

A Newsletter for the flora of New Mexico, from the Range Science Herbarium and Cooperative Extension Service, College of Agriculture and Home Economics, New Mexico State University.

In This Issue —

- Chama Plants 1
- Plant Reports 7
- *Ranunculus acris* 8

A Preliminary Catalog of the Vascular Plants of the Chama Land and Cattle Company—Frank Sims Ranch, Rio Arriba County, New Mexico

Kenneth D. Heil

San Juan College, Farmington, NM 87402

Steve L. O’Kane, Jr.

Department of Biology, University of Northern Iowa, Cedar Falls, IA 50614-0421

Abstract. A preliminary checklist of the vascular flora of the Chama Land & Cattle Company and the adjacent Frank Simms Ranch, Rio Arriba County is given. In total 80 families, 264 genera, 498 species, 1 hybrid species, 3 subspecies, and 4 varieties are known to occur in these 36,000 acre ranches in Rio Arriba County, New Mexico.

Introduction

In Rio Arriba County, the Chama Land and Cattle Company (CLCC) is located east of Chama and extends east to the Carson National Forest, north to near Colorado and approximately five miles south to the Cañones Box. The Simms Ranch is southeast and adjacent to CLCC. CLCC is owned by the Jicarilla Apache Indian Tribe and was purchased in June 1995 out of a bankruptcy proceeding. Frank Simms was retained by the Tribe to continue as general manager. The ranch consists of approximately 36,000 acres and contains the largest private elk heard in the world. Besides trophy elk hunting, other hunts include mule deer, bison, and wild turkey. Numerous lakes and streams provide excellent trout fishing.

The Study Area

The CLCC is located in the southern San Juan Mountains and is part of the watersheds of the Chama and Brazos Rivers (Figure 1). Together, CLCC and the Simms Ranch occupy approximately 36,000 acres. The highest point is Grouse Mesa 3475 m (11,403 ft.) and the lowest point is 2405 m (7900 ft.). Much of the study area was logged in the 1970s and 1980s. Some of the larger creeks and streams include the East and West Forks of the Brazos River, Poso Creek, Cañones Creek, and Willow Creek. There are numerous artificial lakes and ponds throughout the study area which include Hidden, No Tellum, North, Bobo, Sugar Loaf, Gary, and Poso Lakes. The two major land forms are Grouse Mesa, Sugar Loaf Mountain, and the large montane-subalpine park at the headwaters of the Brazos River.

Plant Communities (Dick-Peddie 1993)

Subalpine Coniferous Forest *Picea engelmannii* (Engelmann spruce), *Abies bifolia* var. *arizonica* (corkbark fir), *Juniperus communis* var. *depressa* (common juniper), *Ribes montigenum* (red prickly currant), *Mertensia lanceolata* (prairie bluebells), *Trifolium brandegeei* (Brandegees’ clover), *Erigeron coulteri* (Coulter’s fleabane), *Vaccinium myrtillus* (whortleberry), *Festuca idahoensis* (Idaho fescue), and *Festuca thurberi* (Thurber’s fescue).

Upper Montane Coniferous Forest *Abies concolor* (White fir), *Pseudotsuga menziesii* (Douglas-fir), *Populus tremuloides* (aspen), *Salix scouleriana* (Scouler’s willow), *Festuca arizonica* (Arizona fescue), *Erigeron eximus* (splendid daisy), *Erigeron formosissimus* (beautiful fleabane), and *Arnica cordifolia* (heartleaf arnica).

Lower Montane Coniferous Forest *Pinus ponderosa* (ponderosa pine), *Quercus gambelii* (Gambel oak), *Festuca arizonica* (Arizona fescue), *Muhlenbergia montana* (mountain muhly), *Wyethia arizonica*

(Continued on page 2, Chama Plants)

Botanice est Scientia Naturalis quae Vegetabilium cognitioem tradit.

— Linnaeus



(*Chama Plants*, continued from page 1)

(Arizona mules-ears), *Bahia dissecta* (rag-leaf bahia), *Heliomeris multiflora* (showy golden-eye), *Senecio eremophilus* subsp. *kingii* (King's ragwort), and *Solidago simplex* (Mount Albert golden-rod).

Montane Riparian *Populus angustifolia* (narrow leaf cottonwood), *Alnus incana* subsp. *tenuifolia* (thin-leaf alder), *Agrostis gigantea* (giant creeping bent-grass), *Agrostis scabra* (rough bent-grass), *Acer glabrum* (Rocky Mountain maple), *Cornus stolonifera* (red osier dogwood), *Salix bebbiana* (Bebb willow), *Salix planifolia* (diamond-leaf willow), *Carex microptera* (small-wing sedge), *Pedicularis groenlandica* (pink elephant), *Juncus mertensianus* (Merten's rush), and *Equisetum arvense* (common horse-tail).

Aquatics *Myriophyllum sibiricum* (short-spike watermilfoil), *Sagittaria latifolia* (broad-leaf arrowhead), *Alisma trivale* (water plantain), *Ranunculus aquatilis* (water buttercup), and *Elodea bifoliata* (two leaf waterweed).

Methodology

All habitat types, elevations, aspects, and geologies were inspected throughout the growing season, including lakes and ponds. Voucher specimens were made and the first duplicate deposited at San Juan College (SJNM). Second duplicates are at the University of Northern Iowa (ISTC). Additional duplicates, when available, will be distributed at a later date.

Acknowledgements

A very special thanks and Frank Simms and the CLCC. Appreciation is given to Pat Carpenter CLCC, and to the Jicarilla Tribe. Also thanks to those who helped in collecting: Dave Jamieson (Ft. Lewis College), Chick Keller (Los Alamos), Les Lundquist (San Juan College), and Wayne Mietty (Farmington). A special note of thanks is given to our wives, Marilyn Heil and Arlene Prather-O'Kane for their forbearance as botany widows.

General References

- Allred, K. 1997. A Field Guide to the Grasses of New Mexico, 2nd ed. Agricultural Experiment Station. New Mexico State Univ.
Allred, K. 2007. A Working Index of New Mexico Vascular Plant Names. Department of Animal & Range Sciences, New Mexico State Univ.
Carter, J. L. 1997. Trees and Shrubs of New Mexico. Mimbres. Pub.
Dick-Peddie, W. A. 1993. New Mexico vegetation, past, present, and future. Univ. of New Mexico Press, Albuquerque, NM.
Heil, K. D. and S. L. O'Kane, Jr. 2005. Catalog of the Four Corners Flora. Vascular plants of the San Juan River Drainage, Arizona, Colorado, New Mexico and Utah. Ninth Edition. Department of Math and Science, San Juan College.
Ivey, R. DeWitt. 2003. Flowering Plants of New Mexico, 4th ed. R.D. & I. Ivey, pubs., Albuquerque, New Mexico
Komarek, S. 1994. Flora of the San Juans. A Field Guide to the Mountain Plants of Southwestern Colorado. Kivakf Press.
Martin, W. C. and C. R. Hutchins. 1981. A Flora of New Mexico. Volumes I and II. J. Cramer.
Weber, William A and Ronald C. Wittman. 2001. Colorado Flora: Western Slope 3rd Edition. Univ. Press of Colorado, Boulder.

The Catalog

FERNS

Aspleniaceae (Spleenwort Family)

Asplenium septentrionale (L.) Hoffm. Forked spleenwort
Asplenium trichomanes L. Maidenhair spleenwort

Dennstaedtiaceae (Bracken Family)

Pteridium aquilinum (L.) Kuhn Bracken Fern

Dryopteridaceae (Shield-fern Family)

Cystopteris fragilis (L.) Bernh. Brittle bladder-fern
Cystopteris reevesiana Lellinger Reeves bladder-fern
Dryopteris felix-mas (L.) Schott Male-fern
Woodsia neomexicana Windham New Mexico cliff-fern
Woodsia oregana D. C. Eaton Oregon cliff-fern

Polypodiaceae (Polypody Family)

Polypodium hesperium Maxon Western polypody

Pteridaceae (Lip-fern Family)

Cheilanthes feei Moore Santa Fe lip-fern
Cryptogramma acrostichoides R. Br. American rockbrake

FERN ALLIES

Equisetaceae (Horse-tail Family)

Equisetum arvense L. Field horsetail
Equisetum hyemale L. Rough horsetail

Isoëtaceae (Quillwort Family)

Isoetes bolanderi Engelm. Bolaner's quillwort

Selaginellaceae (Little-Clubmoss Family)

Selaginella densa Rydb. Lesser spikmoss

GYMNOSPERMS

Cupressaceae (Cedar Family)

Juniperus communis L. var. *depressa* Pursh Common juniper
Juniperus scopulorum Sarg. Rocky Mountain juniper

Pinaceae (Pine Family)

Abies bifolia A. Murray var. *arizonica* (Mirriam) O'Kane & K.D. Heil Cork-bark fir
Abies concolor (Gord & Glend.) Hoopes White fir
Picea engelmannii Parry Engelmann spruce
Picea pungens Engelm. Colorado blue spruce
Pinus ponderosa Laws. var. *scopulorum* Engelm. Ponderosa pine
Pinus strobiformis Engelm. White pine
Pseudotsuga menziesii (Mirbel) Franco var. *glauca* (Mayr) Franco Douglas-fir

ANGIOSPERMS

Aceraceae (Maple Family)

Acer glabrum Torr. Rocky Mountain maple
Acer negundo L. Box elder

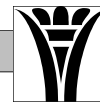
Adoxaceae (Adoxa Family)

Adoxa moschatellina L. Moschatel
Sambucus racemosa L. var. *microbotrys* (Rydb.) K. & P. Red elderberry

Agavaceae (Agave Family)

Yucca baileyi Woot. & Standl. Navajo yucca

(Continued on page 3, *Chama Plants*)



(Chama Plants, continued from page 2)

Alismataceae (Water-plantain, Arrowhead Family)

Alisma trivale Pursh Northern water-plantain
Sagittaria cuneata Sheld. Arum-leaf arrowhead

Alliaceae (Onion Family)

Allium cernuum Roth Nodding onion
Allium geyeri S. Wats. var. *geyeri* Geyer's onion
Allium geyeri S. Wats. var. *tenerum* M. E. Jones Bubil onion

Amaranthaceae (Amaranth Family)

Amaranthus albus L. Prostrate pigweed

Apiaceae (Parsley Family)

Contioselinum scopulorum (A. Gray) Coult. & Rose Rocky Mountain hemlock parsley
Cymopterus lemmonii (Coulter & Rose) Dorn Alpine mountain-parsley
Cymopterus longilobus (Rydb.) W.A. Weber Wavewing
Heracleum lanatum Michaux Common cow-parsnip
Osmorhiza depauperata Philippi Sweet cicely
Oxypolis fendleri (A. Gray) Heller Fendler's cowbane

Apocynaceae (Dogbane Family)

Apocynum androsaemifolium L. var. *androsaemifolium* Spreading dogbane

Araceae (Arum Family)

Lemna minuta H. B. K. Least duckweed

Araliaceae (Ginseng Family)

Aralia racemosa L. subsp. *bicrenata* (Wooton & Standley) Welsh & Atwood American spikenard

Asclepiadaceae (Milkweed Family)

Asclepias subverticillata (A. Gray) Vail Horse-tail milkweed

Asteraceae (Sunflower Family)

Achillea millefolium L. Common yarrow
Agoseris aurantiaca (Hook.) Greene var. *aurantiaca* Burnt orange agoseris
Agoseris glauca (Pursh) D. Dietr. var. *glauca* Pale agoseris
Ambrosia acanthicarpa Hook. Bur ragweed
Ambrosia psilostachya DC. Perennial ragweed
Ambrosia trifida L. Giant ragweed
Anaphalis margaritacea (L.) Benth. & Hook. Pearly everlasting
Antennaria marginata Greene White-margin pussytoes
Antennaria media Greene Rocky Mountain pussytoes
Antennaria microphylla Rydb. Rosy pussytoes
Antennaria parvifolia Nutt. Common pussytoes
Antennaria rosea subsp. *rosea* Rosy pussytoes
Antennaria rosulata Rydb. Breaks pussytoes
Arctium minus (Hill) Bernh. Lesser burdock
Arnica chamissonis Lessing subsp. *foliosa* (Nutt.) Maguire Leafy arnica
Arnica cordifolia Hook. Heartleaf arnica
Arnica latifolia Bong. Daffodil arnica
Arnica mollis Hook. Hairly arnica
Artemisia biennis Willd. Biennial wormwood
Artemisia campestris L. var. *borealis* (Pall.) M. Peck Field wormwood
Artemisia carruthii Wood ex Carruth Carruth's sagebrush
Artemisia dracunculoides L. Tarragon
Artemisia frigida Willd. Fringed sage
Artemisia ludoviciana Nutt. subsp. *ludoviciana* Louisiana wormwood
Artemisia nova A. Nels. Black sagebrush
Bahia dissecta (A. Gray) Britt. Rag-leaf bahia
Brickellia grandiflora (Hook.) Nutt. Tasselflower brickelbrush
Chrysothamnus depressus Nutt. Dwarf rabbitbrush
Chrysothamnus vaseyi (Gray) Greene Vasey's rabbitbrush
Cirsium arvense (L.) Scop. Canada thistle
Cirsium parryi (A. Gray) Petrak Parry's thistle
Cirsium scopulorum (Greene) Cockerell Mountain thistle
Cirsium undulatum (Nutt.) Spreng. var. *tracyi* (Rydb.) Welsh Tracy's thistle
Cirsium vulgare (Savi) Ten. Bull thistle
Conyza canadensis (L.) Cronq. Canadian horseweed
Dieteria bigelovii (A. Gray) Morgan & Hartman var. *bigelovii* Bigelows' spiny aster
Ericameria nauseosa (Pallas ex Pursh) G. L. Nesom & G. I. Baird var. *oreophila* (A. Nels.) G. L. Nesom & G. I. Baird Rubber rabbitbrush
Erigeron coulteri Porter Coulter's daisy
Erigeron eximus Greene Splendid daisy
Erigeron flagellaris A. Gray Trailing fleabane

Erigeron formosissimus Greene var. *formosissimus* Beautiful fleabane
Erigeron glacialis (Nutt.) A. Nelson var. *glacialis* Subalpine fleabane
Erigeron leiomerus A. Gray Glaber daisy
Erigeron pinnatisectus (A. Gray) A. Nels. Feather-leaf fleabane
Erigeron speciosus (Lindl.) DC. Pretty daisy
Erigeron sp. Fleabane
Erigeron subtrinervis Rydb. Three-nerve fleabane
Eurybia lauca (Nutt.) G. L. Nesom Gray's wood aster
Gnaphalium exilifolium A. Nels. Slender cudweed
Grindelia arizonica A. Gray Arizona gumweed
Grindelia squarrosa (Pursh) Dunal var. *serrulata* (Rydb.) Steyer. Curlycup gumweed
Gutierrezia sarothrae (Pursh) Britt. & Rusby Broom snakeweed
Helianthella parryi A. Gray Parry's dwarf-sunflower
Helianthus annuus L. Common sunflower
Helianthus petiolaris Nutt. Prairie sunflower
Heliomeris multiflora Nutt. Showy golden eye
Heterotheca pumila (Greene) Semple Alpine false-aster
Heterotheca villosa (Pursh) Shinnars Golden aster
Hieracium triste Willd. ex Spreng. var. *gracile* (Hook.) A. Gray Woolly hawkweed
Hymenoxys hoopesii (A. Gray) Bierner Orange sneezeweed
Hymenoxys richardsonii (Hook.) Cockerell Colorado rubberweed
Madia glomerata Hook. Tarweed
Matricaria discoides DC. Disc mayweed
Oreochrysum parryi (A. Gray) Rydb. Parry's goldenrod
Packera crocata (Rydb.) W. A. Weber & Á. Löve Saffron ragwort
Packera dimorphophylla (Greene) W. A. Weber & Á. Löve var. *dimorphophylla* Split-leaf groundsel
Packera neomexicana (A. Gray) W. A. Weber & Á. Löve var. *mutabilis* (Greene) W. A. Weber & Á. Löve New Mexico groundsel
Packera pseudaurea (Rydb.) W. A. Weber & Á. Löve var. *flavula* (Greene) W. A. Weber & Á. Löve Streambank ragwort
Packera streptanthifolia (Greene) W. A. Weber & Á. Löve Rocky Mountain ragwort
Pyrocoma crocea (A. Gray) Greene Curly-head goldenhead
Ratibida columnifera (Nutt.) Woot. & Standl. Mexican-hat
Rudbeckia laciniata L. var. *ampla* (A. Nels.) Cronq. Cutleaf coneflower
Senecio amplexens A. Gray var. *amplexens* Showy alpine ragwort
Senecio amplexens A. Gray var. *holmii* (Greene) Harrington Holm's ragwort
Senecio atratus Greene Black-tipped ragwort
Senecio bigelovii A. Gray Nodding ragwort
Senecio crassulus A. Gray Thick-leaf ragwort
Senecio eremophilus Richards. subsp. *kingii* (Rydb.) G. W. Douglas & Ruyle-Douglas King's ragwort
Senecio serra Hook. var. *admirabilis* (Greene) A. Nels. Tall ragwort
Senecio triangularis Hook. Arrow-leaf ragwort
Solidago lepida DC. Goldenrod
Solidago simplex Kunth Mt. Albert goldenrod
Solidago velutina DC. Three-nerve goldenrod
Symphotrichum ascendens (Lindl.) G. L. Nesom Western aster
Symphotrichum falcatum (Lindl.) G. L. Nesom var. *commutatum* (Torr. & A. Gray) G. L. Nesom Prairie aster
Symphotrichum foliaceum (Lindl. ex DC.) G. L. Nesom var. *apricum* (A. Gray) G. L. Nesom Alpine aster
Symphotrichum laeve (L.) Löve & Löve Geyer's blue aster
Symphotrichum spathulatum (Lindl.) G. L. Nesom var. *spathulatum* Mountain aster
Taraxacum officinale G. H. Weber ex F. H. Wigg Common dandelion
Townsendia leptotes (A. Gray) Osterh Common Townsend daisy
Tragopogon dubius Scop. Yellow salsify
Wyethia arizonica A. Gray Arizona mule-ears
Xanthium strumarium L. Rough cocklebur

Berberidaceae (Barberry Family)

Berberis fendleri A. Gray Fendler's barberry
Mahonia repens (Lindl.) G. Don Holly-grape

Betulaceae (Birch Family)

Alnus incana (L.) Moench subsp. *tenuifolia* (Nutt.) Breitung Thin-leaf alder

Boraginaceae (Borage Family)

Lithospermum incisum Lehm. Narrowleaf stoneseed
Lithospermum multiflorum Torr. ex A. Gray Many flowered stoneseed
Mertensia brevistyla S. Wats. Shortstyle bluebells
Mertensia ciliata (James ex Torr.) G. Don Tall fringed bluebells
Mertensia franciscana Heller Franciscan bluebells
Mertensia lanceolata (Pursh) DC. var. *lanceolata* Prairie bluebells
Plagiobothrys scouleri (H. & A.) Johnston Scouler's popcorn-flower

(Continued on page 4, Chama Plants)

Botany is the natural science that transmits the knowledge of plants.

— Linnaeus



(*Chama Plants, continued from page 3*)

Brassicaceae (Mustard Family)

Alyssum simplex Rudolphi Alyssum
Boechera fendleri (S. Watson) W.A. Weber Fendler's rockcress
Boechera sp. Rockcress
Boechera stricta (Graham) Al-Shehbaz Drummond's rockcress
Capsella bursa-pastoris (L.) Medic. Shepherd's purse
Cardamine cordifolia A. Gray Heart-leaf bittercress
Descurainia incisa (Engelm. ex A. Gray) Britton subsp. *filipes* (A. Gray) Rollins Western tansy mustard
Descurainia incisa (Engelm. ex A. Gray) Britton subsp. *incise* Western tansy mustard
Descurainia sophia (L.) Webb ex Prantl Tansy mustard
Draba albertina Greene Slender draba
Draba aurea M. Vahl ex Hornem. Golden Whitlow-grass
Draba helleriana Greene var. *helleriana* Heller Whitlow-grass
Draba spectabilis Greene Showy Whitlow-grass
Erysimum capitatum (Dougl. ex Hook.) Greene var. *purshii* (Durand) Rollins Pursh's wallflower
Lepidium draba L. Whitetop
Lepidium ramosissimum A. Nelson Many-branched pepperweed
Lepidium virginicum L. Virginia pepperweed
Nocca fendleri (A. Gray) Holub subsp. *glauca* (A. Nelson) Al-Shehbaz & M. Koch Wild candytuft
Rorippa alpina (S. Watson) Rydb. Alpine yellow-cress
Rorippa palustris (L.) Besser var. *palustris* Bog yellow-cress
Stanleya pinnata (Pursh) Britton var. *pinnata* Princes plume
Thlaspi arvense L. Field pennycress
Turritis glabra L. Tower rockcress

Campanulaceae (Bellflower Family)

Campanula parryi A. Gray Parry's bellflower
Campanula rotundifolia L. Bluebell bellflower

Caprifoliaceae (Honeysuckle Family)

Lonicera involucrata (Richards.) Banks Four-line honeysuckle
Symphoricarpos rotundifolius A. Gray Round-leaf snowberry

Caryophyllaceae (Pink Family)

Cerastium arvense L. subsp. *strictum* (L.) Ugborgho Field chickweed
Cerastium fontanum Baumg. Common chickweed
Eremogone fendleri (A. Gray) Ikonnikov var. *fendleri* Fendler's sandwort
Minuartia obtusiloba Rydb. Rydberg's sandwort
Moehringia macrophylla (Hook.) Torr. Largeleaf sandwort
Sagina saginoides (L.) Karst Arctic pearlwort
Silene drummondii var. *drummondii* Drummond's catchfly
Silene menziesii Hook. Menzies' campion
Silene scouleri Hook. Simple campion
Silene vulgaris (Moench) Garcke Maidenstears
Spergularia rubra (L.) J. & K. Presl Red sand-spurry
Spergularium lanuginosum Michaux subsp. *saxosum* (A. Gray) Weber Spreading sandwort
Stellaria crassifolia Ehrhart Fleshy starwort
Stellaria longipes Goldie Long-stalk starwort
Stellaria umbellata Turcz. ex Kar. & Kir. Umbrella starwort

Celastraceae (Stafftree Family)

Pachystima myrsinites (Pursh) Raf. Mountain-lover

Chenopodiaceae (Goosefoot Family)

Chenopodium album L. Lambsquarters
Chenopodium atrovirens Rydb. Piñon goosefoot
Chenopodium capitatum (L.) Asch. var. *parvicapitatum* S. Welsh Smallhead chenopod
Chenopodium foliosum Asch Leafy goosefoot
Chenopodium fremontii var. *fremontii* S. Wats. Fremont's goosefoot
Monolepis nuttalliana (Schultes) Greene Nuttall's poverty weed

Cornaceae (Dogwood Family)

Cornus sericea L. subsp. *sericea* Red-osier dogwood

Crassulaceae (Stonecrop Family)

Sedum lanceolatum Torr. subsp. *lanceolatum* Common stonecrop
Sedum rhodanthum A. Gray Pink stonecrop
Sedum rosea (L.) Scop. Roseroot

Cyperaceae (Sedge Family)

Carex aquatilis Wahlenb. var. *aquatilis* Water sedge
Carex athrostachya Olney Slender-beak sedge
Carex aurea Nutt. Golden sedge
Carex canescens L. Silvery sedge
Carex disperma Dewey Soft-leaf sedge
Carex geyeri F. Boott Geyer's sedge
Carex microptera Mackenz. Small-wing sedge
Carex nigricans Meyer Black alpine sedge

Carex norvegica Retz Norway sedge.
Carex occidentalis Bailey Western sedge
Carex pellita Muhl. Ex Willd. Woolly sedge
Carex praeceptorum Mackenz. Early sedge
Carex praegracilis W. Boott Clustered field-sedge
Carex pyrenaica Wahl. Pyrenean sedge
Carex siccata Dewey Dry-spike sedge
Carex utriculata F. Boott Northwest Territory sedge
Eleocharis acicularis (L.) R. & S. Needle spikerush
Eleocharis palustris (L.) Roemer & Schults Common spikerush
Eriophorum angustifolium Honckeny Tall cottongrass

Elaeagnaceae (Oleaster Family)

Shepherdia canadensis (L.) Nutt. Russet buffalo-berry

Elatinaceae (Waterwort Family)

Elatine triandra Schkuhr Three-stamen waterwort

Ericaceae (Heath Family)

Chimaphila umbellata (L.) W. Bart Pipsissewa
Moneses uniflora (L.) A. Gray Single-delight
Orthilia secunda (L.) House Sidebells wintergreen
Pyrola asarifolia Nutt. Liver-leaf wintergreen
Pyrola chlorantha Swartz Green-flower wintergreen
Pyrola minor L. Snowline wintergreen
Pyrola picta J. E. Smith White-veined wintergreen
Vaccinium cespitosum Michaux Dwarf blueberry
Vaccinium myrtillus L. Whortleberry
Vaccinium scoparium Leiberg ex Coville Grouseberry

Euphorbiaceae (Spurge Family)

Chamaesyce serpyllifolia (Pers.) Small Thyme-leaf spurge

Fabaceae (Pea Family)

Astragalus bisulcatus (Hook.) A. Gray var. *haydenianus* (A. Gray) Barneby Hayden's milkvetch
Astragalus lonchocarpus Torr. Rushy milkvetch
Astragalus tenellus Pursh Loose-flower milkvetch
Lathyrus lanszwertii Kellogg var. *leucanthus* (Rydb.) Dorn Nevada pea
Lotus corniculatus L. Birds-foot trefoil
Lotus wrightii (A. Gray) Greene Wright's deervetch
Medicago lupulina L. Black medic
Medicago sativa L. Alfalfa
Melilotus officinalis (L.) Pallas Yellow sweet clover
Onobrychis vicifolia Scop. Sainfoin
Thermopsis rhombifolia Nutt. ex Richards. var. *montana* (Nutt.) Isley Golden banner
Trifolium brandegei S. Wats. Brandegee's clover
Trifolium longipes Nutt. var. *reflexum* A. Nels. Droopflower clover
Trifolium longipes Nutt. var. *rusbyi* (Greene) Harrington Rusby's droopflower clover
Trifolium gymnocarpon Nutt. Hollyleaf clover
Trifolium pratense L. Red clover
Trifolium repens L. White clover
Vicia americana Muhl. var. *americana* American vetch

Fumariaceae (Fumitory Family)

Corydalis aurea Willd. Golden smoke
Corydalis caseana A. Gray subsp. *brandegei* (S. Wats.) G. Ownbey Brandegee's fumewort

Gentianaceae (Gentian Family)

Gentiana parryi Engelm. Parry's gentian
Gentianella amarella (L.) Börner subsp. *acuta* (Michx.) Gillett Autumn dwarf gentian
Gentianopsis barbellata (Engelm.) Iltis Perennial fringed gentian
Gentianopsis thermalis (Kuntze) Iltis Rocky Mountain fringed gentian
Swerbia perennis L. Felwort

Geraniaceae (Geranium Family)

Geranium caespitosum James subsp. *caespitosum* Pineywoods geranium
Geranium richardsonii Fisch. & Traut. Richardson's geranium
Geranium viscosissimum Fisch. & C. A. Meyer ex C. A. Meyer Sticky purple geranium

Grossulariaceae (Currant or Gooseberry Family)

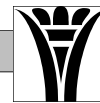
Ribes cereum Dougl. Wax currant
Ribes inerme Rydb. White-stem currant
Ribes laxiflorum Pursh Trailing black currant
Ribes montigenum McClatchie Red prickly currant
Ribes wolfii Rothr. Rothrock's currant

Haloragaceae (Water-milfoil Family)

Myriophyllum sibiricum Kom. Short-spike water-milfoil

Hydrocharitaceae (Frogbit Family)

(Continued on page 5, *Chama Plants*)



(*Chama Plants, continued from page 4*)

Elodea bifoliata St. John Two-leaf waterweed

Hydrophyllaceae (Water-leaf Family)

Hydrophyllum fendleri (A. Gray) Heller Fendler's waterleaf

Phacelia heterophylla Pursh Two-leaf scorpion-weed

Iridaceae (Iris Family)

Iris missouriensis Nutt. Missouri iris

Sisyrinchium montanum Greene Strict blue-eyed grass

Juncaceae (Rush Family)

Juncus arcticus Willd. Arctic rush

Juncus articulatus L. Joint-leaf rush

Juncus bufonius L. Toad rush

Juncus ensifolius Wikstr. var. *brunnescens* (Rydb.) Cronq. Sword-leaf rush

Juncus hallii Engelm. Hall's rush

Juncus longistylis Torr. Long-style rush

Juncus mertensianus Bong. Mertens' rush

Luzula parviflora (Ehrh.) Desv. Millet woodrush

Lamiaceae (Mint Family)

Dracocephalum parviflorum Nutt. American dragonhead

Mentha arvensis L. Wild mint

Prunella vulgaris L. Self-heal

Liliaceae (Lily Family)

Anticlea elegans (Pursh) Rydb. Mountain deathcamas

Calochortus gunnisonii S. Wats. var. *gunnisonii* Gunnison's sego-lily

Disporum trachycarpum (S. Wats.) Benth. & Hook. Bellwort

Maianthemum racemosum (L.) Link subsp. *amplexicaule* (Nutt.) LaFrankie False Solomon seal

Maianthemum stellatum (L.) Link Stellate smilacina

Streptopus amplexifolius (L.) DC. Twisted-stalk

Veratrum californicum Durand Skunk cabbage

Linaceae (Flax Family)

Linum lewisii Pursh Blue flax

Loasaceae (Loasa Family)

Mentzelia conspicua T.K. Todsen Chama blazingstar

Malvaceae (Mallow Family)

Malva neglecta Wallr. Common mallow

Sidalcea candida A. Gray White checkers

Sphaeralcea fendleri A. Gray Fendler's globe-mallow

Nyctaginaceae (Four O'clock Family)

Mirabilis albida (Walter) Heimerl, Annuaire White four o'clock

Onagraceae (Evening-primrose Family)

Chamerion angustifolium (L.) Holub var. *circumvagum* Mosquin Fireweed

Epilobium brachycarpum C. Presl Tall annual willow-herb

Epilobium ciliatum Raf. subsp. *ciliatum* Fringed willow-herb

Epilobium halleanum Hausskn. Hall's willow-herb

Epilobium hornemannii Reichenb. var. *hornemannii* Hornemann's will-herb

Gayophytum diffusum Torr. & A. Gray subsp. *parviflorum* Lewis & Szweykowski Spreading groundsmoke

Oenothera elata Kunth subsp. *hirsutissima* (A. Gray ex S. Wats.) Dietrich Hooker's evening-primrose

Oenothera flava (A. Nels.) Garrett subsp. *flava* Yellow evening-primrose

Oenothera villosa Thunberg subsp. *strigosa* (Rydb.) W. Dietrich & P. H. Raven Hairy evening-primrose

Orchidaceae (Orchid Family)

Calypto bulbosa (L.) Oakes var. *americana* (R. Brown) Luer Fairy slipper orchid

Corallorhiza maculata Raf. Spotted coralroot

Corallorhiza trifida Chat. Yellow coralroot

Corallorhiza wisteriana Conrad Wister's coralroot

Goodyera oblongifolia Raf. Western rattlesnake plantain

Listera cordata (L.) R. Br. var. *nephrophylla* (Rydb.) Hulten Heartleaf twayblade

Platanthera huronensis (Nutt.) Lindl. Huron green orchid

Platanthera purpurascens Sheviak & Jennings Purple-petal bog orchid

Platanthera sparsiflora (S. Wats.) Schl. Sparse-flowered bog orchid

Spiranthes romanzoffiana Cham. Hooded lady-tresses

Orobanchaceae (Broomrape Family)

Castilleja linariifolia Benth. Linear-leaf paintbrush

Castilleja miniata Dougl. ex Hook. Giant red Indian paintbrush

Castilleja occidentalis Torr. Western paintbrush

Castilleja sulphurea Rydb. Sulphur paintbrush

Pedicularis groenlandica Retz. Pink elephant head

Pedicularis procera A. Gray Giant lousewort

Pedicularis racemosa Dougl. ex Benth. var. *alba* (Pennell) Cronq. Sickletop lousewort

Oxalidaceae (Woodsorrel Family)

Oxalis dillenii Jacq. Slender yellow woodsorrel

Plantaginaceae (Plantain Family)

Callitriche hermaphroditica L. Northern water star-wort

Callitriche verna L. Vernal water star-wort

Collinsia parviflora Dougl. Blue-eyed mary

Gratiola neglecta Torr. Clammy hyssop

Limosella aquatica L. Water mudwort

Linaria dalmatica (L.) Mill. Dalmation toadflax

Linaria vulgaris Hill Butter and eggs

Mimulus guttatus DC. Seep monkeyflower

Orthocarpus luteus Nutt. Yellow owl-clover

Orthocarpus purpureo-albus A. Gray Purple owl-clover

Penstemon barbatus (Cav.) Roth var. *trichander* (A. Gray) Keck Beardlip penstemon

Penstemon crandallii A. Nels. subsp. *crandallii* Crandall's penstemon

Penstemon glaber Pursh var. *brandegeei* (Porter ex Rydb.) Freeman Smooth beardtongue

Penstemon lentus Pennell var. *lentus* Abajo penstemon

Penstemon rydbergii A. Nels. Rydberg's penstemon

Penstemon strictus Benth. Rocky Mountain penstemon

Penstemon whippleanus A. Gray Purple penstemon

Veronica anagallis-aquatica L. Water speedwell

Veronica catenata Pennell Pennell's speedwell

Veronica peregrina L. var. *xalapensis* (H. B. K.) Pennell Hairy purslane speedwell

Veronica wormskjoldii R. & S. American alpine speedwell

Poaceae (Grass Family)

Achnatherum hymenoides (Roem. & Schult.) Barkworth Indian ricegrass

Achnatherum lettermanii (Vasey) Barkworth Letterman's needlegrass

Achnatherum robustum (Vasey) Barkworth Sleepy grass

Agrostis exarata Trin. var. *minor* Hook. Spike bent-grass

Agrostis gigantea Roth. Giant creeping bent-grass

Agrostis scabra Willd. Rough bentgrass

Agrostis stolonifera L. Creeping bent-grass

Alopecurus aequalis Sobol. Short-awn floxtail

Beckmannia syzigachne (Steud.) Fern. subsp. *baicalensis* (Kusn.) T. Koyama & Kawano American slough-grass

Blepharoneuron tricholepis (Torr.) Nash Pine dropseed

Bromus anomalus Rupr. ex Fourn. Smooth brome

Bromus catharticus Vahl Rescue grass

Bromus ciliatus L. Fringed brome

Bromus inermis Leyss. var. *inermis* Smooth brome

Bromus porteri (Coul.) Nash Porter's brome

Bromus richardsonii Link Richardson's brome

Bromus tectorum L. Cheatgrass

Calamagrostis canadensis (Michx.) Beauv. Canada reedgrass

Dactylis glomerata L. Orchard grass

Danthonia intermedia Vasey Timber danthonia

Danthonia parryi Scribn. Parry's oatgrass

Echinochloa crus-galli (L.) Beauv. Barnyard grass

Elymus bakeri (E. Nels.) Löve Baker's wheatgrass

Elymus elymoides (Raf.) Swezey Squirrel-tail

Elymus smithii Rydb. Smith's wheatgrass

Elymus trachycaulus (Link) Gould ex Shinners subsp. *subsecundus* (Link) A. & D. Löve Slender wheatgrass

Elymus trachycaulus (Link) Gould ex Shinners subsp. *violaceus* (Hornemann) Lange Purple wheatgrass

Elymus trachycaulus (Link) Gould ex Shinners subsp. *trachycaulus* Slender wheatgrass

Festuca arizonica Vasey Arizona fescue

Festuca arundinacea Schreber Tall fescue

Festuca idahoensis Elmer Idaho fescue

Festuca pratensis Huds. Meadow fescue

Festuca saximontana Rydb. Mountain fescue

Festuca sororia Piper Ravine fescue

Festuca thurberi Vasey Thurber's fescue

Glyceria grandis S. Wats. American manngrass

Glyceria striata (Lam.) A. S. Hitchc. Fowl manngrass

Hesperostipa comata (Trin. & Rupr.) Barkworth subsp. *comata* Needle & thread grass

Hierochloa odorata (L.) Beauv. Sweet grass

Hordeum brachyantherum Nevski Meadow barley

Hordeum jubatum L. Foxtail barley

Lolium perenne L. var. *perenne* Perennial ryegrass

Melica porteri Scribn.

Muhlenbergia montana (Nutt.) A. S. Hitchc. Mountain muhly

Muhlenbergia richardsonis (Trin.) Rydb. Richardson's muhly

Nassella viridula (Trin.) Barkworth Green needlegrass

Phalaris arundinacea L. Reed canary-grass

Phleum alpinum L. var. *commutatum* (Gaudin) Richter Alpine timothy grass

(Continued on page 6, Chama Plants)

*(Chama Plants, continued from page 5)*

Phleum pratense L. Timothy grass
Piptatherum micranthum (Trin. & Rupr.) Barkworth Little-seed ricegrass
Poa arctica R. Br. Arctic bluegrass
Poa compressa L. Canada bluegrass
Poa fendleriana (Steud.) Vasey Muttongrass
Poa glaucifolia Scribn. & Williams Plains bluegrass
Poa palustris L. Fowl bluegrass
Poa pratensis L. Kentucky blue grass
Trisetum spicatum (L.) Richt. Spike trisetum

Polemoniaceae (Phlox Family)

Ipomopsis aggregata (Pursh) Grant subsp. *aggregata* Scarlet gilia
Phlox caryophylla Wherry Pagosa phlox
Polemonium foliosissimum Gray Sky pilot

Polygonaceae (Buckwheat Family)

Bistorta bistortoides (Pursh) Small American bistort
Bistorta vivipara (L.) S.F. Gray Alpine bistort
Eriogonum alatum Torr. in Sitgr. Winged buckwheat
Eriogonum lonchophyllum Torr. & A. Gray var. *lonchophyllum* Spear-leaf buckwheat
Eriogonum racemosum Nutt. var. *racemosum* Red-root buckwheat
Polygonum aviculare L. Yard knotweed
Polygonum douglasii Greene var. *douglasii* Douglas' knotweed
Polygonum kelloggii Greene Kellogg's knotweed
Polygonum sawatchense Small Sawatch knotweed
Rumex acetosella L. Sheep sorrel
Rumex crispus L. Curly dock
Rumex densiflorus Osterhout Dense-flowered dock
Rumex occidentalis L. var. *fenestratus* (Greene) Dorn Western dock
Rumex triangulivalvis (Danser) K.H. Rechinger White dock

Portulacaceae (Purslane Family)

Claytonia lanceolata Pursh Spring beauty
Lewisia pygmaea (Gray) B.L. Robinson Alpine bitter-root
Montia chamissoi (Ledebour ex Sprengel) Durand & Jackson Miner's lettuce

Potamogetonaceae (Pondweed Family)

Stuckenia pectinatus (L.) Boerner Sago pondweed

Primulaceae (Primrose Family)

Androsace septentrionalis L. Rock-jasmine
Dodecatheon pulchellum (Raf.) Merrill Darkthroat shooting-star
Primula parryi A. Gray Parry's primrose

Ranunculaceae (Buttercup Family)

Aconitum columbianum Nutt. subsp. *columbianum* Columbian monkshood
Actaea rubra (Aiton) Willd. Baneberry
Anemone multifida Poiret Pacific anemone
Anemone patens L. var. *multifida* Pritzel Pasque flower
Aquilegia coerulea James var. *coerulea* Colorado columbine
Aquilegia elegantula Greene Western red columbine
Caltha leptosepala DC. White marsh-marigold
Clematis columbiana (Nutt.) Torr. & A. Gray Columbian virgin's-bower
Clematis hirsutissima Pursh var. *hirsutissima* Hairy clematis
Delphinium nuttallii Pritz. ex Walp. var. *nuttallii* Nelson's larkspur
Delphinium ramosum Rydb. Mountain larkspur
Geum macrophyllum Willd. var. *perincisum* (Rydb.) Raup Large-leaf avens
Geum triflorum Pursh var. *ciliatum* (Pursh) Fassett Old man's whiskers
Myosurus apetalus A. Gray var. *montanus* (G. R. Campbell) Whittemore Bristly mouse-tail
Ranunculus alismifolius Geyer var. *montanus* S. Wats. Water plantain buttercup
Ranunculus aquatilis L. Aquatic buttercup
Ranunculus cardiophyllus Hook. Heart-leaf buttercup
Ranunculus inamoenus Greene var. *inamoenus* Graceful buttercup
Ranunculus macounii Britt. Macoun's buttercup
Ranunculus pennsylvanicus L. Pennsylvania buttercup
Thalictrum fendleri Engelm. ex Gray Fendler's meadow-rue

Rhamnaceae (Buckthorn Family)

Ceanothus fendleri A. Gray Fendler's ceanothus

Rosaceae (Rose Family)

Amelanchier alnifolia (Nutt.) Nutt. Western service-berry
Crataegus rivularis Nutt. River hawthorn
Dasiphora fruticosa (L.) Rydb. Shrubby cinquefoil
Dryocallis arguta (Pursh) Rydb. Sticky cinquefoil
Fragaria virginiana Duchesne Virginia strawberry
Geum macrophyllum Willd. var. *perincisum* (Rydb.) Raup Large-leaved avens

Holodiscus dumosus (Nutt.) Heller Mountain spray
Potentilla anserina L. Common silverweed
Potentilla concinna Richardson var. *concinna* Elegant cinquefoil
Potentilla diversifolia Lehm. Vari-leaf cinquefoil
Potentilla gracilis Dougl. ex Hook. var. *pulcherrima* (Lehm.) Fern. x *hippiana* Lehm Cinquefoil
Potentilla pensylvanica L. var. *pensylvanica* Pennsylvania cinquefoil
Potentilla subjuga Rydb. Colorado cinquefoil
Rosa woodsii Lindl. var. *ultramontana* (S. Wats.) Jepson Wood's rose
Prunus virginiana L. var. *melanocarpa* (A. Nels.) Sarg. Black chokecherry
Rubus idaeus L. var. *strigosus* (Michx.) Focke Gray-leaf red raspberry
Rubus parviflorus Nutt. Thimbleberry
Sibbaldia procumbens L. Sibbaldia
Sorbus scopulina Greene Rocky Mountain ash

Rubiaceae (Madder Family)

Galium aparine L. Stickwilly
Galium boreale L. Northern bedstraw
Galium trifidum L. Three-petal bedstraw
Galium triflorum Michx. Fragrant bedstraw

Salicaceae (Willow Family)

Populus acuminata Rydb. Lanceleaf cottonwood
Populus angustifolia James Narrowleaf cottonwood
Populus tremuloides Michx. Aspen
Salix amygdaloides Anderss. Peach-leaf willow
Salix bebbiana Sarg. Bebb's willow
Salix drummondiana Barratt ex Hook. Drummond willow
Salix eriocephala Michx. var. *ligulifolia* (C. R. Ball) Dorn Missouri willow
Salix exigua Nutt. subsp. *exigua* Coyote willow
Salix lasiandra Benth. var. *caudata* (Nutt.) Sudw. Greenleaf willow
Salix monticola Bebb Park willow
Salix planifolia Pursh var. *planifolia* Diamond-leaf willow
Salix scouleriana Barratt ex Hook. Scouler's willow

Santalaceae (Sandalwood Family)

Comandra umbellata (L.) Nutt. subsp. *pallida* (A. DC.) Piehl Bastard-toadflax

Saxifragaceae (Saxifrage Family)

Heuchera parvifolia Nutt. Littleleaf alumroot
Heuchera rubescens Torr. Red alumroot
Lithophragma glabra Nutt. in Torr. & A. Gray Bulbous woodland-star
Lithophragma tenellum Nutt. Slender woodland-star
Mitella pentandra Hook. Fivestar miterwort
Mitella stauropetala Piper var. *stenopetala* (Piper) Rosend. Smallflower miterwort
Saxifraga bronchialis L. Spotted saxifrage
Saxifraga hyperborea R. Br. Pygmy saxifrage
Saxifraga odontoloma Piper Brook saxifrage
Saxifraga rhomboidea Greene Diamond-leaf saxifrage

Scrophulariaceae (Figwort Family)

Scrophularia lanceolata Pursh Lance-leaf figwort
Verbascum thapsus L. Mullein

Solanaceae (Nightshade Family)

Physalis longifolia Nutt. var. *longifolia* Longleaf groundcherry

Typhaceae (Cat-tail Family)

Sparganium angustifolium Michx. Narrowleaf bur-reed
Typha latifolia L. Broadleaf cattail

Urticaceae (Nettle Family)

Urtica dioica L. subsp. *gracilis* (Ait.) Selander California nettle

Valerianaceae (Valerian Family)

Valeriana edulis Nutt. ex Torr. & A. Gray Tobacco root

Verbenaceae (Vervain Family)

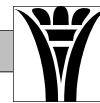
Verbena bracteata Lag. & Rodr. Big-bract verbena
Verbena macdougalii Heller MacDougal's vervain

Violaceae (Violet Family)

Viola adunca J. E. Smith var. *adunca* Hookedspur violet
Viola adunca J. E. Smith var. *bellidifolia* (Greene) Harrington Alpine hookedspur violet
Viola canadensis L. var. *scopulorum* Rocky Mountain violet

Viscaceae (Mistletoe Family)

Arceuthobium vaginatum (Willd.) Presl subsp. *cryptopodum* (Engel.) Hawksworth & Wiens
Pineland dwarf mistletoe



Plant Distribution Reports

New records and significant distribution reports for New Mexico plants should be documented by complete collection information and disposition of a specimen (herbarium). Exotic taxa are indicated by an asterisk (*), endemic taxa by a cross (+).

— Ken Heil [San Juan College, Farmington, NM 87402] and Steve O'Kane [Dept. Botany, University of Northern Iowa, Cedar Falls, IA 50614]

Asclepias cutleri Woodson (Asclepiadaceae, Cutler's milkweed): San Juan County, Navajo Nation. Farm Road north of Shiprock along the San Juan River. Ca 11.5 mi west of cattleguard and end of pavement. Erigeron bellidiastrum, Streptanthella longirostris, Rumex hymenosepalus. N36° 56' 47" W108° 55' 44". 5000'. 15 May 2007. Arnold Clifford, Kenneth Heil, Steve O'Kane, and Mike Howard 28368 (SJNM).

Asclepias ruthiae Maguire & Woodson (Asclepiadaceae, Ruth's milkweed): San Juan County, Navajo Nation. Farm Road north of Shiprock along the San Juan River. Ca 10 mi west of cattleguard and end of pavement. Sandy soils. *Nama sp.*, *Dalea lanata*, *Asclepias macrosperma*, *Opuntia polyacantha*, rosemary mint. N36° 56' 21" W108° 55' 27". 5000'. 15 May 2007. Arnold Clifford, Kenneth Heil, Steve O'Kane, and Mike Howard 28369 (SJNM).

****Astragalus miser*** Douglas var. *oblongifolius* (Rydb.) Cronq. (Fabaceae, timber milkvetch): Rio Arriba County. Carson National Forest. East flank of San Antonio Mountain with Douglas-fir, aspen, festuca, and *Holodiscus*. N36° 50.877' W106° 0.393' Elev. 9800'. 12 July 2007. Steve O'Kane & Ken Heil 8409 (SJNM).

Carex nigricans Meyer (Cyperaceae, black alpine sedge): Rio Arriba County. Chama Land & Cattle Company. Poso Road. SE of Sugar Loaf Mountain where dirt road forks; NE of Sugar Loaf Lake. Spruce-fir forest with scattered aspen. Moist area along small drainage. N36° 51.477' W106° 29.065' Elev. 10,065'. 26 June 2007. Steve O'Kane & Ken Heil 8262 (SJNM).

Carex praeceptorium Mackenzie (Cyperaceae, early sedge): Rio Arriba County, San Juan Mountains; Chama Land & Cattle Co.. Just east of Poso Creek and ca 1/3 mile south of where Poso Road crosses Poso Creek. Circular fen with *Carex* surrounded by shrubby cinquefoil. Damp soil. N36° 50'.807' W106° 27.518'. 9775' 27 June 2007. Kenneth Heil & Steve O'Kane 28635 (SJNM).

Cymopterus longilobus (Rydb.) W.A. Weber (Apiaceae, mountain rock-parsley): 2nd known record. Rio Arriba County, San Juan Mountains; Chama Land & Cattle Co.. Upper Canoñes Box near confluence of Canoñes Creek and Poso Creek. Quartzite cliffs and talus. Saxifraga, Erigeron, Cystopteris. N36° 50'.402' W106° 27.746'. 9750' 27 June 2007. Kenneth Heil & Steve O'Kane 28650 (SJNM). Det. by Ron Hartman.

Lithophragma glabrum Nutt. (Saxifragaceae, bulbous woodland-star): Rio Arriba County: San Juan Mountains; Chama Land & Cattle Co., just north of lodge. Scattered ponderosa pine, Gambel Oak, Rocky Mountain juniper, spring beauty. N36° 52' 00" W106° 34' 17". 8025', 03 May 2007, Kenneth Heil and Les Ludquist 28340 (SJNM).

Mertensia brevistyla Watson (Boraginaceae, short-style bluebells): Rio Arriba County: San Juan Mountains; Chama Land & Cattle Co., just north of lodge. Scattered ponderosa pine, Gambel Oak, Rocky Mountain juniper, spring beauty, and *Lithophragma*. N36°

52' 00" W106° 34' 17". 8025', 03 May 2007, Kenneth Heil and Les Ludquist 28329 (SJNM).

Mitella stauropetala Piper var. *stenopetala* (Piper) Rosendahl (Saxifragaceae, small-flower miterwort): Rio Arriba County, San Juan Mountains; Chama Land & Cattle Co., ca 6.4 miles east on Poso Road from headquarters. Road-cut in moist area. Engelmann spruce, corkbark fir, *Luzula*, *Stellaria umbellata*, and *Pyrola minor*. N36° 52'.298' W106° 30.264'. 9750' 25 June 2007. Kenneth Heil & Steve O'Kane 28614 (SJNM).

Mitella pentandra Hooker (Saxifragaceae, five-star bishop's cap): Rio Arriba County, San Juan Mountains; Chama Land & Cattle Co.. ca 6.4 miles east on Poso Road from headquarters. Road-cut in moist area. Engelmann spruce, corkbark fir, *Luzula*, *Stellaria umbellata*, and *Pyrola minor*. N36° 52'.298' W106° 30.264'. 9750' 25 June 2007. Kenneth Heil & Steve O'Kane 28615 (SJNM). [this is the second report for this species]

Orogenia linearifolia Watson (Apiaceae, turkeypea): Rio Arriba County: 3.4 mi north of Lumberton on dirt road to Edith, Colorado. Two track east of county road. Big sage, *Astragalus missouriensis* var. *humistratus*, *Tetraneuris acaulis* var. *arizonica*, blue grama grass, scattered Rocky Mountain juniper. Soils derived from the Mancos Formation. N36° 58' 20" W106° 54' 49". 7130'. 10 May 2007. Kenneth Heil and Les Ludquist 28349 (SJNM).

Oxalis dillenii Jacquin (Oxalidaceae, Erect woodsorrel): Rio Arriba County, San Juan Mountains; Chama Land & Cattle Co.. ca 3 miles east on Poso Road from headquarters. Collections along roadside. Ponderosa pine, Douglas-fir, white-fir, Gambel oak, and *Spergularia rubra*. N36° 52'.870' W106° 32.480'. 8260' 25 June 2007. Kenneth Heil & Steve O'Kane 28579 (SJNM).

Polygonum kelloggii E.L. Greene (Polygonaceae, Kellogg's knotweed): Collections around a small pond. Riparian with *Carex sp.*, *Poa sp.*, *Scirpus*, *Limosella*. N36° 52'.925' W106° 33.121'. 8120' 25 June 2007. Kenneth Heil & Steve O'Kane 28570 (SJNM). Det. by James Reveal.

Saxifraga hyperborea R. Brown (Saxifragaceae, pygmy saxifrage): Rio Arriba County. Chama Land & Cattle Company. Northwest escarpment of Grouse Mesa. Volcanic tuff in spruce-fir community. In shade of rock. N36° 49.950' W106° 24.501' Elev. 11,400". 26 June 2007. Steve O'Kane & Ken Heil 8300 (SJNM).

****Silene vulgaris*** (Moench) Garcke (Caryophyllaceae, maidenstears). Rio Arriba County, San Juan Mountains; Chama Land & Cattle Co. 3.3 mi north of headquarters to junction with North Road. Ca 3.2 mi up North Road near "No Tellum Lake". Roadside with *Rudbeckia*, aspen, Engelmann spruce, and *Bromus*. N36° 54'.985' W106° 30.720'. 9390' 26 July 2007. Kenneth Heil & Steve O'Kane 28855 (SJNM).

****Sonchus uliginosus*** Bieberstein (Asteraceae, moist sowthistle): Rio Arriba County, San Juan Mountains. F.S. Road 133 ca 6.4 mi north of US64. Roadside with *Mirabilis linearis*, *Heliomeris*, *Eriogonum racemosum*, and *Chrysothamnus*. N36° 47'.053' W106° 07.463'. 9390' 25 August 2007. Kenneth Heil, Wayne Mietty, and Chick Keller 29012 (SJNM).



Publication and Subscription Information

"The New Mexico Botanist" is published irregularly (as information accrues) at no charge. You may be placed on the mailing list by sending your name and complete mailing address to the editor:

Kelly Allred
The New Mexico Botanist
MSC Box 3-I
New Mexico State University
Las Cruces, NM 88003
or
Email: kallred@nmsu.edu

Available on-line at <http://spectre.nmsu.edu/dept/welcome.html?rsh>

Kelly Allred

Ranunculus acris Not Known From New Mexico

Kelly Allred

Range Science Herbarium, New Mexico State University
Las Cruces, NM 88003

Martin & Hutchins, in their monumental *A Flora of New Mexico*, report *Ranunculus acris* Linnaeus from "open areas; northern to western; 6,000-8,000 ft." This report, the only one for this species for New Mexico, is evidently based on a single specimen at UNM: "Taos County: gravel loam of stream area and slopes, vicinity of Baca Grande campground, near Eagle Nest. Elev. ca. 8,500 ft. Corolla yellow. 28 June 1975, Bob Hutchins 5528." An examination of this specimen shows it to have the following significant features: leaves compound, the 3 leaflets deeply lobed or parted, the margins incised or toothed; petals 5-6 mm long, 4 mm wide, equaling the sepals.

None of these features correspond with the European *Ranunculus acris*, which has simple (though deeply parted) leaves and petals 8-15 mm long, 7-13 mm wide, and longer than the sepals.

The plant in question, though, fits exactly the variation of *Ranunculus macounii* Britton, already known from the state, to which name the collection is assigned.

The recent *Flora of North America* treatment for *Ranunculus acris* reports it as absent from Colorado, Texas, and Oklahoma, with a single dot on the map for Arizona. *Ranunculus macounii* is common throughout the Rocky Mt states (and elsewhere).

The two are compared in the following illustrations:

(Much thanks to Jane Mygatt and UNM for allowing me to examine the specimen in question.)

R. acris



R. macounii



[from Britton & Brown *Illustrated Flora*, 1913]



The New Mexico
Botanist

COOPERATIVE EXTENSION SERVICE

U.S. Department of Agriculture
New Mexico State University
Las Cruces, NM 88003