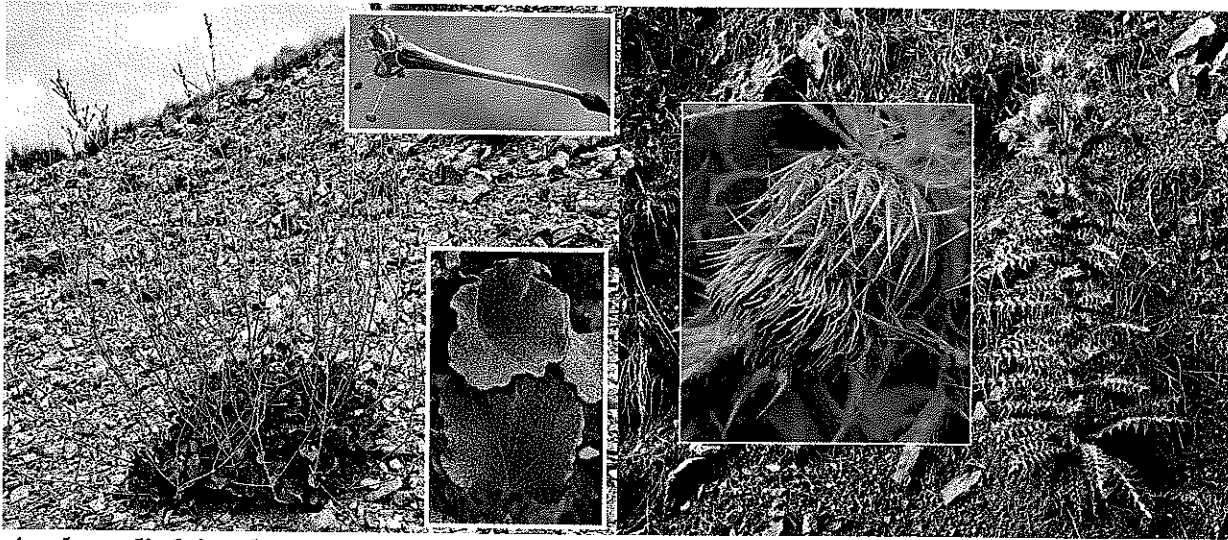
Mid July: Rio Costilla Ranch, Capitan Mountains, Gila Box.

August: Presideo, Texas, Big Bend, Texas, Crow Flats, Black Range and/or San Mateo Mountains.

September: Otero Mesa, Capulin Mountain, Guadalupe Mountains.

NEW RARE PLANT PHOTOS

The proposed new flora for the state will include photos of all plant species that are endemic to the state or that are listed as Rare by the New Mexico Rare Plant Technical Counsel. Following are examples of the rare plant photos acquired during the 2011 field season. The cover photo is of the rare state endemic *Synthyris oblongifolia*.



Anulocaulis leiosolenus var. *howardii*

Cirsium inornatum



Erigeron rybius

Heuchera wootonii



Monarda humilis

Phacelia cloudcroftensis



Potentilla sierrae-blancae

Sedum integrifolium subsp. *neomexicanum*



Senecio sacramentanus



Silene scouleri var. *grisea*



Solidago wrightii var. *guadelupensis*

Thelypodopsis vaseyi