**Supplementary Table 2.**

CONIFEROUS TREE AND SHRUB TAXA

**Pinaceae (pine Family)**; seeds, needle fragments, seed wings

The seeds of the conifers from the Ziegler Reservoir fossil site were difficult to differentiate. *Pseudostuga* *menziesii* has a relatively large seed compared to *Picea* sp. Seeds that were identified as *Picea* sp. may belong to *P. pungens, P. engelmannii,* or *P. glauca*. Seeds resembling *P. pungens* or *P. engelmannii* could sometimes be differentiated based on shape, but we used cf. in these species identifications because they are uncertain. Seeds identified as *Picea* cf. *pungens* and *Picea* cf. *engelmannii* were relatively small and had a grainy texture.

We could not morphologically separate the needles or seed wings of *Picea engelmannii*, *Picea pungens,* or *Picea glauca* since they are morphologically very similar(Jackson and Weng, 1999). Needles can only be separated by thin section and examination of the position of the resin canals (Weng and Jackson, 2000), this was not attempted. Needles and seed wings were classified as *Picea* sp.

Seeds identified as cf. *Abies* sp. were larger than *Picea* sp. and had irregular indentations with remnants of the outer seed wrapper commonly adhered to the seed.

 ***Abies concolor* (Gordon & Glend.) Lindl. ex Hildebr.** (white fir); cones, cone scale bracts

*Abies concolor* cones have been identified by Dane Miller based on cone scale bract morphology (Miller et al., in this volume). eFloras, 2013: Found in coniferous forests from 1700 to 3400 m in CO. Kershaw et al., 1998: Grows on slopes in the montane zone from southern ID and WY to NM. SEINet, 2013: Present in CO, a few east of Snowmass Village in Eagle County. Carter, 1988; Harrington, 1964: Mountain slopes, WY to OR, scattered over the mountainous part of CO, from central to southern CO, 2286 to 3048 m. Weber, 1976: Canyons near Colorado Springs and southwestward, medium elevations in foothills. Weber, 1987; Weber and Wittmann, 2012: Montane canyonsides, southern CO counties.

***Abies* sp.(Gordon & Glend.) Lindl. ex Hildebr.** **/ *Picea* sp. A. Dietr. type** (western white fir / spruce); wood

Wood from Locality 49 (53-63 cm) was sectioned with a razor blade and examined under a compound microscope. The wood is identified as *Abies* sp. / *Picea* sp. type. Single rows of bordered pits were present on tracheids, cross field pitting looks more taxodioid than piceoid, no resin canals observed, possibly ray tracheids with pitting but difficult to see clearly. Presence of ray tracheids indicates spruce and presence of ray parenchyma only, indicates fir.

***Abies* sp., *Abies* sp. type, andcf. *Abies* sp.**(fir, species not identified); needle fragments, cone scale bases, seeds

*Abies lasiocarpa* (subalpine fir) grows in the Ziegler Reservoir basin today but has not been identified in the Ziegler Reservoir macrofossil record. Carter, 1988: Found at higher elevations than *Abies concolor,* 2591 to 3658 m.

 ***Picea engelmannii* Parry ex Engelm.** (Englemann spruce); cones

Huggins, 2004: Subalpine, prefers higher slopes with drier conditions than *Picea pungens*. Kershaw et al., 1998: Cool, moist slopes and ravines, montane to subalpine, British Columbia and southwest Alberta to NM. Carter, 1988; Harrington, 1964; Weber, 1976: Mountains and ravines especially where moist, scattered in the mountains of CO, upper montane and subalpine, 2591 to 3658 m. Weber, 1987; Weber and Wittmann, 2012: Dominant forest tree of subalpine, not necessarily along streams.

 ***Picea* cf. *engelmannii* Parry ex Engelm.**(Englemann spruce); seeds

 ***Picea* cf. *pungens*** **Engelm.** (Colorado blue spruce); seeds, cone scale bases

Huggins, 2004: Montane and subalpine, prefers lower elevations and wetter locations than *Picea engelmannii*, often riparian, and occasionally on moist north facing slopes. Kershaw et al., 1998: Grows along streams and in canyons from WY to NM. Carter, 1988; Harrington, 1964: Rich moist soils especially along streams and in valleys of WY, CO, NM, AZ, and probably UT, scattered in the mountains of CO, mostly from central, west central, and southwest regions, foothills to montane, 2134 to 2896 m. Weber, 1976: Streamsides in steep canyons of the foothills. Weber, 1987; Weber and Wittmann, 2012: Always near streamsides.

***Picea* sp. A. Dietr.** (spruce, species not identified); seeds, needle fragments, seeds, seed wings, cones, cone scale bases

***\*Picea* sp. type A. Dietr.** (spruce); budscales

Translucent papery budscales, some were very similar to those of *Picea pungens*. More work is needed to compare these budscales to those of other conifers, reference materials were not available.

 ***Pinus flexilis* E. James** (limber pine); needle

Carter, 1988: Foothills to subalpine 1524 to 3353 m. Kershaw et al., 1998: Warm ridges and rocky slopes, foothills to subalpine, southern British Columbia and Alberta south to NM. Weber, 1976: Common pine of windswept summits, foothills to subalpine. Weber, 1987; Weber and Wittmann, 2012: Open sites, rocky and gravelly areas, upper montane and subalpine, usually in open sites. Harrington, 1964: Often on summits, ridges or rocky foothills, Alberta to CA, south to TX and AZ, north central, central and south central CO at 1524 to 3353 m.

***Pseudotsuga menziesii* (Mirb.) Franco** and **cf. *Pseudotsuga menziesii*****(Mirb.) Franco** (douglas fir); seeds, needles, needle fragments, cones

Huggins, 2004: Montane to lower subalpine, moist slopes often among aspen and spruce-fir. Kershaw et al., 1998: Moist to very dry sites, foothills to subalpine, central British Columbia and Alberta to NM. Harrington, 1964: Hills and mountains, often on deep soils of north-facing slopes, Alberta to British Columbia, south to CA, AZ, and western TX, distributed widely in mountains of CO, 1829 to 3353 m. Weber, 1976: Moist canyons in the foothills and montane zones, mostly on north slopes. Weber 1987; Weber and Wittmann, 2012: Montane, moist canyon walls and slopes.

DECIDUOUS TREE AND SHRUB TAXA

**Betulaceae (birch family)**

 ***Betula* cf. *occidentalis* Hook.**(water birch, mountain birch); seeds, catkin scale

Kershaw et al., 1998: Foothills, mountains, and subalpine zones, along streams and lakes, AK to northern NM. Huggins, 2004: Montane and riparian habitats. Harrington, 1964: River banks and plains, Saskatchewan to British Columbia south to NE, NM, and CA, scattered over the mountainous ⅔ of CO, 1524 to 2744 m. Weber, 1976: Lists synonym *Betula fontinalis*, along streams, foothills to subalpine. Weber, 1987; Weber and Wittmann, 2012: Canyon bottoms, close to water, montane, uncommon on the western slope. Carter, 1988: Along streams in moist valleys, hillsides, 1524 to 2744 m. Culver and Lemly, 2013: 1525 to 3865 m, occurs along streams, wet gulches and at springs and seeps*,* an indicator of a high, persistent water table, usually from a spring or seep.

 **cf. *Betula pumila* L.**(swamp birch, bog birch); seeds

Smaller than other *Betula* species seeds. Kershaw et al., 1998: Wet sites in the foothills and montane zones from the southern Yukon and Northwest Territories to WY. Harrington, 1964; Weber, 1976, 1987; Weber and Wittmann, 2012: Not listed. Weber, 1976: Lists *Betula glandulosa* (bog birch), subalpine, some varieties of *B. glandulosa* are now considered *B. pumila*. Weber, 1987: Lists *B. glandulosa*, around slow streams and beaver ponds, subalpine. Carter, 1988: Marshes and moist areas, 2286 to 3353 m.

**Cornaceae (dogwood family)**

***Cornus sericea* ssp*. sericea*** and ***Cornus* cf. *sericea* ssp. *sericea* =** *Cornus stolonifera* Michx. (red-osier dogwood); seeds

Montgomery, 1977: Seed is strongly asymmetric with longitudinal veins, other species are typically more round. Other species in the R.G. Baker Collection were more round and not as asymmetric as the Ziegler Reservoir specimens. Huggins, 2004: Montane to subalpine zones, moist soil of streambanks, swamps, and low meadows. Carter, 1988: Foothills to subalpine. Kershaw et al., 1998: Moist, wooded to open areas, plains to montane, southern Yukon and Northwest Territories to NM. Harrington, 1964: Hills, slopes, and banks, Newfoundland to AK, south to Mexico, scattered in western ⅔ of CO, 1372 to 3048 m. Weber, 1987; Weber and Wittmann, 2012: Shaded montane canyons. Weber, 1976: Along streams, foothills to subalpine. Correll and Correll, 1972: Shrub, wet soil about springs, along streams and on wet seepy slopes, often with willows and alders, Canada and AK, south to D.C., NM, AZ, and CA. Culver and Lemly, 2013: 1525 to 3500 m, locally common in moist gulches and cool ravines and along streams from foothills to subalpine zones, a dominant understory shrub along Colorado’s riparian areas.

 ***Cornus* sp. L.** (dogwood, species not identified);seeds

**Rhamnaceae (buckthorn family)**

 **cf. *Ceanothus* sp. L.** (buckbrush)

Kershaw et al., 1998: Lists *Ceanothus velutinus*, foothills to montane, dry open sites, *C. fendleri*, foothills to montane, dry slopes. Weber, 1976, 1987; Weber and Wittmann, 2012: *C. fendleri*, dry hillsides and foothills, coniferous forest understory plant, *C. velutinus,* foothills and drier parts of subalpine zone, steep canyon slopes, *C. herbaceous,* mesas, a Midwest prairie relict, *C. martinii,* in oak scrub. Carter, 1988: *C. fendleri*, open valleys, hill-sides, woods, gravelly soil, western ⅔ of CO, 1676 to 2744 m, *C. herbaceous*, plains and hills in sandy soil, 1524 to 2286 m, *C. velutinus*, hillsides and mountain slopes, 1981 to 2744 m. Taylor, 1986: *C. velutinus*, shrub, open forests, and along mountain ridges, forming thickets. Harrington, 1964: *C. fendleri,* scattered over western ⅔ of CO, except NW corner, 1676 to 2744 m, *C. velutinus*, scattered over western half of CO, mostly northern part 1981 to 2744 m, *C. ovatus*, north-central and central CO, 1524 to 2286 m.

**Rosaceae (rose family)**

***Crataegus erythropoda* type Ashe** (cerro hawthorn); nutlets

Fruit with 5 nutlets, nutlets have prominent ridges. Harrington, 1964: Nutlets pitted or deeply concave ventrally. Specimens most closely resemble *Crataegus erythropoda*. Huggins, 2004: Montane stream banks. Carter, 1988; Harrington, 1964: On stream banks and in valleys, WY to NM and AZ, western half of CO, 1676 to 2438 m. SEINet specimens occur at even higher elevations: Delta, 2621 m; Gunnison, 2134 to 2195 m; Eagle, 2469 m; Mesa, 2437 m; Montrose, 2560 m; San Miguel, 2804 m. Highest elevations in San Miguel Co. are 2753 m according to Google Earth. Weber, 1987; Weber and Wittmann, 2012: Dry hillsides rather than near streambeds. Weber, 1976: Canyonsides, lower foothills and mesas.

***Crataegus*** **sp. L.** and **cf. *Crataegus*** **sp. L.** (hawthorn, species not identified); nutlets, thorns

Other species of *Crataegus* present near Snowmass Village today but not found as fossils include:

***Crataegus macracantha* Lodd. ex Loudenin** (large-thorn hawthorn). Carter, 1988: Hillsides, canyons, slopes, 1524 to 2134 m. Weber, 1987; Weber and Wittmann, 2012: Close to streams. Weber, 1976: Not listed.

***Crataegus rivularis* Nutt.** (black hawthorn) *= Crataegus douglasii* var*. rivularis* (Nutt.) Sarg.(river hawthorn).  Huggins, 2004:Black hawthorn, foothills to subalpine, often found near water, British Columbia and Alberta to WY. Harrington, 1964: Pitted or deeply concave ventrally, valleys and banks, WY to ID, south to NM, AZ, and NV, western ⅓ of CO, 1676 to 2591 m. SEINet: Mesa, 2529 m; Grand, 2256 m and 2332 m. Weber 1987; Weber and Wittmann, 2012: The most common hawthorn along streams in the western slope. Weber 1976: Not listed.

***Crataegus saligna* Greene** (willow hawthorn). Huggins, 2004: Endemic to CO. Harrington, 1964: Canyons and banks, western ⅓ of CO, 1829 to 2286 m, CO only. SEINet: Eagle, 2134 m. Weber 1987; Weber and Wittmann, 2012: Abundant in Gunnison and CO river basins. Weber, 1976: Not listed.

***Prunus virginiana* var. *demissa* (Nutt.) Torr.** **=** *Prunus melanocarpa* (A. Nelson) Rydb. *= Prunus virginiana* var. *melanocarpa* (A. Nelson) Sarg.(western chokecherry); seeds

Specimens from Locality 56 were compared to *Prunus virginiana* (chokecherry) in the R.G. Baker Collection, the comparative material was a little too large. *Prunus virginiana* var. *demissa* collected in CO was a good match for the fossil material. Huggins, 2004: Montane zone, dry to moist open sites, oak mountain shrubland, and aspen forest. Carter, 1988; Harrington, 1964: Hills, valleys, and banks, Canada, south to GA, NM, CA, CO from 1372 to 2744 m. Weber, 1976: Gulches, canyonsides, plains to foothills. Weber, 1987; Weber and Wittmann, 2012: Along streams in lower valleys. Kershaw et al., 1998:Dry to moist sites, plains to montane, Northwest Territories to NM. Carter, 1988: Roadsides, borders of woods.

***Prunus* sp. L.** (chokecherry, species not identified); seeds

Other species of *Prunus* present near Ziegler Reservoir today but not found as fossils include:

***Prunus emarginata*** **(Douglas) Eaton** (bitter cherry), Kershaw et al., 1998: Occurs mainly west of the continental divide in the foothills from British Columbia to UT. Weber, 1976, 1987; Weber and Wittmann, 2012: Not listed.

***Prunus pensylavanica* L. f.** (pin cherry), Kershaw et al., 1998:Found ondry to moist sites from plains to subalpine, Northwest Territories south to CO. Harrington, 1964: Woods, hills, and banks, Newfoundland to Hudson Bay, south to IN and CO, north-central, central, and south-central CO, 1676 to 2591 m. Carter, 1988: 1676 to 2591 m. Weber, 1976: Infrequent, ravines in the foothills. Weber, 1987; Weber and Wittmann, 2012: Not listed.

***Rubus idaeus*** **type L.** (wild red raspberry); seeds

A specimen from bulk sample Locality 56.579 was not comparable to *Rubus parviflorus* but *Rubus idaeus* was a good match. These are the only two taxa listed in the Weber floras. Kershaw et al., 1998:Moist to dry, open or wooded, foothills to montane, AK to NM. Huggins, 2004: Upper montane to subalpine, rocky disturbed soil, streambanks in aspen and spruce-fir forests. Harrington, 1964: Not listed. Carter, 1988: Moist ravines, foothills to subalpine. Weber 1976, 1987; Weber and Wittmann, 2012: Lists *Rubus idaeus* ssp. *melanolasius* = *Rubus sachaliensis*.

***Rubus* sp. L.** (raspberry, species not identified); seeds

Some specimens were broken and could not be identified to species.

**Caprifoliaceae (honeysuckle family)**

***Sambucus nigra* ssp. *canadensis* type (L.) R. Bolli**(common elderberry); seed

A specimen from Locality 49, 82-92cm, is most comparable to *Sambucus nigra* ssp. *canadensis* (L.) R. Bolli *= Sambucus canadensis* L., and dissimilar to *Sambucus* *racemosa* var. *pubens* (Michx.) Koehne (red-berried elder) = *Sambucus pubens* Michx. *= Sambucus racemosa* L. Harrington, 1964: Lists *Sambucus canadensis,* occurs from Nova Scotia to Manitoba, south to FL and TX, north-central and central CO, 1524 to1676 m. Carter, 1988: Lists *Sambucus canadensis*, creeks and roadsides, plains to foothills. Weber, 1976: Mesa-plain irrigated fringe, escaped from cultivation. Huggins, 2004; Kershaw et al., 1998; USDA, 1993; Weber, 1987; Weber and Wittmann, 2012: Not listed. Correll and Correll, 1972: In wet soil in low places, especially along streams and on edge of swamps, Nova Scotia and Quebec west to Manitoba, SD, south to FL, and TX.

**Fagaceae (beech family)**

 **cf. *Quercus gambelii* Nutt.** (Gambel’s oak); buds and budscales

Small brown budscales were abundant as macrofossils, they are similar in size and shape to the budscales of *Quercus gambelii*. Modern *Quercus gambelii* budscales are hairy along the margins and back side of the scale. The fossil budscales are typically tattered on the edges and no hairs can be seen. A few fossil budscales were found, which appear to have remnants of hairs along the margins. A confident identification is difficult due to the relatively poor condition of the fossil budscales so we use cf. to express this uncertainty. Kershaw et al., 1998: Dry slopes in foothills, southern WY to NM. Weber, 1976, 1987; Weber and Wittmann, 2012: Abundant, dominating the plateaus. Carter, 1988: dry foothills, canyon walls, stream margins 1219 to 2591 m. Harrington, 1964: Dry hills, slopes, and along streams, CO to NV, south to NM and AZ, scattered over CO, 1219 to 2591 m, except the east-central, northeast and north-central parts.

**Salicaceae (willow family)**

***\*Populus tremuloides* typeMichx.**(quaking aspen); large, shiny buds and bud scales

It is possible that the buds and bud scales of *Populus tremuloides* are modern contaminants. Modern buds were observed on the ground surface during the Ziegler Reservoir fossil site excavation. Huggins, 2004: Montane up to 3048 m. Kershaw et al., 1998: Dry to moist sites, foothills to subalpine, AK to NM. Carter, 1988; Harrington, 1964: 1829 to 3048 m, mountains, slopes, and valleys. Weber 1987, 1976: Foothills to subalpine. Corell and Corell, 1972: Common in high mountains, in bogs, swamps, and wet meadows of NM and AZ.

 **cf. *Salix* sp. L.** (willow); bud scale

Carter, 1988; Culver and Lemly, 2013; Harrington, 1964; Weber, 1976, 1987: Many taxa.

**Buds and budscales** (taxa unknown) from deciduous trees and shrubs

Budscales are common in the Ziegler Reservoir samples.Budscalesappear shiny and are generally triangular in shape, varying in size.

HERBACEOUS PLANT TAXA

**Apiaceae (carrot family**); seeds

Kershaw et al., 1998: Usually perennial herbs, plains to subalpine, wet to moist to dry. Harrington, 1964; Weber 1976, 1987; Weber and Wittmann, 2012: Many taxa.

**Araliaceae (aralia family)**

 **cf. *Aralia* sp.** **L.** (spikenard); seeds

Kershaw et al., 1998: Lists *Aralia nudicaulis*, perennial herb, moist shaded sites foothills to montane, British Columbia and Alberta to CO. Weber, 1976, 1987; Weber and Wittmann, 2012: *Aralia nudicaulis*, infrequent in cool ravines, foothills and montane, an eastern species disjunct in the eastern foothills, collected from North Inlet, Rocky Mountain National Park. *A. racemosa* reported in CO in 1820, also a taxon of the eastern U.S. *A. bicrenata*, shaded streamsides, a species of Mexico and the southwestern United States. Harrington, 1964: *A. nudicaulis*, Newfoundland to BC, south to GA, CO and WA, from north-central and central CO, 1829 to 2438 m.

**Asteraceae (sunflower family); seeds**

***Cyclachaena xanthifolia* (Nutt.) Fresen.** ***=*** *Iva xanthifolia* (giant sumpweed);seed

Annual weed. Harrington, 1964: Waste places and fields, moist ground, WI to Alberta, south to NM and AZ, scattered in CO, 1372 to 2134m. Weber 1976, 1987; Weber and Wittmann, 2012: Common tall weed of late summer, in cultivated ground on the plains. SEINet records in CO: Garfield Co. at 2130 m and Gunnison Co. at 2445 m. Tends to occur at lower elevations than that of Ziegler Reservoir (2705 m). Kershaw et al., 1998: Not listed. Correll and Correll, 1972: Annual, infrequent in sandy stream beds and sandy stream margins, Quebec to Alberta, south to D.C., MO, AZ, OK, TX, NM.

***Helianthus* sp. L.** (sunflower);seed

Huggins, 2004: No taxa. Weber, 1987; Weber and Wittmann, 2012: No montane or subalpine taxa listed, lists 6 taxa, lower valleys, open pine forests. Kershaw et al., 1998: Perennials and annuals, dry to moist, plains to montane. Harrington, 1964: Lists about 10 taxa. Weber, 1976: Lists 5 taxa, plains to foothills, and piedmont valleys. SEINet records in CO: *Helianthus annuus* is recorded along Snowmass Creek at 2591 m, below the elevation of Ziegler Reservior (2705 m). Hartmann, 2013: Lists specimens as high as Ziegler Reservoir.

**Amaranthaceae (pigweed family)** = Chenopodiacaeae (goosefoot family)

***Chenopodium* spp. L.** and ***Chenopodium* sp. L.** (goosefoot); seeds

Kershaw et al., 1998: Lists *C. album* and *C. capitatum*, annual herbs. Harrington, 1964; Weber 1976, 1987; Weber and Wittmann, 2012: Many taxa listed.

**cf. *Chenopodium* sp. L.** / ***Amaranthus* sp. L.** (goosefoot / pigweed); seeds

***Chenopodium berlandieri* type Moq.** (netseed lamb’s quarters); seeds

Huggins, 2004: Montane to subalpine, found on disturbed sites. Harrington, 1964: Waste ground and fields, KS to CA, common in CO, 1219 to 2591 m. Weber, 1987; Weber and Wittmann, 2012: Abundant native ruderal weed, seed distinctly pitted. Kershaw et al., 1998; Weber, 1976: Not listed.

***Chenopodium berlandieri* var. *bushianum* type(Aellen) Cronquist***= Chenopodium bushianum* type(Bush’s goosefoot); seeds

*Chenopodium berlandieri* var. *bushianum* type has a pronounced snout and is larger than *Chenopodium berlandieri* type. Some have more surface pattern than others. A specimen from Locality 56 is comparable to *Chenopodium berlandieri* var. *bushianum* type. Harrington, 1964; Kershaw et al., 1998; Weber, 1976, 1987; Weber and Wittmann, 2012: Not listed.

***Chenopodium glaucum* L.** (oak-leaved goosefoot), seeds

A relatively small chenopod seed with a pattern of coarse bumps directed toward the beak, has large reticulae in the middle and doesn't have the radiating pattern that other chenopods have. Huggins, 2004; Kershaw et al., 1998: Not listed. Harrington, 1964: Widely distributed in Canada and the U.S., waste places and saline areas, scattered in CO, 1219 to 2286 m. Weber, 1987; Weber and Wittmann, 2012: Common in drying mud of pond shores. Weber, 1976: Shores of drying ponds, late summer. SEINet does show some specimens collected in CO that reach elevations comparable to Ziegler Reservoir. Therefore, it is conceivable that this plant could grow there today. Correll and Correll, 1972: Annual, in marshes and along streams in saline and alkaline soils, NM, AZ, TX, New Brunswick to VA.

***Chenopodium standleyanum* type** (Standley’s goosefoot); seeds

*Chenopodium standleyanum* has a very smooth and very shiny surface with sculpture visible underneath. It is smaller than *C. berlandieri* var. *bushianum* and about the same size as *C. berlandieri* (the other two common species in the Ziegler Reservoir record). These two have obvious surface sculpture and are not quite as shiny. None of the other 18 species in the R.G. Baker Collection match *C. standleyanum* features--either they are the wrong size, wrong sculpture, or both. Harrington, 1964: PA to NE, south to FL and NM, should be looked for in eastern, especially southeastern CO. Weber and Wittmann, 2012: Not listed.

**Brassicaceae (mustard family)**

***Descurainia pinnata* (Walter) Britton** (green tansymustard); seeds

Harrington, 1964: Annual plant, many subspecies, 1219 to 2896 m. Kershaw et al., 1998: Annual herb, dry open ground, plains to montane, Yukon and Northwest Territories to NM. Weber, 1976, 1987; Weber and Wittmann, 2012: Spring weed of valleys and disturbed ground, plains to montane, common at lower altitudes.

**cf. *Lepidium* sp. L.** (pepperweed); seeds

Huggins, 2004: Lists *Lepidium perfoliatum*, montane, sunny south-facing slopes. Kershaw et al., 1998: Lists *Lepidium densiflorum*, annual, dry, open slopes and disturbed ground, plains to montane, southern Northwest Territories to NM, and *L. ramosissimum,* dry, open, or wooded sites, disturbed sites, plains, foothills, montane, southern Northwest Territories and Alberta to CO. Harrington, 1964: Annual or perennial. Weber, 1976: Lists 7 taxa, most species are weedy, annual, biennial, or perennial, *L. ramosissimum*, abundant in mountain valleys. Weber, 1987; Weber and Wittmann, 2012: Lists 8 taxa, most species weedy, *L. montanum* occurs in pinyon-juniper, *L. ramosissimum* occurs in inter-mountain parks and oak-aspen.

***Lepidium densiflorum* type Shrad.** (common pepperweed); seeds

Harrington, 1964: Annual, plains, roadsides, fields, and waste places, scattered over CO, few from the extreme western part, 1067 to 2896 m. Kershaw et al., 1998: Annual, dry, open slopes, and disturbed ground, plains to montane, southern Northwest Territorries to NM. Weber, 1976, 1987; Weber and Wittmann, 2012: Common weed, usually at low elevations.

**Campanulaceae (bellflower family)**

***Campanula americana* type L.** (American bellflower); seeds

Montgomery, 1977: Seed has a margin with a narrow wing. Our specimen looks very similar to *Campanula americana* but it may be another species, possibilities include *C. rotundifola*, *C. uniflora*,or *C. parryi*. Huggins, 2004: Lists *C. rotundifolia, C. parryi,* and *C. uniflora*. Kershaw et al., 1998: Lists *C. rotundifolia*, perennial herb, moist to dry, open or partly shaded sites; plains to subalpine southern Yukon and Northwest Territories to NM, as well as some species mentioned in Huggins, 2004. Harrington, 1964: Not listed. Weber, 1976, 1987; Weber and Wittmann, 2012: *C. rotundifolia*, dry mountainsides, lower to medium altitudes; *C. uniflora*, alpine tundra; *C. parryi*, subalpine to near timberline. No SEINet specimens in CO. Fassett, 1957: Rich woods and shores.

**Caryophyllaceae (pink family)**

***Silene antirrhina* type L.** (sleepy catchfly); seeds

Montgomery, 1977: Seed with concentric rows of papillae. Huggins, 2004: Not listed. Kershaw et al., 1998: Annual. Harrington, 1964: Fields and waste places, scattered in CO, 1219 to 2286 m. Weber, 1987; Weber and Wittmann, 2012: Annual weed. Weber, 1976: Dry slopes, mesas, and foothills. SEINet lists herbarium specimens in CO at 2515 m, 2256 m, 2491 m, listed as 2652 m in the Wet Mountains, but this seems too high.

**cf. Ericaceae (heath family)**

**Lamiaceae (mint family)**

**cf. *Salvia* L.** (sage); seeds

Harrington, 1964: Lists *Salvia reflexa, S. azura*, and *S. sylvestris*, annuals or perennials, prairies, plains, fields, roadsides, and waste ground. Weber, 1976; Weber and Wittmann, 2012: Lists *S. reflexa*, uncommon, alien, weedy annual on floodplains in the piedmont valleys. Weber, 1987: *Salvia sylvestris*, locally established near Aspen, CO. Kershaw et al., 1998: Not listed.

***Monarda fistulosa* L.**(wild bergamot); seeds

Harrington, 1964: *M. fistulosa menthafolia*, valleys hills and plains, Saskatchewan to Alberta, south to TX and AZ. Scattered over the western ⅔ of CO, 1524 to 2744 m. Kershaw et al., 1998: Perennial herb, moist to moderately dry open sites, plains to montane, British Columbia and Alberta to NM. Weber, 1976: *M. fistulosa* var. *menthaefolia*, abundant in gulches and along roadsides, mesas, and foothills. Weber, 1987; Weber and Wittmann, 2012: Streamsides and meadows in foothills. Correll and Correll, 1972: Perennial herb, in dry open woods, old fields, wet meadows and ditches, alluvial thickets, edge of woods and marshes, from Quebec and New England, west to MN, south to GA, AL, LA, TX, OK. USDA, 1993: Erect perennial, a variety of habitats, wet meadows, damp prairies, pastures, ditches, along streams, around ponds, damp thickets.

**Oxalidaceae family (wood sorrel family)**

***Oxalis* cf. *corniculata* L.** (yellow wood sorrel); seeds

Huggins, 2004; Kershaw et al., 1998, Weber, 1987, 1976: Not listed. Harrington, 1964: Lists *Oxalis violacea*, *O. stricta*, and *O. europaea*, annuals or perennials, rich ground, woods. Weber and Wittmann, 2012: Annuals or short-lived perennials.

**Poaceae (grass family)**; florets

**Ranunculaceae (buttercup family)**

 ***Ranunculus* sp. L.** (buttercup); seeds

Culver and Lemly, 2013; Harrington, 1964; Kershaw et al., 1998; Weber, 1976, 1987; Weber and Wittmann, 2012: Many taxa listed with elevations ranging higher and lower than the Ziegler Reservoir fossil site (2705 m).

**Rosaceae (rose family)**

***Fragaria vesca* L.**  ***/ Fragaria virginiana* Duchesne**(wood strawberry / strawberry), similar in size

Huggins, 2004: Lists *Fragaria virginiana* and *F. vesca*. *F. virginiana*, montane to subalpine, dry soil in aspen, mixed conifer, and spruce-fir forests. *F. vesca* prefers moister sites. Kershaw et al., 1998: *F. virginiana*, perennial, well drained, open sites plains to subalpine, Yukon and Northwest Territories to NM, *F. vesca*, moist sites in foothills and montane zones, British Columbia and Alberta to NM. Harrington, 1964; Weber, 1976: Not listed. Weber, 1986; Weber and Wittmann, 2012: *F. vesca*, more mesic sites than *F. virginiana*, *F. virginiana* found in dry forests. Taylor, 1986: *F. virginiana*, open forests and on moist slopes especially in aspen groves.

***Fragaria* sp. L.** (wild strawberry, species not identified); seeds

***Potentilla* sp.L.**(cinquefoil, species not identified); seeds

Taylor, 1986: Most are tall herbs, one is a shrub. Huggins, 2004: Montane, subalpine, sagebrush communities. Kershaw et al., 1998: Plains to alpine, dry to moist. Harrington, 1964: Perennials, many species. Weber, 1987, 1976; Weber and Wittmann, 2012: Annuals or perennials.

***Potentilla* X *diversifolia* Lehm. (pro sp.) *=*** *Potentilla diversifolia* Lehm.(diverse-leaved cinquefoil); seeds

Kershaw et al., 1998: Perennial herb, moist open sites, in meadows, montane to alpine, Yukon and Northwest Territories to NM. Harrington, 1964: High mountains, Alberta to British Columbia, south to NM and CA, mountains of CO, 2134 to 3658 m. Weber, 1987, Weber and Wittmann, 2012: Abundant in alpine and subalpine. Weber, 1976: Very common in subalpine meadows. Correll and Correll, 1972: Perennial, in wet meadows and along stream banks in high mountains, western Canada, south to NM, AZ, and Baja CA. Culver and Lemly, 2013: Perennial, 2195 to 4400 m, common in wet meadows and alpine tundra.

***Potentilla* cf. *norvegica* L.**(Norwegian cinquefoil); seeds

Harrington, 1964: Annual or biennial, waste places and rich ground, scattered over CO except in the extreme eastern part, 1372 to 2591 m. Kershaw et al., 1998: annual or biennial, moist meadows, waste ground, lower elevations from AK to NM. Weber, 1976, 1987; Weber and Wittmann, 2012: Alien, weed in disturbed soil, pastures, shorelines. Correll and Correll, 1972: Annual or short-lived perennial, wet meadows and marshes, about lakes and ponds, along irrigation ditches and thickets, widespread in North America, OK, TX, NM, AZ.

**cf. Solanaceae (night shade family);** seeds

Harrington, 1964; Weber 1976, 1987; Weber and Wittmann, 2012: Many taxa. Correll and Correll, 1972: Herbs, shrubs, and trees.

**Urticaceae (nettle family)**

 ***Urtica dioica* L.** and ***Urtica dioica* ssp. *gracilis*****(Aiton) Selander** (stinging nettle); seeds

Huggins, 2004: Lists synonym *Urtica gracilis*, montane to subalpine, along streams or disturbed areas in moist soil. Kershaw et al., 1998: Perennial herb, moist rich sites, often on disturbed ground, plains to montane, southern Yukon and Northwest Territories to NM. Harrington, 1964: Waste places and alluvial ground, distributed widely in North America, 1372 to 2957 m. Weber, 1976: Lists *Urtica dioica*, tall herb found along irrigation ditches and streams in the lower foothills and piedmont valleys. Weber, 1987; Weber and Wittmann, 2012: Lists *U. gracilis*, along irrigation ditches and streams, *U. gracilis* ssp. *holosericea*, only in Moffet Co. Harrington, 1964: Lists 2 taxa in CO, streams, canyons, ditches, waste places, alluvial ground. Corell and Corell, 1972: Thickets, springy places and along streams, British Columbia south to AZ, east to the Atlantic coast. Culver and Lemly, 2013: Not listed.

**Verbenaceae (verbena family)**

***Verbena hastata* L.** (blue vervain); seeds

Huggins, 2004; Kershaw et al., 1998; Weber, 1987: Not listed. Harrington, 1964: Valleys, thickets, plains, and pastures, widespread in Canada and the U.S. Mostly from NE, occurs in CO from 1067 to 1524 m. Weber, 1976, 1987: Swamps and irrigation ditches, piedmont valleys and plains. Weber and Wittmann, 2012: Not listed. Not an obligate lowland/wetland plant. Correll and Correll, 1972: Moist fields, wet meadows, prairies, swamps, woods and streamsides, edge of ponds, lakes and sloughs, often forming large conspicuous colonies in wetlands, Nova Scotia to British Columbia, south to FL, NE, AZ, OK, TX, NM. A field-form can be found in dry fields and pastures. SEINet lists herbarium specimens up to 1700 m. Hartmann, 2013: Specimens suggest that this taxon can occur as high in elevation as Ziegler Reservoir (2705 m). Culver and Lemly, 2013: Biennial, perennial, 1025 to 2745 m, found along margins of ponds, lakes, streams and ditches, widespread throughout contiguous United States.

**Violaceae (violet famiy)**

***Viola* spp**. **L.** and ***Viola* sp.** **L.** (violet); seeds

Culver and Lemly, 2013; Huggins, 2004; Kershaw et al., 1998: Mentions several species. Harrington, 1964; Weber, 1976, 1987; Weber and Wittmann, 2012: Perennial herbs, many taxa in CO. USDA, 1993: Occurs in western CO, perennial herb, wet meadows, along streams, and in bogs.

AQUATIC AND WETLAND PLANT TAXA

**Alismataceae (water-plantain family)**; embryos

Seed embryos from this family were identified. Muenscher, 1944: Aquatic or marsh perennials, rarely annuals, emersed or rarely submersed in marshes and shallow water. Weber, 1976, 1987; Weber and Wittmann, 2012: Lists genera *Alisma* and *Sagittaria*, muddy places. Culver and Lemly, 2013: Lists species of *Alisma* and *Sagittaria*, found in CO from 1065 to 3050 m.

 ***Alisma* sp. L.** (water plantain); embryos

Weber, 1976, 1987: *Alisma plantago-aquatica* ssp*. brevipes*, mud along ditches and pond shores on the plains and piedmont valleys. Weber, 1987; Weber and Wittmann, 2012: *A. gramineum*, infrequent, drying ponds, Moffet Co. Weber and Wittmann, 2012: *A. triviale*, muddy ditches and ponds, (*A. plantago-aquatica* of manuals). Muenscher, 1944: Perennial herbs, emersed or floating leaves, *A. plantago-aquatica*, shallow water and wet margins of lakes, temporary ponds, sloughs, and ditches, common throughout the U.S. *A. gramineum*, shallow ponds and on mud along riverbanks, usually in alkaline soils or in limestone regions, not shown to occur in CO. Harrington, 1964: *A. plantago-aquatica* scattered over the western ⅔ of CO (1372 to 2438 m). Corell and Corell, 1972: *A. gramineum*, submersed perennial herb. Culver and Lemly, 2013: *A. gramineum*, emergent, muddy shores, in shallow water, flats, and stream banks, 1650 to 2375 m. *A. trivale,* wet places along pond shores, in ditches, marshes, mudflats, rarely in deep water, 1525 to 3050 m.

**Brassicaceae (mustard family)**

**cf. *Rorippa palustris* (L.) Besser**(marsh yellowcress); seeds

Kershaw et al., 1998: Annual or biennial herb, marshy or muddy sites, plains to montane, AK to NM.Muenscher, 1944:Perennial, lowlands and marshes, species not listed in this book. Culver and Lemly, 2013; Huggins, 2004: Lists *Nasturtium officinale* (related). Harrington, 1964: *Rorippa palustris* = *R. islandica*, water or wet ground, widely distributed in North America, found in north-central CO at 1372 to 2896 m. Weber 1976, 1987; Weber and Wittmann, 2012: Seeds more than .5 mm long, muddy places, plains to montane. Correll and Correll, 1972: Annual or biennial, in marshes, bogs, muddy soil on edge of ponds, seepage areas, about springs, and along streams, widely distributed throughout much of North America, OK, TX, NM, AZ.

**Ceratophyllaceae (hornwort family)**

***Ceratophyllum demersum* L.**(coon tail); seeds

Muenscher, 1944: Found in CO and throughout the U.S. in shallow ponds and slow streams, may dominate newly made lakes and temporary ponds with water high in organic matter and material in solution. Plants grow attached to the bottom in the early growing season and later float. The branch tips become thickened and break off and sink to the bottom becoming winter buds that remain dormant under the ice. Fassett, 1957: Submersed aquatic plants without roots, usually occurring in hardwater. Harrington, 1964: Lakes and ponds, Newfoundland to WA, south to FL, Mexico, CA, CO from 1524 to 1981 m. Weber, 1987; Weber and Wittmann, 2012: Lakes and ponds in the mountains. Weber, 1976: Submerged, lakes and ponds in the piedmont valleys. eFloras, 2013: Up to 1700 m. SEINet records for CO: Gunnison Co., 2286 m, Jackson Co. (Lake John), 2456 m, Larimer Co. (Hohnholtz Lake), 2412 m, San Juan Co. (Boyce Lake), 2661 m, La Plata Co. (Electra Lake), 2553 m with *Potamogeton pectinatus*, Conejos Co. (pond in ponderosa pine forest), 2728 m. Correll and Correll, 1972: Entirely submersed, quiet waters of lakes and ponds, slow streams, Quebec to northern British Columbia, south to Mexico, OK, TX, NM, AZ. Culver and Lemly, 2013: Emergent perennial, 1065 to 2895 m, common in lakes, ponds, irrigation ditches and slow-moving streams. Can be a dominant species in warm, nutrient-rich waters, provides fall forage for waterfowl and can occur as dense mats.

**Characeae (stonewort, muskgrass family)**

 ***Chara* sp. L. (muskgrass)**; oogonia

State of Washington Department of Ecology, 2013: More than 30 species of *Chara* in the U.S., fresh to brackish water, inland and coastal, in both shallow and deep water. Some species found in alkaline lakes and slow-moving streams. Muskgrassses will often grow in deeper water than vascular aquatic plants. *Chara* prefer alkaline, hard water ponds, while *Nitella* prefer more acidic ponds with soft sediments. Completely submersed in shallow (4 cm) to deep (20 m) water. Prescott, 1978: *Chara* has 5 cells twisted around the oogonium with a 5 celled coronula at the apex, plants are coated with lime. *Tolypella* and *Nitella* have 10 cells in the coronula, plants are not coated with lime.

**Cyperaceae** and **cf. Cyperaceae(sedge family)**; seeds

Usually perennial, plains to alpine, dry to moist.

***Carex* sp. L. biconvex** and **cf. *Carex* sp. biconvex** (sedge); seeds

Lenticular shaped,two-sided convex sedge seeds. Perennials. Difficult to identify species within this group.

***Carex* sp.L.trigonous** (sedge); seeds

Three sided sedge seeds. Perennials. Difficult to identify species within this group.

 **cf. *Carex aquatilis* Wahlenb.** (water sedge); seeds

Kershaw et al., 1998: Wet open sites, shallow water, foothills to alpine, AK to NM. Weber, 1976, 1987; Weber and Wittmann, 2012: Alpine and subalpine lake shores. Hurd et al., 1998: Wet meadows, swamps, ponds, lakeshores, and streambanks, foothills to near timberline. Muenscher, 1944: Common in shallow ponds, sloughs, marshes, widespread across northern states. Harrington, 1964: Wet meadows and swamps, Greenland to AK, south to Quebec, NM and CA, scattered in mountains of CO, few from extreme west, 1524 to 3506 m. Corell and Corell, 1972: Swamps, marshes, wet meadows, lake and pond shores and stream banks, often in shallow water, Greenland to AK, south to Quebec, NM, AZ and CA. Culver and Lemly, 2013: Perennial, 1465 to 4265 m, grows in shallow water or saturated soils within montane to subalpine zones, frequently forms monoculture stands.

 ***Carex flava* type L.** (yellow sedge); seeds

Hurd et al., 1998: Wet, usually sandy meadows, sometimes on calcareous soils at low to mid elevations. British Columbia to Newfoundland, south to central ID (rare) and MT, east through IN, NJ, and PA. Harrington, 1964; Muenscher, 1944: Not listed. Weber and Wittmann, 2012: Not listed.

 ***Cyperus odoratus* type** **L.** (fragrant flatsedge); seeds

The seeds are comparable in size to *C. odoratus* but could belong to another species. Weber, 1987, Weber and Wittmann, 2012: Found in hot springs in Gunnison Co., alien. Weber, 1976: Lists several taxa that seem to be low elevation. Harrington, 1964; Muenscher, 1944: Not listed. Corell and Corell, 1972: Perennial, mud of swamps, ditches and streams, at edge of lakes and creeks. eFloras, 2013: up to 1500 m. Culver and Lemly, 2013: Annual, perennial, 1115 to 1440 m, locally common on wet sand and mud along riverbanks, ponds, sloughs and marshes.

***Eleocharis macrostachya* type Britton** (sedge, spikerush); seeds

Specimen in Locality 49, 82-92 cm, looks most comparable to *E. macrostachya* but there are others that it is also similar to. We call this specimen *E. macrostachya* type. Fassett, 1957: IL to British Columbia, south to LA, TX, CA, and Mexico. Muenscher, 1944: Perennials or rarely annuals, widely distributed, mostly in marshes and shallow water, species not listed in the book. USDA Plants, 2013: Shows it in CO. Harrington, 1964: Perennials, moist to wet ground, west of Mississippi River from British Columbia to Mexico, common in CO, 1067 to 2744 m. Weber, 1976: Wet places, plains to subalpine. Weber 1987: Equates this taxon with *E. palustris.* Weber and Wittmann, 2012: Most common and variable species in wet places throughout the area.Corell and Corell, 1972: Rhizomatous perennial, marshes, vernal pools, wet meadows, alkaline mud, found in CO. Culver and Lemly, 2013: Equates this taxon with *E. palustris*.

***Eleocharis palustris* (L.) Roem. & Schult.** and ***Eleocharis palustris* type**(creeping spike rush); seeds

Muenscher, 1944:Common in shallow water of lakes and streams, map shown. Fassett, 1957: Muddy and sandy shores, shallow water, Newfoundland to British Columbia to ME, MI, ND, WY, ID, and OR. Kershaw et al., 1998: Perennial sedge, wet sites, often in standing water, plains to montane, Yukon and Northwest Territories to NM. Corell and Corell, 1972; Harrington, 1964; Weber, 1976: Not listed. Weber, 1987: Wet places throughout CO (west slope). Weber and Wittmann, 2012: Difficult to distinguish taxa of the *palustris* group. Hartmann, 2013: Up to 2700 m. Culver and Lemly, 2013: 1020 to 3260 m, common along ditches, streams, pond margins and in moist meadows.

 ***Eleocharis* sp. R. Br.** (spikerush)

Muenscher, 1944: Perennials, rarely annuals, mostly in marshes and shallow water. Harrington, 1964: Annual or perennial grass-like plants.

***Schoenoplectus acutus* var. *acutus* (Muhl. ex Bigelow) Á. Löve & D. Löve***= Scirpus acutus*(tule, hard-stem bulrush); seeds

A good match for *Schoenoplectus acutus*. There is some variation in the size, shape, and color of the fossil seeds as well as in the modern specimens. *S. acutus* has a finer more subtle reticulate pattern than *S. validus* which has a larger coarser pattern. Most of the specimens are identified as *Schoenoplectus acutus*. There are also some larger *Scirpus* sp. specimens that were unable to be identified to species which were named *Scirpus* sp. (large). Muenscher, 1944: Shallow ponds, lakes, sloughs and marshes, can cover large areas in calcareous regions, widespread in the U.S. except for the SE region, map shown. Fassett, 1957: Commonly in hardwater. Kershaw et al., 1998: Shallow water from British Columbia and Alberta to NM. Harrington, 1964: Wet soil and shallow water, widespread in Canada and the U.S., in CO from 1067 to 2591 m. Weber, 1976: Very wet places, piedmont valleys and plains. Weber 1987: *S. acutus*, common on muddy shores of lower river valleys. Weber and Wittmann, 2012: Not listed. eFloras, 2013: Found in CO. Hartmann, 2013: North Park, CO, 2494 to 2500 m. This plant tends to occur at lower elevations than Ziegler Reservoir. Corell and Corell, 1972: Rhizomatous perennial, alkaline or calcareous mud, marshes, usually in water. Culver and Lemly, 2013: Perennial, 1060 to 2705 m, fresh often calcareous to brackish marshes and muddy shores of lakes and streams in water as deep as 1 m, often grows with *Typha* spp.

***Schoenoplectus americanus* (Pers.) Volkart ex Schinz & R. Keller** = *Scirpus americanus* Pers. (American bulrush); seeds

Weber, 1976: Common in sloughs, plains, and piedmont valleys. Fassett, 1957: Abundant in shallow water of sandy lakes, often in somewhat brackish water eastward. Muenscher, 1944: In shallow water or on sandy shores of lakes, ponds, and streams, most abundant in saline, brackish, or alkaline waters. Harrington, 1964: Wet or moist ground, scattered over all of CO, 1067 to 2591 m. Corell and Corell, 1972: Rhizomatous perennial, low moist ground, in water and near seepage areas. Culver and Lemly, 2013: expected to occur in CO.

 ***Scirpus* sp**. **L.** (bulrush); seeds

Locality 56: *Scirpus americanus* looks slightly bigger than our specimens and *Scirpus acutus* is slightly smaller. Muenscher, 1944: Many grow in ponds and lakes, others in wet swales and marshes. Corell and Corell, 1972; Harrington, 1964: Annual or perennial plants.

**Hydrocharitaceae (water nymph family)**

***Najas flexilis* (Willd.) Rostk. & W.L.E. Schmidt**(slender water nymph); seeds

Rook, 2002: A slender, elongated, rooted aquatic plant, seldom found in water less than 0.9 m deep. Clear waters of lakes and ponds with low to medium concentrations of plant nutrients, often rich in lime. Aquatic Weed Control LLC, 2004: Ponds, lakes and sluggish streams to depths of 4 m. Slender water-nymph tolerates brackish conditions. Bennike et al., 2001: Annual, thermophilous plants that live in water bodies of high summer water temperature. Produce great quantities of seeds which preserve well. Common in Quaternary deposits in Europe. Winter temps play no role since plant overwinters by seed. Common in North America. *N. flexilis* is less warmth demanding that *N. marina* and *N. minor*. In North America the species is characteristic of alkaline lakes. Found in interglacial deposits in Europe including Denmark. Lots of seeds likely indicate extensive stands of *Najas* on a soft bottom. Muenscher, 1944:A variable species with long, slender stems in deep water and forming short, compact, bushy plants in shallow water along sandy shores. Common in shallow ponds, lakes, and sluggish streams. Widespread in the northern states. Not shown as occurring in CO, map shown. Fassett, 1957: Common and widespread. Harrington, 1964: Expected in CO. SEINet: No specimens in CO. Kershaw et al., 1998; Weber, 1976, 1987; Weber and Wittmann, 2012: Not listed. eFloras: 1500 m. There is no evidence of this plant occurring in CO. Corell and Corell, 1972: In fresh to somewhat brackish water, occurrence in the southwest region needs verification according to this flora. Culver and Lemly, 2013: Not listed.

**Juncaginaceae (arrowgrass family)**

 **cf. *Triglochin* sp. L.** (arrowgrass); capsule

USDA, 1993: *Triglochin maritimum*, occurs in CO, marshes, wet meadows, particularly in alkaline areas, perennial herb. Kershaw et al., 1998: Lists *T. maritima*, standing often brackish water, wet open ground, plains to montane, AK to NM. *T. palustre*, montane and subalpine with similar habitat and range. Weber, 1976, 1987; Weber and Wittmann, 2012: *T. maritimum* (*T. maritima*), alkaline flats on the plains, fens and dry washes from the lower valleys to intermountain basins, and *T. palustris*, bogs and pond shores, subalpine and montane, not necessarily strongly alkaline, mountain meadows and fens. Muenscher, 1944: *T. maritima*, low, wet meadows and marl bogs and on alkaline or brackish flats, chiefly in western states, *T. palustris*, wet marl bogs and springy places, chiefly in northeastern states and rare in the Rocky Mountain states. Harrington, 1964: *T. maritima*, bogs, western ¾ of CO, 1372 to 2591 m, *T. palustris*, from western ¾ of CO, 1372 to 3048 m. Corell and Corell, 1972: *T. palustre*, wet meadows, bogs and mud flats, gravelly stream margins, often brackish or alkaline. *T. maritimum*, saline and alkaline wet meadows and marshes. *T. debilis*, wet meadows and marshes along streams in brackish to saline or alkaline situations, found in CO. Culver and Lemly, 2013: *T. maritima*, perennial, 1500 to 3430 m, locally common in marsh areas, seeps, lake shores and moist meadows, grows mostly in alkaline soils. *T. palustris*, perennial, 1555 to 3370 m, uncommon in marsh areas, seeps, lake shores and moist meadows, grows mostly in alkaline soils.

**Lamiaceae (mint family)**

***Lycopus americanus*** **Muhl. ex W.P.C. Bartram** (bugleweed, water horehound); seeds

Montgomery, 1977: Seed margin with whitish ridge. Fassett, 1957: Wet ground and lake shores, Newfoundland to British Columbia, south to FL, TX, UT, and CA. Harrington, 1964: Herbaceous perennial, moist or wet ground, Newfoundland to British Columbia, south to FL and CA, western ⅔ of CO, except northwest part, 1372 to 2286 m. Weber, 1976: Nutlets with a smooth corky ridge, swamps and streambanks, mostly in the piedmont valleys. Weber, 1987; Weber and Wittmann, 2012: Swamps and streambanks, lowlands. Muenscher, 1944: Not listed. Correll and Correll, 1972: Low grounds, soggy meadows, marshes, in water and on edge of ponds, streams and ditches, wet soils about lakes and in canyons, Newfoundland to British Columbia, south to FL, AL, MS, OK, TX, NM, AZ, and CA. Culver and Lemly, 2013: Perennial, 1150 to 2285 m, common in moist soil, sometimes in standing water.

***Mentha arvensis* L.**(field mint, wild mint); seeds

Huggins, 2004: Montane, streambanks, and meadows, wet to moist soil, riparian areas. Kershaw et al., 1998: Perennial herb, moist to wet, open or shaded sites; plains to mountains, Yukon and Northwest Territories to NM. Harrington, 1964: Moist or wet ground, circumpolar, south to PA, NM, and CA, scattered in CO, 1372 to 2896 m. Weber, 1987; Weber and Wittmann, 2012: Along irrigation ditches, sloughs and streambanks in the lowlands. Weber, 1976: Irrigation ditches, sloughs, and streambanks, plains and piedmont valleys. Muenscher, 1944: Not listed. Correll and Correll, 1972: In moist rich soils, cattail swamps, seeping wet meadows, marshes, about lakes, springs and along ditches and streams, AZ, NM, TX. Culver and Lemly, 2013: Perennial, 1190 to 2985 m, common in moist places, especially along streams and ditches.

**Menyanthaceae (buck bean family)**

***Menyanthes trifoliata* L.**(buckbean); seeds

Muenscher, 1944: Perennial aquatic or bog plants with creeping stems. Common in shallow ponds and lakes, on floating moors, and in acid bogs. Widespread across the northern United States except on the Great Plains. Durable seed coats which are frequently found in large numbers in acid peat bogs at depths of several meters below the surface. Not shown to occur in CO, map shown. Kershaw et al., 1998: Wet sites, usually in shallow water, plains to mountains, AK to CO. Harrington, 1964: In water or very moist ground, Newfoundland to AK, south to PA, CO, and CA, rare in CO, 4 records from La Plata, Garfield, Boulder, and Larimer counties at 2591 to 2805 m. SEINet has it in CO as high as 2926 m and 3323 m. Weber 1976: Grows in subalpine ponds, spongy stalks and rhizomes are rooted in the mud, leaves, flowers, and stalks rise above the water, showy white flowers. Weber 1987, Weber and Wittmann, 2012: Upper montane and subalpine ponds, northern counties. USDA, 1993: Bog and marsh species, occurs in CO, marshes, bogs, swamps, lakes, perennial herb. Luna et al., 2010: Common in Rocky Mountain subalpine-montane fens. Seeds were shiny when first exposed from the sediment then they became oxidized and lost their luster. Culver and Lemley, 2013: Perennial, 1660 to 3555 m, shallow water of ponds and lakes, slow-moving streams and marshes.

**Plantaginaceae (plantain family)**

***Hippuris vulgaris* L.**(mare’s tail); seeds

Huggins, 2004; Muenshcher, 1944; Weber, 1987: Montane and subalpine zones in slow, shallow water streams and ponds. A perennial, submersed, or emersed aquatic plant, found in rivers, streams, ditches, shallow marshy ponds, and wet mud. Widespread in the northern United States, shown to occur in CO. Fassett, 1957: Usually in cold water, submersed and emersed. Kershaw et al., 1998: Aquatic perennial herb, shallow water and mud flats, plains to subalpine, AK to NM. Harrington, 1964: Swamps and ponds, Greenland to AK, south to NY, NM, CA, western ⅔ of CO, 1676 to 3048 m. SEINet records in CO: at 2956 m, 3018 m. Weber, 1987; Weber and Wittmann, 2012: Common in shallow water of slow streams and ponds, montane and subalpine. Weber, 1976: When emergent, stems stand stiffly out of the water, subalpine ponds. USDA, 1993: Occurs in CO, in and around lakes, ditches, sloughs, ponds and streams, submerged or emersed perennial, fruits eaten by waterfowl. Correll and Correll, 1972: submersed or partly emersed, rooted in mud of shallow water in ponds, streams, marshes, and wet meadows in NM and AZ. Culver and Lemly, 2013: Perennial, 1730 to 3290 m, common in ponds and lakes, emergent or sometimes completely submerged, seeds and vegetation eaten by waterfowl.

**Poaceae(grass family)**

***Calamagrostis canadensis* type (Michx.) P. Beauv.** (blue joint grass); florets

Occurs in CO, common in marshes, wet meadows, and beaver ponds, mostly on mucky peaty soil. Fassett, 1957: Common in moist places. Kershaw et al., 1998: Perennial grass, moist to wet, open sites, plains to subalpine, AK to NM. Harrington, 1964: Marshes, wet places, open woods, meadows, wet thickets, and streamsides, Greenland to AK, south to MD, NC, MO, KS, CO, AZ, and CA, western ⅔ of CO, 1524 to 3353 m. Harrington lists other species that grow in wet places. SEINet: Many specimens occur above 3000 m in CO. Weber, 1976: Wet shores of lakes and bogs, montane, and subalpine. Weber, 1987; Weber and Wittmann, 2012: Very common on borders of montane and subalpine ponds and in aspen groves. Muenscher, 1944: Perennials, common in marshes, wet meadows, and beaver ponds, mostly on mucky or peaty soil, shown in CO. Corell and Corell, 1972: Marshes, wet places, open woods, and meadows. Luna et al., 2010: Plant of Rocky Mountain subalpine-montane fens. Culver and Lemly, 2013: 1615 to 4315 m, one of the most common riparian grasses in the mountains, occurring along mountain streams, edges of lakes and ponds from foothills to subalpine.

**Polygonaceae (knotweed family)**

***Rumex fueginus* Phil**. *= Rumex maritimus* ssp. *fueginus* (Phil.) Hultén (golden dock); seeds

Very small seed with thin ridges. Fassett, 1957: Along lakes and rivers, British Columbia to WI, south to northern IL, KS, and lower CA. Huggins, 2004: Not listed. Kershaw et al., 1998: Annual or biennial, grows on sandy often salty or alkaline open sites on the plains and foothills from the Yukon and Northwest Territories to NM. Harrington, 1964: Annual, open plains, slopes, often in sandy soil, throughout North America, mostly in north-central CO, 1220 to 2591 m. Weber, 1987; Weber and Wittmann, 2012: Wet ground of drying pools and streamsides, lower valleys, low sprawling plant. Weber, 1976: Annual, sandy shores of ponds from plains to montane. USDA, 1993: Occurs in CO, around ponds, often near or in brackish water, perennial herb. Corell and Corell, 1972: Annual or occasional biennial, lake margins, marshy ground, in shallow water, and on sandy-gravel bars along streams and about lakes and ponds, AZ, NM, TX. Culver and Lemly, 2013: 1195 to 2745 m, found along shores of lakes and marshes.

***Persicaria lapathifolia* type L. Gray** *= Polygonum lapathifolium* type L. (curlytop knotweed); seeds

Muenscher, 1944: Not listed. Harrington, 1964: Annual, moist or wet ground, scattered in the eastern half of CO, 1067 to 2286 m. Corell and Corell, 1972: Annual, in marshes, wet meadows, in and about water of ponds, lakes, and streams, TX, OK, NM, AZ. USDA, 1993: Erect annual, moist soil, wet meadows, ditches, and disturbed areas. Hartmann, 2013: Specimens suggest that this taxon can occur as high, or higher than the elevation of the Ziegler Reservoir (2705 m). Weber and Wittmann, 2012: Alien on pond borders and irrigation ditches. Culver and Lemly, 2013: Annual, 1065 to 3100 m, common in shallow water, margins of lakes and ponds, and irrigation ditches. Though native to other regions of North America, Colorado and Wyoming consider *P. lapathifolia* as an adventive species.

**Potamogetonaceae (pondweed family)**

***Potamogeton* sp. L.** (pondweed); seeds

Weber, 1976, 1987; Weber and Wittmann, 2012: Found in almost every pond of every size, important water fowl food.

***Potamogeton alpinus* type Balb.** (alpine pondweed); seeds

Martin, 1951: Seed with truncate saddle-back top, trap door apex acute, trap door does not go all the way to the top. Kershaw et al., 1998: Calm, shallow water, plains to subalpine from AK to CO. Weber, 1976, 1987: Subalpine ponds. Weber and Wittmann, 2012: Common at high elevations across CO. Muenscher, 1944: Cold ponds, lakes and streams in shallow or deep water, northeastern states to the Pacific Northwest, shown in CO. Harrington, 1964: Streams and ponds, Nova Scotia to AK south to CO, UT, and CA, from the western half of CO at 1981 to 3658 m. Corell and Corell, 1972: Not listed. Culver and Lemly, 2013: Emergent, perennial, 2075 to 3535 m, montane to subalpine ponds and lakes.

***Potamogeton gramineus*  L.** and ***Potamogeton gramineus* type L.** (variable pondweed); seeds

Weber, 1987; Weber and Wittmann, 2012: Achenes under 3 mm long. Martin, 1951: A low rim is present along trap door margins, door goes all the way to the style base. Muenscher, 1944: Common in lakes and slow streams, often in deep water, widespread across northern U.S. including CO, map shown. Fassett, 1957: Many varieties from shallow to deep water. Kershaw et al., 1998: Similar habitat to *Potamogeton natans*, AK to NM. Harrington, 1964: Lakes and streams, Greenland to AK, south to NJ, NM, and CA, north-central and central CO, 2286 to 2744 m, but likely more widely distributed. Weber, 1976: Lakes and reservoirs, plains and mountains. Corell and Corell, 1972: Ponds, lakes, marshes, and sluggish streams in NM, AZ, and eastern states. Porsild and Cody, 1980: Common in still water, .5 to 3 m deep. Culver and Lemly, 2013: Partially emergent perennial, 1525 to 3415 m, common and widespread in lakes and ponds in mountains to subalpine, common throughout the contiguous United States.

***Potamogeton natans* L.**(floating-leaf pondweed); seeds

Weber, 1987; Weber and Wittmann, 2012: Achenes 3-5 mm long, Western Slope records from Gunnison and Mesa counties. Martin, 1951: 3.5 by 3.5 mm, deeply dimpled, style base persistent, trap door moderately ridged. Muenscher, 1944; Fasset, 1957: Shallow lakes, ponds, sluggish streams, widespread in the northern states including CO, map. Kershaw et al., 1998: Aquatic perennial herb, still or slow moving shallow water, plains to subalpine, British Columbia and Alberta to NM. Harrington, 1964: Widely distributed in the northern hemisphere. North-central and south-central CO, 1524 to 2744 m but expected anywhere. Weber, 1976: Ponds and ditches mostly on the plains. USDA, 1993: Floating and submersed leaves, occurs in CO, shallow ponds, edges of lakes in slow moving streams often in brackish water, partially submersed perennial, eaten by waterfowl. Corell and Corell, 1972: Marshy ponds and lakes, often brackish. Culver and Lemly, 2013: Partially emergent, 1150 to 3100 m, uncommon, but likely under collected. Found in lakes, ponds and ditches.

***Potamogeton praelongus* Wulfen**(white-stem pondweed); seeds

Has the largest seeds of the *Potamogeton* taxa found at Ziegler Reservoir and only occurs in Unit 16. Weber, 1976, 1987: Achenes 4-5 mm. Weber and Wittmann, 2012: Relatively rare, to be expected on the Western Slope of CO. Martin, 1951: 4 by 3 mm, trap door acutely ridged, commonly truncate at the top. Muenscher, 1944; Fassett, 1957: Lakes and ponds usually in deep, clear water but sometimes in shallow ponds with soft, peaty bottom, widespread across northern United States including CO, map. Harrington, 1964: Deep water, Newfoundland to AK, south to NJ, CO, and CA, northwestern, central, and north-central CO, 2744 to 3354 m. Weber, 1976: Lakes and ponds at fairly high altitudes in the mountains. USDA, 1993: Submersed leaves, occurs in western CO, deep water in lakes and streams, submersed perennial, eaten by waterfowl. Freckman herbarium: 0.9 to 4 m of water. Corell and Corell, 1972: Not listed. Porsild and Cody, 1980: still waters 1 to 2 m deep. Culver and Lemly, 2013: Perennial, 1830 to 3230 m, found in deep water in mountain lakes and ponds.

 ***Potamogeton pusillus* type L*.*** (baby pondweed); seeds

Weber, 1976, 1987: Ponds and streams, foothills to subalpine. Weber and Wittmann, 2012: Two collections from La Plata and Moffat counties, Western Slope, CO. Muenscher, 1944: Common in lakes, ponds, and slow streams, often in deep water, shown in CO. Corell and Corell, 1972: Neutral or slightly alkaline or slightly brackish water of ponds and rivers, often forming large masses, OK, TX, NM, AZ, through much of the United States and Canada. Harrington, 1964: Scattered in CO, few in extreme eastern part, 1524 to 3048 m, but to be expected anywhere. Porsild and Cody, 1980: Wholly submersed, quiet waters up to 2 m deep. Culver and Lemly, 2013: Perennial, 1525 to 3230 m, found in shallow pools and shallow ditches.

 ***Stuckenia pectinata* (L.) Börner** ***=*** *Potamogeton pectinatus* L. (sago pondweed); seeds

Kershaw et al., 1998: Shallow water, AK to CO. Weber 1976, 1987: Ponds (often alkaline) of plains and piedmont valleys, low elevations. Fassett, 1957: Hard or brackish water of lakes and slow flowing streams, widespread. Muenscher, 1944: Common in ponds, lakes, and slow streams, chiefly in nonacid waters. Harrington, 1964: In fresh or saline water, New Brunswick to AK, south to FL, TX, and CA, scattered over the state, 1219 to 3048 m. Corell and Corell, 1972: In alkaline, brackish, or saline water of ponds, quiet rivers, marshes, OK, TX, NM, AZ, west to AK, south to Mexico. Weber and Wittmann, 2012: Very common in ponds and lakes throughout CO. Culver and Lemly, 2013: Perennial, 1165 to 3290 m, plants wholly submerged, commonly found in shallow mountain lakes and slow-moving streams.

***Stuckenia vaginata* (Turcz.) Holub** = *Potamogeton vaginatus*Turcz. (sheathed pondweed); seeds

In the majority of the Ziegler Reservoir *Potamogeton* spp. specimens, the lid does not go all the way to the top (to the style base), so the specimens must be either *Potamogeton pectinatus* or *P. vaginatus* (=*Stuckenia vaginata*), according to Martin, 1951. When sectioned, *P. pectinatus* has a wider comma head and *P. vaginatus* has a more tapered comma head. The Ziegler Reservoir specimens look most like *P. vaginatus*. Martin, 1951: The trap door is remote from the style base, trap door has a ridge, acute apex on door when removed, sometimes the lid seems more remote from the style base similar to *P. pectinatus*, but it has a ridge and *P. pectinatus* does not. Muenscher, 1944: Deep water of lakes and rivers, widespread in the northern states, not shown in CO. Fassett, 1957: In hard or brackish water. Kershaw et al., 1998: Aquatic, perennial herb, shallow to deep, standing or fast moving water, plains to mountains, AK to WY. Harrington, 1964; Weber, 1976, 1987: Not listed. Weber and Wittmann, 2012: Barely entering into northern CO, to be expected on the Western Slope. SEINet records in CO and WY: Jackson Co. (Lake John), 2456 m, Larimer Co. (Mary’s Lake), 2346 m, WY at 2012 m, 1639 m, SD at 1829 m. Porsild and Cody, 1980: Fresh or somewhat brackish water up to 2 m deep. eFloras, 2013: Up to 2300 m. Culver and Lemly, 2013: Perennial, 1465 to 3290 m, found in montane lakes and ponds.

 ***Zannichellia palustris* L.** (horned pondweed); seeds

USDA, 1993: Submersed aquatic, fresh or brackish lakes, ponds, streams, submersed perennial, food for waterfowl and fish. eFloras, 0-2900 m. Weber, 1976, 1987: Slow streams, plains to subalpine. Weber and Wittmann, 2012: Slow streams and ditches, lower elevations. Fassett, 1957: Hard to brackish water, Saskatchewan to WI, MO, and TX, west to the Pacific. Muenscher, 1944: Submered perennials, lakes, bays, streams, and ditches in fresh or brackish water, shown in CO. Harrington, 1964: Ponds, ditches, and streams, scattered over CO, 1067 to 2896 m. Corell and Corell, 1972: Submerged aquatic, in fresh or brackish water in pools, marshes, and streams. Culver and Lemly, 2013: Submerged, perennial, 1065 to 3050 m, found in slow-moving streams, ditches and along pond margins.

**Ranunculaceae (buttercup family)**

***Ranunculus aquatilis* L.** ***=*** *Batrachium trichophyllum*(whitewater crowfoot); seeds

Montgomery, 1977: Surface of seed transversely ridged. Muenscher, 1944: Shallow water less than 2.1 m deep. In ponds, lakes, and streams, widely distributed in the United States, except in the southeastern states and lower Mississippi Valley, occurs in CO, map shown. Fassett, 1957: Common in shallow water. Kershaw et al., 1998: Aquatic, perennial herb, shallow, still or slow moving water, plains to subalpine, AK to NM. Harrington, 1964: Ponds and slow streams, Labrador to AK, south to KY, NM, and CA, scattered over CO, 1372 to 3048 m. Weber, 1987: Submersed leaves. Weber, 1976: Common in ponds and streams, plains to subalpine, achenes roughly transversely ridged. Weber and Wittmann, 2012: Not listed. USDA, 1993: Aquatic, submersed leaves, ponds, ditches, steams, vernal ponds, perennial herb, achenes eaten by waterfowl, submerged aquatic. Correll and Correll, 1972: Perennial with submersed stems, commonly attached and floating in ponds, streams, pools, and springs, often in swift flowing water, Newfoundland to Labrador to AK, south to NC, IN, NM, AZ, Baja CA. Culver and Lemly, 2013: Submerged perennial, 1065 to 3750 m, common in ponds, streams and creeks.

***Ranunculus macounii* Britton** (Macoun’s buttercup); seeds

Harrington, 1964: Perennials, moist or wet ground, Newfoundland to AK, south to MI, NM, and CA, scattered over the western ⅔ of CO, 1524 to 2896 m. Kershaw et al., 1998: Moist sites, plains and foothills, British Columbia and Alberta to NM. Weber, 1976, 1987; Weber and Wittmann, 2012: Riparian woodlands, ditches and sloughs, piedmont valleys and plains. Muenscher, 1944: Not listed. Correll and Correll, 1972: Annual or perennial, creeping in mud about lakes and ponds in marshes and ditches, Newfoundland and Labrador to AK, south to MI, NE, NM, AZ, and CA. eFloras, 2013: To 2900 m. Culver and Lemly, 2013: Perennial, 1525 to 2925 m, common in moist meadows, riparian woods, along streams and often in disturbed areas.

***Ranunculus pensylvanicus* L. f.** (bristly crowfoot); seeds

Fassett, 1957: Common on wet shores, occurs in CO. Harrington, 1964: Moist or wet ground, Newfoundland to AK, south to NJ, NM, and WA, south-central CO from 1981 to 2286 m. Kershaw et al., 1998; Weber, 1976, 1987: Not listed. Weber and Wittmann, 2012: *R. pensylvanica*, to be expected. USDA, 1993: A perennial herb, occurs in southwest CO, in wet meadows, marshes, ditches, achenes eaten by birds. Muenscher, 1944: Not listed. Correll and Correll, 1972: Terrestrial annual, in wet meadows, standing in shallow water on edge of pools and lakes, Newfoundland to AK, south to NJ, NM, AZ. eFloras: Up to 1700 m. Hartmann, 2013: Specimens from 2300 to 2800 m. Culver and Lemly, 2013: Annual, perennial, 1705 to 2950 m, uncommon in moist places, along streams and in moist meadows.

***Ranunculus sceleratus* L.**(cursed crowfoot); seeds

Montgomery, 1977: Margin of seed thick and corky, surface has minute transverse ridge. Fassett, 1957: A common weed on muddy shores. Harrington, 1964: Borders of lakes, ponds, and streams, AK south to IA, NM, and CA, scattered in CO except in extreme east, 1372 to 3048 m. Weber, 1976: Lists *R.* *sceleratus* var. *multifidus,* annual, achene corky keeled, introduced weed, very wet places, around watering troughs, springs, irrigation ditches, this variety is native. Kershaw et al., 1998; Muenscher, 1944; Weber, 1987; Weber and Wittmann, 2012: Not listed. Correll and Correll, 1972: Palustrine or rarely aquatic annual, borders of lakes, streams, and marshland often thriving in brackish or alkaline sites, WA to NE, south to TX, LA, and GA. Porsild and Cody, 1980: Wet peaty places. Culver and Lemly, 2013: Emergent, annual, perennial, 1095 to 3430 m, found in shallow water of streams and ponds, on floodplains and in wet meadows.

 ***Ranunculus uncinatus* D. Don ex G. Don** (hooked buttercup); seeds

Harrington, 1964: Shaded rather moist places, along streams, 1676 to 3506 m. Kershaw et al., 1998: Moist shaded slopes, foothills, and montane, British Columbia and Alberta to CO. Muenscher, 1944; Weber 1976, 1987: Not listed. Weber and Wittmann, 2012: Moist woodlands, middle altitudes. Correll and Correll, 1972: Terrestrial annual or perennial, in wet soil on edge of and in water about springs and ponds, and along streams, British Columbia to AK, south to NM, AZ, CA, NM. Culver and Lemly, 2013: Annual, perennial, 1955 to 3995 m, found in moist meadows, marshes and along streams.

**Typhaceae (cattail family);** Perennial aquatic or marsh plants

***Sparganium natans* L.** = *Sparganium minimum* (slender burreed); seeds

Muenscher, 1944: Arctic burreed, subalpine and rare in CO. In cold, spring-fed ponds and sluggish streams, usually on soft bottom. Chiefly in the northeastern states and at higher altitudes from the Rocky Mountains westward, occurs in CO, map shown. Huggins, 2004: Lists *S. emersum* and *S. angustifolium* but not *S. minimum*. Fassett, 1957: Springy spots, pools, and ponds. Kershaw et al., 1998: Aquatic perennial herb, shallow water in ponds and lakes, in montane and subalpine zones from Yukon and Northwest Territories to MT and UT. Harrington, 1964: Ponds and streams, Labrador to AK, south to OR, CO, and NJ, north-central CO, few specimens from 2438 to 2591 m. Weber, 1976: Margins of ponds, *S. minimum* (arctic burreed), rare in subalpine bogs. Weber, 1987; Weber and Wittmann, 2012: Margins of ponds, infrequent in subalpine bogs and old beaver ponds. USDA, 1993: Occurs in CO, bogs, ponds, often in shallow standing water, floating or emergent perennial, eaten by waterfowl. Corell and Corell, 1972: Submerged in shallow water, Labrador to AK, south to NJ, TN, AZ, and CA. Culver and Lemly: Perennial, 2345 to 3535 m, uncommon, grows in shallow water of ponds and high mountain ponds.

**Violaceae (violet family)**

***Viola macloskeyi* type** **F.E. Lloyd** (Macloskey’s violet); seeds

Two different sized specimens are noted in Locality 56. The small specimen is comparable to *Viola macloskeyi* from the R.G. Baker Collection. The larger *Viola* specimen is comparable to *V. pedata* L. (birdfoot violet) in the R. G. Baker Collection, but this specimen could be many other species, and therefore treated as *Viola* sp. Harrington, 1964; Kershaw et al., 1998; Weber, 1976, 1987: Not listed. Weber and Wittmann, 2012: Subalpine wet forests and streamsides. USDA, 1993: Perennial herb, wet meadows, along streams, bogs, often occurs in large mats. Culver and Lemly, 2013: Perennial, 2410 to 3840 m, found in moist moss along shady streams and in subalpine forests.

**Bryophytes**

**Amblystegiaceae (amblysegia family)**

 ***Drepanocladus* sp.** (C. Müll.) G. Roth (drepanocladus moss); stems and leaves

Identified by Miriam Jones. Specimens lack a midrib and have inflated aylar cells. Common in minerotrophic peatlands, wet ground, or standing water (Jones, M., personal communication, 2013).

**References Cited**

Aquatic Weed Control LLC, 2004. Online Aquatic Plant identification Utility. http://www.awc-america.com/plant\_id\_utility/plants/najfle.html, Accessed in April, 2013.

Bennike, O., Jenson, J.B., Lemke, W., 2001. Late Quaternary records of *Najas* spp. (Najadaceae) from the southwestern Baltic region. Review of Palaeobotany and Palynology 114, 259-267.

Carter, J.L., 1988. Trees and Shrubs of Colorado. Johnson Books, Boulder, Colorado.

Corell, D.S., Corell, H.B., 1972. Aquatic and Wetland Plants of Southwestern United States, volume 1, The Blackburn Press, Caldwell, NJ.

Corell, D.S., Corell, H.B., 1972. Aquatic and Wetland Plants of Southwestern United States, volume 2, The Blackburn Press, Caldwell, NJ.

Culver, D.R., Lemly, J.M., 2013. Field Guide to Colorado’s Wetland Plants.Prepared for

U.S. Environmental Protection Agency, Region 8, 1595 Wynkoop Street, Denver, CO 80202-1129.

eFloras, 2013. Botanical Database published on the internet. Missouri Botanical Garden, St. Louis, MO & Harvard University Herbaria, Cambridge, MA. <http://www.efloras.org>, Accessed in April through July, 2012.

Fassett, N.C., 1957. A Manual of Aquatic Plants. The University of Wisconsin Press. Madison, Wisconsin.

Freckmann, R.W., Herbarium, 2012. University of Wisconsin-Stevens Point. Wisconsin Plants web site. http://wisplants.uwsp.edu, Accessed in April, 2013.

Gleason, H.A., Cronquist, A., 1991. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. The New York Botanical Garden, Bronx, New York.

Harrington, H.D., 1964. Manual of the Plants of Colorado. Sage Books, Denver.

Hartmann, R., 2013. Floristic Projects at the Rocky Mountain Herbarium, plant inventory data. http://[www.rmh.uwyo.edu/research/floristics.php](http://www.rmh.uwyo.edu/research/floristics.php), Accessed in August, 2013.

Huggins, J.L., 2004. Snowmass Village ~ Wild at Heart, A Field Guide to Plants Birds & Mammals of Snowmass/Aspen & the Colorado Rocky Mountains. Who Press, Basalt.

Hurd, E.G., Shaw, N.L., Mastrogiuseppe, J., Smithman, L.C., Goodrich, S., 1998. Field Guide to Intermountain Sedges. General Technical Report RMRS-GTR-10. Ogden, UT: U.S. Department of Agriculture, Forest Service, Rocky Mountain Research Station.

Integrated Taxonomic Information System (ITIS), 2013. ITIS on-line database. http://www.itis.gov, Accessed in April, 2013.

Jackson, S.T., Weng, C., 1999. Late Quaternary extinction of a tree species in eastern North America. Proceedings of the National Academy of Sciences 96(24), 13847–13852.

Kershaw, L., MacKinnon, A., Pojar, J., 1998. Plants of the Rocky Mountains. Lone Pine Publishing, Edmonton, Alberta, Canada.

Luna, T., Vance, L.K., McIntyre, C., 2010. Rocky Mountain Subalpine-Montane Fen.  Montana Field Guide.  <http://FieldGuide.mt.gov/displayES_Detail.aspx?ES=9234>, Accessed in October, 2013.

Martin, A.C., 1951. Identifying pondweed seeds eaten by ducks. The Journal of Wildlife Management 15, 253-258.

Montgomery, F. H., 1977. Seeds and fruits of plants of eastern Canada and northeastern United States. University of Toronto Press, Toronto, Canada.

Muenscher, W.C., 1944. Aquatic Plants of the United States. Comstock Publishing Associates, Ithaca, NY.

Porsild, A.E., Cody, W.J., 1980. Vascular Plants of Continental Northwest Territories, Canada. National Museums of Canada, Canada.

Prescott, G.W., 1978. How to know the freshwater algae, third edition, The Pictured Key Nature Series, Wm. C. Brown Company Publishers, Dubuque, Iowa.

Rook, E.J.S., 2002. Flora, Fauna, Earth, and Sky: The Natural History of the Northwoods. <http://www.rook.org/earl/bwca/nature/aquatics/najas.html>, Accessed in April, 2013.

Southwest Environmental Information Network, SEINet, 2013. http://swbiodiversity.org/seinet/index.php, Accessed in April through August, 2013.

State of Washington Department of Ecology, 2013. An On-line Version of an Aquatic Plant Identification Manual for Washington's Freshwater Plants. <http://www.ecy.wa.gov/programs/wq/plants/plantid2/descriptions/cha.html>, Accessed in April, 2013.

Taylor, R.J., 1986. Rocky Mountain Wildflowers. Second Edition. The Mountaineers, Seattle.

U.S. Department of Agriculture (USDA), 2013. PLANTS database. [http://plants.usda.gov](http://plants.usda.gov/), Accessed in April through August, 2013.

U.S. Department of Agriculture (USDA), 1993. Western Wetland Flora: Field Office Guide to Plant Species. USDA Soil Conservation Service, West National Technical Center, Portland, Oregon.

Weber, W.A., 1976. Rocky Mountain Flora. University Press of Colorado, Niwot, Colorado.

Weber, W.A., 1987. Colorado Flora, Western Slope. Colorado Associated University Press, Boulder, Colorado.

Weber W.A., Wittmann, R.C., 2012. Colorado Flora, Western Slope. University Press of Colorado, Boulder, Colorado.

Weng, C., Jackson, S.T., 2000. Species differentiation of North American spruce (*Picea*) based on morphological and anatomical characteristics of needles. Canadian Journal of Botany 78(11), 1367-1383.