

CHECKLIST OF PLANTS
NAVAJO-KAIPAROWITS REGION

Eastern Kane County Utah
and
Northern Coconino County Arizona

by
N. D. Atwood and S. L. Welsh

The Center for Health and Environmental Studies of Brigham Young University is conducting an environmental impact study in the Kaiparowits Basin of Kane County, Utah. This project is funded by the participants constructing the Navajo and proposed Kaiparowits Power Generating Stations. The purpose of the study is to test the hypothesis that a coal burning generating plant will not have a significant impact on the plant communities and associated fauna.

Structure and dynamics of the biotic communities, climate regimes, productivity of key species, pathology of deer and jack-rabbits, and the trace element content of plants, soils, and air are being investigated within pinyon-juniper, desert grassland, sagebrush, blackbrush, vanclevea, and desert shrub communities.

The studies were designed to obtain three years of data before and three years after each power plant goes into operation. The studies, therefore, began during the summer of 1971 and have continued year-round to the present. Navajo Plant will be fully operational during this coming summer. Baseline studies have been initiated with respect to the Kaiparowits Plant, with particular emphasis given to obtain background data on the trace elements and the pathological condition of deer and jack-rabbits. During this next year, emphasis will also be given to revegetation and rehabilitation of disturbed sites within the desert shrub communities of the Kaiparowits Basin.

BYU's effort represents only approximately half of the environmental research funded by the power companies. Northern Arizona University is conducting studies in Arizona in relation to the Navajo Generating Station.

Attached is a map showing the approximate location of each of our study sites.

Cedar Mountain

- Site 1. Vanclevea: grass community on deep sandy soils
- 2. Juniper woodland
- 3. Semi-arid desert grassland
- 4. Blackbrush community

Tropic Shale: sites 5 and 26

Smoky Mountain

- Site 6. Sagebrush and juniper
- 7. Spiny hopsage and blackbrush
- 8. Spiny hopsage and blackbrush
- 9. Shadscale and Budsage

Ahlstrom Point

- Site 10. Ephedra: grass community on deep sandy soils
- 11. Blackbrush community

Nipple Bench

- Site 12. Blackbrush Community
- 13. Semi-desert shrub, grass community
- 14. Spiny hopsage and blackbrush community
- 23. Blackbrush community
- 24. ~~Spring~~ hopsage: grass community

Last Chance and Warm Creeks

- Sites 16, 16 and 34: Riparian communities

Lower Wahweap Drainage

- Site 17. Semi-arid desert grassland
- 18. Blackbrush community

Sites South of Page

- Site 19. Blackbrush community
- 20. Semi-arid desert grassland
- 21. Pinyon-juniper woodland
- 22. Blackbrush community

Four-mile Bench

- Site 27. Pinyon-juniper woodland
- 28. Sagebrush community
- 29. Pinyon-juniper woodland on rocky ledges and ~~rocks~~

Brigham Plains

- Site 30. Grassland with cool and warm season grasses

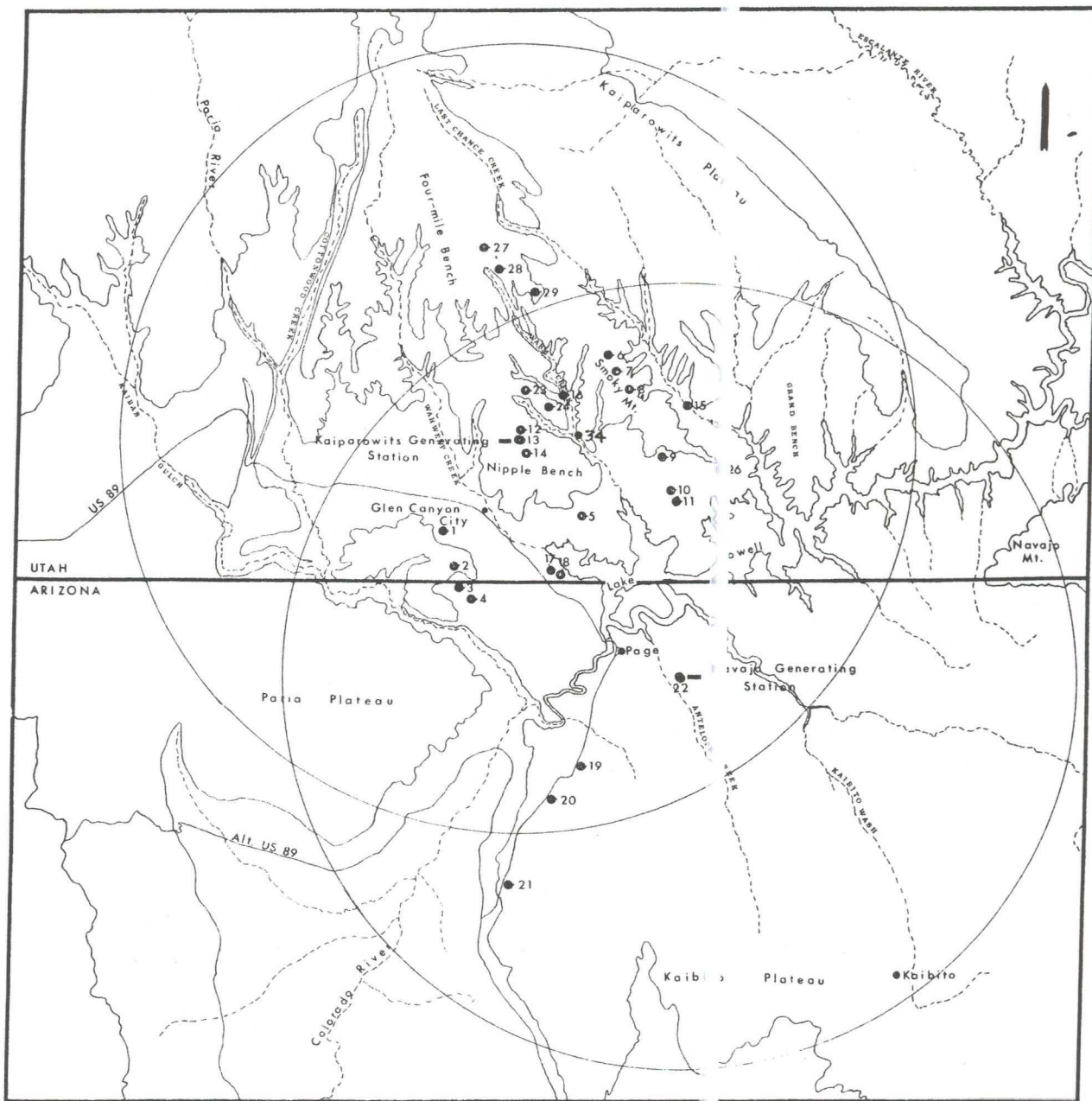
Grand Bench: Pristine Grassland

Hanging Gardens: Mesic ecosystem along the Colorado River drainage (between San Juan River and up-stream from Grand Bench).

Periodically, climatic, soils, and plant community data are obtained from most of these sites. All sites have been inventoried for soils and plants and many have been inventoried for birds, large and small mammals and ground dwelling arthropods.

Most of BYU's current research activity is being done on Cedar Mountain, Nipple Bench, Four-mile Bench, and the Hanging Gardens.

The following check list of plants has been obtained since the summer of 1971 to the present. Even though the precipitation can vary from less than 4 inches to at least 13 inches, the Kaiparowits Basin is floristically rich.



Checklist of Plants

Aceraceae

Acer negundo L.

Aizoaceae

Mollugo cerviana (L.) Seringe

Amaranthaceae

Acanthochiton wrightii Torr.

Amaranthus graecizans L.

Tidestromia lanuginosa (Nutt.) Standl.

Anacardiaceae

Rhus trilobata Nutt. var. simplicifolia (Greene) Barkley

Toxicodendron rydbergii (Small) Greene

Apocynaceae

Amsonia eastwoodiana Rydb.

Amsonia palmeri Gray

Amsonia tomentosa Torr. & Frem.

Apocynum cannabinum L.

Asclepiadaceae

Asclepias asperula Decne.

Asclepias cryptoceras Wats.

Asclepias latifolia (Torr.) Raf.

Asclepias macrosperma Eastw.

Funastrum heterophyllum (Engelm.) Standl.

Berberidaceae

Mahonia fremontii Torr.

Mahonia repens L.

Betulaceae

Betula occidentalis Hook.

Ostrya knowltonii Coville

Boraginaceae

Amsinckia intermedia Fisch. & Mey.

Coldenia hispidissima (Torr.) Gray

Cryptantha abata Johnst.

Cryptantha circumscissa (H. & A.) Johnston

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Boraginaceae (continued)

Cryptantha confertiflora (Greene) Pays.
Cryptantha crassiseppala (T. & G.) Greene
Cryptantha fendleri (Gray) Greene
Cryptantha flava (Nels.) Pays.
Cryptantha fulvocanescens (Gray) var. echinodes (Jones) Higgins
Cryptantha gracilis Osterh.
Cryptantha humilis (Gray) Pays.
Cryptantha jamesii Torr. var. multicaulis (Torr.) Pays.
Cryptantha jamesii (Torr.) Pays. var. disticha (Eastw.) Pays.
Cryptantha jamesii (Torr.) Pays. var. cinerea (Greene) Pays.
Cryptantha micrantha (Torr.) Johnst.
Cryptantha muricata (H. & A.) Nels. & Macbr.
Cryptantha nevadensis Nels. & Kenn.
Cryptantha pterocarya (Torr.) Greene
Cryptantha recurvata Coville.
Heliotropium convolvulaceum (Nutt.) Gray
Lappula occidentalis (Wats.) Greene
Lithospermum incisum Lehm.
Lithospermum tenellum Nutt.

Cactaceae

Echinocereus engelmannii (Parry) Rümpler
Opuntia aurea Baxter
Opuntia erinacea Engelm. & Bigel.
Opuntia polyacantha Haw
Opuntia whipplei Engelm. & Bigel.
Sclerocactus whipplei (Engelm. & Bigel.) B. & R.

Campanulaceae

Nemacladus glanduliferus Jeps. var. orientalis McVaugh

Capparidaceae

Cleome lutea Hook.
Cleome serrulata Pursh
Cleomella palmeriana Jones

Caprifoliaceae

Sambucus coerulea Raf.
Symphoricarpos longiflorus Gray
Symphoricarpos oreophilus Gray
Symphoricarpos utahensis Rydb.

Caryophyllaceae

Arenaria sp.
Silene antirrhina L.
Stellaria jamesiana Torr.

Celastraceae

Forsellesia nevadensis (Gray) Greene

Chenopodiaceae

Atriplex canescens (Pursh) Gray
Atriplex confertifolia (Torr. & Frem.) Wats.
Atriplex corrugata A. Nels.
Atriplex garrettii Rydb.
Atriplex graciliflora Jones
Atriplex navajoensis Hanson
Atriplex saccaria Wats.
Chenopodium fremontii Wats.
Chenopodium leptophyllum Nutt.
Chenopodium pratericola Rydb.
Corispermum hyssopifolium (Pall.) Moq.
Corispermum nitidum Kit.
Cycloloma atriplicifolium (Spreng.) Coult.
Eurotia lanata (Pursh.) Moq.
Grayia brandegei Gray
Grayia spinosa (Hook.) Moq.
Salsola pestifer A. Nels
Suaeda torreyana Wats.

Commelinaceae

Tradescantia occidentalis (Britt.) Smyth

Compositae

Acamptopappus sphaerocephalus Harv. & Gray
Agrosëris aurantiaca
Antennaria parvifolia Nutt.
Aplopappus acaulis (Nutt.) Gray
Aplopappus drummondii (T. & G.) Blake
Aplopappus nuttallii T. & G.
Aplopappus scopulorum (Jones) Blake
Ambrosia acanthicarpa Hook.
Artemisia bigelovii Gray
Artemisia dracaunculoides Pursh
Artemisia filifolia Torr.
Artemisia ludoviciana
Artemisia pacifica Nutt.
Artemisia tridentata Nutt.
Aster frondosus (Nutt.) T. & G.
Aster glaucodes Blake
Aster lucelene Blake
Baccharis emoryi Gray
Bahia neomexicana Gray?
Brickellia atractyloides Gray
Brickellia californicum (T. & G.) Gray
Brickellia longifolia Wats.
Brickellia oblongifolia Nutt.

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Compositae (continued)

Brickellia scabra (Gray) A. Nels.
Centaurea repens L.
Chaenactis douglasii (Hook.) H. & A.
Chaenactis macrantha D. C. Eaton
Chaenactis stevioides Hook. & Arn.
Chrysanthemum Greenei (Gray) Greene
Chrysanthemum nauseosus (Pall.) Britt. ssp. consimilis (Greene) H. & C.
Chrysanthemum nauseosus (Pall.) Britt. ssp. anaphalodes (Greene) H. & C.
Chrysanthemum nauseosus (Pall.) Britt. ssp. leiospermus (Gray) H. & C.
Chrysanthemum viscidifloras (Hook.) Nutt. ssp. stenophyllus (Gray) Hall
Cichorium intybus L.
Cirsium arizonicum (Gray) Petrak
Cirsium bipinnatum (Eastw.) Rydb.
Cirsium neomexicanum Gray
Cirsium nidulum
Cirsium pulchellum (Greene) Woot. & Standl.
Cirsium rydbergii Petrak
Cirsium undulatum (Nutt.) Spreng.
Cirsium utahensis Petrak
Conyza canadensis (L.) Cronq.
Dicoria canescens Gray
Dyssodia thurberi (Gray) Nels.
Encelia frutescens Gray
Erigeron concinnus (H. & A.) T. & G.
Erigeron divergens T. & G.
Erigeron eatonii Gray
Erigeron tanacetifolia (H. B. K.) Nees
Filago californica Nutt.?
Gaillardia gracilis Nels.
Gaillardia pinnatifida Torr.
Grindelia aphanactis Rydb.
Grindelia squarrosa (Pursh) Dunal.
Gutierrezia sarothrae (Pursh) Britt. & Rusby
Helenium hoopesii Gray
Helianthella microcephala Gray
Helianthus anomalus Blake
Helianthus petiolaris Nutt.
Heterotheca villosa (Nutt.) Shinn.
Hymenopappus filifolius Hook.
Hymenoxys acaulis (Pursh) Parker
Hymenoxys bigelovii (Gray) Parker?
Hymenoxys richardsonii (Hook.) Cockrell
Iva axillaris Pursh
Layia glandulosa (Hook.) H. & A.
Lygodesmia exigua Gray
Lygodesmia spinosa Nutt.
Machaeranthera sp.
Machaeranthera linearis Greene
Machaeranthera tanacetifolia (H. B. K.) Nees
Machaeranthera tortifolia (Gray) Cronq. & Keck
Malacothrix glabrata Gray
Malacothrix sonchoides (Nutt.) T. & G.

Compositae (continued)

Oxytenia acerosa Nutt.
Pectis papposa (Harv.) Gray
Perezia wrightii Gray
Petradoria pumila Nutt.
Psilotrophe cooperi (Gray) Greene
Psilotrophe sparsiflora (Gray) A. Nels.
Senecio longilobus Benth.
Senecio multicapitatus Greenm.
Senecio multilobatus T. & G.
Senecio uintahensis Nels.
Solidago canadensis L.
Solidago occidentalis (Nutt.) T. & G.
Solidago sparsiflora Gray
Sonchus asper (L.) Hill
Sonchus oleraceus L.
Stephanomeria exigua Nutt.
Stephanomeria tenuifolia (Jones) Hall
Stylocline micropoides Gray
Tetradymia canescens DC.
Tetradymia glabrata Gray
Thelesperma subnudum Gray
Townsendia annua Beaman
Townsendia exscapa (Richards) Porter
Townsendia incana Nutt.
Townsendia strigosa Nutt.
Vanclevea stylosa (Eastw.) Greene
Viguiera annua (Jones) Blake
Viguiera soliceps Barneby
Wyethia scabra Hook.
Xanthium saccharatum Wallr.

Convolvulaceae

Convolvulus arvensis L.
Evolvulus nuttallianus R. & S.

Crassulaceae

Sedum stenopetalum Pursh

Cruciferae

Arabis fendleri (Wats.) Greene
Arabis lignifera Nels.
Arabis perennans Wats.
Arabis pulchra Jones
Capsella bursa-pastoris (L.) Medic.
Caulanthus crassicaulis (Torr.) Wats.
Draba cuneifolia Nutt.
Descurainia pinnata (Walt.) Britt.
Descurainia richardsonii (Sweet) O. E. Schulz
Erysimum asperum Nutt.
Hutchinsia procumbens (L.) Desv.

Cruciferae (continued)

Dithyrea wislizenii Engelm.
Lepidium densiflorum Schrad.
Lepidium montanum Nutt.
Lepidium perfoliatum L.
Lesquerella gordonii (Gray) Wats.
Malcolmia africana (L.) R. Br.
Physaria chambersii Rollins
Rorippa nasturtium-aquaticum (L.) Schinz. & Thell.
Sisymbrium altissimum L.
Sisymbrium linifolium Nutt.
Stanleya pinnata (Pursh) Britt.
Streptanthella longirostris (Wats.) Rydb.
Streptanthus cordatus Nutt.
Thelypodium integrifolium (Nutt.) Endl.
Thlaspi montanum L.

Cupressaceae

Juniperus communis L.
Juniperus osteosperma (Torr.) Little
Juniperus scopulorum Sarg.

Cyperaceae

Carex garberi Fern.
Carex vesicaria L.
Carex rossii Boott.
Cladium californicum (Wats.) O'Neill
Cyperus schweinitzii Torr.
Eleocharis pauciflora (Lightf.) Link
Fimbristylis puberula (Michx.) Vahl.
Scirpus acutus Muhl.
Scripus americanus Pers.
Scirpus paludosus A. Nels.

Elaeagnaceae

Elaeagnus angustifolia L.
Shepherdia argentia (Pursh) Nutt.
Shepherdia rotundifolia Parry

Ephedraceae

Ephedra cutleri Peebles
Ephedra torreyana Wats.
Ephedra viridis Coville

Equisetaceae

Equisetum arvense L.
Equisetum laevigatum A. Braun

Ericaceae

Arctostaphylos patula Greene

Euphorbiaceae

Croton texensis (Klotzsch) Nuell. Arq.

Euphorbia fendleri T. & G.

Euphorbia glyptosperma Engelm.

Euphorbia parryi Engelm.

Reverchonia arenaria Gray

Fagaceae

Quercus gambelii Nutt.

Quercus turbinella Greene

Quercus undulata Torr.

Fumariaceae

Corydalis aurea Willd.

Gentianaceae

Centaureum exaltatum (Griseb.) W. F. Wight

Swertia albomarginata (Wats.) Kuntze

Swertia Utahensis (Jones) St. John

Geraniaceae

Erodium cicutarium (L.) L'Her.

Erodium texanum Gray

Gramineae

Agropyron smithii Rydb.

Agrostis palustris Huds.

Agrostis semiverticillata (Forsk.) C. Chr.

Andropogon barbinodis Lag.

Andropogon glomeratus (Walt.) B.S.P.

Andropogon hallii Hack

Andropogon scoparius Michx.

Aristida adscensionis L.

Aristida fendleriana Steud.

Aristida glauca (Nees) Walt.

Aristida longiseta Steud.

Bouteloua aristidoides (H.B.K.) Lag.

Bouteloua curtipendula (Michx.) Torr.

Bouteloua gracilis (H.B.K.) Lag.

Bromus marginatus Nees

Bromus rigidus Roth

Bromus rubens L.

Gramineae (continued)

Calamagrostis scopulorum Jones
Dactylis glomerata L.
Distichlis stricta (Torr.) Rydb.
Elymus canadensis L.
Elymus glaucus Buckl.
Elymus triticoides Buckl.
Festuca octoflora Walt.
Glyceria elata (Nash) Hitchc.
Hilaria jamesii (Torr.) Benth.
Muhlenbergia andina (Nutt.) Hitchc.
Muhlenbergia asperifolia (Nees & Mey) Parodi
Muhlenbergia curtifolia Scribn.
Muhlenbergia pungens Thurb.
Munroa squarrosa (Nutt.) Torr.
Oryzopsis hymenoides (Roem. & Schult.) Ricker
Panicum capillare L.
Panicum huachucae Ashe?
Panicum tennesseense Ashe
Panicum virgatum L.
Phragmites communis Trin.
Poa bigelovii Vasey & Scribn.
Poa longiligula Scribn. & Will.
Poa pratensis L.
Poa secunda Presl.
Polypogon monspeliensis (L.) Desf.
Schismus arabicus Nees
Secale cereale L.
Setaria viridis (L.) Beauv.
Sitanion hystrix (Nutt.) Smith
Sorghastrum nutans (L.) Nash
Sphenopholis obtusata (Michx.) Scribn.
Sporobolus contractus Hitchc.
Sporobolus cryptandrus (Torr.) Rydb.
Stipa comata Trin. & Rupr.
Stipa scribneri Vasey
Tridens pulchellus (H.B.K.) Hitchc. ex Jepsom
Trisetum spicatum (L.) Richt.

Hydrophyllaceae

Eucrypta micrantha Torr.
Nama demissum Gray
Nama hispidum Gray
Nama retrorsum Howell
Phacelia affinis Gray
Phacelia cephalotes Gray
Phacelia constancei Atwood
Phacelia corrugata A. Nels.
Phacelia crenulata Torr.
Phacelia demissa Gray
Phacelia hastata Dougl. ex Lehm.
Phacelia heterophylla Pursh
Phacelia howelliana Atwood

Hydrophyllaceae (continued)

Phacelia integrifolia Torr.
Phacelia invesiana Torr.
Phacelia mammillarensis Atwood
Phacelia pulchella Gray var. goodingii (Bradl) Howell
Phacelia rafaelsenis Atwood
Phacelia rotundifolia Torr.
Phacelia sericea (Graham) Gray

Junaceae

Juncus arcticus Willd. var. balticus (Willd.) Trautv.
Juncus brunnescens Rydb.
Juncus saximontanus A. Nels
Juncus torreyi Cov.
Juncus tracyi Rydb.

Labiatae

Hedeoma drummondii Benth.
Marrubium vulgare L.
Monardella odoratissima Benth.
Poliomintha incana (Torr.) Gray
Salvia dorrii (Kellogg) Abrams

Leguminosae

Albizia julibrissin Durax.
Astragalus agrophyllus Nutt.
Astragalus amphioxys Gray var. vespertinus (Sheld.) Jones
Astragalus amphioxys Gray var. amphioxys
Astragalus bisulcatus (Hook.) Gray
Astragalus calycosus Torr.
Astragalus ceramicus Sheld.
Astragalus coltonii Jones var. coltonii
Astragalus convallarius Greene
Astragalus desperatus Jones
Astragalus eremiticus Sheld.
Astragalus flavus Nutt.
Astragalus kentrophyta Gray var. coloradoensis Barneby
Astragalus lentiginosus Dougl. var. diphysus (Gray) Jones
Astragalus lentiginosus Dougl. var. palans (Jones) Jones
Astragalus lonchocarpus Torr.
Astragalus malacoides Barneby
Astragalus megacarpus (Nutt.) Gray
Astragalus mollissimus Torr. var. thompsonae (Wats.) Barn.
Astragalus moencoppensis Jones
Astragalus newberryi Gray
Astragalus nuttallianus DC. Eaton
Astragalus oophorus Wats. var. caulescens Jones
Astragalus praelongus Sheld.
Astragalus preussii Gray var. preussii

Leguminosae (continue)

Astragalus sabulonum Gray
Astragalus sesquiflorus Wats.
Astragalus striatiflorus Jones
Astragalus zionis Jones
Cercis occidentalis Torr.
Dalea fremontii Gray ex Torr.
Dalea lanata Spreng.
Glycyrrhiza lepidota (Nutt.) Pursh
Lathyrus brachycalyx Rydb. ssp. zionis (C.L. Hitchc.) Welsh
Lathyrus pauciflorus Fern
Lotus humistratus Greene
Lotus utahensis Otley
Lupinus argenteus Pursh
Lupinus pusillus Pursh ssp. intermontanus (Peller) Dunn
Lupinus sericeus Pursh
Medicago lupulina L.
Melilotus alba Desr.
Melilotus officinalis (L.) Lam.
Oxytropis lambertii P. sh var. bigelovii Gray
Petalostemon flavescens Wats.
Petalostemon occidentalis Torr.
Peteria thompsonae Wats.
Psoralea epipsila Barnb.
Psoralea juncea Eastw.
Psoralea lanceolata Pursh
Sophora stenophylla Gray
Trifolium andinum Nutt.
Vicia americana Muhl.

Liliaceae

Allium cernuum Roth
Allium nevadense Wats.
Androstephium breviflorum Wats.
Calochortus flexuosus Jones
Calochortus nuttallii T. & G. var. aureus (Wats.) Ownbey
Fritillaria atropurpurea Nutt.
Smilacina stellata (L.) Desf.
Yucca angustissima Engelm.
Yucca baccata Torr.
Yucca baileyi Woot. & Standl.
Yucca utahensis McKelvey
Zigadenus vaginatus (Rydb.) McBride

Linaceae

Linum aristatum Engelm.
Linum lewisii Pursh

Loasaceae

Mentzelia albicaulis Dougl.
Mentzelia multiflora (Nutt.) Gray

Lobeliaceae

Lobelia cardinalis L. ssp. graminea (Lam.) M. Vaugh

Loranthaceae

Arceuthobium vaginatum (H.B.K.) Eichler
Phoradendron juniperinum Engelm.

Malvaceae

Sphaeralcea coccinea (Pursh) Rydb.
Sphaeralcea grossulariaefolia (Torr.) D. Don
Sphaeralcea leptophylla (Gray) Rydb.
Sphaeralcea parvifolia A. Nels.
Sphaeralcea rusbyi Gray

Nyctaginaceae

Abronia fragrans Torr.
Abronia nana Wats.
Allionia chiosyi Standl.
Allionia incarnata L.
Boerhaavia torreyana (Wats.) Standl.
Hermidium alipes Wats.
Mirabilis multiflora (Torr.) Gray
Oxybaphus glabra Wats.
Oxybaphus linearis (Pursh) Robins.
Tripterocalyx micrantha (Torr.) Hook.
Tripterocalyx wootonii Standl.

Oleaceae

Fraxinus anomala Torr.

Onagraceae

Epilobium angustifolium L.
Epilobium hornemannii Reichenb.
Epilobium paniculatum Nutt.
Gaura parviflora Dougl.
Gayophytum nuttallii T. & G.
Oenothera albicaulis Pursh
Oenothera caespitosa Nutt.
Oenothera chamaenerioides Gray
Oenothera clavaeformis Torr. & Frem.
Oenothera contorta Dougl. ex Hook.
Oenothera decorticans (H. & A.) Greene
Oenothera eastwoodiae (Munz) Raven
Oenothera lavandulaefolia T. & G.
Oenothera longissima Rydb.
Oenothera multijuga Wats.

Onagraceae (continued)

Oenothera pallida Lindl.
Oenothera pterosperma Wats.
Oenothera scapiodea Nutt. ex T. & G.

Orchidaceae

Corallorhiza maculata Raf.
Epipactis gigantea Dougl. ex Hook.

Orobanchaceae

Orobanche fasciculata Nutt.
Orobanche multiflora Nutt.

Papaveraceae

Argemone corymbosa Greene

Pinaceae

Abies lasiocarpa (Hook.) Nutt.
Picea engelmannii Parry
Pinus edulis Engelm.
Pinus flexilis James
Pinus ponderosa Lawson

Plantaginaceae

Plantago insularis Eastw.
Plantago purshii Roem. & Schult.

Polemoniaceae

Eriastium diffusum (Gray) Mason
Gilia aggregata (Pursh) Spreng.
Gilia congesta Hook.
Gilia gunnisonii T. & G.
Gilia latifolia S. Wats. ex Parry
Gilia leptomeria Gray
Gilia longiflora (Torr.) D. Don
Gilia scopulorum Jones.
Gilia sinuata Dougl. ex DC.
Gilia subnuda Torr.
Gilia polycladon Torr.
Langloisia setosissima (T. & G.) Greene
Leptodactylon pungens (Torr.) Nutt. ex Rydb.
Linanthus bigelovii (Gray) Greene
Microsteris gracilis (Dougl. ex Hook.) Greene
Navarettia breweri (Gray) Greene
Phlox austromontana Cov.
Phlox cluteana Nels.
Phlox longiflora Torr.
Phlox stansburyi (Torr.) Heller
Polemonium delicatum Rydb.

Polygalaceae

Polygala subspinos Wats.

Polygonaceae

Chorizanthe brevicornu Torr.
Eriogonum alatum Torr.
Eriogonum cernuum Nutt.
Eriogonum corymbosum Benth. var. corymbosum
Eriogonum corymbosum Benth. var. glutinosum (ones) Jones
Eriogonum corymbosum Benth. var. ?
Eriogonum deflexum Torr.
Eriogonum densum Greene
Eriogonum flexum Jones
Eriogonum inflatum Torr. & Frem.
Eriogonum jamesii Benth.
Eriogonum leptocladon T. & G.
Eriogonum leptophyllum (Torr.) W. & S.
Eriogonum microthecum Nutt.
Eriogonum microthecum Nutt. var. ?
Eriogonum nidularium Coville
Eriogonum ovalifolium Nutt.
Eriogonum palmerianum Reveal in Munz
Eriogonum racemosum Nutt.
Eriogonum scabrellum Reveal
Eriogonum shockleyi Wats. var. longilobum (Jones) Reveal
Eriogonum subreniforme Wats.
Eriogonum umbellatum Torr.
Eriogonum wetherillii Eastw.
Polygonum sawatchense Small
Rumex hymensepalus Torr.

Polypodiaceae

Adiantum capillus-veneris L.
Pellaea atropurpurea (L.) Link.

Portulacaceae

Lewisia pygamaea (Gray) Robbins
Portulaca mundula Johnst.
Portulaca oleracea L.
Talinum parviflorum Nutt.

Potamogetonaceae

Potamogeton pusillus L.
Zanichilla palustris L.

Primulaceae

Androsace septentrionalis L.
Androsace occidentalis Pursh
Dodcatheon radicum Greene
Primula specuicola Rydb.

Pyrolaceae

Pyrola secunda L.

Ranunculaceae

Anemone tuberosa Rydb.
Aquilegia micrantha Eastw.
Clematis ligusticifolia Nutt.
Delphinium scaposum Greene
Ranunculus cymbalaria Pursh
Ranunculus juniperinus Jones
Thalictrum fendleri Engelm.

Rhamnaceae

Ceanothus fendleri Gray
Rhamnus betulaefolia Greene

Rosaceae

Amelanchier utahensis Koehne
Cercocarpus intricatus Wats.
Cercocarpus montanus Raf.
Chamaebatiaria millefolium (Torr.) Maxim.
Coleogyne ramosissima Torr.
Cowania mexicana D. Don
Fallugia paradoxa (Don) Engl.
Heuchera rubescens Torr.
Holodiscus dumosus (Nutt.) Heller
Ivesia ?
Petrophytum caespitosum (Nutt.) Rydb.
Potentilla concinna Richards?
Rosa woodsii Lindl.
Rubus neomexicanus Gray.

Rubiaceae

Galium stellatum Kellogg

Rutaceae

Thamnosma montana Torr. & Frem.

Salicaceae

Populus fremontii Wats.
Populus tremuloides Michx.
Salix amgdaloides Anderss
Salix exigua Nutt.
Salix lasiandra Benth.
Salix scouleriana Barratt

Santalaceae

Comandra unbellatum (L.) Nutt.

Saxifragaceae

Philadelphus microphyllus Gray

Ribes leptanthum Gray

Scrophulariaceae

Castilleja chromosa A. Nels.

Castilleja linariifolia Benth.

Collinsia parviflora Dougl.

Cordylanthus wrightii Gray

Mimulus eastwoodiae Rydb.

Mimulus guttatus DC.

Mimulus rubellus Gray

Mimulus sp.

Pedicularis centranthera Gray

Penstemon ambiguus

Penstemon angustifolium Nutt.

Penstemon bridgesii Gray

Penstemon comarrhenus Gray

Penstemon eatonii Gray

Penstemon laevis Pennell

Penstemon palmeri Gray

Penstemon subglaber Rydb.

Penstemon thompsoniae (Gray) Rydb.

Penstemon utahensis Eastw.

Veronica anagallis-aquatica L.

Solanaceae

Chamaesarcha coronopus (Dunal) Gray

Datura meteloides DC. Eaton

Lycium andersonii Gray

Lycium pallidum Miers

Nicotiana attenuata Torr.

Nicotiana trigonophylla Dunal

Physalis fendleri Gray

Solanum triflorum Nutt.

Tamaricaceae

Tamarix ramosissima Ledeb.

Typhaceae

Typha domingensis Pers.

Ulmaceae

Celtis reticulata Torr.

Umbelliferae

Cymopterus multinervatus (Coult. & Rose) Tidestrom.

Cymopterus newberryi (Wats.) Jones.

Cymopterus purpurascens (Gray) Jones

Cymopterus purpureus Wats.

Lomatium foeniculaceum (Nutt.) Coult. & Rose var. macdougallii (Coult. & Rose) Cronq.

Lomatium macdougallii Coult. & Rose ?

Lomatium parryi (Wats.) Macbr.

Urticaceae

Parietaria pensylvanica Muhl.

Violaceae

Viola canadensis L.

Vitaceae

Parthenocissus inserta (Kerner) K. Fritsch.

Zanichellaceae

Zanichellia palustris L.

Zygophyllaceae

Tribulus terrestris L.