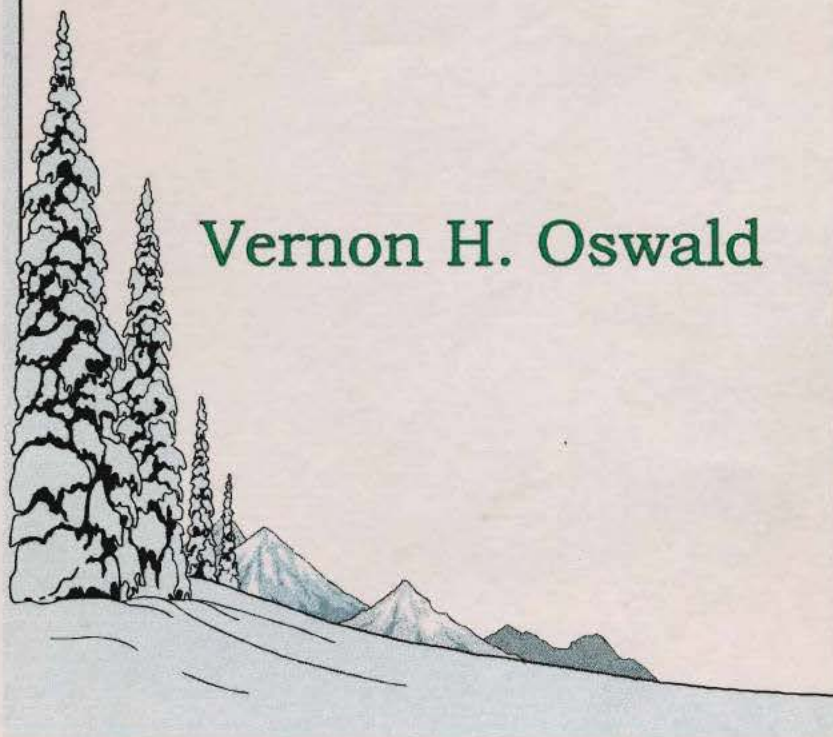


Vascular Plants of
**Butte Creek
House Meadow
Ecological Reserve**

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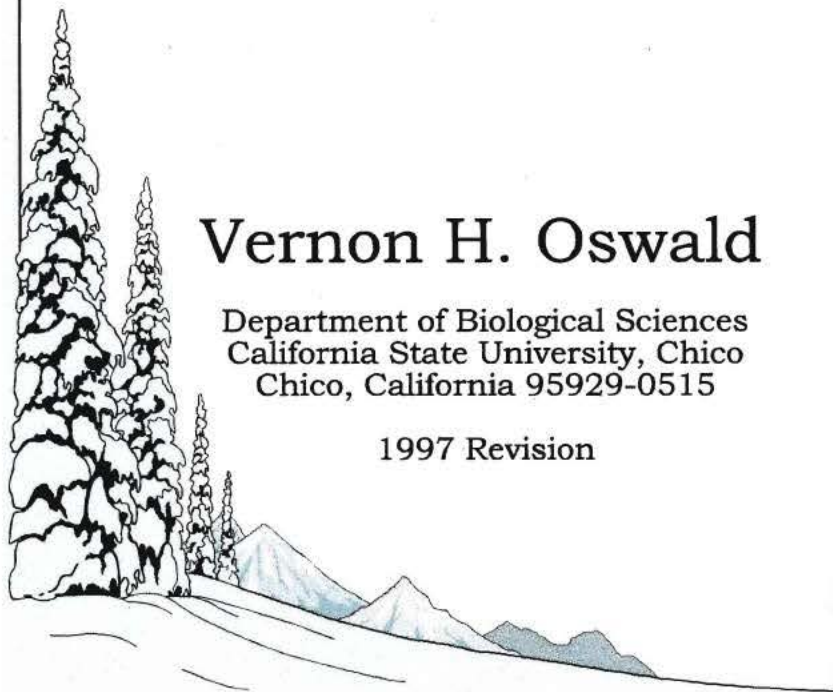


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Butte Creek
House Meadow
Ecological Reserve

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1997 Revision



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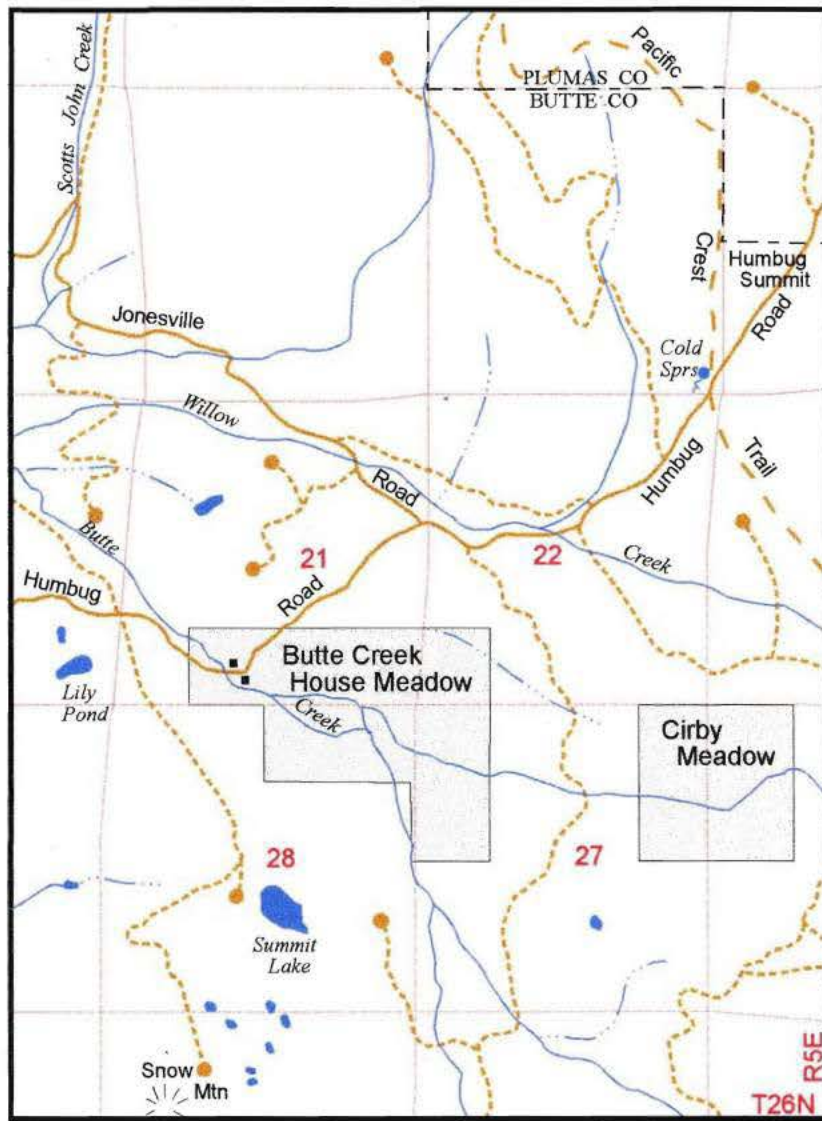


FIGURE 1. Butte Creek House Meadow Ecological Reserve and adjacent features.

INTRODUCTION

A survey of the vascular flora of Butte Creek House Meadow Ecological Reserve was carried out between late June, 1989 and early October, 1990. The primary purpose of the survey was to collect data for a continuing study of the vascular flora of Butte County, which has now been published (Oswald & Ahart, 1994).

Butte Creek House Meadow Ecological Reserve is a 320 acre parcel located in the north tip of Butte County, California, about three miles east-southeast of Jonesville (T26N R5E, portions of Sections 21, 22, 27, and 28]. Two branches of Butte Creek converge on the meadow—one branch originates in wet meadows about two miles to the east, and a second branch originates at a series of springs and snow lakes about 2 miles to the southeast. The land was formerly a free-holding within Lassen National Forest that was used for summer grazing. The property was acquired by the State of California in 1987 and is being managed by the California Department of Fish and Game. The perimeter of the parcel has now been fenced to exclude cattle, which are grazed in the surrounding National Forest. A meadow restoration project is underway, and a series of check dams have been installed to stabilize the creek banks and restore the water table. Public access will probably be permitted at some time in the future after the creek banks have become stabilized.

The reserve is within the red fir forest community characterized by Munz (1973), at elevations varying from about 5800 ft on the main meadow to about 6100 ft in the northeast corner of the reserve. The main meadow consists of both wet and dry montane meadow associations. The meadow borders support a lodgepole pine woodland, which is particularly extensive on low ground along the creeks in the southeast portion of the reserve. The latter woodland is separated from the more open meadow to the west by a cross-fence. The higher upland surrounding the meadow consists of fir and Jeffrey pine woodland, with patches of montane chaparral and rock outcrop associations. Geologically, the area is of volcanic origin and lies near the southern end of the Cascade Range.

TABLE 1. Numerical analysis of the vascular flora of Butte Creek Meadow Ecological Reserve.

FAMILIES	GENERA	SPECIES	VARIETIES*	TOTAL	NON-NATIVE	CNPS LISTED
56	168	274	7	281	14 (5%)	2

*Includes both varieties and subspecies.

A total of 281 plant taxa in 56 families and 168 genera was recorded during the survey (see Table 1). Only 5 percent of the plants are non-native introductions to California, and of these, half are introduced grasses. No study of this kind is ever complete—although the area was visited on 15 occasions between early spring and early fall, a number of species have undoubtedly not been recorded.

Only two plants are listed in the CNPS *Inventory of Rare and Endangered Vascular Plants of California* (Skinner & Pavlik, 1994): obtuse starwort (*Stellaria obtusa*) is rare in California but more common elsewhere, and Shasta beardtongue

(*Penstemon heterodoxus* var. *shastensis*) is a plant of limited distribution in California. On the other hand, a number of plants on the reserve are of interest to the Butte County flora. Meadow arnica (*Arnica chamissonis*), dwarf thistle (*Cirsium scariosum*), western hawk's-beard (*Crepis occidentalis* var. *conjuncta*), vernal water-starwort (*Callitriche verna*), Nuttall's monolepis (*Monolepis nuttalliana*), and short-flowered monkey-flower (*Mimulus breviflorus*) are presently known only from the reserve, and at least some of these seem to be conspicuously absent from similar habitat in northern Butte County. In addition, the populations of common waterplantain buttercup (*Ranunculus alismifolius* var. *alismifolius*) and Newberry's gentian (*Gentiana newberryi* var. *tiogana*) are by far the largest known for the county.

Nomenclature in the plant list is based upon *The Jepson Manual* (Hickman, 1993), although author abbreviations follow Brummitt and Powell. Some synonyms used in *A California Flora* (Munz, 1973) are included in brackets. Common names are mostly those of Abrams (1923-1960). The date(s) associated with each plant indicate the flowering interval for the plant at the study site, in so far as it could be determined from limited observations. *Early* is applied to days 1 through 10, *mid* to days 11 through 20, and *late* to days 21 through the end of the month. The flowering intervals, together with locations and habitats in which the plants were found, should be considered to be positive but not inclusive statements. Thus, a particular plant might be found at some location other than the ones mentioned in the plant list, or the plant might be found blooming before or after the date or interval indicated. Words such as rare, common, abundant, etc., are entirely subjective.

Some voucher specimens have been collected. They are indicated by collection number and are deposited in the herbarium at California State University, Chico (CHSC).

REFERENCES

- Abrams, L. 1923-60. *Illustrated Flora of the Pacific States*. Vols. 1-IV.; vol. IV by R. Ferris. Stanford University Press, Stanford.
- Brummitt, R.K. & C.E. Powell, editors. 1992. *Authors of Plant Names*. Royal Botanic Gardens, Kew.
- Hickman, J.C., Editor. 1993. *The Jepson Manual. Higher Plants of California*. University of California Press, Berkeley.
- Munz, P.A. 1973. *A California Flora with Supplement*. [Combined edition of *Flora* (1959) and *Supplement* (1969)]. University of California Press, Berkeley.
- Oswald, V.H. & L. Ahart. 1994. *Manual of the Vascular Plants of Butte County, California*. California Native Plant Society, Sacramento.
- Skinner, M.W. & B.M. Pavlik. 1994. *Inventory of Rare and Endangered Vascular Plants of California*. 5th Edition. California Native Plant Society, Sacramento.

Names printed in **boldface** are plants listed in the CNPS *Inventory*. Names in a non-serif typeface, e.g., *Taraxacum officinale*, are not native to the California flora.

THE PLANT LIST

FERNS AND FERN ALLIES

EQUISETACEAE – HORSETAIL FAMILY

Equisetum arvense L. – COMMON HORSETAIL. Locally common herbaceous perennial along washes, streams, and drainages. All plants observed vegetative.

OPHIOGLOSSACEAE – ADDER'S-TONGUE FAMILY

Botrychium multifidum (S.G.Gmel.) Rupr. – LEATHER GRAPE FERN. Uncommon fern at the base of the rocky slope on the south edge of the meadow and on the north side of the creek. Late Jun.

POLYPODIACEAE – FERN FAMILY

Athyrium filix-femina (L.) Roth ex Mert. var. *cyclosorum* Rupr. – WESTERN LADY FERN. Common in alder thickets in the lodgepole pine woodland east of the cross-fence.

Cystopteris fragilis (L.) Bernh. – BRITTLE FERN. Occasional on shaded banks along the creek.

CONIFEROPHYTA – CONIFER DIVISION

PINACEAE – PINE FAMILY

Abies magnifica A.Murray bis var. *magnifica* – RED FIR. Occasional tree of upland forest surrounding the meadow.

Pinus contorta Douglas ex Loudon ssp. *murrayana* (Grev. & Balf.) Critchf. – SIERRA LODGEPOLE PINE. Scattered on the meadow and the dominant tree on meadow edges. An extensive lodgepole pine woodland extends from the meadow eastward on low ground behind (east of) the cross-fence.

Pinus jeffreyi Grev. & Balf. – JEFFREY PINE. Common tree in upland forest surrounding the meadow.

ANTHOPHYTA – FLOWERING PLANT DIVISION

DICOTYLEDONES – DICOT CLASS

ACERACEAE – MAPLE FAMILY

Acer glabrum Torr. var. *torreyi* (Greene) Smiley – MOUNTAIN MAPLE. One seedling noted on the rocky slope on the south side of the meadow. Vegetative.

APIACEAE – CARROT FAMILY

[Umbelliferae]

Angelica breweri A.Gray – BREWER'S ANGELICA. Herbaceous perennial on the southwest side of Butte Creek near Humbug Rd. Mid Jul (vegetative). [*A. arguta* Nutt. ex Torr. & A.Gray var. *breweri* A.Gray DiTomaso]

Cymopterus terebinthinus (Hook.) M.E.Jones var. *californica* (J.M.Coult. & Rose) Jeps. – CALIFORNIA CYMPTERUS. Occasional herbaceous perennial on dry meadow edges and in rocky places. Late May–Jul. [*Pteryxia terebinthina* (Hook.) J.M.Coult. & Rose var. *californica* (J.M.Coult. & Rose) Mathias]

Ligusticum grayi J.M.Coult. & Rose – GRAY'S WILD LOVAGE. Common herbaceous perennial on the edges of the meadow and in lodgepole pine woodland. Late Jun–Jul.

Osmorhiza chilensis Hook. & Arn. – MOUNTAIN SWEET-CICELY. Common herbaceous perennial on forest floor. Late Jun–Jul.

Perideridia bolanderi (Gray) A.Nelson & J.F.Macbr. ssp. *bolanderi* – BOLANDER'S YAMPAH. Locally common herbaceous perennial on open, rocky drainages in upland forest on the north side of the meadow and in dry, meadow-like openings in lodgepole pine woodland east of the cross-fence. Late Jun–Jul.

Perideridia parishii (J.M.Coult. & Rose) A.Nelson & J.F.Macbr. ssp. *latifolia* (Gray) T.I.Chuang & Constance – PARISH'S YAMPAH. Common herbaceous perennial in moist to wet or marshy meadow and along creeks. Early Jul–Sep.

Sanicula tuberosa Torr. – TURKEY-PEA. Occasional to locally abundant herbaceous perennial on meadow edges and in openings in forest. Late Apr–Jun.

Sphenosciadium capitellatum A.Gray – SWAMP WHITEHEADS. Herbaceous perennial in a marsh along the south fence line in Section 27. Late Jul–Sep.

APOCYNACEAE – DOGBANE FAMILY

Apocynum androsaemifolium L. – MOUNTAIN DOGBANE. Occasional herbaceous perennial on dry forest floor and on rocky slopes. Plants vegetative.

ASTERACEAE – SUNFLOWER FAMILY

[*Compositae*]

Achillea millefolium L. – YARROW. Common herbaceous perennial on dry meadow and in open forest. Late Jun–Sep. [*A. lanulosa* Nutt., *A. millefolium* L. var. *lanulosa* (Nutt.) Piper]

Agoseris glauca (Pursh) Raf. var. *monticola* (Greene) Q.Jones ex Cronquist – MOUNTAIN AGOSERIS. Common and sometimes locally abundant herbaceous perennial on summer-dry meadow and meadow edges. Late Jul–Oct. [*Oswald 3898*]

Agoseris grandiflora (Nutt.) Greene – LARGE-FLOWERED AGOSERIS. Herbaceous perennial on the dry bed of the north fork of the creek just downstream from the cross-fence. Late Jul.

Arnica chamissonis Less. ssp. *foliosa* (Nutt.) Maguire – MEADOW ARNICA. Common herbaceous perennial along drainages and streams, in moist depressions, and on drier parts of the meadow. Late Jun–Sep. [*Oswald & Ahart 3822*]

Aster alpigenus (Torr. & A.Gray) A.Gray var. *andersonii* (A.Gray) M.Peck – ALPINE ASTER. Common herbaceous perennial on moist to wet meadow. Late Jun–Sep.

Aster eatonii (A.Gray) Howell – EATON'S ASTER. Locally common herbaceous perennial along streams and in marshy places in the lodgepole pine woodland east of the cross-fence. Late Sep–Oct.

Aster occidentalis (Nutt.) Torr. & A.Gray var. *occidentalis* – WESTERN ASTER. Common herbaceous perennial on summer dry meadow and creek banks and in thickets east of the cross-fence. Early Jul–Oct. [Includes var. *intermedius* A.Gray; Oswald 3899]

Cirsium scariosum Nutt. – ELK THISTLE. Fairly common herbaceous perennial on drier parts of the meadow. All plants are the stemless form of this taxon. Late Jun–Jul. [*C. acaulescens* (A.Gray) K.Schum., *C. drummondii* Torr. & A.Gray misapplied, *C. foliosum* (Hook.) DC. misapplied; Oswald & Ahart 3828]

Cirsium vulgare (Savi) Ten. – BULL THISTLE. Scattered to locally common weedy biennial on meadow edges and in lodgepole pine woodland. Early Jul–Oct.

Crepis occidentalis Nutt. ssp. *conjuncta* Babc. & Stebbins – WESTERN HAWKSBEARD. Uncommon herbaceous perennial scattered on the dry edge of a small, meadow-like opening in lodgepole pine woodland along the south fence line in Section 27. Early Jul. [Oswald 4341]

Ericameria bloomeri (A.Gray) J.F.Macbr. – BLOOMER'S GOLDENBUSH. Occasional subshrub on gravelly soils along Humbug Rd. Late Aug–Sep. [*Haplopappus bloomeri* A.Gray]

Erigeron lassenianus Greene var. *lassenianus* – LASSEN DAISY. Locally common herbaceous perennial on dry upland near Humbug Rd. Late Jun–Jul.

Eriophyllum lanatum (Pursh) J.Forbes var. *grandiflorum* (A.Gray) Jeps. – LARGE-FLOWERED WOOLLY-SUNFLOWER. Occasional herbaceous perennial in dry, rocky openings and along drainages in upland forest. Late Jun–Aug.

Gnaphalium palustre Nutt. – WESTERN MARSH CUDWEED. Occasional annual on gravel bars, along drainages, and in *Veratrum* patches. Early Jul–Sep.

Helenium bigelovii A.Gray – BIGELOW'S SNEEZEWEED. Occasional in moist places along the north edge of the meadow. Late Jun–Sep.

Hieracium albiflorum Hook. – WHITE-FLOWERED HAWKWEED. Occasional herbaceous perennial in dry upland forest and on rocky slopes. Mid Jul.

Madia bolanderi (A.Gray) A.Gray – BOLANDER'S TARWEED. Locally abundant herbaceous perennial in the marsh along the south fence line in Section 27. Late Aug–Oct.

Madia gracilis (Sm.) D.D.Keck – SLENDER TARWEED. Annual forb on a dry, rocky drainage in upland forest on the north side of the meadow. Late Jul.

Psilocarphus tenellus Nutt. – SLENDER WOOLLY-MARBLES. Locally abundant diminutive annual on a vernal wet flat in open forest along the fence line bordering Humbug Rd. northeast of the cabins. Early Jul.

Senecio aronicoides DC. – CALIFORNIA RAGWORT. Locally common herbaceous perennial in openings in upland forest on the north side of the meadow. Late May–Jul.

Senecio cymbalarioides Buek – ALPINE MEADOW RAGWORT. Locally common herbaceous perennial on wetter meadow on the south side of the creek. This is the only recorded population of this species in Butte County. Early Jun–Jul. [*S. subnudus* DC. misapplied; Oswald & Ahart 3834]

Senecio triangularis Hook. – ARROW-LEAVED RAGWORT. Occasional herbaceous perennial along creeks, in alder thickets, and in marshes. Early Jul–Sep.

Solidago canadensis L. ssp. *elongata* (Nutt.) D.D.Keck – CANADIAN GOLDEN-ROD. Herbaceous perennial along the creek near the bridge on Humbug Rd. Mid Jul.

Stephanomeria lactucina A.Gray – LARGE-FLOWERED STEPHANOMERIA. Occasional herbaceous perennial in brushy openings in woodland on the north side of the meadow. Late Jul.

Taraxacum officinale Weber – COMMON DANDELION. Common herbaceous perennial on wet to dry meadow and meadow edges. Late Apr–Oct.

Wyethia mollis A.Gray – WOOLLY MULE'S-EARS. Uncommon herbaceous perennial on the south side of the road near the cabins and in a small, meadow-like opening along the south fence in Section 27. Early Jul.

BETULACEAE – BIRCH FAMILY

Alnus incana (L.) Moench ssp. *tenuifolia* (Nutt.) Breitung – MOUNTAIN ALDER. Shrubby tree scattered along the creek near Humbug Rd and forming thickets in lodgepole pine woodland east of the cross-fence. Late Apr–May. [*A. tenuifolia* Nutt.]

BORAGINACEAE – BORAGE FAMILY

Cryptantha affinis (A.Gray) Greene – SIDE-GROOVED CRYPTANTHA. Locally abundant annual forb on dry meadow edges and on elevated knolls in the meadow. Early Jun–Jul.

Hackelia californica (A.Gray) I.M.Johnst. – CALIFORNIA STICKSEED. Scattered herbaceous perennial on meadow edges and in dry, upland forest. Early Jun–Jul.

Hackelia nervosa (Kellogg) I.M.Johnst. – SIERRA STICKSEED. Occasional herbaceous perennial on dry floor of upland forest and in lodgepole pine woodland. Early Jun–Jul.

Plagiobothrys scouleri (Hook. & Arn.) I.M.Johnst. – SCOULER'S POPCORN-FLOWER. Locally abundant annual forb along the creek and on drier parts of the meadow. Early Jul–Sep.

BRASSICACEAE – MUSTARD FAMILY

[Cruciferae]

Arabis platysperma A.Gray var. *platysperma* – BROAD-SEEDED ROCKCRESS. Herbaceous perennial on the rocky slope on the south side of the meadow. Mid Jul (in fruit).

Barbarea orthoceras Ledeb. – AMERICAN WINTERCRESS. Biennial to perennial herb scattered along drainages and in moist places on the meadow. Early Jun–Jul.

Capsella bursa-pastoris (L.) Medik. – SHEPHERD'S-PURSE. Occasional weedy annual at the old corral and on drier parts of the meadow. Early Jun–Jul.

Cardamine breweri S.Watson – SIERRA BITTERCRESS. Locally abundant herbaceous perennial in shallow water and on wet soil along streams, pools, and drainages. Late Jun–Oct.

Erysimum capitatum (Douglas) Greene ssp. *capitatum* – WESTERN WALL-FLOWER. Occasional herbaceous perennial on the rocky slope bordering the south side of the meadow and on forest floor east of the cross-fence. Late Jun–Jul.

Rorippa curvisiliqua (Hook.) Bessey ex Britton var. *orientalis* Stuckey – WESTERN YELLOWCRESS. Occasional annual or biennial on moist to wet soil of depressions and stream margins. Early Jun–Oct.

CALLITRICHACEAE – WATER-STARWORT FAMILY

Callitriche verna L. – VERNAL WATER-STARWORT. Submerged perennial in quiet water and marshy pools on the edge of the creek. Mid Jul–Sep. [Oswald 4380]

CAMPANULACEAE – BELLFLOWER FAMILY

Heterocodon rariflorum Nutt. – HETEROCODON. Locally abundant delicate annual on moist cut-banks of streams and drainages; also found in patches of *Veratrum*. Late Jun–Jul.

Porterella carnosula (Hook. & Arn.) Torr. – PORTERELLA. Locally abundant annual forb on the drying beds of a few of the drainages on the meadow. Late Jun–Jul.

CAPRIFOLIACEAE – HONEYSUCKLE FAMILY

Sambucus mexicanus C.Presl ex DC. – BLUE ELDERBERRY. Deciduous shrub on and along the base of the rocky slope on the south side of the meadow. Mid Jul. [Includes *S. cerulea* Raf.]

Symphoricarpos mollis Nutt. – CREEPING SNOWBERRY. Occasional trailing subshrub among scattered lodgepole pines near the cabins. Late Jun.

CARYOPHYLLACEAE – PINK FAMILY

Sagina saginoides (L.) H.Karst. – ARCTIC PEARLWORT. Delicate herbaceous perennial on moist gravel bars along the streams. Early Jul.

Silene douglasii Hook. var. *douglasii* – DOUGLAS' CATCHFLY. Herbaceous perennial on the rocky slope on the south side of the meadow. Mid Jul.

Silene lemmonii S.Watson – LEMMON'S CATCHFLY. Scattered to locally abundant herbaceous perennial on forest floor on the north and east sides of the meadow. Late Jun–Jul.

Spergularia rubra (L.) J. & C.Presl – RUBY SANDSPURRY. Locally abundant herbaceous perennial along washes and on gravelly openings in the meadow. Early Jul.

Stellaria longipes Goldie var. *longipes* – LONG-STALKED STARWORT. Common herbaceous perennial in moist to marshy places on the meadow and in grassy openings in lodgepole pines. Late Jun–Sep. [Oswald 3838]

Stellaria obtusa Engelm. – OBTUSE STARWORT. Delicate herbaceous perennial forming small mats on moist gravel along streams. Early Oct. CNPS List 2, rare in California but more common elsewhere.

CHENOPODIACEAE – GOOSEFOOT FAMILY

Chenopodium sp. – LAMB'S-QUARTERS. A patch of weedy *Chenopodium* of the *album* type was found near the cabins, but the fruits were not mature enough for a firm species identification. Early Jul.

Monolepis nuttalliana (Schult.) Greene – NUTTALL'S MONOLEPIS. Locally abundant annual forb in gravelly openings and disturbed places on drier parts of the

meadow. This is the only known location of this taxon in Butte County. Late Jun–Sep. [Oswald & Ahart 3833 and 3959]

CONVOLVULACEAE – MORNING-GLORY FAMILY

Calystegia malacophylla (Greene) Munz ssp. *malacophylla* – SIERRA MORNING-GLORY. Uncommon trailing herbaceous perennial along the north fork of Butte Creek near the east edge of the open meadow. Late Jul (vegetative).

CORNACEAE – DOGWOOD FAMILY

Cornus sericea L. ssp. *sericea* – AMERICAN DOGWOOD. Small deciduous shrubs at the base of the rocky slope on the south side of the meadow and in brushy thickets on the east side of the cross-fence. Early Jul. [*C. stolonifera* Michx., *C. occidentalis* (Torr. & A.Gray) Coville, *C. x californica* C.A.Mey., *C. stolonifera* Michx. var. *occidentalis* (Torr. & A.Gray) C.L.Hitchc. forma *californica* (C.A.Mey.) C.L.Hitchc.]

CUSCUTACEAE – DODDER FAMILY

Cuscuta sp. – DODDER. A single unidentifiable vegetative plant was in a small meadow along the south fence line in Section 27.

ERICACEAE – HEATH AND WINTERGREEN FAMILY

[Includes *Pyrolaceae*]

Arctostaphylos nevadensis A.Gray – PINEMAT MANZANITA. Common low shrub in dry openings and on brushy knolls in upland forest surrounding the meadow. Early Jun.

Arctostaphylos patula Greene – GREEN-LEAVED MANZANITA. Fairly common shrub of brushy openings in upland forest. Early Apr–Jun.

Chimaphila menziesii (R.Br. ex D.Don) Spreng. – LITTLE PRINCE'S-PINE. Herbaceous perennial on the rocky slope on the south side of the meadow. Mid Jul.

Orthilia secunda (L.) House – ONE-SIDED WINTERGREEN. Occasional herbaceous perennial forming localized colonies at the base of the rocky slope on the south side of the meadow and in alder thickets on the east side of the cross-fence. Mid Jul. [*Pyrola secunda* L.]

Pterospora andromedea Nutt. – PINEDROPS. Saprophytic perennial on dry forest floor in the lodgepole pine woodland east of the cross-fence. Late Jul.

Pyrola picta Sm. – WHITE-VEINED WINTERGREEN. Herbaceous perennial on the rocky slope on the south side of the meadow. Mid Jul.

Sarcodes sanguinea Torr. – SNOW PLANT. Saprophytic perennial in scattered locations in woodland on the east side of the cross-fence. Late Jun–Jul.

Vaccinium uliginosum L. ssp. *occidentale* (A.Gray) Hultén – WESTERN BLUE-BERRY. Locally common low shrub in wet parts of the meadow on the south side of the creek. Late Jun (vegetative).

FABACEAE – PEA FAMILY

[*Leguminosae*]

Lotus oblongifolius (Benth.) Greene var. *oblongifolius* – STREAMBANK LOTUS. Occasional herbaceous perennial along creeks in the lodgepole pine woodland on the

east side of the cross-fence. Late Jun–Jul. [*L. oblongifolius* var. *nevadensis* (A.Gray) Munz]

Lotus purshianus (Benth.) Clem. & E.G.Clem. var. *purshianus* – SPANISH LOTUS. Common annual forb along creeks and meadow edges. Late Jul–Oct.

Lupinus arbustus Douglas ex Lindl. – SPURRED LUPINE. Herbaceous perennial on the wooded slope on the south side of the creek at the bridge on Humbug Rd. Mid Jul. [*L. arbustus* ssp. *silvicola* (A.Heller) D.B.Dunn]

Lupinus polyphyllus Lindl. var. *burkei* (S.Watson) C.L.Hitchc. – MEADOW LUPINE. Occasional herbaceous perennial on the marsh along the south fence in Section 27. Late Jun–Jul. [*L. polyphyllus* ssp. *superbus* (A.Heller) Munz]

Lupinus lepidus Douglas var. *sellulus* (Kellogg) Barneby – STOOL LUPINE. Locally common in dry, open forest along Humbug Rd near the cabins. Late Jun–Jul. [*L. sellulus* Kellogg; Oswald & Ahart 3821]

Trifolium breweri S.Watson – FOREST CLOVER. Common on dry edges and floor of open forest. Late May–Sep.

Trifolium cyathiferum Lindl. – BOWL CLOVER. Herbaceous perennial on a wet slope in open forest near the intersection of Sections 21, 22, 27, and 28. Late Jun.

Trifolium kingii S.Watson var. *productum* (Greene) Jeps. – SHASTA CLOVER. Common herbaceous perennial on forest floor east of the cross-fence. Late Jun–Jul. [*T. productum* Greene]

Trifolium longipes Nutt. var. *nevadense* Jeps. – LONG-STALKED CLOVER. Common herbaceous perennial in moist to wet meadow. Early Jun–Jul. [*T. longipes* var. *hansenii* (Greene) Jeps.]

Trifolium monanthum A.Gray var. *monanthum* – CARPET CLOVER. Herbaceous perennial forming matted colonies in moist places along streams and drainages. Early Jul–Aug. [Includes var. *parvum* (Kellogg) McDermott]

Trifolium repens L. – WHITE CLOVER. Herbaceous perennial between Humbug Rd and the reserve fence near the bridge. Early Jul.

Trifolium wormskioldii Lehm. – SPRINGBANK CLOVER. Herbaceous perennial found in the marsh along the south fence in Section 27. Early Jul–Sep.

FAGACEAE – OAK FAMILY

Chrysolepis sempervirens (Kellogg) Hjelmq. – BUSH CHINQUAPIN. Uncommon shrub in brushy forest openings. Flowering interval not recorded. [*Castanopsis sempervirens* (Kellogg) Dudley]

Quercus vaccinifolia Kellogg – HUCKLEBERRY OAK. Locally common shrub in rocky patches of chaparral and in open upland forest. Mid Jul.

GENTIANACEAE – GENTIAN FAMILY

Gentiana newberryi A.Gray var. *tiogana* (A.Heller) J.S.Pringle – ALPINE GENTIAN. Common and locally abundant herbaceous perennial in summer-dry meadow. Late Jul–Sep. [Oswald & Ahart 3956]

Gentianopsis simplex (A.Gray) Iltis – HIKER'S GENTIAN. Scattered to locally common herbaceous perennial on the moist, grassy bank of the creek in the main meadow. Mid Jul. [*Gentiana simplex* A.Gray]

GROSSULARIACEAE – GOOSEBERRY FAMILY

[In *Saxifragaceae* in some floras]

Ribes roezlii Regel var. *roezlii* – SIERRA GOOSEBERRY. Occasional shrub on dry meadow edges and forest floor. Early Jul (in fruit).

HYDROPHYLLACEAE – WATERLEAF FAMILY

Nemophila parviflora Douglas ex Benth. var. *austiniae* (Eastw.) Brand – AUSTIN'S NEMOPHILA. Annual forb in a patch of *Veratrum* just east of the cross-fence. Late Jun.

Nemophila spatulata Coville – SIERRA NEMOPHILA. Occasional annual forb in moist places on the meadow. Early Jun–Jul.

Phacelia mutabilis Greene – CHANGEABLE PHACELIA. Common herbaceous perennial on dry forest floor east of the cross-fence. Early Jul–Aug.

Phacelia racemosa (Kellogg) Brandegee – RACEMOSE PHACELIA. Delicate annual on moist meadow edges and on gravel bars along the creek. Late Jun–Jul.

HYPERICACEAE – ST. JOHN'S-WORT FAMILY

Hypericum anagalloides Cham. & Schtdl. – TINKER'S-PENNY. Common prostrate herbaceous perennial in moist places along drainages, depressions, and streams. Late Jun–Jul.

LAMIACEAE – MINT FAMILY

[*Labiatae*]

Monardella glauca Greene – GLAUCOUS MONARDELLA. A single plant that seems to correspond to this mint was located on dry upland forest on the north side of the meadow. Mid Jul. [*M. odoratissima* Benth. ssp. *glauca* (Greene) Epling]

Monardella odoratissima ssp. *pallida* (A.Heller) Epling – PALLID MOUNTAIN MONARDELLA. Common perennial on rocky slopes and in openings in upland forest. Early Jul.

Prunella vulgaris L. var. *lanceolata* (Barton) Fernald – SELFHEAL. Locally abundant herbaceous perennial in moist places along streams and marshes. Late Jun–Sep.

Stachys ajugoides Benth. var. *rigida* (Nutt. ex Benth.) Jeps. & Hoover – RIGID HEDGE-NETTLE. Occasional herbaceous perennial along the various branches of the creek. Mid Jul–Oct. [*Stachys rigida* Nutt. ex Benth.]

LENTIBULARIACEAE – BLADDERWORT FAMILY

Utricularia vulgaris L. – COMMON BLADDERWORT. Locally abundant submersed aquatic in a shallow, drying pool on the meadow. Late Jun (plants vegetative).

LIMNANTHACEAE – MEADOWFOAM FAMILY

Floerkea proserpinacoides Willd. – FALSE MERMAID. Uncommon annual forb in patches of *Veratrum* in a small, meadow-like opening along the south fence in Section 27. Late Jun–Jul. [Oswald 4340]

MALVACEAE – MALLOW FAMILY

Sidalcea glaucescens Greene – GLAUCOUS CHECKERBLOOM. Common herbaceous perennial on dry meadow edges and open forest floor. Late Jun–Sep.

Sidalcea oregana (Nutt. ex Torr. & A.Gray) A.Gray ssp. *spicata* (Regel) C.L. Hitchc. – OREGON CHECKER. Scattered herbaceous perennial in wet meadow and along creeks. Late Jun–Oct.

ONAGRACEAE – EVENING PRIMROSE FAMILY

Circaea alpina L. ssp. *pacifica* (Asch. & Magnus) Raven – ENCHANTER'S-NIGHTSHADE. Locally abundant herbaceous perennial in alder thickets and along rocky creek banks east of the cross-fence. Late Jul–Sep.

Epilobium brachycarpum C.Presl – PANICLED WILLOWHERB. Common annual in openings in upland woodland. Late Jul. [*E. paniculatum* Nutt. ex Torr. & A. Gray, together with the varieties and forms]

Epilobium canum (Greene) Raven ssp. *latifolium* (Hook.) Raven – CALIFORNIA-FUCHSIA. Herbaceous perennial on the rocky, dry bank of the north branch of Butte Creek east of the cross-fence. Late Aug–Sep. [*Zauschneria californica* Presl ssp. *latifolia* (Hook.) D.D.Keck]

Epilobium ciliatum Raf. ssp. *glandulosum* (Lehm.) P.Hoch & Raven – GLANDULAR WILLOWHERB. Common herbaceous perennial in moist to wet places along the creek and in the marsh along the south fence in Section 27. Late Jun–Sep.

Epilobium halleanum Hausskn. – SLENDER WILLOWHERB. Scattered to locally common slender herbaceous perennial along drainages and wet depressions on the main meadow, and in meadow-like openings in lodgepole pine woodland east of the cross-fence where it is often in patches of *Veratrum*. [*E. brevistylum* Barbey var. *ursinum* (Parish ex Trel.) Jeps., *E. glandulosum* Lehm. var. *tenue* (Trel.) C.L. Hitchc.]

Epilobium hornemannii Rechb. – HORNEMANN'S WILLOWHERB. Herbaceous perennial found on a shaded bank of a marshy ditch in a stand of lodgepole pines in the southwest corner of the main meadow. Mid Jul. [Oswald 3859]

Epilobium oregonense Hausskn. – OREGON WILLOWHERB. Small herbaceous perennial in wet depressions and along drainages in the main meadow. Late Jun. [Oswald & Ahart 3824]

Epilobium torreyi (S.Watson) P.Hoch & Raven – TORREY'S SPIKE-PRIMROSE. Annual forb in the main meadow along the north branch of the creek and in the swampy meadow along the south fence in Section 27. Late Jul–Sep. [*Boisduvalia stricta* (A.Gray) Greene]

Gayophytum diffusum Torr. & A.Gray ssp. *parviflorum* F.H.Lewis & Szweyk. – NUTTALL'S GROUNDSMOKE. Locally abundant annual forb on dry meadow edges. Mid Jul–Oct. [*G. nuttallii* Torr. & A.Gray misapplied]

Gayophytum heterozygum F.H.Lewis & Szweyk. – ZIGZAG GROUNDSMOKE. Abundant annual forb in upland forest. Late Jul–Aug.

Gayophytum humile A.Juss. – DWARF GROUNDSMOKE. Locally abundant annual forb in meadow-forest ecotone and on the knolls in the main meadow. Early Jul.

Gayophytum racemosum Torr. & A.Gray – BLACK-FOOTED GROUND-SMOKE. Common annual forb on gravel bars and gravelly banks along the creek. Mid Jul–Oct.

OROBANCHACEAE – BROOM-RAPE FAMILY

Orobanche uniflora L. var. *uniflora* – NAKED BROOMRAPE. Perennial parasite of *Saxifraga nidifica* in a small meadow along the south fence in Section 27. Early Jul. [Includes var. *minuta* (Suksd.) G.Beck]

PAEONIACEAE – PAEONY FAMILY

[Included in *Ranunculaceae* in some floras]

Paeonia brownii Douglas ex Hook. – WESTERN PAEONY. Herbaceous perennial in meadow-forest ecotone on the north side of the meadow. Late May (in fruit.)

PAPAVERACEAE – POPPY FAMILY

[Includes *Fumariaceae* of some floras]

Dicentra formosa (Haw.) Walp. – PACIFIC BLEEDINGHEARTS. Common to locally abundant herbaceous perennial among lodgepole pines east of the main meadow. Early Jun–Jul.

Dicentra uniflora Kellogg – STEER'S-HEAD. Scattered to fairly common herbaceous perennial on gravelly soil of open forest and rock outcrops on the north side of the meadow, the plants blooming soon after snow melt. Late Apr–May.

POLEMONIACEAE – PHLOX FAMILY

Collomia linearis Nutt. – NARROW-LEAVED COLLOMIA. Annual forb in a localized population on the dry bank of the creek near the bridge on Humbug Rd. Late Jun. [Oswald 4319]

Collomia tinctoria Kellogg – YELLOW-STAINING COLLOMIA. Delicate annual on a dry, eroded bank of the creek in the main meadow. Late Jul.

Gilia capillaris Kellogg – SMOOTH-LEAVED GILIA. Delicate annual on a springy drainage on a slope above the north branch of the creek near the intersection of Sections 21, 22, 27, and 28. Early Jul.

Gilia leptalea (A.Gray) Greene ssp. *leptalea* – BRIDGES' GILIA. Locally abundant annual forb on rocky drainages in upland forest on the north side of the meadow. Late Jun–Aug.

Ipomopsis aggregata (Pursh) V.E.Grant ssp. *formosissima* (Greene) Wherry – SCARLET GILIA. Herbaceous biennial on the rocky slope on the south side of the meadow. Mid Jul. [*Gilia aggregata* (Pursh) Sreng.]

Linanthus ciliatus (Benth.) Greene – WHISKERBRUSH. Annual forb forming localized populations in rocky openings in upland forest. Late Jun.

Linanthus harknessii (Curran) Greene – HARKNESS' LINANTHUS. Locally abundant annual on open, gravelly soil on the upper bank of the creek and in dry, rocky drainages in upland forest. Late Jun–Sep.

Navarretia divaricata (Torr. ex A.Gray) Greene ssp. *divaricata* – MOUNTAIN NAVARRETTIA. Locally abundant on gravelly flats along the edge of the meadow and in openings in forest. Late Jun–Jul.

Navarretia intertexta (Benth.) Hook. ssp. *propinqua* (Suksd.) A.G.Day – GREAT BASIN NAVARRETIA. Common small, delicate white-flowered annual on seepy slopes, on gravelly spots on the meadow, and along the creek. Late Jun–Oct.

Phlox gracilis (Hook.) Greene – SLENDER PHLOX. Occasional delicate annual in meadow, on meadow border, and in upland forest. These plants are the white-flowered rather than the typical pink-flowered form. Late Jun–Jul. [*Microsteris gracilis* (Hook.) Greene including ssp. *humilis* (Greene) V.E.Grant & var. *humilior* (Hook.) Cronquist]

POLYGONACEAE – BUCKWHEAT FAMILY

Eriogonum marifolium Torr. & A.Gray – MARUM-LEAVED BUCKWHEAT. Occasional herbaceous perennial in openings and rocky places in dry upland forest. Late Jun–Jul.

Eriogonum nudum Douglas ex Benth. var. *pubiflorum* Benth. – HAIRY-FLOWERED BUCKWHEAT. Herbaceous perennial in a dry, rocky drainage in upland forest along the north side of the meadow. Late Jul.

Polygonum arenastrum Jord. ex Boreau – COMMON KNOTWEED. Common annual at the corral and occasional in other disturbed places. Mid Jul–Oct.

Polygonum bistortoides Pursh – WESTERN BISTORT. Scattered herbaceous perennial in moist to wet meadow and swampy places. Late Jun–Jul.

Polygonum douglasii Greene ssp. *douglasii* – DOUGLAS' KNOTWEED. Common annual in dry meadow borders, and on gravel bars and gravelly flats along the creek. Mid Jul–Oct.

Polygonum minimum S.Watson – LEAFY DWARF KNOTWEED. Annual in a thicket near the creek in the lodgepole pine woodland east of the cross-fence. Late Jul.

Polygonum polygaloides Meisn. ssp. *kelloggii* (Greene) J.C.Hickman – KELLOGG'S KNOTWEED. Locally common annual along moist drainages and in moist meadow. Late May–Jul.

Rumex acetosella L. COMMON SHEEP SORREL. Locally abundant herbaceous perennial on meadow edges and in open forest. Late Jun–Jul. [*R. angiocarpus* Murb.]

Rumex salicifolius Weinm. var. *triangulivalvis* (Danser) J.C.Hickman – WILLOW DOCK. Herbaceous perennial on gravel bars along the creek in the main meadow. Mid Jul. [*R. triangulivalvis* (Danser) Rech.f. var. *oreolapathum* Rech.f.]

PORTULACACEAE – PURSLANE FAMILY

Calandrinia ciliata (Ruiz & Pav.) DC. – REDMAIDS. Common weedy annual in gravelly openings in moist to drier parts of the meadow. Late Jun–Sep. [*C. ciliata* var. *menziesii* (Hook.) J.F.Macbr.; Oswald & Ahart 3835]

Calyptidium umbellatum (Torr.) Greene – PUSSYPAWS. Common herbaceous perennial on dry meadow borders and in open forest. Early May–Jul.

Claytonia rubra (Howell) Tidestr. ssp. *rubra* – NORTHERN MINER'S-LETTUCE. Locally common annual on the wooded north edge of the meadow. Late May–Jul. [*Montia perfoliata* (Donn ex Willd.) Howell var. *depressa* (A.Gray) Jeps. misapplied]

Lewisia nevadensis (A.Gray) B.L.Rob. – SIERRA LEWISIA. Locally common herbaceous perennial in wet, meadow-like openings in forest and in wet meadow border. Late May–Jun.

Lewisia triphylla (S. Watson) B.L. Rob. – THREE-LEAVED LEWISIA. Locally common small perennial in a wet, meadow-like opening in forest on the north side of the main meadow. Early Jun.

Montia chamissoi (Ledeb. ex Spreng.) Greene – TOAD-LILY. Herbaceous perennial forming locally dense populations on wet gravel bars and in shallow water or boggy drainages along the creek. Late Jun–Jul.

Montia linearis (Douglas ex Hook.) Greene – LINEAR-LEAVED MONTIA. Locally common annual in patches of *Veratrum* along the north edge of the meadow. Late Jun–Jul.

PRIMULACEAE – PRIMROSE FAMILY

Dodecatheon alpinum (A. Gray) Greene – ALPINE SHOOTINGSTAR. Scattered herbaceous perennial in wet places along streams and drainages and in swampy places. Early Jun–Jul.

RANUNCULACEAE – BUTTERCUP FAMILY

Aconitum columbianum Nutt. ssp. *columbianum* – COLUMBIA MONKSHOOD. Occasional herbaceous perennial in willow thickets and in marshy places east of the cross-fence. Early Jul.

Aquilegia formosa Fisch. – CRIMSON COLUMBINE. Scattered herbaceous perennial in the lodgepole pine woodland east of the cross-fence. Late Jun–Jul. [Includes var. *truncata* (Fisch. & C.A. Mey.) Baker]

Caltha leptosepala DC. var. *biflora* (DC.) G. Lawson – MARSH-MARIGOLD. Locally common in a wet drainage on the south side of the main meadow and in a swamp along the south fence in Section 27. Early Jul–Aug. [*C. biflora* DC. including ssp. *howellii* (Huth) Abrams]

Delphinium depauperatum Nutt. – DWARF LARKSPUR. Common herbaceous perennial on the elevated knolls in the meadow. Late Jun.

Delphinium nuttallianum Pritz. ex Walp. – NUTTALL'S LARKSPUR. Occasional perennial along wooded edges and on forest floor. Early Jul.

Ranunculus alismifolius Geyer ex Benth. var. *alismifolius* – COMMON WATER-PLANTAIN BUTTERCUP. Abundant herbaceous perennial forming large, colorful colonies on the main meadow in early spring. This is the most extensive population known for Butte County. Late Apr–Jul. [Includes var. *hartwegii* (Greene) Jeps.; *Oswald & Ahart 4268*]

Ranunculus alismifolius var. *alismellus* A. Gray – SMALL WATER-PLANTAIN BUTTERCUP. Locally common herbaceous perennial along wet drainages in the lodgepole pine woodland east of the cross-fence. Early Jun.

Ranunculus aquatilis L. var. *capillaceus* (Thuill.) DC. – WATER BUTTERCUP. Locally abundant in the creek where it is found in both rapidly flowing water and in quiet pools. Some plants have the terminal leaves less dissected than the stem leaves, approaching the var. *hispidulus* Drew. Late Jun–Oct.

Ranunculus flammula L. – CREEPING BUTTERCUP. Delicate creeping perennial in moist depressions in the meadow. Late Jun–Jul. [Includes var. *ovalis* (Bigelow) L.D. Benson]

Ranunculus occidentalis var. *ultramontanus* Greene – MOUNTAIN BUTTERCUP. Occasional herbaceous perennial on elevated knolls in the meadow, on meadow border, and in open woods. Late Jun.

Ranunculus orthorhynchus Hook. var. *orthorhynchus* – STRAIGHT-BEAKED BUTTERCUP. Occasional perennial along moist drainage on the main meadow and in the marsh along the south fence in Section 27. Early Jun–Jul.

Ranunculus uncinatus D.Don ex G.Don var. *parviflorus* (Torr.) L.D.Benson – HOOK-SEEDED BUTTERCUP. Herbaceous perennial on the edge of a thicket along the creek east of the cross-fence. Late Jul.

Thalictrum fendleri Engelm. ex A.Gray var. *fendleri* – FENDLER'S MEADOW-RUE. Occasional herbaceous perennial in thickets and along streams east of the cross-fence. Early Jun–Jul.

RHAMNACEAE – BUCKTHORN FAMILY

Ceanothus cordulatus Kellogg – MOUNTAIN WHITETHORN. Common low shrub on meadow edges and in upland forest. Late Jun–Jul.

Ceanothus prostratus Benth. – MAHALA-MATS. Fairly common prostrate shrub in dry openings in forest. Late Apr–Jun.

ROSACEAE – ROSE FAMILY

Amelanchier utahensis Koehne – UTAH SERVICE-BERRY. Occasional shrub on meadow edges and on the rocky slope on the south side of the meadow. Early Jul (plants vegetative). [Our plants previously referred to *A. pallida* Greene]

Fragaria virginiana Duchesne – MOUNTAIN STRAWBERRY. Herbaceous perennial forming small colonies on moist meadow borders and elevated knolls. Early Jun. [Includes ssp. *platypetala* (Rydb.) Staudt]

Geum macrophyllum Willd. – BIG-LEAVED AVENS. Occasional herbaceous perennial in wet places on the meadow near the creek and in the marsh along the south fence in Section 27. Late Jun–Oct.

Holodiscus microphyllus Rydb. var. *glabrescens* (Greenm.) F.A.Ley – ROCK SPIRAEA. Locally common shrub on a stony and brushy elevation near the northeast corner of the reserve. Late Aug (in fruit).

Horkelia fusca Lindl. ssp. *parviflora* (Nutt.) D.D.Keck – SMALL-FLOWERED HORKELIA. Locally abundant herbaceous perennial on elevated knolls and along the wooded edge of the meadow. Northern Butte County is in a transitional area between the ssp. *parviflora* and the ssp. *tenella* (see next), and the distinction between the two is not always sharp. Early Jul. [Oswald 3837]

Horkelia fusca ssp. *tenella* (S.Watson) D.D.Keck – SLENDER HORKELIA. Similar to and often growing with the previous subspecies from which it differs by having more deeply lobed leaves. Late Jun–Jul. [Oswald 3838]

Horkelia tridentata Torr. – THREE-TOOTHED HORKELIA. Common herbaceous perennial in dry upland forest. Early Jun–Jul.

Potentilla glandulosa Lindl. ssp. *ashlandica* (Greene) D.D.Keck – MOUNTAIN CINQUEFOIL. Scattered herbaceous perennial on drier parts of the meadow and along meadow edges. Early Jun–Jul. [Our plants formerly referred to ssp. *nevadensis* (S. Watson) D.D.Keck]

Potentilla gracilis Douglas ex Hook. var. *fastigiata* Nutt.) S. Watson – SLENDER CINQUEFOIL. Herbaceous perennial scattered in moist meadow and along the creeks. Late Jun–Oct. [*P. gracilis* ssp. *nuttallii* (Lehm.) D.D. Keck]

Potentilla millefolia Rydb. – CUT-LEAVED CINQUEFOIL. Common prostrate herbaceous perennial in moist to dry meadow. The population here is the most extensive of any recorded for Butte County. Late Apr–Sep. [Oswald & Ahart 3826]

Rubus parviflorus Nutt. – THIMBLEBERRY. Deciduous shrub on the rocky slope on the south side of the meadow. Early Jul (plant vegetative).

Spiraea densiflora Nutt. ex Torr. & A. Gray. – DENSE-FLOWERED SPIRAEA. Scattered small shrub on a rocky, brush-covered elevation near the northeast corner of the reserve. Late Jul.

RUBIACEAE – MADDER FAMILY

Galium bifolium S. Watson – LOW MOUNTAIN BEDSTRAW. Locally abundant small annual on meadow edges, elevated knolls on the meadow, and in patches of *Veratrum*. Early Jun–Jul.

Galium bolanderi A. Gray – BOLANDER'S BEDSTRAW. Herbaceous perennial in woodland east of the cross-fence. Early Jul.

Galium trifidum L. var. *pacificum* Wiegand – PACIFIC BEDSTRAW. Common slender-stemmed perennial along wet drainages on the meadow. Late Jun. [*G. trifidum* var. *subbiflorum* Wiegand; Oswald & Ahart 3825]

Kelloggia galioides Torr. – KELLOGGIA. Occasional herbaceous perennial on forest floor and on rocky slopes. Late Jun–Jul.

SALICACEAE – WILLOW FAMILY

Salix lucida Muhl. ssp. *lasiandra* (Benth.) E. Murray – YELLOW WILLOW. Occasional willow along the creek in the lodgepole pine woodland east of the cross-fence. Flowering interval not determined. [*Salix lasiandra* Benth.]

Salix lemmonii Bebb – LEMMON'S WILLOW. Shrubby tree along the base of the rocky slope on the south side of the meadow and in the woodland east of the cross-fence. Early May–Jun.

SAXIFRAGACEAE – SAXIFRAGE FAMILY

Lithophragma glabrum Nutt. – BULB-BEARING WOODLANDSTAR. Herbaceous perennial in a patch of *Veratrum* near the northeast end of the main meadow. Early Jun.

Saxifraga nidifica Greene var. *nidifica* – PEAK SAXIFRAGE. Locally common herbaceous perennial in a patch of *Veratrum* on a wet slope in open forest near the intersection of Sections 21, 22, 27, and 28. Late Jun. [Oswald 4318]

Saxifraga oregana Howell – BOG SAXIFRAGE. Locally common herbaceous perennial along wet depressions and drainages in the wetter southeast portion of the main meadow and also in the marsh along the south fence in Section 27. Late Jun–Jul.

SCROPHULARIACEAE – FIGWORT FAMILY

Castilleja applegatei Fernald ssp. *pinetorum* (Fernald) T.I.Chuang & Heckard – WAVY-LEAVED INDIAN-PAINTBRUSH. Herbaceous perennial scattered in brushy and rocky openings in dry, upland forest. Late Jul.

Castilleja lacera (Benth.) T.I.Chuang & Heckard – CUT-LEAVED OWL-CLOVER. Locally abundant on vernal wet drainages on woodland slopes on the north side of the meadow. Late Jun–Jul. [*Orthocarpus lacerus* Benth.; Oswald 4339]

Castilleja miniata Douglas ex Hook. – SCARLET INDIAN-PAINTBRUSH. Herbaceous perennial in the marsh along the south fence in Section 27. Early Jul–Oct.

Castilleja tenuis (A.Heller) T.I.Chuang & Heckard – HAIRY OWL-CLOVER. Abundant annual forb in a small meadow along the south fence in Section 27. Early Jul. [*Orthocarpus hispidus* Benth.]

Collinsia parviflora Douglas ex Lindl. – SMALL-FLOWERED COLLINSIA. Annual forb found in moist openings in forest. Early Jun.

Collinsia torreyi A.Gray var. *wrightii* (S.Watson) I.M.Johnst. – WRIGHT'S COLLINSIA. Locally abundant small annual forb on vernal wet flats, meadow borders, and open forest floor. Early Jun–Jul.

Gratiola ebracteata Benth. – BRACKETLESS HEDGE-HYSSOP. Locally abundant on wet soil along the edge of a pool on the north branch of the creek in the main meadow. Late Jul.

Mimulus breviflorus Piper – SHORT-FLOWERED MONKEY-FLOWER. Delicate, yellow-flowered annual in a localized population in a patch of *Veratrum* on a springy seep in open forest near the intersection of Sections 21, 22, 27, and 28. This is a new Butte County record of a plant that normally is found from Lassen and Modoc counties northward (Munz, 1973). Late Jun–Jul. [Oswald & Feenstra 4338]

Mimulus breweri (Greene) Coville – BREWER'S MONKEY-FLOWER. Inconspicuous small annual along moist drainages and in moist meadow. Late Jun–Jul.

Mimulus guttatus Fisch. ex DC. – SEEP MONKEY-FLOWER. Annual to short-lived perennial along moist drainages, along streams where it is often in shallow water, and in patches of *Veratrum*. The latter have very small flowers and probably correspond to the var. *micranthus* (A.Heller) Munz. Late Jun–Oct.

Mimulus moschatus Douglas ex Lindl. – MUSK MONKEY-FLOWER. Common and often locally abundant herbaceous perennial on dry forest floor and along streams and washes. Late Jun–Sep.

Mimulus primuloides Benth. ssp. *primuloides* – PRIMROSE MONKEY-FLOWER. Common and widespread herbaceous perennial forming small patches on moist to wet meadow. Plants with smaller flowers and hairy leaves are sometimes recognized as the var. *pilosellus* (Greene) Smiley. Early Jun–Sep.

Mimulus torreyi A.Gray – TORREY'S MONKEY-FLOWER. Locally abundant annual on dry, gravelly flats in open forest and on meadow borders. Late Jun–Jul.

Pedicularis semibarbata A.Gray – PINWOODS LOUSEWORT. Scattered to locally common on rocky edges and dry upland forest floor. Late May–Jul.

Penstemon gracilentus A.Gray – SLENDER BEARDTONGUE. Scattered to common on rocky slopes and in brushy openings in upland forest. Mid Jul–Sep.

Penstemon neotericus D.D.Keck – PLUMAS COUNTY BEARDTONGUE. Herbaceous perennial in rocky and brushy openings in dry upland forest along the north edge of the reserve. Mid Jul.

Penstemon rydbergii A.Nelson var. *oreocharis* (Greene) N.H.Holmgren – MEADOW BEARDTONGUE. Common perennial on moist to wet meadow and meadow edges. Late Jun–Sep. [*P. oreocharis* Greene]

Penstemon heterodoxus A.Gray var. *shastensis* (D.D.Keck) N.H.Holmgren – SHASTA BEARDTONGUE. Occasional on dry floor of lodgepole pine woodland east of the cross-fence. Late Jul. CNPS List 4, plants of limited distribution. [Oswald 4378]

Verbascum thapsus L. – WOOLLY MULLEIN. Scattered biennial weed along the creeks. Late Aug.

Veronica americana (Raf.) Schwein. ex Benth. – AMERICAN BROOKLIME. Common herbaceous perennial along the creek and in other wet drainages and depressions. Late Jun–Aug.

Veronica peregrina L. ssp. *xalapensis* (Humb., Bonpl. & Kunth) Pennell – PURSLANE SPEEDWELL. Annual forb in moist gravel on the edge of the creek. Mid Jul–Aug. [Oswald & Ahart 39541]

Veronica scutellata L. – MARSH SPEEDWELL. Herbaceous perennial found in a few moist depressions and marshy ditches on the main meadow. Late Jun–Jul. [Oswald & Ahart 3823]

Veronica serpyllifolia L. ssp. *humifusa* (Dicks.) Syme – THYME-LEAVED SPEEDWELL. Perennial herb in moist drainages in the meadow and on gravel bars along the creek. Early Jun–Jul.

SOLANACEAE – NIGHTSHADE FAMILY

Chamaesaracha nana (A.Gray) A.Gray – DWARF FALSE GROUND-CHERRY. Locally common herbaceous perennial on gravelly openings in meadow border and on dry knolls in the meadow. Late Jun–Jul. [*Leucophysalis nana* (A.Gray) Averett]

VIOLACEAE – VIOLET FAMILY

Viola adunca Sm. – WESTERN DOG VIOLET. Herbaceous perennial forming small colonies in moist to dry meadow and meadow edges and on damp soil along the creek. Late Apr–Jul, sometimes blooming again in the fall.

Viola bakeri Greene – BAKER'S VIOLET. Scattered to locally common on knolls in the meadow, in forest borders, and on the floor of lodgepole pine woodland. Late Apr–Jul. [Oswald 4180]

Viola glabella Nutt. – STREAM VIOLET. Locally common herbaceous perennial in shaded thickets along the creek. Early Jun–Jul.

Viola macloskeyi Lloyd – MACLOSKEY'S VIOLET. Occasional herbaceous perennial along wet drainages in the lodgepole pine woodland east of the cross-fence. Early Jun.

Viola purpurea Kellogg ssp. *dimorpha* M.S.Baker & J.C.Clausen – MOUNTAIN VIOLET. Common herbaceous perennial in upland forest on the north side of the meadow. Early May–Jul.

Viola purpurea ssp. *integrifolia* M.S.Baker & J.C.Clausen – MOUNTAIN VIOLET. Locally abundant in open woodland on the north side of the meadow. The type for

this subspecies was collected along Humbug Rd. just east of the Butte-Plumas county line. Late May–Jul. [Oswald & Ahart 4269]

VISCACEAE – MISTLETOE FAMILY

[Loranthaceae]

Arceuthobium americanum Nutt. ex Engelm. – LODGEPOLE PINE DWARF-MISTLETOE. Occasional parasite of lodgepole pine (*Pinus contorta* var. *murrayana*). Early May. [Oswald 3839]

Arceuthobium campylopodum Engelm. – WESTERN DWARF-MISTLETOE. Uncommon parasite of Jeffrey pine (*Pinus jeffreyi*). Flowering interval not determined.

ANTHOPHYTA – FLOWERING PLANT DIVISION

MONOCOTYLEDONES – MONOCOT CLASS

CYPERACEAE – SEDGE FAMILY

Carex aurea Nutt. – GOLDEN-FRUITED SEDGE. Noted along the edge of a stagnant pool in a swamp along the south fence in Section 27. Late Jul.

Carex brainerdii Mack. – BRAINERD'S SEDGE. Cespitose sedge in a gravelly spot near the east end of the open meadow. Early Jun.

Carex fracta Mack. – FRAGILE-SHEATHED SEDGE. Scattered in open woodland behind the cross-fence.

Carex integra Mack. – SMOOTH-BEAKED SEDGE. Cespitose sedge on dry, gravelly places along the creek. Early Jun. [Oswald & Ahart 3831]

Carex lenticularis Michx. var. *lipocarpa* (Holm) L.A. Standl. – FAT-FRUITED SEDGE. Noted in a swamp along the south fence in Section 27. Early Jul. [*C. kelloggii* W.Boott]

Carex simulata Mack. – SHORT-BEAKED SEDGE. Along a drainage in the swamp along the south fence in Section 27. Early Jul.

Carex subfusca W.Boott – RUSTY SLENDER SEDGE. Cespitose perennial on sloping drainages in woodland and in meadow-like openings in lodgepole pine woodland on the east side of the cross-fence. Early Jul.

Carex utriculata Boott – BEAKED SEDGE. Forming extensive colonies in vernal wet drainages on the meadow. Early Jul. [*Carex rostrata* Stokes ex With.]

Carex whitneyi Olney – WHITNEY'S SEDGE. Cespitose sedge in meadow-forest ecotone along the north side of the meadow. Early Jul. [*Carex jepsonii* J.T.Howell]

Eleocharis acicularis (L.) Roem. & Schult. var. *acicularis* – NEEDLE SPIKE-RUSH. Delicate perennial on the drying bottom of a pool in the meadow. Late Jul.

Eleocharis acicularis var. *bella* Piper – BEAUTIFUL SPIKE-RUSH. Delicate tufted annual on wet gravel along the creek. Late Jun. [*E. bella* (Piper) Svenson; Oswald & Ahart 3829]

Eleocharis pauciflora (Lightf.) Link – FEW-FLOWERED SPIKE-RUSH. Uncommon perennial on wet, grassy and sedgy edges of the north fork of Butte Creek. Late Jul.

Scirpus congdonii Britton – CONGDON'S BULRUSH. Common herbaceous perennial along streams and in other wet places on the meadow. Late Jun.

IRIDACEAE – IRIS FAMILY

Sisyrinchium bellum S. Watson – BLUE-EYED-GRASS. Occasional herbaceous perennial in moist places. Mid Jun–Jul.

JUNCACEAE – RUSH FAMILY

Juncus balticus Willd. var. *mexicanus* (Willd.) Kuntze – MEXICAN RUSH. Rhizomatous perennial forming extensive colonies in moist to dry meadow. None of the plants seem to have leaf blades, a trait usually attributed to this taxon, but they do have the characteristic twisted culms of Mexican rush. Early Jul.

Juncus dubius Engelm. – MARIPOSA RUSH. Cespitose perennial found on wet soil along the north branch of Butte Creek. Late Jul. [Oswald & Ahart 3900]

Juncus hemiendytus F.J.Herm. var. *hemiendytus* – VERNAL POOL DWARF RUSH. Inconspicuous diminutive annual on damp soil of drainages and stream margins. Late Jun. [Oswald & Ahart 3830]

Juncus howellii F.J.Herm. – HOWELL'S RUSH. Occasional cespitose perennial along the creek in the meadow and on vernal moist drainages in bordering woodland. Early Jul.

Juncus nevadensis S. Watson – SIERRA RUSH. Occasional herbaceous perennial forming colonies in moist drainages on the meadow. Late Jun. [Oswald & Ahart 3827]

Juncus tenuis Willd. – SLENDER RUSH. Cespitose perennial on a sloping drainage on the east side of the cross-fence near the intersection of Sections 21, 22, 27, and 28. Early Jul.

Luzula comosa E.Mey. var. *comosa* – COMMON WOOD-RUSH. Tufted herbaceous perennial in a thicket along the south side of the main meadow. Early Jul (in fruit).

LILIACEAE – LILY FAMILY

[Includes *Amaryllidaceae*]

Allium campanulatum S. Watson – SIERRA ONION. Scattered to locally common perennial in dry meadow border and in rocky openings in upland forest. Late Jun–Jul.

Calochortus leichtlinii Hook.f. – LEICHTLIN'S MARIPOSA-LILY. Occasional herbaceous perennial in rocky and brushy openings in dry, upland forest. Mid Jul.

Calochortus nudus S. Watson – NAKED MARIPOSA-LILY. Herbaceous perennial on one of the rocky knolls in the meadow and on the wooded edge of the meadow. Early Jun–Jul.

Camassia quamash (Pursh) Greene ssp. *quamash* – COMMON CAMAS. Occasional herbaceous perennial in the wetter parts of the meadow on the south side of the creek. Also found in a vernal wet, meadow-like opening in forest north of the main meadow and in a marsh along the south boundary in Section 27. Late May–Jul. [Camassia leichtlinii (Baker) S. Watson ssp. *suksdorfii* (Greenm.) Gould]

Lilium pardalinum Kellogg ssp. *shastense* (Eastw.) M.W.Skinner – SHASTA LILY. Herbaceous perennial in a thicket in lodgepole pine woodland east of the cross-fence. Late Jul (in fruit). [*Lilium kelleyanum* Lemmon in part, misapplied]

Smilacina racemosum (L.) Desf. – WESTERN FALSE SOLOMON'S-SEAL. Occasional herbaceous perennial on the rocky slope on the south side of the meadow and in the

lodgepole pine woodland east of the cross-fence. Early Jun. [Includes var. *amplexicaulis* (Nutt.) S. Watson and var. *glabra* (J.F. Macbr.) H. St. John]

Smilacina stellata (L.) Link – STAR-FLOWERED FALSE SOLOMON'S-SEAL. Herbaceous perennial at the bottom of the rocky slope on the south side of the meadow. Early Jul (in fruit).

Triteleia hyacinthina (Lindl.) Greene – WILD HYACINTH. Occasional herbaceous perennial in moist thickets and meadow-like openings in the lodgepole pine woodland east of the cross-fence. Late Jul. [*Brodiaea hyacinthina* (Lindl.) Baker]

Triteleia ixioides (W.T. Aiton) Greene ssp. *anilina* (Greene) L.W. Lenz – MOUNTAIN PRETTYFACE. Occasional to locally abundant herbaceous perennial on meadow edges and in openings in upland forest. Late Jun–Jul. [*Brodiaea lutea* (Lindl.) Morton var. *anilina* [sic] (Greene) Munz]

Veratrum californicum Durand var. *californicum* – CALIFORNIA CORN-LILY. Common herbaceous perennial forming extensive colonies on moist meadow borders and low openings in forest. Late Jun–Jul.

ORCHIDACEAE— ORCHID FAMILY

Listera convallarioides (Sw.) Nutt. ex Torr. – BROAD-LEAVED TWAYBLADE. Uncommon perennial forb in an alder thicket east of the cross-fence. Late Jul.

Platanthera leucostachys Lindl. – WHITE-FLOWERED BOG ORCHID. Occasional herbaceous perennial in wet thickets and drainage on the south side of the meadow and locally common in the marsh along the south fence in Section 27. Late Jun–Jul. [*Habenaria dilatata* (Pursh) Hook. var. *leucostachys* (Lindl.) Ames]

POACEAE – GRASS FAMILY

[Gramineae]

Achnatherum occidentale ssp. *californica* (Merr. & Burt Davy) Barkworth – CALIFORNIA NEEDLEGRASS. Common perennial on dry border and open forest floor. Early Jul. [*Stipa californica* Merr. & Burt Davy]

Agrostis exarata Trin. – SPIKE BENTGRASS. Perennial grass in the drying bed of the north branch of the creek near the cross-fence. Late Jul. [var. *monolepis* (Torr.) Hitchc., the awned phase, sometimes recognized]

Agrostis pallens Trin. – LEAFY BENTGRASS. Occasional perennial grass along the creek. Mid Jul. [*A. diegoensis* Vasey]

Agrostis scabra Willd. – ROUGH BENTGRASS. Perennial grass on a wet, sandy bar along the north branch of the creek. Late Jul.

Agrostis stolonifera L. var. *major* (Gaudin) Farw. – REDTOP. Perennial along the meadow-forest edge approaching the cross-fence on the north side of the meadow. Late Aug. [*A. alba* L., misapplied in part]

Agrostis variabilis Rydb. – MOUNTAIN BENTGRASS. Occasional tufted perennial on wet sand bars along the creek. Late Jul. [*Oswald 3897* & *Oswald & Ahart 3957*]

Alopecurus pratensis L. – MEADOW FOXTAIL. Tufted perennial scattered along the creek in the main part of the meadow. This is an uncommon introduced grass in Butte County, having been collected previously only from a lawn in north Chico. Late Jun.

Avena fatua – WILD OAT. Scattered annual grass at the corral. Some of these plants are only moderately hairy at the base of the lemmas, tending toward the cultivated oat, *A. sativa* L. Early Jul.

Bromus carinatus Hook. & Arn. var. *carinatus* – CALIFORNIA BROME. Common perennial on rocky slopes and in upland forest. Late Jun. [*B. marginatus* Nees ex Steud., *B. polyanthus* Scribn.]

Danthonia californica Bol. Var. *americana* (Scribn.) Hitchc. – CALIFORNIA OATGRASS. Common perennial on dry meadow and meadow borders and in open woods. Late Jun.

Deschampsia cespitosa (L.) P.Beauv. ssp. *cespitosa* – TUFTED HAIRGRASS. Abundant tufted perennial on moist to dry meadow. Late Jun.

Deschampsia elongata (Hook.) Munro – SLENDER HAIRGRASS. Perennial in a meadow-like opening along the south fence in Section 27. Early Jul.

Elymus elymoides (Raf.) Swezey ssp. *californicus* (J.G.Sm.) Barkworth – SQUIRRELTAIL. Occasional tufted perennial on meadow border and on dry forest floor. Late Jun. [*Sitanion hystrix* (Nutt.) J.G.Sm. var. *californicum* (J.G.Sm.) F.D. Wilson]

Elymus glaucus Buckley ssp. *glaucus* – BLUE WILD-RYE. Fairly common tufted perennial along creeks in the lodgepole pine woodland east of the cross-fence. Mid Jul.

Glyceria elata (Nash) M.E.Jones – TALL MANNAGRASS. Common perennial grass on wet gravel or in shallow water along the creek. Early Jul.

Hordeum brachyantherum Nevski ssp. *brachyantherum* – MEADOW BARLEY. Scattered to locally abundant perennial in moist places on the meadow and on gravel bars along the creeks. Early Jul.

Hordeum marinum L. ssp. *gussoneanum* (Parl.) Thell. – MEDITERRANEAN BARLEY. Weedy annual at the corral and in a dry, gravelly spot along the wooded north edge of the meadow. Late Jun. [*H. geniculatum* All.]

Melica fugax Bol. – SMALL MELIC. Scattered perennial in open woods along the east fence in Section 27. Early Jul.

Muhlenbergia filiformis (Thurb.) Rydb. – SLENDER MUHLY. Occasional delicate annual in moist meadow and on wet, sandy gravel along the creek. Early Jul.

Phleum pratense L. – TIMOTHY. Occasional tufted perennial in the meadow near the creek. Early Jul.

Poa bolanderi Vasey – BOLANDER'S BLUEGRASS. Scattered annual in dry, upland forest. Late Jun.

Poa compressa L. – CANADIAN BLUEGRASS. Scattered rhizomatous grass on the meadow. Early Jun.

Poa pratensis L. ssp. *pratensis* – KENTUCKY BLUEGRASS. Rhizomatous perennial in the meadow along the creek. Early Jun.

Torreyochloa pallida (J.Presl) G.L.Church var. *pauciflora* (J.Presl) J.I.Davis – WEAK MANNAGRASS. Perennial in shallow water of the creek. Late Aug. [*Glyceria pauciflora* J.Presl, *Puccinellia pauciflora* (Presl) Munz]

POTAMOGETONACEAE – PONDWEED FAMILY

Potamogeton gramineus L. – GRASS-LEAVED PONDWEED. Locally abundant submersed aquatic in several shallow pools in the main meadow. Late Jun–Jul. [Oswald & Ahart 3832]

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