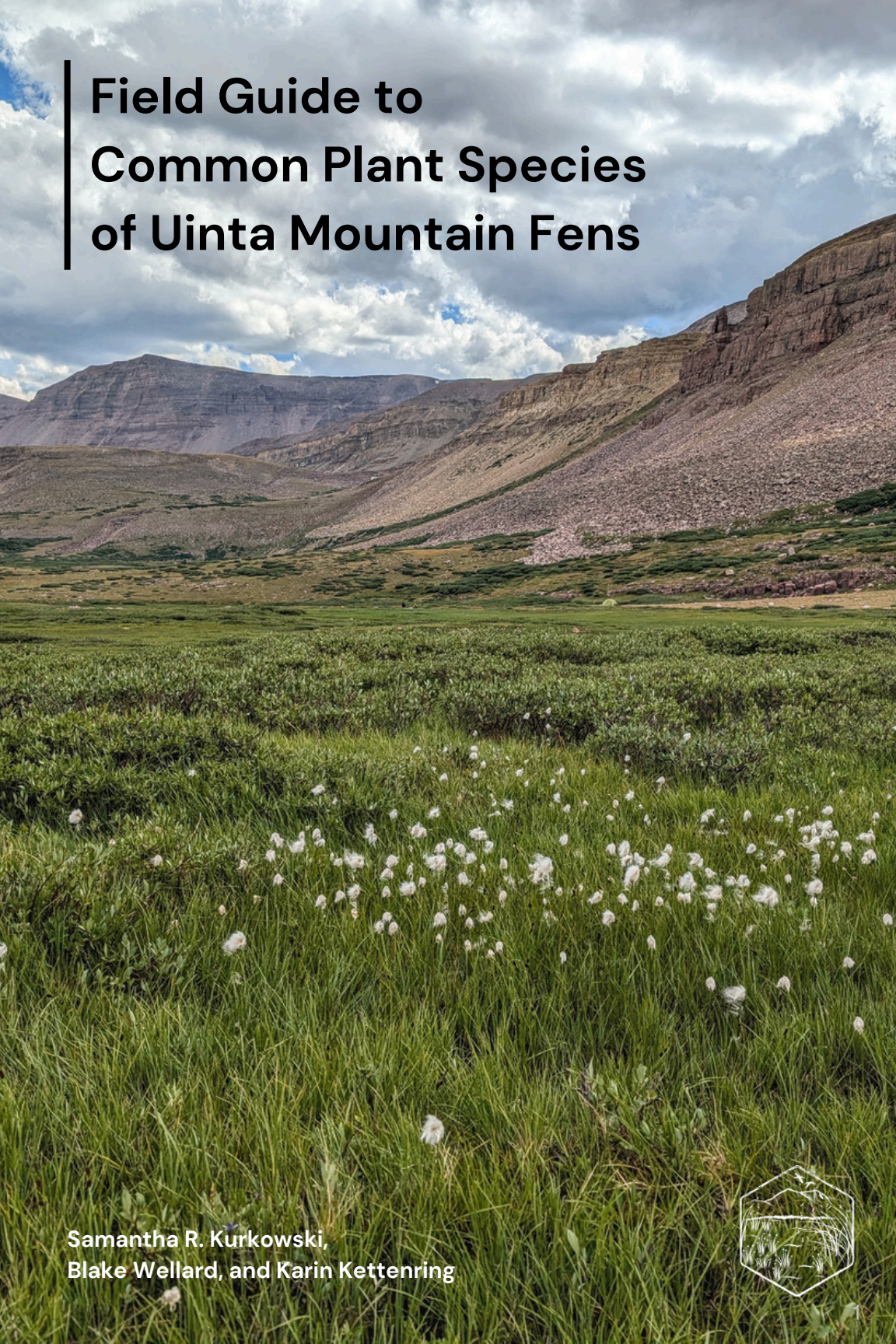
Field Guide to Common Plant Species of Uinta Mountain Fens



Samantha R. Kurkowski,
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Cover Photos

Front: Basin fen in the High Uinta Wilderness just east of King's peak, with water sedge (*Carex aquatilis*) and onehead cottongrass (*Eriophorum scheuchzeri*) in the foreground and diamondleaf willow (*Salix planifolia*) further back. The rocky, rounded peaks of the Uinta Mountains rise behind the fen.

Back: *Sphagnum* moss on the edge of a fen in the eastern Uinta Mountains. Mud sedge (*Carex limosa*) protrudes from the moss.

Suggested citation:
Kurkowski, S. R., Wellard, B., & Kettenring, K. M. (2026). *Field guide to common plant species of Uinta Mountain fens.* Utah State University Wetland Ecology and Restoration Laboratory and Utah State University Extension.

Contents

Preface 4
Acknowledgments 4
Introduction 5
- Uinta Mountain Range 5
- Uinta Mountain Wetlands 6
- Fens and Peatlands 7
- Wetland Plants 8

How to Use This Guide 9
- Species Included in This Guide 9
- Data Sources and Additional Resources 11
- Species Profile Key 12
- Botanical Diagrams 16

Bryophytes 21
Ferns + Fern-Allies 23
Dicot Forbs 25
Monocot Forbs 98
Grasses 111
Rushes 130
Sedges 144
Shrubs 193
Glossary 207
Image Credits 213
- Licenses Associated With Each Image 213
- Creative Commons License or Public Domain 213
- Used by Permission, All Rights Reserved 215

References 216
Index 218
Ruler ..... Inside Back Cover

Preface and Acknowledgments

Preface

Fens are a unique class of wetland that host many specialized plant species globally and, in Utah, occur primarily in the Uinta Mountains. Fens are characterized by deep organic soils that consist of at least 40 cm of undecomposed plant material, known as peat. Peat is developed and maintained by continuously saturated hydrologic conditions caused by groundwater discharge, with the water table remaining at or near the soil surface year-round. While water is critical to how fens function, fens would not be formed without the plant material that becomes peat. Vegetation is the foundation for peat soils and many of the ecosystem services that fens provide, including habitat for wildlife, increased water retention, improved water quality, and carbon storage. By getting to know fen plant species, we can better understand how fens function and how threats such as drought, recreation, grazing, or wildfire may affect them.

This guide provides an easy-to-use resource for amateurs and professionals who want to identify plants in fens. This guide includes key characteristics for identifying species, details on similar species and how to tell them apart, and information on habitat and frequency of occurrence. Species range from wetland obligates to upland plants that occasionally make their way into fens, with the purpose of including most species that may be encountered in a fen.

When exploring fens, stay on trails when possible, pack out waste, and leave vegetation where you find it. Plants found in fens can be rare, and pulling up a plant could mean destroying one of very few individuals of a species.

Acknowledgments

This guide was made possible with support from the Environmental Protection Agency's Wetland Program Development Grant (CD00111201). We thank Diane Menuz at the Utah Geological Survey and Joanna Lemly and Denise Culver at the Colorado Natural Heritage Program for their template, whose Colorado and Utah Central Basin wetland plant guides inspired this work. We also thank Kris Valles, Glen Rink, and Sandy Johnston for their help with species identifications. Sherel Goodrich provided expert feedback on the species included in this guide. Meghan McCormick and Mindy Wheeler provided additional conservation status information for several species that had not been ranked within Utah. When not otherwise cited, plant part illustrations were created by Elisabeth Stimmel.

Uinta Mountain Range

The Uinta Mountains are located in northeast Utah and are home to the state's highest peaks, reaching 13,528 feet in elevation at Kings Peak (Figure 1). The Uintas span over 100 miles and are one of two mountain ranges in the United States that run east to west, the other being the Transverse Ranges in Southern California. This range also contains the High Uintas Wilderness, a designated wilderness area covering over 450,000 acres, established in 1984 through the Utah Wilderness Act. In this guide, we focus primarily on the high-elevation portions of the Uinta Mountains (above 9,000 feet) because this is where fens occur most frequently (Smith & Lemly, 2017; Smith, 2023).

The climate throughout the Uintas remains cooler and wetter than the majority of Utah year-round, largely due to its higher elevation. The High Uintas Wilderness receives 38.8 inches of precipitation annually and has an average minimum and maximum temperature of -14 °F and 79 °F, respectively (Natural Resources Conservation Service [NRCS], 2024). The range contains a variety of ecosystems, including alpine tundra, rock scree, subalpine conifer and aspen conifer forests, mountain brush, wide river valleys, and wetlands. Containing the tallest peaks in the state, the Uinta Mountains sit at the top of watersheds that feed the Bear River, Duchesne River, Green River, Provo River, and Weber River. These rivers are important water sources for many ecosystems and population centers in the Intermountain West, including the Wasatch Front, the Great Salt Lake, and the Uinta Basin and Colorado Plateau.

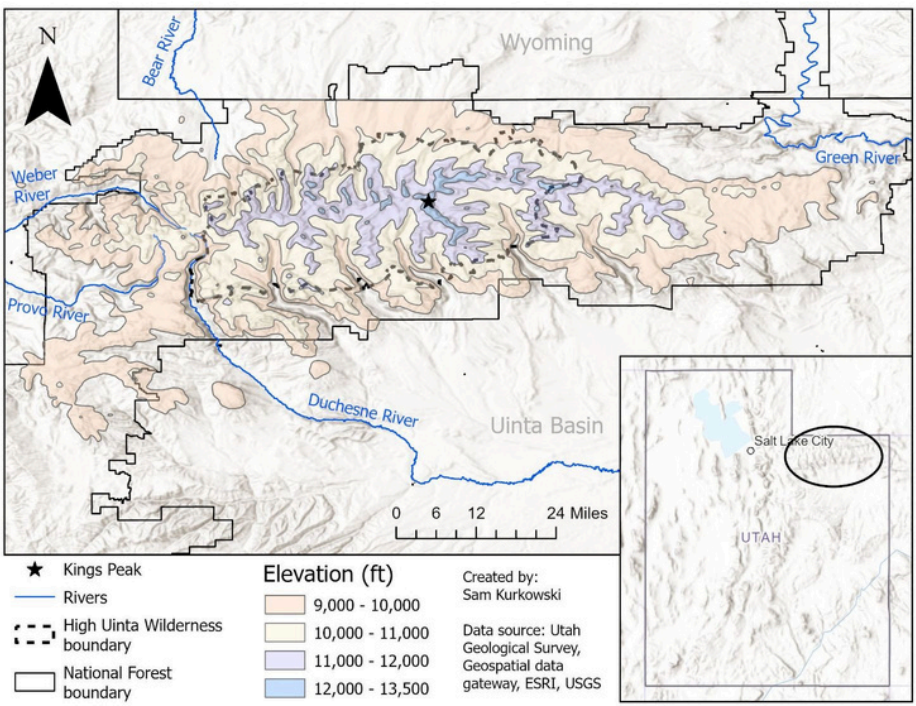


Figure 1. *Map of the Uinta Mountain Range with elevation gradient and relevant features. The inset shows the position of the range within Utah.*

Introduction

The Uinta Mountains' geology primarily consists of Red Pine Shale and glacial deposits (Hansen, 1969). Red Pine Shale is the uppermost formation of the geologic Uinta Mountain Group, with accumulations of thick sand, gravel, and mud. The majority of the Uinta Mountains were glaciated around 30,000 years ago, resulting in abundant lakes, glacial moraines, and glacially abraded bedrock. Today, the Uintas are a highly weathered range with high-altitude deposits of loose rock formed by glaciation and long-term weathering under a sustained severe climate. Land use throughout the range is limited to recreation, grazing, and timber harvest due to its challenging topography and wilderness status.

Botanically, the Uinta Mountain Range is home to many locally rare and uncommon species due to its distinct environment compared to the rest of the state. Many species occur readily in other parts of the world but have small, isolated populations, called disjunct populations, in mountain ranges like the Uintas.

Uinta Mountain Wetlands

The Uinta Mountains contain many types of wetlands, including riparian wetlands, marshes, wet meadows, and fens. **Wetlands** are categorized by examining three main features: hydrology, soils, and vegetation. Wetland hydrology refers to the timing and duration of flooding or soil saturation. Wetlands do not always have standing water and can experience periods of dry soil or have water just below the soil surface that keeps the soil saturated. Soils can influence a site's hydrology by preventing drainage or allowing water to drain through the soil, but hydrology also alters soils. Long periods of saturation change soils, which can accumulate organic matter and develop distinct colors and smells due to the low-oxygen conditions. The vegetation found in wetlands is often dictated by the hydrology and soils present at a site. Plants have special adaptations that allow them to withstand saturated conditions.

In the mountains, landscape position and proximity to hydrologic features often determine where wetlands occur and what type of wetland forms. Riparian wetlands are very common in the Uintas, occurring alongside streams and rivers. Marshes occur in a variety of landscape positions from lake margins to stagnant river oxbows or areas flooded by beaver dams. Wet meadows are the wetland type most similar to fens and are abundant throughout the Uinta Mountains, ranging from small to expansive and from flat to steeply sloping. As their name suggests, wet meadows are somewhat intermediate between a dry meadow and a peatland, with groundwater discharge maintaining moist to wet soils for at least part of the growing season. Often dominated by grasses and forbs, wet meadows can be difficult to distinguish from dry meadows, but they have slightly different dominant plant species, wetter soils, and may accumulate a small layer of organic soil. They can be differentiated from fens by their organic soil depth, which is less than 40 cm or lacking entirely.

All types of wetlands provide critical ecosystem services to wildlife, humans, and the environment. Mountain wetlands in particular help retain water throughout the growing season and improve water quality due to their position high in the watershed. Water moves more slowly through wetland soil and vegetation than it would in a stream, prolonging the time water is available to downstream areas. Retaining water higher in the watershed also reduces flood risk by lowering the flow volumes rivers experience during high-runoff events like spring snowmelt. As water flows slowly through wetlands, sediment

and contaminants such as heavy metals from bedrock are removed, improving water quality. Wetlands also serve as important habitats for numerous plant and animal species. They serve as refugia after fires and during periods of drought when upland habitats lack green vegetation. Wetlands also offer different environmental conditions in which specialized plants can grow, increasing the diversity of the landscape overall. Many rare and threatened species in the Uintas rely on mountain wetlands, including the Columbia spotted frog (*Rana luteiventris*), the northern green orchid (*Platanthera aquilonis*), and fewseed bog sedge (*Carex microglochin*).

Even in remote areas like the High Uinta Wilderness, wetlands face numerous threats. Recreational trails, camping, and animals can disturb soils and trample vegetation. Grazing by livestock and recreational animals, such as horses, is particularly destructive to soils, causing rutting that can lead to groundwater channelization and severe soil erosion. Reservoirs in the Uinta Mountains also impact wetlands by altering their hydrologic regimes, including unnaturally deep, continuous flooding. Large-scale changes in climate and weather patterns also impact wetlands. Drought is more common as summers become increasingly warm and dry, and as winter snowpack thins. Many alpine plants are adapted to cooler conditions, and warming temperatures may make alpine habitats too warm for these species to persist. Climate change has also increased the frequency and severity of wildfires, stretching the capacity of wetlands to resist fire as soils dry out. Finally, invasive species are fairly uncommon at high elevations in the mountains due to their remote locations, but species such as European common reed grass (Phragmites australis spp. australis) and Canada thistle (Cirsium arvense) remain a concern.

Fens and Peatlands

Peatlands are a specific and unique type of wetland that have continuously saturated conditions, with the water table just below the soil surface throughout the entire growing season. The constant saturation promotes the accumulation of organic soil, or peat, by slowing the decomposition process due to a lack of oxygen. To be considered a peatland by many regulatory bodies, a wetland must have at least 40 cm of organic soil. Peat accumulates very slowly over thousands of years and can reach depths of many meters, given enough time and the right conditions. Peatlands occur across the globe from arctic to tropical environments. As long as the water table is just below the surface year-round, peat can form.

Peatlands are classified into two main categories, bogs and fens, depending on the water source that keeps them saturated. **Bogs** are peatlands fed mainly by rainwater, and often occur in moist boreal or tropical environments that receive large annual rainfall. **Fens** are fed mainly by groundwater, with minimal rainfall inputs, and can occur even in arid environments with scarce rainfall. In Utah, peatlands are exclusively fens because of the dry environment, and most of the state's peatlands occur in the mountainous Uinta region. The cooler, wetter growing seasons and mountain geology observed in alpine and subalpine environments support peat accumulation better than the climate and geology found at lower elevations. Fens in the Uinta Mountains occur in a variety of positions on the landscape wherever there is sufficient groundwater discharge, including valley bottoms, lake margins, and even steep slopes.

In addition to the ecosystem services provided by many wetland types, peatlands store large amounts of

carbon. As peat soils accumulate organic matter, that carbon is sequestered in the ground rather than being decomposed and released into the atmosphere. This makes fens a valuable resource in combating climate change, and maintaining the integrity of peat-accumulating wetlands is a significant way to reduce carbon emissions.

Fen Plants

The vegetation found in wetlands, and fens in particular, is often specialized to tolerate wet soils. Like all living things, plants and their roots need to respire, or breathe, to live. When soils are waterlogged for long periods, plants must use specialized mechanisms to deliver oxygen to their roots. The most common adaptation is aerenchyma, or large, porous cells in stems and leaves that allow oxygen to pass through the plant like a straw and reach the roots.

Plants are grouped by their ability to tolerate wet soil conditions, using a wetland indicator status code (Table 1) developed by the U.S. Army Corps of Engineers as part of its regulatory framework for wetlands. This code describes the likelihood that a plant will be found in a wetland habitat, ranging from obligate wetland plants (OBL), which almost always occur in wetlands to upland plants (UPL) which seldom occur in wetlands.

Plants in fens must often deal with naturally low nutrient conditions in addition to waterlogged soils. Despite peatlands containing large amounts of organic matter, that material remains undecomposed and is not available for plants to take up. This phenomenon means that fens are often nutrient-poor, especially in nitrogen. Some plants, such as sundews (*Drosera anglica*) and bladderworts (*Utricularia* spp.), have adapted to these conditions by consuming insects to supplement their nutrient intake. Other plants are evergreens and retain their leaves for many years to retain scarce nutrients, such as alpine wintergreen (*Gaultheria humifusa*) and western Labrador tea (*Rhododendron columbianum*).

In the Uintas, sedges are the dominant species and often the primary peat producers, but mosses are also important in peatlands. Sphagnum moss is a unique type of moss with exceptional water-retention capacity and often forms peat in bogs. While not as dominant in the Uinta Mountains and fens in general, Sphagnum moss is still present in the range and is occasionally the primary peat producer. Another peat-forming group of mosses is the brown mosses, primarily in the family Amblystegiaceae. This group of mosses is more difficult to distinguish, comprises many genera and species, and can be found throughout the Uintas.

Table 1. *Wetland indicator status codes and descriptions.*

Indicator code	Indicator status	Definition
OBL	Obligate wetland	Almost always occurs in wetlands
FACW	Facultative wetland	Usually occurs in wetlands, but may occur in non-wetlands
FAC	Facultative	Occurs in wetlands and non-wetlands
FACU	Facultative upland	Usually occurs in non-wetlands, but may occur in wetlands
UPL	Obligate upland	Almost never occurs in wetlands

Species Included in This Guide

We developed a list of common plant species found in Uinta Mountain fens through a combination of field surveys and database searches. We conducted field surveys in 2024 and 2025 in four separate sections of the High Uinta Wilderness. We also searched past reports, online databases such as iNaturalist, and the peer-reviewed literature to include common species not observed during the field surveys. Two botanists familiar with Uinta fens reviewed this list: Sheryl Goodrich and coauthor Blake Wellard. The final list includes 186 species; however, it is not exhaustive of all plants that could occur in fens. We aimed to include the most likely species that could be encountered in Uinta fens, ranging from wetland obligates to upland species that occasionally occur at the edges of fens, on hummocks, or in drying-out fens. Users should consider using taxonomic keys such as *Uinta Flora* (Goodrich & Huber, 2014), *A Utah Flora* (Welsh, 2015), or the *Intermountain Flora* series (Cronquist, 1972) for more detailed information about each species and for species not found in this guide.

Plant species are organized into eight categories based on taxonomy and physical appearance: bryophytes, ferns and fern-allies, dicot forbs, monocot forbs, grasses, rushes, sedges, and shrubs. A brief description of the plants in each category is provided below. Within each section, species are organized alphabetically according to genus and species.

Bryophytes – Bryophytes are nonvascular, seedless plants that include mosses, liverworts, and hornworts. These plants lack conductive tissues such as veins, including xylem or phloem, or roots, and instead have rhizoids that hold the plants in place. They reproduce using spores or vegetatively, where new individuals develop from vegetative parts. Bryophytes are common in fens and of great importance but can be extremely difficult to identify without a microscope and are therefore not emphasized in this guide. Rather, this guide includes two bryophyte species that are particularly distinct and ecologically relevant.

Ferns and Fern-Allies – Ferns and fern-allies are primitive, nonflowering plants that reproduce through spores. They have unique, scalelike leaves and are often shorter than knee-high, although some species in the tropics can become as large as trees. Ferns are not particularly common in fens, and only two species are included in this guide.

Dicot Forbs – Forbs are flowering herbaceous plants, or plants with showy flowers that are not woody. All forbs can be divided into dicotyledons (dicots) or monocotyledons (monocots). This section includes dicot forb species, or flowering plants that emerge from the soil with two initial seed leaves, or cotyledons. Dicots usually have net-like leaf venation and flower parts in multiples of four or five. This section includes species from many different families and genera and is taxonomically the widest ranging. Dicot forbs are common across all soil moisture levels, from wetlands to uplands.

How to Use This Guide

Monocot Forbs – Still consisting of forbs, the species in this section are monocots, meaning they have a single initial leaf arising from the seed. Monocots typically have parallel leaf venation and flower parts in multiples of three. Grasses, rushes, and sedges are also monocots, but are graminoids, or grass-like plants, so they are separated into their own sections. Fewer forbs are monocots than dicots, including species such as orchids (Orchidaceae) and camas plants (Melanthiaceae). Monocot forbs also span the entire soil moisture spectrum, occurring in wetland and upland environments.

Grasses – This section highlights plants in the grass family (Poaceae). Grasses found in fens are often generalists that can persist in wetter environments, but there are some wetland-specific grasses as well. Grasses can be distinguished from other graminoids, or grass-like plants, by their round, hollow stems, the presence of a ligule (a small appendage found where the leaf blade separates from the stem), and a small flower with two bracts and no petals (Figure 13). While all originating from the same family, grasses are made up of many genera.

Rushes – Rushes are graminoids in the Juncaceae family and are distinguished by their round, unjointed, and often hollow stems with basal, cylindrical leaves. They have small, six-parted flowers that are subtended by tepals (undifferentiated petals) and often form clusters that emerge from the side of the stem. Most plants in this family are considered true rushes (*Juncus* spp.), but species such as woodrushes (*Luzula* spp.) are also included. Rushes are common in wetland environments but can also be found in uplands.

Sedges – Sedges appear in the Cyperaceae family and are also grass-like graminoids. However, they are distinguished by their solid, triangular stems and distinct flowers. Flowers of sedges (*Carex* spp.) lack petals and sepals and have only a single bract, called a scale. The flowers and fruit of sedges are enclosed by a sac called a perigynium and arranged in spikes that can be unisexual or bisexual (Figure 14). Other genera in this family include spikerushes (*Eleocharis* spp.), cottongrasses (*Eriophorum* spp.), and bulrushes (*Scirpus* spp.). Sedges are often dominant in Uinta fens but can also be found in uplands.

Shrubs – Shrubs are plants that have woody stems and branches and are typically short in stature with branching trunks. Trees are also woody plants, but they have unbranched stems and do not readily occur in Uinta fens. Shrubs are most easily identified by their branch and leaf arrangement, leaf shapes, and fruit characteristics. Shrubs most commonly seen in fens are willows (*Salix* spp.) and blueberries (*Vaccinium* spp.).

Data Sources and Additional Resources

Key characteristics are largely based on information from the Uinta Flora (Goodrich & Huber, 2014) and A Utah Flora (Welsh, 2015). Additional floras, including the Intermountain Flora series (see introductory volume, Cronquist et al., 1972) and the Flora of North America (Flora of North America Editorial Committee, 1993+), were sometimes consulted as well. Scientific names and families are largely derived from Plants of the World Online (POWO, 2026), and synonyms are listed when alternate names appeared in one of the listed floras or in the U.S. Department of Agriculture (USDA) PLANTS Database. In some cases, issues of nomenclature are discussed in the species' comments section. These comments sometimes refer to subspecies (ssp.), which are geographically isolated variants of a species, and to varieties (var.), which are non-isolated variants. The abbreviation spp. refers to all species in a genus, such as *Carex* spp. or *Juncus* spp.

While this guide uses plain language when possible, many technical botanical terms aid in describing specific plant features, including plant parts, shapes, and ways of attachment. Users will find a glossary at the end of the guide and illustrations in the Botanical Diagrams section to help readers who are less familiar with the terminology. The guide *Plant Identification Terminology—An Illustrated Glossary* (Harris & Harris, 2001) was used to create the glossary and illustrations and is another excellent resource.

Additional resources that help identify wetland plants include the following:

- *Uinta Flora* (Goodrich & Huber, 2014): a technical key for all species found within the Uinta Mountain Range that includes specific locale information but not complete descriptions outside of the key.
- *A Utah Flora* (Welsh, 2015): a technical key that includes descriptions for all plants in Utah.
- *Intermountain Flora* series (see introductory volume, Cronquist et al., 1972): multivolume set of books with keys, descriptions, and illustrations for all species found in the Intermountain West.
- *Flora of North America* (Flora of North America Editorial Committee, 1993+): website and multivolume set of books with keys, descriptions, and illustrations for all species in the United States and Canada.
- *Grasses of the Intermountain Region* (Anderton & Barkworth, 2009): book with keys, description, range maps, and illustrations for grasses in the region.
- *Field Guide to Intermountain Sedges* (Hurd et al., 1998): free guide to Carex spp. available online from the U.S. Forest Service with keys, photographs, and more.
- *Field Guide to Intermountain Rushes* (Hurd et al., 1997): free guide to Juncus spp. available online from the U.S. Forest Service with keys, photographs, and more.
- *Woody Plants of Utah* (Van Buren et al., 2011): book with vegetative-based key, range maps, photographs, and descriptions of woody plants in Utah.
- *Field Guide to Colorado's Wetland Plants* (Culver & Lemly, 2013): guide with descriptions, photographs, illustrations, and range maps of wetland plants from Colorado.

Species Profile Key

1 ***Trollius albiflorus* (A.Gray) Rydb.**

2 American globeflower

Ranunculaceae 3

4









All photos - © Sam Kurkowski

Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: TRAL8

5-11

12 **Key characteristics:**

- Stems stocky and glaucous, usually tufted from a caudex; 20-60 cm tall
- **Leaves palmately divided, the lobes incised and toothed**
- Sepals petaloid, 5-15, white to cream, forming a bowl; quickly deciduous
- Fruit made of folicles 8-12 mm long, each many seeded

13 **Similar species:** *Caltha leptosepala* has elliptic leaves without incised lobes and slightly smaller flowers.

14 **Habitat and ecology:** Does best in wet, boggy areas. Occasional along streams, in meadows, fens, and conifer forests; 9,000-10,800 ft.

15 **Comments:** This species is an early bloomer, flowering soon after snowmelt in wet places, often seen with *Caltha leptosepala*.

16 **Dicot Forb**

Species Profile Key

1. **Scientific name:** This includes the genus and species as seen in Plants of the World Online (POWO, 2026).
2. **Common name:** It is possible for common names to vary widely for the same species. Common names included in this guide are the names most commonly seen in the USDA PLANTS Database (USDA-NRCS, 2022), Plants of the World Online (POWO, 2026), and *Uinta Flora* (Goodrich & Huber, 2014).
3. **Family name:** This is the name as seen in Plants of the World Online.
4. **Photos and illustrations:** This provides examples of each species, their diagnostic features, and, occasionally, diagnostic features of similar species for comparison. Authors are credited alongside each image, followed by the source and a number indicating licensing information. Additional information about contributors and licensing information can be found in the credits at the end of the guide.
5. **Wetland indicator status:** This qualitative rank indicates a species' affinity for wetland or upland habitat. The ranks included in this guide are from the U.S. Army Corps of Engineers' 2020 National Wetland Plants List and were obtained from the USDA PLANTS Database. The ranks correspond to the Arid West region and range from obligate wetland (OBL), which almost always occurs in wetlands, to upland (UPL), which almost always occurs in uplands (Table 1).
6. **Native status:** This indicates whether a plant is native and naturally occurring within Utah, or introduced (non-native) to the state. Non-native species can also be designated as noxious (i.e., invasive) by the Utah Department of Agriculture and Food, depending on the extent to which they threaten public health, crops, livestock, land, or other property. There are no noxious weeds currently found in the high Uinta fens.
7. **Conservation status:** This refers to the global and state ranks assigned by the NatureServe system of species rarity (Master et al., 2012). Data were obtained from the NatureServe database or provided by Meghan McCormick and Mindy Wheeler when there were recent updates that had not been published to the database yet (Utah State University, written communication, 2025). Values range from 1 to 5, with lower numbers indicating a greater risk of global extinction or extirpation from the state, and higher numbers indicating a secure species (Table 2).
8. **C-Value:** This number represents the "coefficient of conservatism," or the tendency of a plant to be a generalist or specialist and grow in disturbed or pristine habitats. Low values indicate that species often occur in disturbed sites, and high values indicate that species are associated with pristine sites (Table 3). Intermediate values indicate that species are equally likely to occur at either type of site. All non-native species are assigned a value of 0. C-values in this guide were derived from the National Wetland Condition Assessment and use values from the state of Utah or the closest available state (U.S. Environmental Protection Agency, 2024). Methods for obtaining the values are described in McCoy-Sulentic et al. (2021).

9. **Duration:** This indicates whether the species is annual (living for 1 year or less) or perennial (living for 2 or more years). This information was taken from the USDA PLANTS Database.
10. **Synonyms:** This provides alternate scientific names used for the species.
11. **USDA PLANTS symbol:** An alpha-numeric code assigned by the USDA PLANTS Database, which is unique to each species. The code is composed of the first two letters of the genus and the first two letters of the species, with numbers added when necessary to distinguish among species with the same letters.
12. **Key characteristics:** Bullet points list the main features used to identify each species. Generally, the first bullet describes plant size, habit, stem characteristics, and rooting structure. The second bullet describes the leaves, including leaf shape, size, texture, and attachment style. The remaining bullets describe the flowering and fruiting structures of the plant. Characteristics in bold indicate important diagnostic features.
13. **Similar species:** Species that could be mistaken for the main species are listed, as well as how to distinguish between the species.
14. **Habitat and ecology:** This section describes the general habitat where a species is found, derived from the habitat described in *Uinta Flora* and field experience.
15. **Comments:** Some species include additional comments to aid in identification or understanding. These comments may include helpful tips for identification, notes about range or abundance, or information on taxonomy.
16. **Guide section:** This identifies the section associated with the species.

Table 2. *Natural Heritage Network ranking system definitions. Risk refers to the risk of extinction or collapse for global ("G") ranks and the risk of extirpation within Utah for state ("S") ranks.*

Rank	Definition
G1, S1	**Critically imperiled**: at very high risk due to a very restricted range, very few populations or occurrences, very steep declines, very severe threats, or other factors.
G2, S2	**Imperiled:** at high risk due to a restricted range, few populations or occurrences, steep declines, severe threats, or other factors.
G3, S3	**Vulnerable:** at moderate risk due to a fairly restricted range, relatively few populations or occurrences, recent and widespread declines, threats, or other factors.
G4, S4	**Apparently secure:** at fairly low risk due to an extensive range and/or many populations or occurrences, but with possible cause for some concern as a result of local recent declines, threats, or other factors.
G5, S5	**Secure:** at very low risk due to a very extensive range, abundant populations or occurrences, and little to no concern from declines or threats.
GNR, SNR	**Unranked**: conservation status is not yet assessed.
GNA, SNA	**Not applicable**: species is not a suitable target for conservation activities (e.g., hybrid without conservation value; non-native to the state)

Table 3. *Description of C-Values described in McCoy-Sulentic et al. (2024) based on the EPA National Wetland Condition Assessment (U.S. Environmental Protection Agency, 2023).*

C-Value	Interpretation
0	Non-native species. These tend to be generalists (although not always) and did not evolve in the region where they are now found.
1–2	These are widespread native taxa, with a broad range of ecological tolerances and are often early colonizers of disturbed sites. These species are not indicative of a particular community type and tend to be generalists found in disturbed conditions, such as old fields and roadsides.
3–5	These are species with an intermediate range of ecological tolerance typical of sites with light to moderate levels of human disturbance.
6–8	These species, with a narrow range of tolerance, are typical of relatively undisturbed sites. They are restricted to sites that are relatively unaltered.
9–10	These are the most conservative species, exhibiting a high degree of fidelity to a narrow set of ecological conditions. As specialists intolerant of disturbance, they are typical of minimally disturbed sites. State rare and uncommon plant species are also often included in this group.

Botanical Diagrams

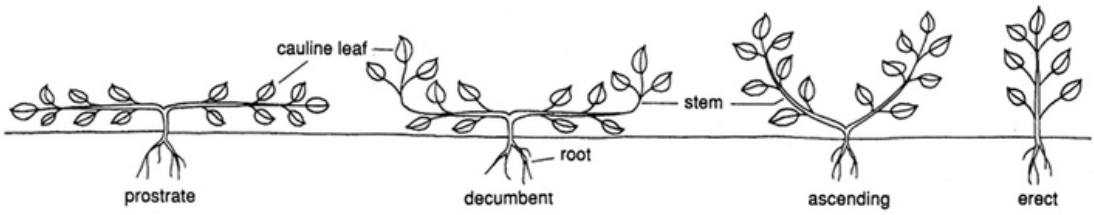


Figure 2. *Types of stem habit (Nakano 2020).*

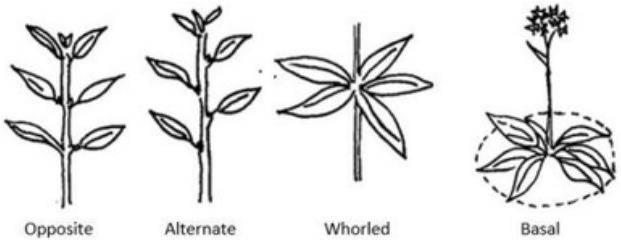


Figure 3. *Common types of leaf arrangements (Nakano 2020).*

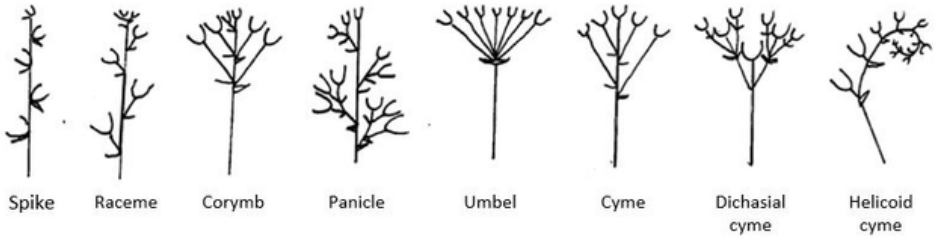


Figure 4. *Types of inflorescence arrangement (Nakano 2020).*

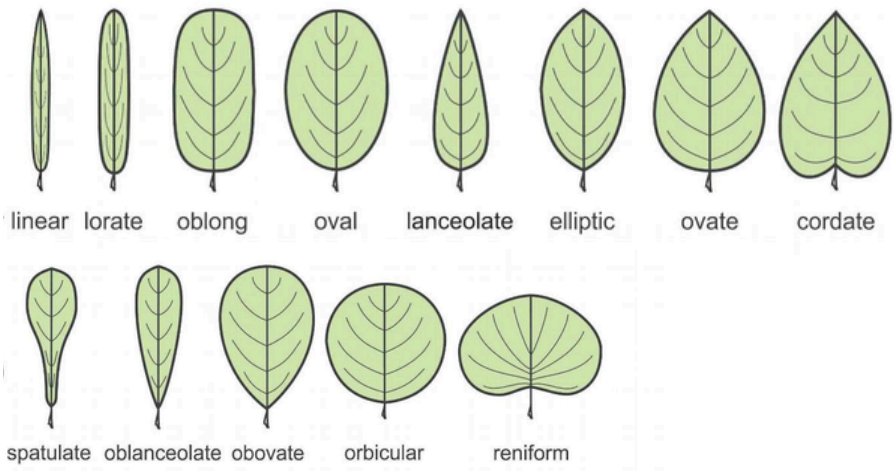


Figure 5. *Types of leaf shapes (Flora of Newfoundland and Labrador, 2026).*

Botanical Diagrams

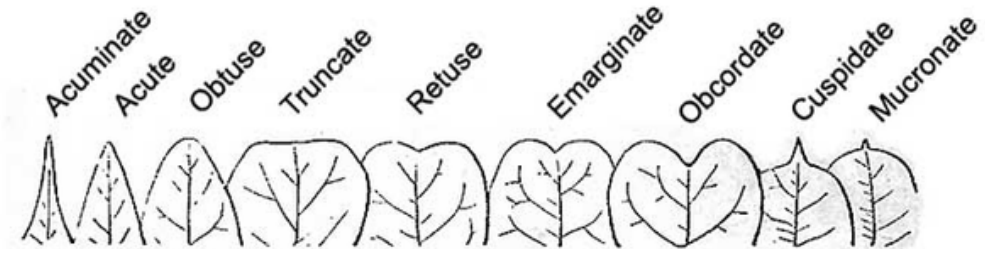


Figure 6. *Leaf apices (tips) shapes (Gray 1880).*

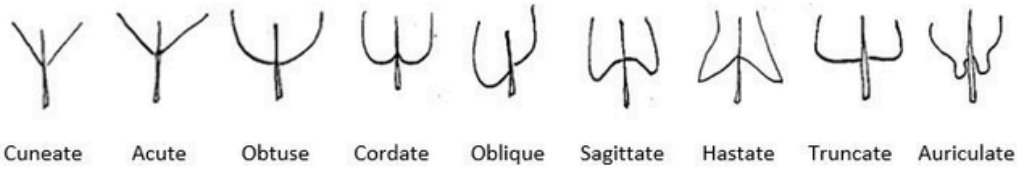


Figure 7. *Leaf base shapes (Nakano 2020).*

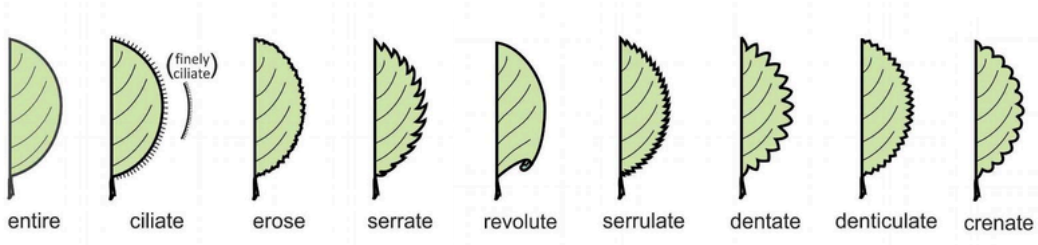


Figure 8. *Types of leaf margins (Flora of Newfoundland and Labrador, 2026).*

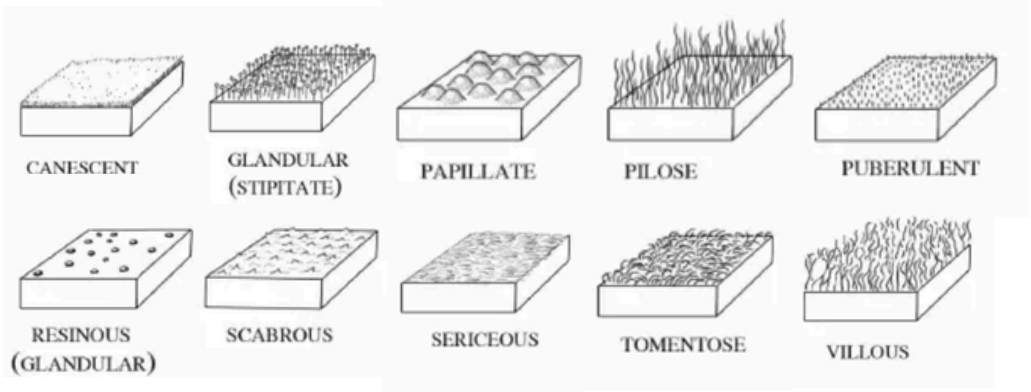


Figure 9. *Types of leaf textures (Wilhelm & Rericha, 2017).*

Botanical Diagrams

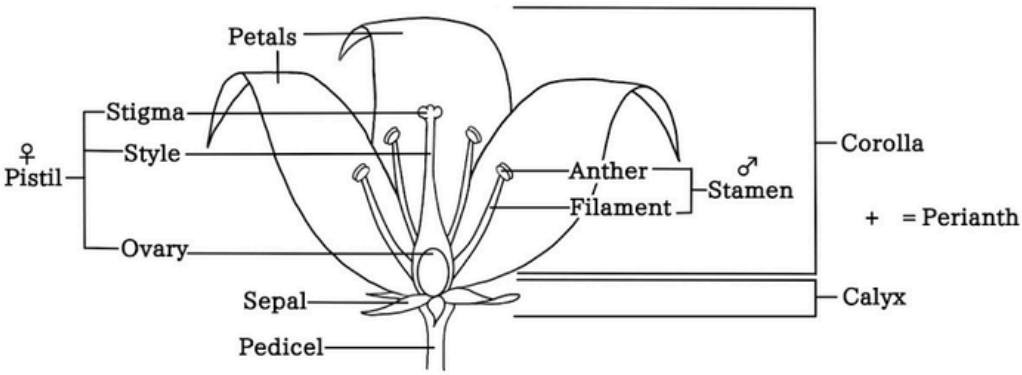


Figure 10. *Parts of a general flower (Elisabeth Stimmel).*

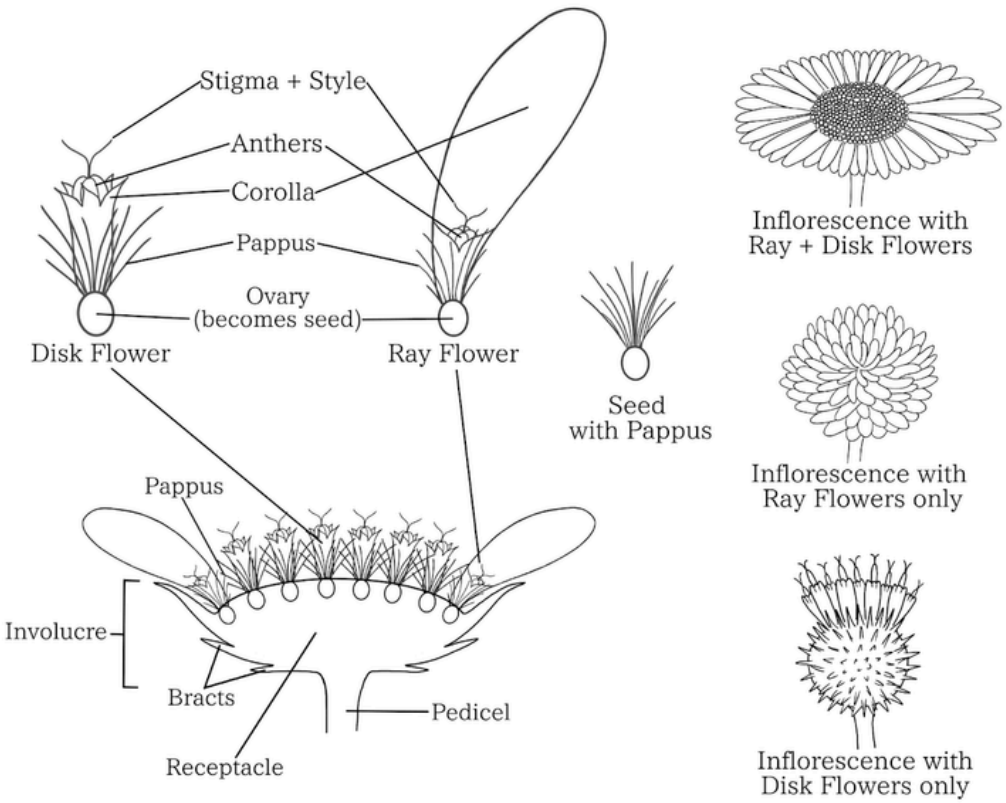


Figure 11. *Asteraceae plant parts (Elisabeth Stimmel).*

Botanical Diagrams

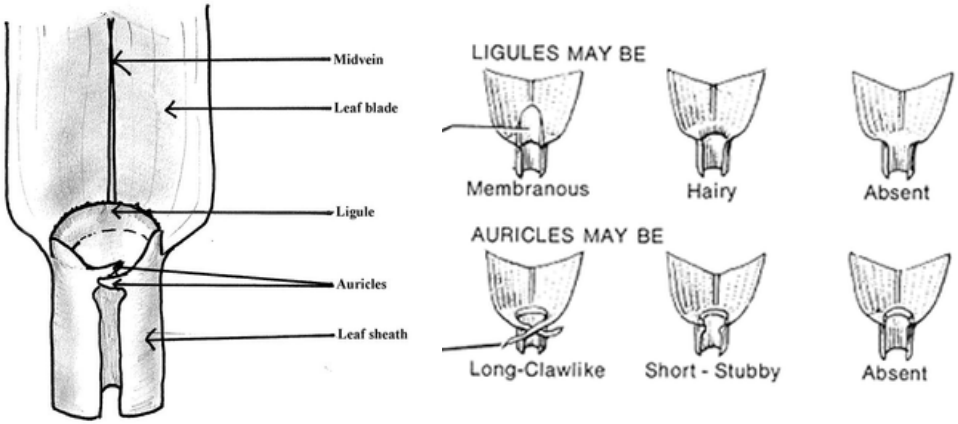


Figure 12. *Parts of a grass leaf; types of ligules and auricles (Sarangi & Jhala, 2017).*

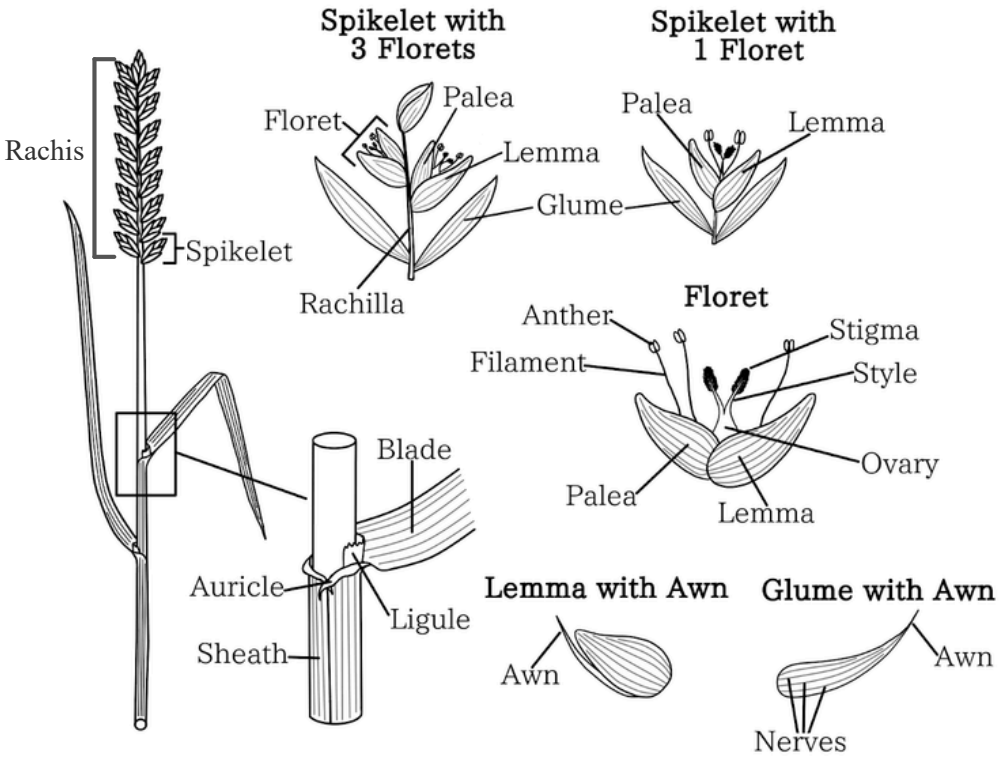


Figure 13. *Grass (Poaceae) plant parts (Elisabeth Stimmel).*

Botanical Diagrams

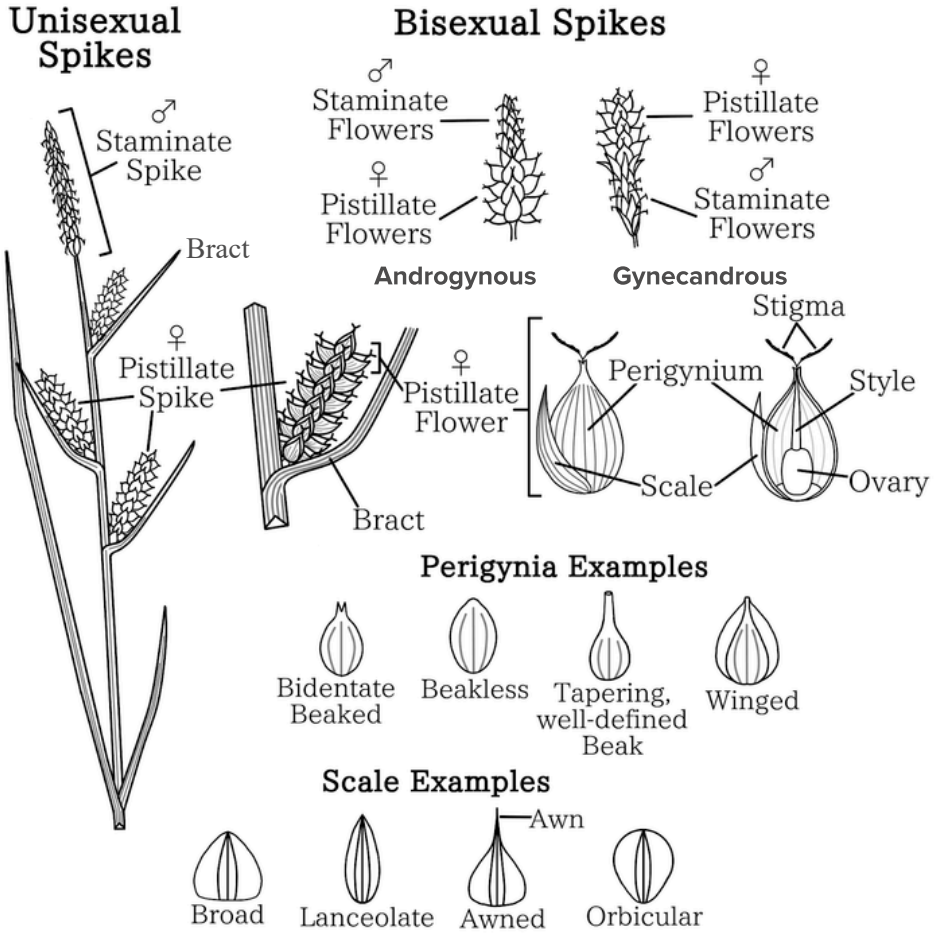


Figure 14. *Sedge (Carex spp.) plant parts; the ovary becomes the achene as the plant matures (Elisabeth Stimmel).*

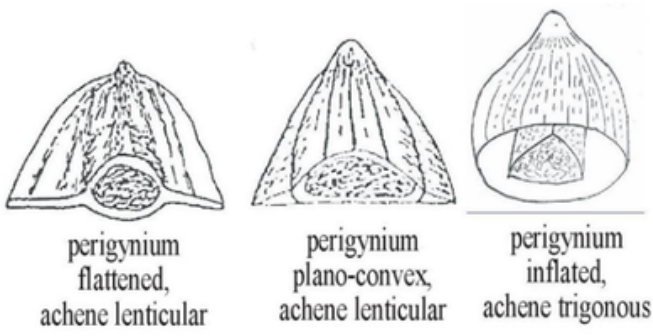


Figure 15. *Perigynia and achene shapes (Rink & Licher, 2015).*

Marchantia polymorpha L.

umbrella liverwort

Marchantiaceae



© Steven Perry, CalPhotos, 1



© Steve Matson, CalPhotos, 5



© Sam Kurkowski, 1

Umbrella shaped structures and bowl shaped cups



© Barry Rice, CalPhotos, 6

Marchantia quadrata: Blob shaped structures



© Dustin Snider, iNaturalist, 3

Lunularia cruciata: Crescent shaped cups



© Juan Carlos Caicedo Hernández, iNaturalist, 3

Wetland indicator status: N/A
Native status: Native
Conservation status: G5 SNR
C-Value: N/A
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: MAPO16

Key characteristics:

- The thallus, or leaflike structure, of the plant is somewhat succulent, irregularly shaped, and has a stippled texture
- **Bowl-shaped cups** may form on the thallus, which are part of the asexual reproduction mechanism
- Small **umbrella shaped structures** protrude from the thallus, either in a flower or jellyfish shape, which produce spores
- The thallus is attached to the substrate through fine hair-like structures called rhizoids

Similar species: The shape of the umbrella-like spore structures are unique to this species. *M. quadrata* has a similar thallus but the umbrella-shaped structures are blob shaped. *Lunularia cruciata* has crescent shaped cups protruding from the thallus instead of bowl-shaped.

Habitat and ecology: Occasional in consistently damp moist and shaded areas, such as near streams, ponds, and fens, and in closed forests. This species is commonly the first to appear following a large wildfire due to the exposed mineral soil and high lime concentrations.

Comments: Liverworts are a particular class of non-vascular plants distinguished from other mosses by their lack of clearly differentiated stems and leaves.

Sphagnum L.
sphagnum moss

Sphagnaceae









A mound of *Sphagnum* moss on the edge of a stream



All photos - © Sam Kurkowski 1

Wetland indicator status: N/A
Native status: Native
Conservation status: N/A
C-Value: N/A
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SPHAG2

Key characteristics:

- Mat forming moss, often creating blankets or mounds of ground cover
- **Tip of moss forming a headlike capitulum**, generally somewhat star-shaped
- Ranges in color from bright green to yellowish to bright red
- The stemlike structures of the moss extend downward and turn brown as they are incorporated into the peat, with leaflike structures coming off of the stem

Similar species: Sphagnum is a unique genus of moss that is quite distinct. The star-shaped capitula visible in the blanket of moss is distinct to Sphagnum species.

Habitat and ecology: Common in wet places that are continuously saturated throughout the growing season, including wet and boggy meadows, seeps, springs, and along stream banks. Often in more acidic environments.

Comments: Sphagnum is a primary producer of peat and requires continuously saturated conditions to survive, making it very characteristic of peatland environments.

Botrychium lunaria (L.) Sw.

common moonwort

Ophioglossaceae



© Vladimir Bryukhov, iNaturalist, 5



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© Dr. Amadej Trnkoczy, CalPhotos, 6

Botrychium multifidum:
2-4 times compound, wide



© Andrii Churilov, iNaturalist, 5

Botrychium crenulatum:
small, 2-5 leaflet pairs



© Ryan Durand, iNaturalist, 5

Wetland indicator status: FAC
Native status: Native
Conservation status: G5 S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: BOLU

Key characteristics:

- Stems simple and fleshy, 3-28 cm tall; common stalk short, with one sterile leaf blade and one fertile leaf blade
- Sterile leaf blade sessile; oblong in outline and **once pinnately divided into 4-9 leaflet pairs**; 5-10 cm long
- Leaflets on sterile blade are fan shaped with entire or crenate margins, **often overlapping**
- Fertile blade has a branched cluster of globose sporangia in two rows
- Fertile branch is longer than the sterile one and protrudes upward

Similar species: Differences in *Botrychium* spp. are mainly related to size and shape of the leaves. *B. multifidum* is larger with 2-4 times compound leaves that are broader than long. *B. crenulatum* is slightly smaller with 2-5 non-overlapping leaflet pairs.

Habitat and ecology: Rare in wet meadows and stream sides; 8,000-9,500 ft. May appear in fens.

Comments: This species is the most geographically widespread of the Botrychium genus, but can be locally rare. In Utah, it's considered rare because it is disjunct from the main continguous populations and has specific habitat requirements.

Equisetum arvense L.

field horsetail

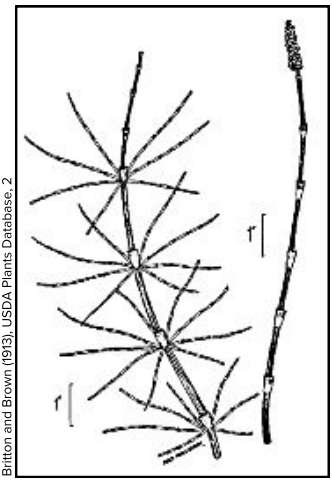
Equisetaceae



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Britton and Brown (1913), USDA Plants Database, 2



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 3
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: EQAR

Key characteristics:

- Stems of two kinds: sterile and fertile
- Fertile stems pinkish to brownish, 6-30 cm tall; emerging in spring and soon withering
- **Sterile stems with many branches in regular whorls**, 10-50 cm tall
- Branches solid, usually not branched again, typically 1-5 cm long

Similar species: Other species in the *Equisetum* genus lack branches on their sterile stems. *E. arvense* will always have whorled branches on the sterile stems.

Habitat and ecology: Common along water courses up to about 8,000 ft. Would be seen on pool margins or near other surface water features in a fen. Can be found in somewhat dry places in conifer and aspen groves.

Comments: *Equisetum* species are an ancient relative of ferns that reproduce by spores. The modern genus that remains originated in the Jurassic period and is the only living genus in the Equisetaceae family.

Achillea millefolium L.

common yarrow

Asteraceae



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© Sam Kurkowski, 1



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 2
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ACMI2

Key characteristics:

- Stems 10-60 cm tall, simple without much branching
- Leaves finely dissected, 3-10 cm long and reduced upward
- Flower heads umbel shaped and numerous
- Flowers small and white or pink, typically with 5 petals

Similar species: *A. filipendulina* is an introduced species in the genus, differentiated by its yellow flowers and extremely dense umbels.

Habitat and ecology: Most likely to be seen on the margin of fens. Widespread in a range of habitats including sagebrush, riparian, meadow, aspen, coniferous forest, and alpine tundra; 6,000-11,100 ft.

Angelica pinnata S. Watson

small-leaf angelica

Apiaceae



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Leaves once pinnate, leaflets > 2x long as wide



© Julia Hobbie, iNaturalist, 5



© Julia Hobbie, iNaturalist, 5

Achillea roseana:
2+ times pinnate, leaflets < 2x long as wide



© Mac Cutler, 1

Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S3
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ANPI2

Key characteristics:

- Plants 30-100 cm tall, forming from stout taproots, stems solitary and occasionally purple
- **Leaves pinnate or parly bipinnate** (some division in lower leaflets), 9-21 cm long
- Leaflets lanceolate with serrate margins; usually **over 2 times as long as wide**
- Inflorescence is 2-5 flat-topped umbels on long peduncles; flower petals white
- Fruit 4-7 mm long at maturity

Similar species: *A. roseana* has leaves twice or more pinnate, with leaflets less than 2 times as long as wide. *A. ampla* is found in the Piceance Basin and has stems over 100 cm tall, globose umbels, and fruit 7-8 mm long at maturity.

Habitat and ecology: Occasional in wetlands, wet meadows, moist forests, and along streams; 6,000-10,000 ft. Most likely to see along fen margins.

Antennaria corymbosa E.E.Nelson

flat-top pussytoes

Asteraceae









A. corymbosa:
bracts white w/ dark spot



A. microphylla:
bracts pinkish, no spot





Wetland indicator status: FAC
Native status: Native
Conservation status: G5 S3
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ANCO

Key characteristics:

- **Plants cespitose, mat-forming** and stoloniferous; **10-30 cm tall**
- **Leaves basal and alternate, less than 3.5 cm long**; 0-1 (rarely 3) distinct nerves, tomentose
- Flower heads many in a branching or compact cluster (cyme)
- Involucral bracts **white with a dark brown spot at the base** of the scarious portion; less than 8 mm high

Similar species: *A. pulcherrima* is from similar habitat but has much larger, 3 nerved leaves and has solitary stems that do not form mats. *A. microphylla* is from drier ground, with involucral bracts white or pinkish and lack a dark spot.

Habitat and ecology: Occasional in wet meadows, fens, along streams, and wet areas in coniferous forests; 8,100-11,000 ft.

Comments: The black spot at the base of the scarious portion of the involucral bract is particularly distinct to this species.

Antennaria pulcherrima (Hook.) Greene

showy pussytoes

Asteraceae


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A. pulcherrima: bracts tomentose w/ brown spot


© Jozien, iNaturalist, 5


© Matt Langemeier, iNaturalist, 5

A. anaphaloides: bracts brownish


© Finn McGhee, iNaturalist, 5


© Mike, iNaturalist, 5

Wetland indicator status: FACU
Native status: Native
Conservation status: G5 S1
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ANPU

Key characteristics:

- **Stems mostly solitary, 23-40 cm tall**, not mat forming or stoloniferous
- **Leaves basal and alternate, 4-20 cm long**; distinctly 3 nerved beneath, tomentose
- Flower heads many in a branching or compact cluster (cyme)
- Involucral bracts **tomentose toward the base, a dark brown spot at the base** of the scarious portion

Similar species: *A. corymbosa* is from similar habitat but has smaller, 0-1 nerved leaves and has cespitose stems that form mats . *A. anaphaloides* is from drier ground and has pale brownish yellow involucral bracts.

Habitat and ecology: Occasional to rare in fens, wet meadows, and streamsides mainly on the north slope of the Uinta Mtns; 8,000-9,500 ft.

Comments: Fen, wet meadow, streamside habitat is a key break for this species - other plants with leaves > 4 cm are not likely to be found in these habitats.

Arnica chamissonis Less.

Chamisso arnica

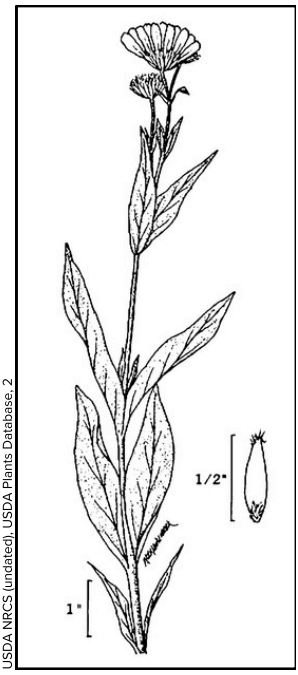
Asteraceae



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USDA NRCS (undated), USDA Plants Database, 2



© Matt Lavin, iNaturalist, 3



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ARCH3

Key characteristics:

- Stems hairy; simple, then branched in the inflorescence; 10-60 cm tall
- Leaves mostly cauline, **tomentose**, lanceolate, 3-11 cm long; **rough or fuzzy to the touch**
- Stems have **5-9 pairs of equally spaced leaves**
- Inflorescence has 3-9 branching heads; flowers yellow with 10-16 petals
- **Involucral bracts are softly hairy, a tuft of whitish hairs at the apex**

Similar species: *A. mollis* has 2-4 pairs of leaves on the stem instead of 5-9. *A. longifolia* does not have tufted white hairs at apex of involucral bracts and has longer, pointier leaves.

Habitat and ecology: Most likely of the genus to be found in fens. Occasional along streams, meadows, rarely in dry places; 7,600-10,000 ft.

Comments: There are many species in the *Arnica* genus, most of which are upland plants. The three included in this guide are the most likely to occur in fens.

Arnica longifolia D.C.Eaton

longleaf arnica

Asteraceae



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USDA NRCS (undated), USDA Plants Database, 2



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ARLO6

Key characteristics:

- Stems hairy, often growing together and sprawling; 30-100 cm tall
- Basal leaves withering early; cauline leaves 5-20 cm long, lanceolate, **pubescent and fuzzy or smooth**
- Stems have **5-9 pairs of equally spaced leaves**
- Inflorescence has 1-9 branching heads; flowers yellow with 8-13 petals
- Involucral bracts are softly hairy, **lacking a tuft of white hairs at the apex**

Similar species: *A. mollis* has 2-4 pairs of leaves on the stem instead of 5-9. *A. chamissonis* has a tuft of white hairs at the tip of the involucral bracts. Both species have broader leaves.

Habitat and ecology: Perhaps occurring along fen margins. Occasional along streams, in seeps, and talus and bounder fields usually with seepage; 9,200-11,200 ft.

Comments: There are many species in the *Arnica* genus, most of which are upland plants. The three included in this guide are the most likely to occur in fens.

Arnica mollis Hook.

hairy arnica

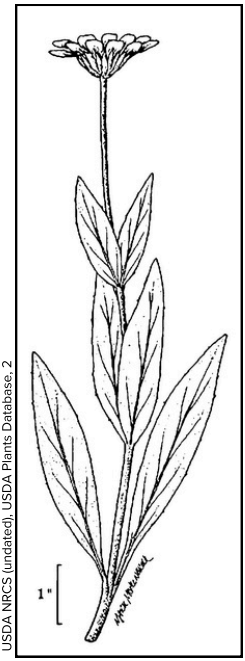
Asteraceae



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USDA NRCS (undated), USDA Plants Database, 2



© Keir Morse, CalPhotos, 6



© Richard Spellenberg, CalPhotos, 6

Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ARMO4

Key characteristics:

- Stems hairy, loosely clump forming; 15-65 cm tall
- Cauline leaves larger than basal ones, 4.5-18 cm long and oblanceolate; **short dense hairs make the leaf rough**
- Stems have **2-4 pairs of equally spaced leaves**
- Inflorescence has 1-5 branching heads; flowers yellow with 12-18 petals
- Involucral bracts are roughly villose, lacking hairs on margins

Similar species: *A. chamissonis* and *A. longifolia* have 5-9 pairs of equally spaced leaves on the stem, while *A. mollis* has 2-4.

Habitat and ecology: Found along fen margins. Occasional in wet and dry meadows, streambanks, talus slopes, and coniferous woods; 8,600-11,000 ft.

Comments: There are many species in the *Arnica* genus, most of which are upland plants. The three included in this guide are the most likely to occur in fens.

Bistorta bistortoides (Pursh) Small

American bistort

Polygonaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: *Polygonum bistortoides* Pursh
USDA PLANTS symbol: BIBI5

Key characteristics:

- Stems growing singly from basal leaves, usually **15-35 cm tall**
- Flowers white or sometimes pinkish, crowded in a dense raceme 1-2 cm wide
- Leaves mostly basal, narrowly lanceolate to linear in shape, dark green and glabrous
- **Inflorescence terminal and oblong**, forming at the top of the stem

Similar species: *B. vivipara* is smaller overall with a longer, narrower raceme, more ovate leaves, and longer petioles. It is the only other species in the genus found in the Uinta Mtns. *B. officinalis* is only found in the Northeastern U.S. and has decidedly pink flowers and winged petioles.

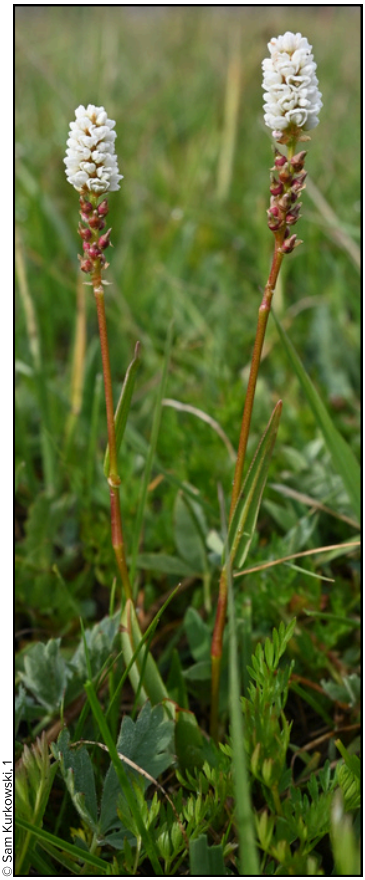
Habitat and ecology: Common in wet and dry meadows, alpine slopes, and sagebrush-grass communities; 7,050-11,500 ft. Most likely to be seen on the edge of fens or on hummocks.

Comments: Very common, especially in alpine plant communities, and distinct.

Bistorta vivipara (L.) Delarbre

alpine bistort

Polygonaceae



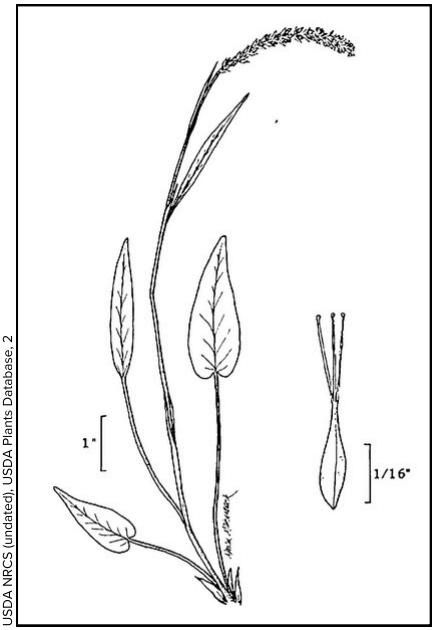
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USDA NRCS (undated), USDA Plants Database, 2

Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: *Polygonum viviparum* L.
USDA PLANTS symbol: BIVI2

Key characteristics:

- Stems growing singly from basal leaves, usually **5-15 cm tall**
- Leaves mostly basal, oblong to lanceolate; long petioles, sometimes as long as the leaf blade
- **Inflorescence terminal and linear**, forming at the top of the stem
- Flowers white to pinkish forming a skinny, spikelike raceme that is over 4 times as long as wide
- At least the lower flowers (but sometimes all) replaced by bulblets as the season progresses; bulblets red to tan to brown

Similar species: *B. bistortoides* is a larger plant overall with larger leaves, a longer stem, and has a wider and fluffier looking inflorescence. This is the only other species in the genus found in the Uinta Mtns.

Habitat and ecology: Common in moist or marginally dry woodlands, meadows, and fens; alpine and subalpine; 8,100-11,900 ft. Most likely to be seen on the edge of fens or on hummocks.

Comments: Very common, especially in alpine plant communities, and distinct.

Caltha leptosepala DC.

white marsh marigold

Ranunculaceae











All photos - © Sam Kurkowski, 1

Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CALE4

Key characteristics:

- Small plant with short stems, 5-40 cm tall; 1 flower per stalk, 1-3 flowers per plant
- Leaves basal, longer than they are wide with small basal lobes and scalloped or nearly entire margins; on a long petiole
- White flowers have 5-15 petal-like sepals and numerous yellow stamens in the center; relatively small, ~2-4 cm across
- Fruit is a head of follicles, each with several seeds protruding from the stem in a light brown, spike-like cluster, 12-20 mm long

Similar species: This species is distinct in Utah. Outside of Utah, some recognize *C. biflora* as a separate species with similar flowers, leaves wider than they are long, and large overlapping basal lobes.

Habitat and ecology: One of the first plants to emerge and bloom in the spring after snowmelt. Common to abundant in wet meadows, streamsides, and around seeps and springs; 9,000-12,000 ft.

Comments: Most abundant and visible in early June following snowmelt but persists as basal leaves or seed heads throughout the summer. Often seen in early summer with *Trollius albiflorus.*

Cirsium arvense (L.) Scop.

Canada thistle

Asteraceae



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Wetland indicator status: FACU
Native status: Introduced
Conservation status: G5 Exotic !
C-Value: 0
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CIAR4

Key characteristics:

- Creeping rhizomatous herb, often forming dense patches; 50-100 cm tall
- Leaves deeply pinnatifid, 3-15 cm long; glabrous with spines on the leaf margins
- Inflorescence made up of many heads, mainly unisexual and comparatively small to other thistles
- Involucral bracts 1-2 cm high and spine-tipped
- Flowers pink and pom-pom like

Similar species: All other Uinta Mtn. thistles are seldom rhizomatous and do not form patches. Generally they grow singly or as small dense clusters, with thick stems and deeply lobed leaves.

Habitat and ecology: Weedy in agricultural areas, ditch banks, and fields. Frequent in riparian communities near beaver dams 4,700-7,500 ft. Spread through recreation up to about 10,000 ft.

Comments: This species is introduced from Eurasia and can be a serious weed. It is not currently classified as an invasive in Utah but is in other states.

Comarum palustre L.

marsh cinquefoil

Rosaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 8
Duration: Perennial
Synonyms: *Potentilla palustris* (L.) Scop.
USDA PLANTS symbol: COPA28

Key characteristics:

- Stems prostrate to ascending, purplish and glabrous to hairy; 10-100 cm long
- Plants rhizomatous
- Leaves cauline, the lower ones largest
- Leaves pinnate with 5-7 leaflets, coarsely serrate; green and hairy to glabrous above, paler and hairy beneath
- Sepals purplish and resembling petals; actual petals also purple, but reduced in size

Similar species: The leaves resemble the *Potentilla* genus but have a distinct arrangement, and the flower is quite different with large purple sepals, and reduced petals.

Habitat and ecology: Rare in fens, wet meadows, or along pond margins from 9,600-9,800 ft.

Comments: This species used to belong to the *Potentilla* genus but was recently moved to *Comarum*.

Conioselinum scopulorum (A.Gray) J.M.Coult. & Rose

Rocky Mountain hemlock parsley

Apiaceae



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C. scopulorum: 1 to few umbels, alternate

L. porteri: numerous whorled umbels



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Wetland indicator status: FACW
Native status: Native
Conservation status: G4 S3
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: COSC2

Key characteristics:

- Plants glaborous with a simple or sparingly branched crown, stems 30-90 cm tall
- Leaves 1-2 times pinnate, 3-19 cm long; leaflets sharply lobed with somewhat conspicuous veining
- Inflorescences is a **widely branching compound umbel; 1 to few per plant, alternate**
- Flowers white and tightly clustered into heads; 3 or more involucral bracts subtending the flower heads
- Fruit is 4-6 mm long, oval, the lateral ribs slightly winged

Similar species: *Ligusticum porteri* is a forest floor species where main umbel is subtended by opposite or whorled umbels and 0-2 involucre bracts.

Habitat and ecology: Broader wetland plant but may be seen in fens. Common in western Uintas, Found along streams and in moist aspen and lodgepole forests; 8,500- 9,000 ft.

Drosera anglica Huds.

English sundew

Droseraceae



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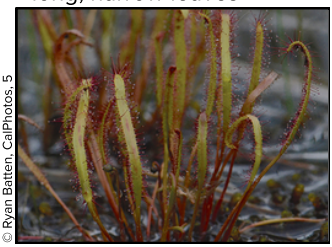
© Barry Rice, CalPhotos, 5

Drosera rotundifolia: round leaves



© Barry Rice, CalPhotos, 5

Drosera linearis: long, narrow leaves



© Ryan Batten, CalPhotos, 5

Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNA
C-Value: 10
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: DRAN

Key characteristics:

- Plants form rosettes, 2-6 cm across and 3-25 cm tall
- Leaves are erect and glabrous, **linear but with a slightly spatulate shape**
- Leaves have hairlike projections along the margins tipped with sticky drops
- Inflorescence is a stem with 1-12 flowers protruding above the rosette
- Flowers are white with 5-6 petals, 8-10 mm in diameter

Similar species: Primary difference is leaf shape. *D. rotundifolia* has round leaves instead of linear. *D. linearis* has much narrower leaves than *D. anglica*.

Habitat and ecology: Rare in fens and other perennially saturated places at high elevations, often associated with calcareous substrates. **Not yet observed in the Uinta Mtns.**

Comments: This species has not yet been observed in the Uinta Mtns. but is suspected to be in the eastern portion of the range, as it is found in similar habitat in CO, WY, and ID.

Epilobium hornemannii Rchb.

Hornemann's willowherb

Onagraceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: EPHO

Key characteristics:

- Stems rhizomatous, puberlent in lines to glandular, **3-30 cm tall**; roots lacking turions
- Leaves opposite, **ovate**, entire or serrulate and not revolute
- Inflorescence and **stem glabrous to glandular or pubescent** but not canescent
- Inflorescence a terminal nodding to erect raceme with few to many pinkish, purplish, or white flowers
- Seed capsule 2-6 cm long and 1-2 mm wide, splitting open to reveal white fluffy pappus when ripe

Similar species: *E. hornemannii* is a small species of the genus, is largely glabrous, and lacks turions. *E. palustre* is generally taller and larger and has more elongated lanceolate leaves. *E. saximontanum* is also small but has turions and its leaves are sessile and gently clasping.

Habitat and ecology: Occasional mainly in wet places along streams, in sedge-forb communities, sagebrush, and aspen and conifer woodlands; 8,200-11,250 ft.

Epilobium palustre L.

marsh willowherb

Onagraceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 8
Duration: Perennial
Synonyms: *Epilobium alpinum* L.
USDA PLANTS symbol: EPPA

Key characteristics:

- Stems rhizomatous, upper portion canescent, **10-50 cm tall**; roots with a turion in late summer
- Leaves opposite, **lanceolate**, entire or loosely serrulate and often revolute; **upper leaf surface glabrous**
- Inflorescence and usually much of the **stem canescent**
- Inflorescence a terminal raceme with numerous pinkish, purplish, or white flowers
- Seed capsule 3-7 cm long and 1-2 mm wide, splitting open to reveal white fluffy pappus when ripe

Similar species: *E. hornemannii* is generally shorter and smaller and has more squat ovate leaves. *E. leptophyllum* is similar in all ways apart from the upper surface of the leaf being finely pubescent.

Habitat and ecology: Rare in low, mesic habitats in Duchesne and Uintah Counties.

Erigeron lonchophyllus Hook.

shortray fleabane

Asteraceae



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cauline leaf



© amelielhb, iNaturalist, 5

basal leaf



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ERLO

Key characteristics:

- Stems sparsely to densely hairy, 3-55 cm tall; plants short-lived perennials from slender taproots, lacking rhizomes
- Basal leaves oblanceolate, 1-11 cm long; **cauline leaves linear**, several to many, 0.5-8 cm long
- Flower heads few to many, on nearly erect peduncles
- Involucral bracts with purplish tips, 4-9 mm high, **mostly in a single series (not imbricate)**
- Flowers white or pinkish, with **petals 2-4 mm long**

Similar species: The short petals are fairly distinct. *E. acris* also has short petals, but has imbricate involucral bracts and lanceolate cauline leaves, rarely linear. *Erigeron* spp. can be differentiated from *Symphyotrichum* spp. as having 1 series of involucral bracts instead of 3-5.

Habitat and ecology: May appear along fen margins but is typically a drier species. Common in riparian communities, wet ground of seeps, wet meadows, and bogs; 5,200-7,200 ft.

Comments: This is one of many *Erigeron* spp. that occur in the Uintas. However, they are primarily upland species found in drier habitats, so only two are included here.

Erigeron speciosus (Lindl.) DC.

showy fleabane

Asteraceae



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Wetland indicator status: UPL
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ERSP4

Key characteristics:

- **Stems hairy** to glandular and 15-90 cm tall; rhizomatous with **well developed caudex**
- Leaves mostly cauline, **well developed, not much reduced up the stem; lanceolate, pubescent** at least on margins, 5-15 cm long
- Inflorescence 1-15 spreading heads
- Involucral bracts with or without hairs, more or less spreading, and purplish; 5-9 mm high
- Flowers white, pink or blue, with **petals 7-18 mm long, 1-2 mm wide**

Similar species: *E. eximius* has glabrous stem leaves, with the lower part of the stem glabrous. *E. glabellus* and *E. formosissimus* have weakly developed or no caudex. *Erigeron* spp. can be differentiated from *Symphyotrichum* spp. as having 1 series of involucral bracts instead of 3-5.

Habitat and ecology: May appear along fen margins but is typically a drier species. Occasional in meadows, sagebrush, riparian, and aspen and coniferous woods; 7,500-10,000 ft.

Comments: This is one of many *Erigeron* spp. that occur in the Uinta Mtns. However, they are primarily upland species found in drier habitats. The two most likely species to occur in fens are included in this guide.

Erythranthe guttata (DC.) G.L.Nesom

seep monkey-flower

Phrymaceae











All photos - © Sam Kurkowski, 1

Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: *Mimulus guttatus* DC.
USDA PLANTS symbol: MIGU

Key characteristics:

- Stems erect or decumbent, often branched, often succulent; 5-90 cm tall; stoloniferous
- Leaves ovate, somewhat cordate, dentate with palmate veins, some > 2.5 cm long
- Inflorescence is a terminal raceme often with 5 to many flowers, sometimes solitary flowers
- Flowers yellow, tubular with 5 lobes, **the lip longer and wider than the other lobes**
- Flower palate bearded with maroon dots

Similar species: *E. guttata* is best differentiated by its larger size and irregularly shaped flower lobes. *E. moschata* flowers have regularly shaped flower lobes and glandular hairy leaves. *E. tilingii* has a mound-like habit, more slender stems, and smaller leaves.

Habitat and ecology: Common along stream banks, in boggy meadows, shallow water, and rock crevices near springs and seeps; 6,000-10,000 ft.

Comments: This is the most common and widespread species in the *Erythranthe* genus.

Erythranthe lewisii (Pursh) G.L.Nesom and N.S.Fraga

purple monkey-flower

Phrymaceae









All photos - © Sam Kurkowski, 1

Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S3
C-Value: 7
Duration: Perennial
Synonyms: *Mimulus lewisii* Pursh
USDA PLANTS symbol: MILE2

Key characteristics:

- Stems erect and unbranched, glandular to glandular-villous; 17-90 cm tall
- Leaves elliptic with palmate veins, irregularly dentate, sessile
- Flowers terminal and solitary or few to several
- **Flowers rose pink** with a yellow throat, tubular with 5 lobes

Similar species: *E. lewisii* is differentiable from others in the genus by its bright pink flowers. All other species in the genus have yellow flowers.

Habitat and ecology: Infrequent along stream banks and lake margins, among rocks in seeps, and in wet meadows; often in aspen and conifer communities; 8,000-11,700 ft.

Erythranthe moschata (Douglas ex Lindl.) G.L.Nesom

musk monkey-flower

Phrymaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S3
C-Value: 4
Duration: Perennial
Synonyms: *Mimulus moschatus* Douglas ex Lindl.
USDA PLANTS symbol: MIMO3

Key characteristics:

- Stems prostrate or decumbent, often branched, 2-30 cm tall; **glandular hairy**
- Leaves glandular hairy, 1.5-5 cm long, dentate
- Flowers yellow, tubular with **5 lobes regular and evenly shaped**, the tongue not longer than the other lobes
- Flower palate bearded (with many small, clustered hairs) with red lines extending out from the tube

Similar species: Distinguishing characteristics are the evenly shaped lobes and glandular hairy leaves and stem. *E. guttata* has irregularly shaped lobes with a longer and wider lip, rounder leaves and glabrous stems.

Habitat and ecology: Uncommon around seeps and springs, along streams and in wet meadows, often with willows and sedges; 7,380-9,000 ft.

Erythranthe primuloides (Benth.) G.L.Nesom & N.S.Fraga

primrose monkey-flower

Phrymaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G4 S2
C-Value: 5
Duration: Perennial
Synonyms: *Mimulus primuloides* Benth.
USDA PLANTS symbol: MIPR

Key characteristics:

- **Stems small and usually mat forming, 0.5-6 cm tall**
- **Leaves crowded toward the base**; ovate, finely dentate, and glabrous to hairy, 7-25 mm long
- Flowers 1-2 per stem; scapose, on slender pedicle 2-10 cm long extending above the leaves
- Flowers yellow, tubular with 5 heart-shaped lobes
- Flowers palate maroon dotted and bearded (with many small, clustered hairs)

Similar species: *E. primuloides* is the smallest *Erythranthe* species and has only basal leaves. *E. tilingii* is slightly larger, has leaves along the stem, and roots at the nodes forming mounds.

Habitat and ecology: Rare in moist sedge-grass meadows and along streams; 10,100-11,020 ft.

Erythranthe tilingii (Regel) G.L.Nesom

Tiling monkey-flower

Phrymaceae









All photos - © Sam Kurkowski, 1

Wetland indicator status: OBL
Native status: Native
Conservation status: GNR SNR
C-Value: 10
Duration: Perennial
Synonyms: *Mimulus tilingii* Regel
USDA PLANTS symbol: MITI

Key characteristics:

- Stems from creeping rhizomes, 5-25 cm tall, **often forming mounds**, glabrous or puberulent
- **Leaves caudate** and glabrous, 1-3 cm long; ovate, dentate
- Flowers terminal with 1-3 per stem
- Flowers yellow, tubular with 5 lobes, the lip longer and wider than the other lobes
- Flower palate maroon dotted and bearded (with many small, clustered hairs)

Similar species: Differentiable from *E. guttata* by the mound-like habit, more slender stems, and smaller leaves. *E. primuloides* has leaves clustered toward the base of the stem instead of caudate, with flowers scapose above the leaves.

Habitat and ecology: Uncommon in wet meadows and willow communities; 8,000-11,200 ft.

Galium bifolium S.Watson

twinleaf bedstraw

Rubiaceae



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Wetland indicator status: UPL
Native status: Native
Conservation status: G5 SNR
C-Value: 3
Duration: Annual
Synonyms: None of Note
USDA PLANTS symbol: GABI

Key characteristics:

- Stems erect or ascending, **glabrous**; 5-20 cm tall
- Leaves linear, **2-4 per whorl**, 2 smaller and 2 larger ones; 1-2.5 cm long
- **Flowers solitary on axillary peduncles**; white
- Fruit bristly with hooked hairs

Similar species: Best differentiated by its singular axillary flower and glabrous stem. Both *G. triflorum* and *G. trifidum* have rough hairy stems, more than 1 flower extending from each axil, and 4-6 leaves per whorl.

Habitat and ecology: Occasional in mountain brush, aspen, forb, and spruce-fir communities; 6,800-10,600 ft.

Comments: *Galium* spp. tend to occur in drier meadow and woodland conditions and only occur occasionally in fens, often on hummocks underneath shrubs.

Galium boreale L.

northern bedstraw

Rubiaceae



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GABO2

Key characteristics:

- Stems erect, rough to smooth along the angles, not retrorsely bristly; 20-80 cm tall
- Leaves narrowly lanceolate, **4 per whorl**, glabrous or roughened marginally, 1-6.5 cm long
- **Flowers numerous in terminal panicles**; white to cream
- Fruit pubescent with straight or curled hairs

Similar species: *G. boreale* is best identified by its numerous flowers forming a fairly dense panicle. *G. triflorum* has wider, pointed leaves and sparse flowers on peduncles. *G. trifidum* also has few flowers on peduncles.

Habitat and ecology: Common in meadows, riparian, aspen, and various coniferous forest communities; 7,000-10,500 ft.

Comments: *Galium* spp. tend to occur in drier meadow and woodland conditions and only occur occasionally in fens, often on hummocks underneath shrubs.

Galium trifidum L.

threepetal bedstraw

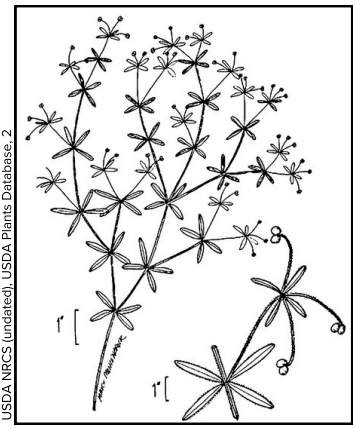
Rubiaceae



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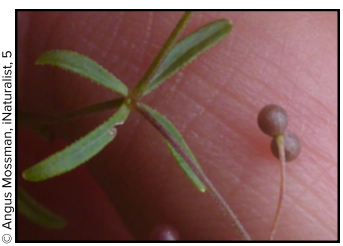
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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GATR2

Key characteristics:

- Stems ascending and **rough to grippy due to stiff, retrorse hairs**; 5-30 cm tall
- Leaves oblong, glabrous or nearly so, **4-6 per whorl**; 3-15 mm long
- **Flowers 1-3 on axillary peduncles** 5-18 mm long; white or greenish
- Fruit glabrous and nearly black at maturity

Similar species: Best identified by its rough stem, branching structure, and smooth fruits. *G. bifolium* has a glabrous stem, little branching, and fruit with hooked bristles. *G. triflorum* is larger, has clusters of 3 flowers, 6 leaves per whorl, and fruit with hooked bristles.

Habitat and ecology: Occasional in meadows, fens, near lake margins, streamside, and in riparian communities; 6,000-11,000 ft.

Comments: *Galium* spp. tend to occur in drier meadow and woodland conditions and only occur occasionally in fens, often on hummocks underneath shrubs.

Galium triflorum Michx.

fragrant bedstraw

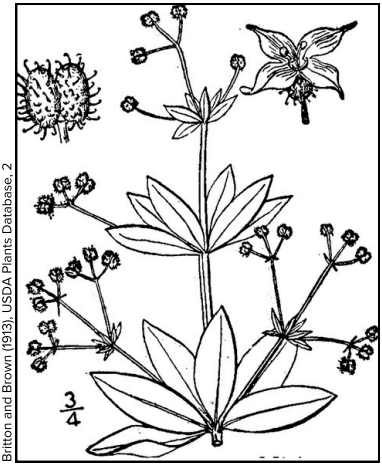
Rubiaceae



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GATR3

Key characteristics:

- Stems ascending and **rough due to stiff, retrorse hairs**; 20-80 cm tall
- Leaves elliptic, cuspidate, glabrous or with stiff hairs below, **usually 6 per whorl**; 1.5-6 cm long
- **Flowers on 3-flowered peduncles** (in groups of 3); **greenish to white**
- **Fruit densely bristly with hooked hairs**

Similar species: Best identified by its 6 leaves per whorl and clusters of 3 flowers. *G. bifolium* has 2-4 leaves per whorl with solitary flowers in leaf axils. *G. trifidum* has 4-6 narrower leaves per whorl and glabrous fruit.

Habitat and ecology: Occasional in moist sites including riparian and meadow communities; 7,600-8,200 ft.

Comments: *Galium* spp. tend to occur in drier meadow and woodland conditions and only occur occasionally in fens, often on hummocks underneath shrubs.

Gentiana algida Pall.

whitish gentian

Gentianaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GEAL2

Key characteristics:

- Stems erect and simple, 5-20 cm tall; often several stems growing together
- Leaves mainly basal, usually 2-3 cauline pairs, linear and sheathing; 2-12 cm long
- Flowers solitary or few together in terminal cymes
- Flowers tubular, 3.5-5 cm long; cream to greenish with purple mottles or stripes

Similar species: *G. algida* has distinctive white flowers and linear basal leaves. Other *Gentiana* spp. have deep blue flowers and ovate leaves.

Habitat and ecology: Infrequent in fens as they mostly occur in drier habitats. Common in alpine, meadow, and *Kobresia* communities, less common in subalpine meadows; 10,000-13,000 ft.

Gentiana calycosa Griseb.

Rainier pleated gentian

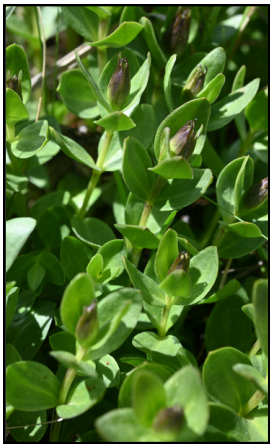
Gentianaceae













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Wetland indicator status: FACW
Native status: Native
Conservation status: GNR SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GECA

Key characteristics:

- Stems decumbent to ascending, 3-20 cm tall; often forming a small patch
- Leaves cauline and basal, broadly ovate, **glabrous**; 1-2 cm long
- Flowers usually solitary and terminal
- Flowers tubular with 5 lobes, 3-4 cm long; deep blue to purplish

Similar species: *G. calyclosa* is best differentiated by its glabrous leaves and stems. *G. affinis* and *G. parryi* have finely ciliolate leaves and sepals, with stems finely puberulent in lines below the leaves. *G. parryi* looks most similar but occurs mostly in southern Utah and the Wasatch, and is unlikely to appear in the Uinta Mtns.

Habitat and ecology: Common on hummocks and edges of fens. Common in wet and dry meadows and alpine tundra; 10,000-11,500 ft.

Comments: *G. calycosa* is the most common gentian in the Uinta Mtns. The two similar species don't occur in the Uinta Mountains and are from other parts of Utah.

Gentiana prostrata Haenke

moss gentian

Gentianaceae



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© Jeff Ward, iNaturalist, 6



© Jeff Ward, iNaturalist, 6



© Kate McKeown, iNaturalist, 5



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S3
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GEPR3

Key characteristics:

- Stems prostrate or ascending, 2-15 cm long, branched from the base; often forming small patches
- Leaves mainly cauline and sheathing; 2-15 mm long
- Flowers solitary and terminal
- **Flowers tubular with 4 main lobes and 4 secondary lobes**, 11-25 mm long; blue to whitish

Similar species: *G. prostrata* flowers and leaves are much smaller than others in the *Gentiana* genus. *G. calycosa* has a larger tubular flower with 5 lobes and broadly ovate leaves.

Habitat and ecology: Occasional in wet meadows and moist places in coniferous woods; 9,000-11,600 ft.

Gentianella tenella (Rottb.) Börner

Lapland gentian

Gentianaceae



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© Elias, iNaturalist, 3



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© Martin Purdy, iNaturalist, 3

Wetland indicator status: UPL
Native status: Native
Conservation status: G4G5 S2
C-Value: 7
Duration: Annual
Synonyms: *Comastoma tenellum* (Rottb.) Toyok.
USDA PLANTS symbol: GETE4

Key characteristics:

- Stems ascending to erect, often branched from taproots; 5-20 cm tall
- Leaves basal and cauline, elliptic to lanceolate; basal leaves larger than cauline leaves
- **Flowers solitary on a naked peduncle 2-10 cm long**
- Flowers blue to white, tubular then divided into 4 lobes 2-6 mm long

Similar species: *G. tenella* is best differentiated by its solitary flowers on a long peduncle. Other *Gentianella* species have many flowers clustered at the terminus of the stems or in the leaf axils.

Habitat and ecology: Uncommon in subalpine dry and wet meadows and in the turf of alpine tundra; 7,900-12,500 ft.

Geranium richardsonii Fisch. and Trautv.

Richardson geranium

Geraniaceae



© Max Licher, SEINet, 4



© Dianne Fristrom, CalPhotos, 4

G. richardsonii: white with pink veins



© Steve Matson, CalPhotos, 5

G. viscosissimum: vibrant pink



© Paul Rothrock, SEINnet, 4



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GERI

Key characteristics:

- Stems erect, branching, and glandular hairy above the midpoint; 10-100 cm tall
- Taproot without loose fibers, the pithy center pinkish
- Leaves palmate with 3-7 toothed lobes; 1-8 cm long
- Flowers typically 2 per peduncle, **white with pinkish veins,** petals 12-22 mm long; stigmas 4-5 mm long
- Mericarps 3-5 mm long

Similar species: *G. richardsonii* is best distinguished by its white flowers, sometimes with pink veins and generally occurs in more moist or shaded areas. *G. viscosissimum* has vibrant pink to purple flowers; stigmas 5-7 mm long; mericarps 5-6 mm long; taproot rope-like with loose fibers, the pithy center brownish. *G. bicknellii* has smaller flowers with petals 6-8 mm long.

Habitat and ecology: Occasional along the edges of fens where it's drier. Widespread and common in meadows, aspen and coniferous woods, and rarely talus; 7,200-10,600 ft.

Comments: There are only three species of *Geranium* in the Uinta Mtns. and six species found in Utah.

Geum macrophyllum Willd.

largeleaf avens

Rosaceae



© Alexey P. Seregin, iNaturalist, 5



© Steve Matson, CalPhotos, 5



© Steve Matson, CalPhotos, 5

G. macrophyllum: rounded to cordate base

G. aleppicum: narrower cuneate base



© John D Reynolds, iNaturalist, 5



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GEMA4

Key characteristics:

- Stems erect with spreading hairs, 20-115 cm tall; with short rhizomes
- Leaves basal and cauline, both types compound leaves but cauline leaves narrower
- **Terminal segment of basal leaves much larger than main lateral lobes, rounded to nearly cordate at the base**
- Flowers yellow with 60 or more stamens
- Lower (persistent) segment of the style slightly glandular pubescent

Similar species: *G. macrophyllum* is best distinguished by its large, rounded leaf segments. *G. rossii* has leaf segments < 1 cm wide and is rarely over 30 cm tall. *G. aleppicum* is the closest lookalike but the terminal segment of the basal leaves are cuneate at the base instead of rounded and only slightly larger than the lateral lobes.

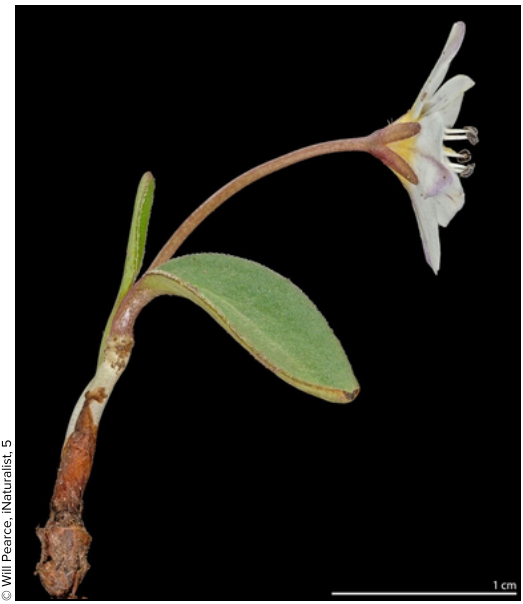
Habitat and ecology: Occasional in moist and often shady places in grass-sedge, willow, and forest communities; 6,000-9,400 ft.

Comments: This is the most common meadow and woodland species of the genus.

Hesperochiron pumilus (Griseb.) Porter

dwarf hesperochiron

Boraginaceae



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© John Doyen, CalPhotos, 5



© Steve Ashcraft, iNaturalist, 5



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Wetland indicator status: FAC
Native status: Native
Conservation status: G4 S3
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: HEPU6

Key characteristics:

- Plant has no visible stems above the ground, 2-12 cm tall
- Leaves all basal forming a rosette, petiolate, 1.5-5 cm long
- Flowers solitary on slender peduncles 2-5 cm long, 1-5 per plant
- Flowers rotate, or bowl shaped, with dense hairs within; 0.5-1.5 cm wide, the lobes mostly longer than the tube
- Flowers white to light blue, often with darker colored veining

Similar species: This species resembles those in the *Claytonia* genus (common name "spring beauties") but can be distinguished by its lack of stem and solitary flowers. It is the only one of its genus found in the Uinta Mtns.

Habitat and ecology: Uncommon in moist ground along streams, in meadows, aspen communities, and desert springs; 5,500-8,500 ft.

Hypericum anagalloides Cham. and Schltdl.

bog St. Johnswort

Hypericaceae



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© Noah Strycker, iNaturalist, 5



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: HYAN2

Key characteristics:

- Stems mostly **prostrate**, branching, **small and slender, 3-20 cm long**
- Leaves 5-7 veined
- Inflorescence cymes of 1-3 flowers or solitary in leaf axils
- **Petals less than 4 mm long**, about equal to the sepals
- **Stamens 15-20**

Similar species: *H. scouleri* is larger, less branched, has erect stems and larger petals and leaves.

Habitat and ecology: Infrequent in wet meadows, fens, along streams, and in moist woods; 8,500-10,500 ft.

Hypericum scouleri Hook.

Scouler's St. Johnswort

Hypericaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: *Hypericum formosum* A.Gray
USDA PLANTS symbol: HYSC5

Key characteristics:

- Stems **erect** and largely simple with occasional branching, **20-60 cm tall**
- Leaves 1-3.5 cm long
- Flowers few to many in branching cymes
- **Petals 7-14 mm long**, longer than the sepals
- **Stamens numerous,** the anthers with a black gland at the apex

Similar species: *H. anagalloides* is smaller with branching stems that grow along the ground (prostrate).

Habitat and ecology: Less likely to see in fens but may occur on the margins. Occasional in meadows, along streams, and in aspen and coniferous woods; 7,000-9,000 ft.

Ligusticum tenuifolium S. Watson

slender-leafed ligusticum

Apiaceae











All photos - © Sam Kurkowski, 1

Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: *Ligusticum filicinum* var. *tenuifolium* Mathias & Constance
USDA PLANTS symbol: LITE2

Key characteristics:

- Stems 11-64 cm tall, scapose, leaves mostly basal
- Leaves with 3 parts, 2-3 times pinnate on long petioles
- Inflorescence terminal and umbel shaped, occasionally subtended by 1-2 lateral ones
- Flowers are small and white with 5 petals
- In early season, flower buds are pink to yellow green and form a dense terminal head

Similar species: *L. filicinum* is a larger, upland species with 2-5 umbels per stalk; often clumping and forming a small bush.

Habitat and ecology: Common in wet and dry meadows, fens, along streams, and in moist coniferous woods; 8,000-11,200 ft.

Comments: *L. tenuifolium* was updated to be a variety of *L. filicinum* but remains listed as its own species because this guide is not including varieties and subspecies.

Limosella aquatica L.

water mudwort

Scrophulariaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: LIAQ

Key characteristics:

- Short, cespitose plant, effectively stemless and low to the ground
- Leaves all basal, linear to spatulate on long petioles (to 9 cm long)
- Scapes slender and often short, bearing a single flower
- Flowers white to pink and 5-lobed

Similar species: *L. aquatica* somewhat resemble species in the *Ranunculus* genus and is best differentiated by its smaller white flowers with pointier petals and its spatulate leaves on long petioles. This species is the only one of its genus in Utah.

Habitat and ecology: Most likely in drawn down fen ponds or near fen pond margins. Infrequent on muddy flats and in shallow water of seeps, ponds, and streams, and wet meadows; 5,000-9,920 ft.

Lithophragma glabrum Nutt.

bulbous woodland star

Saxifragaceae











All photos - © Sam Kurkowski, 1

Wetland indicator status: UPL
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: LIGL2

Key characteristics:

- Stems glandular pubescent, gland tips mostly dark purple; 3-35 cm tall
- Leaves basal, trifolate or palmately compound with lobed leaflets; on petioles 1-5 cm long
- Flowers white to pale pink, **1-4 flower in a raceme**, inflorescence sometimes branching
- Flower **petals 3-5 lobed** and 4-7 mm long
- Few to several **purple bulblets in the inflorescence**

Similar species: *L. parviflorum* lacks bulblets and has 4-7 flowers in a raceme. Flowers in the *Stellaria* and *Pseudostellaria* genera look similar but their petals have fewer lobes and they lack purple stem and palmate leaves.

Habitat and ecology: Most likely to be found on hummocks or fen margins. Occasional in sagebrush, aspen, and riparian communities; 6,600-9,000 ft.

Lomatogonium rotatum (L.) Fr.

marsh felwort

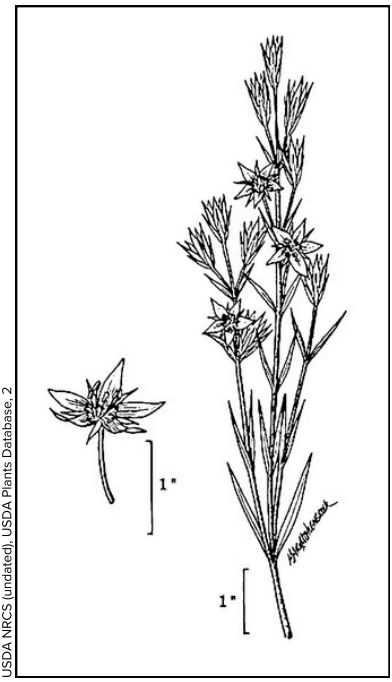
Gentianaceae



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USDA NRCS (undated), USDA Plants Database, 2



© Юлия, iNaturalist, 3



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 9
Duration: Annual
Synonyms: None of Note
USDA PLANTS symbol: LORO

Key characteristics:

- Stems 10-50 cm tall, simple or branched from near the base with branches strongly ascending
- Basal leaves elliptic to spatulate; early withering and often missing
- Stem leaves small (0.5-2.5 cm long) and not reduced upward
- Flowers 5 to numerous per stem
- Petals blue to pale blue or white, 6-15 mm wide; corolla dividing into 4 or 5 petals elliptic-ovate in shape

Similar species: This species is the only one of its genus in the Uinta Mtns. *Swertia perennis* has persistent, larger basal leaves and flowers more purple in color with narrower petals and darker veining.

Habitat and ecology: Rare in wet meadows, fens, and stream banks, including areas under water for a time in spring and early summer; 8,300-9,000 ft.

Menyanthes trifoliata L.

buckbean

Menyanthaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: METR3

Key characteristics:

- Rhizomes growing in mud or out into standing water
- Leaves coming off rhizomes on petioles 5-30 cm long
- Leaves trifolate; leaflets oblanceolate, 2-9 cm long
- Flowers white to pink; in a raceme on scapes 5-30 cm long
- Flowers funnelform with 5 lobes, numerous scaly hairs on the inner surface

Similar species: This species is unique in its growth habit and semi-aquatic nature. *Parnassia fimbriata* flowers also have white hairs, but all other aspects of the plants differ.

Habitat and ecology: Rare in shallow pools, ponds, fens, and lakes in the lodgepole pine-spruce belt. Most likely to be seen in pools within or adjacent to fens.

Comments: Due to its semi-aquatic nature, this species can extend out into water bodies from the shoreline or form patches of emergent vegetation. This is a circumboreal species that is sparsely populated in Utah.

Micranthes odontoloma (Piper) A.Heller

brook saxifrage

Saxifragaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S3
C-Value: 7
Duration: Perennial
Synonyms: *Saxifraga odontoloma* Piper
USDA PLANTS symbol: MIOD2

Key characteristics:

- Stems scapose, 16-78 cm tall
- Leaves all basal, orbicular with crenate-dentate margins on a long petiole; glabrous and tacky
- Inflorescence a spreading panicle with many flowers
- Petals round and linear, white, and spreading; stamens equaling or exceeding the petals, red tipped
- Ovary superior (forming a central cone) and pink to yellow in color

Similar species: None of Note. The leaves and flowers of this species are quite distinct.

Habitat and ecology: Common across the Uinta Mountains, found in wet or moist soil around springs and streams or other moist sites in montane plant communities, often in shade; 7,500-11,000 ft.

Mitella pentandra Hook.

five star miterwort

Saxifragaceae



© Sam Kurkowski, 1



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M. stauropetala: petals white



© Rea Orthner, iNaturalist, 5

M. pentandra: petals greenish



© Sam Kurkowski, 1



© Reid Hardin, iNaturalist, 5



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: *Pectiantia pentandra* (Hook.) Rydb.
USDA PLANTS symbol: PEPE16

Key characteristics:

- Stems 1-4 extending from basal leaves, 10-35 cm tall; scapose or leafless
- Leaves basal, ovate to orbicular with shallow palmate lobes and strong venation; glabrous
- Racemes 3-16 cm long with 4-20 flowers; flowers small (1-2.5 mm wide) and disc shaped, with reflexed petals
- Petals 2-3 mm long, 5 per flower; **greenish, pinnately dissected into antenae-like structures**
- Capsules bowl shaped and opening widely ~2 mm long; seeds many, nestled in bowl, dark brown to black when mature

Similar species: *M. stauropetala* has clearly distinct flowers; petals white with 3 dissected lobes and enlarged white sepals. However, the petals are often early deciduous. Other characteristics to look for are ciliate leaf margins and seldom more than 1 flower per node.

Habitat and ecology: Infrequent along streams and in moist woods, often where shaded; 7,800-10,800 ft.

Parnassia fimbriata K.D.Koenig

fringed grass-of-Parnassus

Celastraceae



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P. palustris: petals entire, no fringe



© Laurel J. Ramseyer, iNaturalist, 5

P. fimbriata: petals fringed



© Sam Kurkowski, 1



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PAFI3

Key characteristics:

- Stems scapose, 14-43 cm tall
- Leaves reniform with 3-16 cm long petioles
- Small leaflike bracts ovate and clasping, borne above the middle of the stem
- Flowers terminal and solitary
- Petals white and fringed on the lower half

Similar species: *P. palustris* has entire petals, leaf bases wedge rather than heart shaped on shorter petioles (1-4 cm long), and bracts borne below the middle of the stem.

Habitat and ecology: Infrequent along streams, around springs, lake shores and other wet places; 7,600-9,300 ft.

Pedicularis groenlandica Retz.

elephant's head

Orobanchaceae



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P. crenulata:
no elephant trunk



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PEGR2

Key characteristics:

- Leaves mostly basal, reduced along the stem; sharply pinnately lobed; dark green and tinged purple-ish at the edges
- Inflorescence extends above and beyond the leaves on a stalk 15-70 cm tall
- Seed capsules are dry, brown, and teardrop shaped
- Flowers pinkish purple; uniquely shaped with side lobes spreading and a long, slender curving beak **resembling the head and trunk of an elephant**

Similar species: The shape and color of the flower is unique, even within the genus. *P. crenulata* can be similar in color but the flower lacks a long curving elephant trunk despite maintaining the hooded head.

Habitat and ecology: Common in boggy, cold, wet meadows and streambanks at 7,800-12,500 ft.

Comments: This is a very common and conspicuous species found often in fens.

Potentilla glaucophylla Lehm.

blueleaf cinquefoil

Rosaceae



All photos - © Sam Kurkowski, 1



leaves silvery green;
entire on lower half, toothed toward the tip



Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: *Potentilla diversifolia* var. *diversifolia* Lehm.
USDA PLANTS symbol: POGL18

Key characteristics:

- Stems erect, branching only in the inflorescence, 6-32 cm tall
- Leaves mainly basal, typically 5-7 palmate
- **Leaves entire on the lower half, then toothed; silvery green on both sides, usually glaucous**
- Flowers yellow, on several-flowered cymes
- Anthers 0.5-0.7 mm long

Similar species: *P. gracilis* has leaves often greener above and lighter below, with leaf margins toothed the entire length. There are numerous *Potentilla* species in the Uinta Mtns. but the two included in this guide are the most common and most likely to be seen in fens.

Habitat and ecology: Most likely to be seen on fen margins. Occasional in wet and dry meadows, open woods, along streams, and frequent in alpine communities; 9,000-12,000 ft.

Potentilla gracilis Douglas ex Hook.

slender cinquefoil

Rosaceae



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green on top leaf surface, silvery green underneath



© johnlikeplants, iNaturalist, 5



© ehappy, iNaturalist, 5

Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: POGR9

Key characteristics:

- Stems erect, branching only in the inflorescence, 4-60 cm tall
- Leaves basal and cauline, palmately compound with 5-9 leaflets
- **Leaf margins toothed the entire length; green and commonly bi-colored** (green above and lighter silvery green below)
- Flowers yellow, on several-flowered cymes
- Anthers 0.8-1.3 mm long

Similar species: *P. glaucophylla* has leaves silvery green on both sides, with entire margins on the lower half and the upper half toothed. There are numerous Potentilla species in the Uinta Mtns. but the two included in this guide are the most common and most likely to be seen in fens.

Habitat and ecology: Most likely to be seen on fen margins. Occasional in dry to wet meadows and open woodlands from 5,400-8,500 ft.

Primula incana M.E.Jones

silvery primrose

Primulaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PRIN

Key characteristics:

- Stems somewhat silvery, 5-45 cm tall
- Leaves 1-4 cm long, glaucous beneath with a whitish crust-like bloom
- Flowers numerous in a terminal cluster, pink to purple
- Flowers tubelike, the tube yellow, with 5 pinkish lobes ~5 mm long

Similar species: *P. parryi* is the only other similar looking primrose and can be distinguished by its larger leaves (6-30 cm long) of a deeper green color, not glaucous, and its larger, vibrant pink flowers with lobes 5-13 mm long.

Habitat and ecology: Rare in wet meadows and calcareous fens; 6,500-8,700 ft.

Comments: This species is most likely to be found in the Sheep Creek Park area on the eastern side of the Uinta Mtns.

Primula tetrandra (Suksd.) A.R.Mast and Reveal

alpine shootingstar

Primulaceae



© Morgan Stickrod, iNaturalist, 5



P. pauciflora: yellow tube at base of petals

© Sam Kurkowski, 1

© Sam Kurkowski, 1



P. tetrandra: no yellow tube, filaments free

© Sam Kurkowski, 1

© Morgan Stickrod, iNaturalist, 5



© Sam Kurkowski, 1



© Sam Kurkowski, 1

Wetland indicator status: FACW
Native status: Native
Conservation status: G3G4 S2
C-Value: 7
Duration: Perennial
Synonyms: *Dodecatheon alpinum* (A.Gray) Greene
USDA PLANTS symbol: PRTE6

Key characteristics:

- Stems solitary, 8-38 cm long
- Leaves basal, oblanceolate to linear with entire margins, gradually tapering into a winged petiole
- Flowers 1 to many, nodding on slender pedicels
- Petals pink to purple and yellow toward the center, strongly reflexed back toward the stem; **filaments free, not protruding from a yellow tube**
- Fruit capsule ovoid and tan to light brown

Similar species: *P. pauciflora* has a distinctive yellow tube protruding from the base of the petals from which the anthers extend.

Habitat and ecology: Occasional in moist to boggy meadows, along streams and around the edges of lakes and ponds 9,400-11,500 ft. Can be found in conifer and aspen woodlands.

Comments: The size of the leaves and the length of the stalks tend to be influenced by elevation and exposure.

Prunella vulgaris L.

common selfheal

Lamiaceae



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 3
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PRVU

Key characteristics:

- Stems rarely branching with crinkled rough hairs, 6-50 cm long
- Leaves opposite, lanceolate, puberulent to glabrous
- Inflorescence is a densely flowered spike 2-5 cm long
- Flowers pink-purple or blueish, with the upper lip hooded and the lower lip 3 lobed and minutely toothed

Similar species: None of note. This is the only species of this genus in Utah and is fairly unique.

Habitat and ecology: Infrequent in wet meadows, riparian communities, and along streams in woods; 5,600-8,100 ft.

Pseudognaphalium stramineum (Kunth) Anderb.

cotton-batting cudweed

Asteraceae



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© Gary McDonald, CalPhotos, 1

Gnaphalium palustre: inflorescence tomentose



© Keir Morse, CalPhotos, 6

Gnaphalium exilifolium: leaves extend beyond inflorescence



© Barry Breckling, CalPhotos, 6



Goodrich & Huber 2014, 2

Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 3
Duration: Annual
Synonyms: *Gnaphalium stramineum* Kunth
USDA PLANTS symbol: PSST7

Key characteristics:

- **Stems 20-80 cm tall**, rarely much branched
- **Stems and both surfaces of leaves woolly, not sticky**
- Inflorescence 2-3 cm wide or wider with numerous heads in clusters
- **Involucral bracts 4-7 mm high and yellowish, tomentose only at the base**
- Leaves not extending to the top of or past the inflorescence

Similar species: *Gnaphalium palustre* has 3-4 mm brown involucral bracts with a whiteish tip, and is loosely tomentose. *Gnaphalium exilifolium* has 3-4 mm involucral bracts that are green or brownish to the tip, and is appressed tomentose. Both are 5-20 cm tall and branched with narrower inflorescence.

Habitat and ecology: Occasional in drainage bottoms, river banks, hillside-seeps, and other moist sites; 5,460-8,600 ft.

Comments: This species can form large patches, most often in draw down areas adjacent to lakes, creating a white cloudlike patch appearance.

Pyrola asarifolia Michx.

liverleaf wintergreen

Ericaceae



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P. asarifolia: style curved, 5-8 mm long

P. minor: style straight, < 2 mm long



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PYAS

Key characteristics:

- Stems scapose, 13-40 cm tall
- Leaves basal, 3-8 cm long, oval and waxy on petioles 1-9 cm long
- Racemes with 2-12 **pink to purplish flowers**; petals 4-7 mm long
- Anthers pink, the pores on short tubes
- **Style curved**, with a flaring collar below the stigma, **5-8 mm long**

Similar species: *P. minor* has a straight style < 2 mm long, without a lobe below the stigma; petals 2-4 mm long. *P. chlorantha* has pale yellowish petals, a style 3-6 mm long, and smaller leaves.

Habitat and ecology: Most likely to be seen on fen margins or hummocks. Occasional in wet places, mostly in woods; 7,000-9,000 ft.

Pyrola chlorantha Sw.

greenflowered wintergreen

Ericaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PYCH

Key characteristics:

- Stems scapose, 9-25 cm tall
- Leaves basal, 1-3 cm long, oval and waxy on petioles 1-6 cm long
- Racemes with 2-9 **yellowish flowers**; petals 4-7 mm long
- Anthers yellowish, the pores on elongate tubes
- **Style curved**, with a flaring collar below the stigma, **3-6 mm long**

Similar species: *P. minor* has a straight style < 2 mm long, without a lobe below the stigma; petals 2-4 mm long. *P. asarifolia* has pink to purplish petals, a style 5-8 mm long, and larger leaves.

Habitat and ecology: Most likely to be seen on fen margins or hummocks. Occasional in moist places, often in woods along streams; 7,300-9,600 ft.

Ranunculus alismifolius Geyer ex Benth.

plainleaf buttercup

Ranunculaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: RAAL

Key characteristics:

- Stems glabrous, 5-46 cm tall, **not rooting at the nodes**
- **Leaves simple, entire and not lobed**; 2-10 cm long
- Flowers yellow with 3-10 petals 7-11 mm long
- Achenes glabrous

Similar species: *R. alismifolius* is most easily distinguished by its entire, not lobed leaves and its stems do not root at the nodes. *R. flammula* readily roots at the nodes and *R. hyperboreus* is quite small and each leaf has 3-5 lobes.

Habitat and ecology: Common to uncommon depending on area of the Uinta Mtns. Found in meadows, sagebrush, and aspen and coniferous forests; 8,000-9,500 ft.

Ranunculus flammula L.

creeping spearwort

Ranunculaceae



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R. cymbalaria:
round, crenate leaves



© mkkennedy, iNaturalist, 5

Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: RAFL2

Key characteristics:

- **Stems acting as strawberry like stolons, often rooting at the nodes**
- Flowering stems 1-10 cm tall
- Leaves simple, linear, and entire, 0.5-7.5 cm long; appearing mostly basal
- Flowers yellow with 5 petals 2-8 mm long
- Achenes glabrous

Similar species: *R. cymbalaria* has round, crenate leaves and narrower, more numerous petals; found at lower elevations.

Habitat and ecology: Most likely to be seen in fen pools or pond margins. Common in edge of ponds, ephemeral ponds, and along streams; 7,600-11,000 ft.

Ranunculus hyperboreus Rottb.

high northern buttercup

Ranunculaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: RAHY2

Key characteristics:

- Stems prostrate to erect, sometimes rooting at the nodes; 10-50 cm long
- Leaves mostly cauline, the **blades simple with 3-5 rounded lobes**, on long petioles 1-6 cm long
- Flowers yellow with 5 petals 2-4.5 mm long
- Achenes glabrous

Similar species: *R. hyperboreus* is quite small and is differentiated by its leaves with 3-5 rounded lobes. *R. scleratus* has lobed leaves but is larger with branching stems and is found below 7,000 ft.

Habitat and ecology: Most likely to be seen in shallow open water on fen margins. Also found in wet meadows and shallow water and mud of beaver ponds. Generally uncommon; 8,400-9,000 ft.

Rhodiola rhodantha (A.Gray) H.Jacobsen

pink stonecrop

Crassulaceae











All photos - © Sam Kurkowski.1

Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2
C-Value: 7
Duration: Perennial
Synonyms: *Sedum rhodanthum* A.Gray
USDA PLANTS symbol: RHRH4

Key characteristics:

- Succulent herb with unbranching stalks often growing in small to moderate bunches
- Leaves alternate, flat, and sessile, sometimes tinged red at the tips
- Flowers numerous; borne in compact, terminal clusters
- Flowers pink to fuscia; corolla divided into 5 distinct petals 8-12 mm long

Similar species: The other stonecrops in the Uintas have yellow flowers and grow in dry places, making them difficult to confuse. Outside the Uintas, *R. integrifolia* has smaller flowers that are deep red to purple.

Habitat and ecology: Occurs frequently in fen margins and on hummocks. Occasional to common in wet meadows and along stream banks; 9,700-11,800 ft.

Saxifraga hirculus L.

yellow marsh saxifrage

Saxifragaceae



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S. serpyllifolia



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S. flagellaris



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SAHI3

Key characteristics:

- Flowering stems erect, **6-20 cm tall**, brownish or yellowish
- Leaves mostly basal, **linear to oblanceolate** and glabrous; stem leaves alternate, similar to basal but smaller; **often > 8 mm long**
- Flowers 1 to few, showy
- Petals bright yellow, 5-7, veined, **7-10 mm long**; stamens pronounced 4-7 mm long; superior ovary forming a central cone
- Capsules are red, 5-lobed, and beaked; 7-12 mm long

Similar species: From drier alpine communities, *S. serpyllifolia* has smaller petals 4-5 mm long, rounder leaves 4-8 mm long, and stems 2-6 cm tall, and *S. flagellaris* is stoloniferous with ciliate leaves and petals forming almost a tube.

Habitat and ecology: Rare in wet and boggy meadows; around 8,600 ft.

Comments: This is a circumboreal species that has disjunct alpine populations in Utah, Montana, Colorado, and New Mexico.

Senecio sphaerocephalus Greene

ballhead ragwort

Asteraceae


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S. sphaerocephalus: finely pubescent


© Sam Kurkowski, 1

S. integerrimus: crinkly hairs


© emikobies, iNaturalist, 5

S. dimorphophullus: auriculate base


© Anthony Culpepper, iNaturalist, 1

Wetland indicator status: FACW
Native status: Native
Conservation status: G4 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SESP4

Key characteristics:

- Stems erect and sparingly tomentose, from stout rhizomes; 30-80 cm tall
- **Leaves mostly basal, cauline leaves reduced upward**
- Leaves petiolate and **oblanceolate, entire** to denticulate margins, **finely pubescent**; 13-30 cm long with petioles
- Inflorescence corymbose with few to many heads
- Flowers yellow with 8-13 petals; involucral bracts 6-12 mm wide

Similar species: *S. integerrimus* has glabrous leaves 4-10 cm long with petioles, the axils, lower petioles, and stem with some translucent, crinkly, multicellular hairs. *S. dimorphophullus* has some leaves deeply sinuate toothed with auriculate bases. Both are from moist to dry habitats.

Habitat and ecology: Most likely to see on fen margins. Occasional in wet or boggy meadows, willow-streamside, other riparian communities, and occasionally sagebrush; 7,600-10,500 ft.

Senecio triangularis Hook.

arrowleaf ragwort

Asteraceae



© Sam Kurkowski, 1



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S. triangularis: triangular

S. crassulus: widest above the middle

S. serra: lanceolate



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SETR

Key characteristics:

- Stems erect and typically glabrous; 25-120 cm tall
- Leaves consistent in size and number upward on the stem
- Leaves petiolate and **triangular (widest at the base), dentate to sinuate-dentate margins**, glabrous; often over 3 cm wide
- Inflorescence corymbose with few to many heads
- Flowers yellow with 5-9 petals; involucral bracts 8-17 mm wide

Similar species: *S. crassulus* leaves are widest beyond the middle, wavy dentate, and 20-50 cm tall. *S. serra* leaves are widest between the middle and the base (lanceolate), seldom over 3 cm wide.

Habitat and ecology: Possible at fen margins or streambanks in fens. Common along streams in meadows, in coniferous woods, sometimes with aspen and willows; 7,600-11,000 ft.

Stellaria borealis Bigelow

boreal starwort

Caryophyllaceae


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S. borealis:
bracts herbaceous, 5-15 mm;
petals short but present


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S. umbellata:
bracts scarious, 1-2mm;
petals lacking


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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: STBO3

Key characteristics:

- Stems glabrous or finely papillate on stem ridges, 25-50 cm long; often forming rhizomatous mats
- **Leaves sessile,** narrowly lanceolate; glabrous or finely papillate on leaf margins, sometimes ciliate at the base; **10-58 mm long**
- Flowers solitary on slender pedicels from leaf axils, and in few-flowerd terminal cymes
- Inflorescence **bracts herbaceous, 5-15 mm long**
- Petals 5 (rarely lacking), **shorter than the sepals,** white, two-lobed, **1.5-3 mm long**

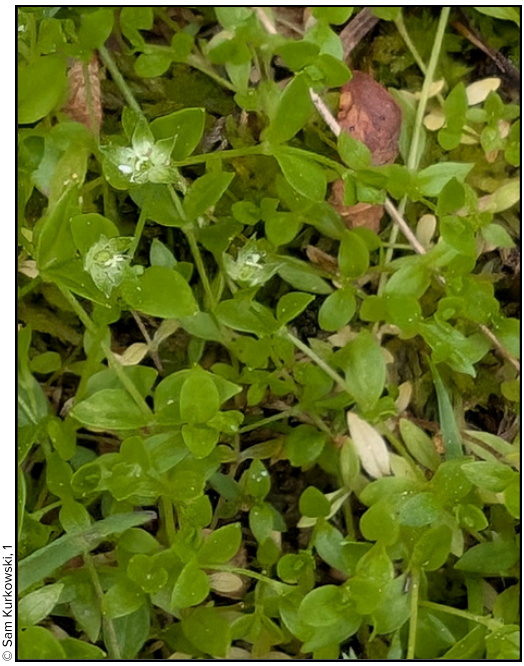
Similar species: *S. calycantha* has shorter leaves and petals (see page 86 for details). *S. umbellata* has scarious bracts 1-2.5 mm long and an umbellate inflorescence with petals lacking. Other similar *Stellaria* species have petals longer than the sepals that are always present.

Habitat and ecology: Occasional in moist meadows, marshes, and streambanks, sometimes in shady woods; 5,600-9,800 ft.

Stellaria calycantha (Ledeb.) Bong.

northern starwort

Caryophyllaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: STCA

Key characteristics:

- Stems glabrous to sparsely villous, 6-40 cm long; oftem forming rhizomatous clumps or mats
- **Leaves sessile**, narrowly lanceolate; glabrous and **usually long-ciliate on the margins; 6-20 mm long**
- Flowers solitary in leaf axils on slender pedicels, and in few-flowerd terminal cymes
- Inflorescence **bracts herbaceous, 5-15 mm long**
- Petals 1-5 (often lacking), **shorter than the sepals**, white, two-lobed, **1-1.5 mm long**

Similar species: *S. borealis* has longer leaves and petals (see page 85 for details). *S. umbellata* has scarious bracts 1-2.5 mm long and an umbellate inflorescence with petals lacking. Other similar *Stellaria* species have petals longer than the sepals that are always present.

Habitat and ecology: Common along streams, in fens, and around seeps and springs; 7,100-10,300 ft.

Stellaria crassifolia Ehrh.

fleshy starwort

Caryophyllaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S1
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: STCR

Key characteristics:

- Stems much branched, glabrous, 3-13 cm long; **often forming rhizomatous mats**
- **Leaves sessile,** lanceolate, more or less succulent, **0.5-1.5 cm long**; fully **glabrous**
- Flowers terminal, at least some solitary in leaf axils
- Sepals 2-3.5 mm long
- Petals 5, **equal to or longer than the sepals,** white, **two-lobed more than 3/4 the petal length**

Similar species: *S. longifolia* has longer leaves 1.5-5.5 cm long and stems 10-55 cm long, not matted; inflorescence terminal with 2-several flowers, none axillary. *S. longipes* has longer leaves 1.5-5.5 cm long and petals 3.5-7 mm long, cleft ½ or less the length of the petal.

Habitat and ecology: Rare in wet meadows, fens, along streams, and near springs; 8,600-11,110 ft.

Stellaria longipes Goldie

longstalk starwort

Caryophyllaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: STLO2

Key characteristics:

- Stems simple or branched, glabrous, 4-18 cm long; often forming rhizomatous clumps
- **Leaves sessile**, linear, **1.5-5.5 cm long**; sometimes **ciliate near the base**
- Flowers terminal and solitary or in few-flowered cymes
- Sepals 3.5-6 mm long
- Petals 5, **equal to or longer than the sepals**, white, **two-lobed less than 1/2 the petal length**

Similar species: *S. longifolia* is rare and has similar leaves 1.5-5.5 cm long, but widest at or above the middle without ciliate hairs, and stems 10-55 cm long; the petals cleft ¾ or more the petal length. *S. crassifolia* can also be clump forming but has shorter, rounder leaves 0.5-1.5 cm long.

Habitat and ecology: Occasional in wet meadows, stream banks, margins of ponds and lakes, and on well-drained rocky slopes; 7,000-11,800 ft.

Comments: This species can do well in disturbed conditions due to its phenotypic plasticity and reproductive biology.

Swertia perennis L.

felwort

Gentianaceae









All photos - © Sam Kurkowski, 1

Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SWPE

Key characteristics:

- Stems usually solitary and unbranched, 10-50 cm tall
- **Basal leaves crowded and prominent** with a long petiole, obovate or spatulate, 4-20 cm long
- Stem leaves few, opposite, and reduced in size up the stem
- **Flowers are blue-purple** or occasionally nearly white, corolla dividing into 5 narrowly lanceolate petals streaked with green or purple. Flowers 5 to numerous per stem
- Fruit capsule is ~1 cm long, smooth, and egg shaped

Similar species: Only one of its genus in the Uinta Mtns. *Lomatogonium rotatum* lacks basal leaves, only has smaller stem leaves, and flowers are wider and lighter in color.

Habitat and ecology: Occasional in wet meadows, fens, and along streams; 8,500-11,500 ft.

Symphyotrichum spathulatum (Lindl.) G.L.Nesom

western mountain aster

Asteraceae



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S. spathulatum: loosely overlapping involucral bracts

S. ascendens: strongly overlapping involucral bracts



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: Aster spathulatus Lindl.
USDA PLANTS symbol: SYSP

Key characteristics:

- Stems solitary or few together, softly villous, 10-50 cm tall
- Leaves 1-10 cm long, narrowly lanceolate and entire, glabrous to puberlent
- Inflorescence has 3-7 (up to 15) showy flower heads arranged in a corymb
- **Involucral bracts in 3-5 series**, ~1mm wide, thinly ciliate, **loosely imbricate (loosely overlapping)**
- Flowers blue or purple with many petals, yellow disc florets at the center; pappus whiteish

Similar species: *S. ascendens* has involucral bracts that are strongly imbricate. *Symphyotrichum* spp. can be differentiated from *Erigeron* spp. as having 3-5 series of involucral bracts instead of 1.

Habitat and ecology: Occasional on fen margins. Widespread along streams and in meadows, sometimes in aspen and coniferous woods; 7,500-10,400 ft.

Comments: *Symphyotrichum* used to belong to the *Aster* genus but was separated as the North American asters. There are many species in this genus that occur in the Uinta Mtns. However, they are primarily upland species found in drier habitats, so only one is included here.

Thalictrum alpinum L.

alpine meadow-rue

Ranunculaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: THAL

Key characteristics:

- Stems erect and scapose, **5-30 cm tall**
- **Leaves all basal or with a small leaf near the base**; 2-8 cm long with segments 3-8 mm long
- Inflorescence occasionally drooping, flowers borne in racemes or panicles
- Flowers perfect with anthers 1.5-3 mm long

Similar species: There are 4 other species of *Thalictrum* in the Uinta Mtns. but all have leaves on their stems.

Habitat and ecology: Uncommon in wet meadows, fens, and conifer communities on or near limestone; 8,600-9,200 ft.

Trollius albiflorus (A.Gray) Rydb.

American globeflower

Ranunculaceae









All photos - © Sam Kurkowski, 1

Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: TRAL8

Key characteristics:

- Stems stocky and glaucous, usually tufted from a caudex; 20-60 cm tall
- **Leaves palmately divided, the lobes incised and toothed**
- Sepals petaloid, 5-15, white to cream, forming a bowl; quickly deciduous
- Fruit made of folicles 8-12 mm long, each many seeded

Similar species: *Caltha leptosepala* has elliptic leaves without incised lobes and slightly smaller flowers.

Habitat and ecology: Does best in wet, boggy areas. Occasional along streams, in meadows, fens, and conifer forests; 9,000-10,800 ft.

Comments: This species is an early bloomer, flowering soon after snowmelt in wet places, often seen with *Caltha leptosepala*.

Valeriana edulis Nutt.

tobacco root

Caprifoliaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VAED

Key characteristics:

- Stems erect and glabrous, 10-100 cm tall
- Basal leaves linear, 7-40 cm long, gradually tapering into an indistinct petiole
- Cauline leaves 1-3 pairs, sessile, pinnatifid with 3-9 lobes
- Inflorescence a compact or elongated panicle with several segments
- Flowers small and white with long styles protruding out of the flower

Similar species: The inflorescence resembles *Toxicoscordion venenosum* but is distinguishable by its broader leaves and smaller flowers.

Habitat and ecology: A generalist wetland species, less likely to be seen in fens. Occasional in riparian, wet and dry meadows, aspen, and open coniferous forest, rarely sagebrush; 7,500-10,700 ft.

Comments: This species has an unpleasant smell, similar to a wet bed or old foot locker.

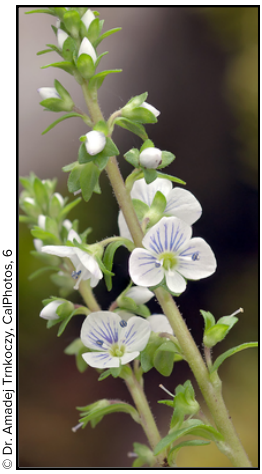
Veronica serpyllifolia L.

thyme-leaf speedwell

Plantaginaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 3
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VESE

Key characteristics:

- Stems **ascending or decumbent**, **glabrous** to finely puberulent; 4-30 cm tall
- Leaves opposite, sessile, elliptic to ovate, and entire
- **Inflorescence a terminal raceme, elongated and scarcely head-like**
- Flowers blue or white with blue stripes, 4 petals, 3-5 mm wide
- **Style 2.2-3 mm long**, longer than the notch of the fruit

Similar species: *V. wormskjoldii* has a style 0.8-1.3 mm long and its inflorescence is a dense head-like cluster.

Habitat and ecology: Occasional in lake margins, wet meadows, and along streams, often under willows; 7,500-11,000 ft.

Veronica wormskjoldii Roem. and Schult.

alpine speedwell

Plantaginaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VEWO2

Key characteristics:

- Stems **erect and unbranching**, with sparse to dense **villous hairs**; 8-30 cm tall
- Leaves opposite, sessile, elliptic to lanceolate, and entire
- **Inflorescence a terminal, clustered head of flowers**
- Flowers blueish purple with 4 petals, 5-10 mm wide
- **Style 0.8-1.3 mm long**, longer than the notch of the fruit

Similar species: *V. serpyllifolia* has a style 2.2-3 mm long and its inflorescence is elongate and not head-like.

Habitat and ecology: Common in wet meadows and along streams and lake margins with sedges and willows; 8,100-11,200 ft.

Viola nephrophylla Greene

northern bog violet

Violaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S5
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VINE

Key characteristics:

- Stems 4-20 cm tall from rhizomes, lacking stolons
- **Leaves prominently crenate**, cordate, 2-7 cm long
- **Flowering stems with leaves borne on the lower 1/4 of the stem**
- Petals mostly light to deep violet, the lateral pair **bearded with crinkled white hairs**

Similar species: *V. palustris* lacks leaves on flowering stems, has glabrous or sparsely bearded petals, and weakly crenate leaves.

Habitat and ecology: Occasional in moist or wet places in bogs, marshes, seeps, meadows, and stream banks; 5,000-10,000 ft.

Viola palustris L.

marsh violet

Violaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VIPA4

Key characteristics:

- Stems 3-19 cm tall from rhizomes and creeping stolons
- **Leaves weakly crenate to entire**, cordate, 0.5-3.5 cm long
- **Flowering stems without leaves**, arising separately from rhizomes
- Petals pale lavender, the lower petals with purple lines; lateral pair **glabrous or sparsely bearded** toward the base

Similar species: *V. nephrophylla* has leaves on the lower 1/4 of flowering stems, bearded petals, and prominently crenate leaves.

Habitat and ecology: Common in wet meadow and streamside communities; 8,000-10,000 ft. Often seen in fens.

Anticlea elegans (Pursh) Rydb.

mountain deathcamas

Melanthiaceae







All photos - © Sam Kurkowski. 1

Wetland indicator status: FACU
Native status: Native
Conservation status: G5 S2S3
C-Value: 6
Duration: Perennial
Synonyms: *Zigadenus elegans* Pursh
USDA PLANTS symbol: ANEL5

Key characteristics:

- Stems erect, 12-80 cm tall
- Leaves basal with long sheaths, blades 8-30 cm long and slightly keeled
- Inflorescence a raceme of many **rather widely spaced flowers**
- Flowers cream to greenish, 7-11 mm long, bearing an obcordate gland at the base of each petal

Similar species: *Toxicoscordion venenosum* has a more densely packed raceme and smaller flowers (petals 3-7 mm) with entire glands.

Habitat and ecology: Common in wet and dry meadows, along streams, aspen and coniferous forest communities, and alpine tundra at 5,600-8,500 ft.

Camassia quamash (Pursh) Greene

blue camas

Asparagaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2S3
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAQU2

Key characteristics:

- Stems simple, unbranched and erect, 30-70 cm tall
- Leaves long and linear, shorter than the inflorescence, 3-6 from the stem base
- Flowers are purplish blue or rarely white with 6 petals and long protruding stamens
- Inflorescence a compact raceme with numerous flowers

Similar species: *Anticlea elegans* and *Toxicoscordion venenosum* have similar plant and inflorescence structure, but lack the elongated narrower petals and the flowers are always white. *C. quamash* can have purple or white flowers.

Habitat and ecology: Common in sagebrush-grass and wet and dry meadow communities, often where wet in spring; 6,200-8,000 ft. Less likely to see in fens.

Neottia borealis (Morong) Szlach.

northern twayblade

Orchidaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S1
C-Value: 8
Duration: Perennial
Synonyms: *Listera borealis* Morong
USDA PLANTS symbol: NEBO2

Key characteristics:

- Stems glabrous below and minutely puberlent above, 5-18 cm tall
- Leaves 2, subopposite, **elliptic** to suborbicular
- Raceme with few **flowers pale or yellowish green**
- **Flower lip is notched at the bottom with rounded lobes, not tapered**
- Flowers puberulent at least along the margins; 8-13 mm long

Similar species: The lip of the *N. cordata* flower is split into two pointed lobes and has subcordate leaves.

Habitat and ecology: Rare in mossy, boggy places in shade of coniferous trees; 9,320-9,560 ft.

Comments: This species' primary range is the Rocky Mountains and Canada. It is most likely to be found in moist humus of coniferous forests or along shaded streams but may appear on the margins of fens.

Neottia cordata (L.) Rich.

heartleaf twayblade

Orchidaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S1
C-Value: 9
Duration: Perennial
Synonyms: *Listera cordata* (L.) R.Br.
USDA PLANTS symbol: NECO12

Key characteristics:

- Stems glabrous, 6.5-25 cm tall
- Leaves 2, opposite, **subcordate**
- Raceme with more dense **flowers purplish or greenish yellow**
- **Flower lip is split for about 1/2 its length into two pointed lobes**
- Flowers glabrous; 3-6 mm long

Similar species: The lip of the *N. borealis* flower is notched at the bottom into two rounded lobes and has elliptic leaves

Habitat and ecology: Rare along streams, and in seeps and wetlands usually in shade of coniferous trees; 7,500-9,560 ft.

Comments: This species' primary range is the Rocky Mountains and Canada. It is most likely to be found in moist humus of coniferous forests or along shaded streams but may appear on the margins of fens.

Platanthera aquilonis Sheviak

northern green orchid

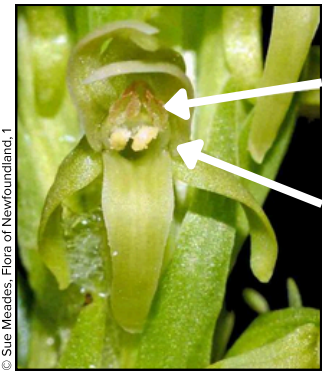
Orchidaceae



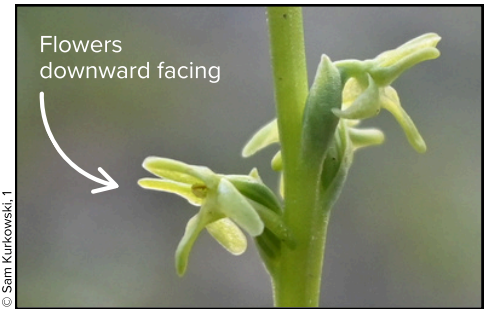
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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PLAQ2

Key characteristics:

- Stems slender or stout, leafy, 5-60 cm tall
- **Flowers greenish yellow**, not usually fragrant; **downward facing**
- Flower lip is somewhat wider at the base and tapers gradually
- **Two anther sacs are positioned diagonally**, with the tips closer than the bases
- Pollinia fall out of the anther sacs and self pollinate the flower

Similar species: *P. huronensis* and *P. dilatata* both have outward facing flowers that are whiter, with vertically positioned anther sacs and more abruptly tapering lips.

Habitat and ecology: Rare in fens, wet meadows, stream banks, seeps, and other wet places; 7,100-10,000 ft.

Comments: This species has **almost no aroma, but can be slightly sweet smelling**. Its downward facing flowers and pollinia rotating forward out of the pollen sacs allow the pollen to fall onto the stigma and self pollinate.

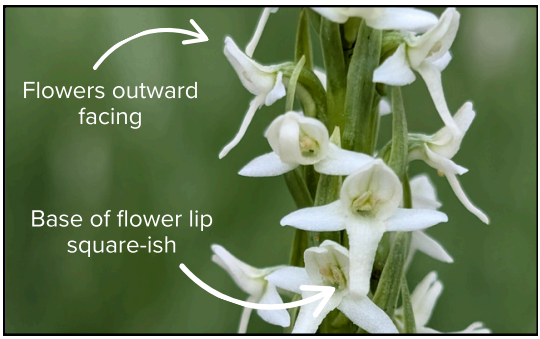
Platanthera dilatata (Pursh) Lindl. ex L.C.Beck

white bog orchid

Orchidaceae



All photos - © Sam Kurkowski, 1





Wetland indicator status: FACW
Native status: Native
Conservation status: G5T5 S2
C-Value:7
Duration: Perennial
Synonyms: *Habenaria dilatata* (Pursh) Hooker
USDA PLANTS symbol: PIDI3

Key characteristics:

- Stems slender or stout, leafy, 15-120 cm tall
- **Flowers white**, rarely pale green, fragrant spicy or clove-like smell; **outward facing**
- **Flower lip abruptly widened toward the base, forming a square-ish shape**
- Two anther sacs are positioned nearly vertically, with the tips and bases at equal distances
- Pollinia remain in the anther sacs until disturbed by an insect pollinator

Similar species: *P. huronensis* is most similar, but has greenish flowers and the lip widens less abruptly. *P. aquilonis* has yellow-green, downward facing flowers with diagonally positioned anther sacs and pollinia falling out.

Habitat and ecology: Uncommon in meadows and fens, wet places, about springs, and along streams; 7,300-10,000 ft. Of the three *Platanthera* species, this is the most common.

Comments: This species has a particularly **strong scent, often described as spicy or clove-like**. It is a widespread species split into 3 varieties based on spur length and shape.

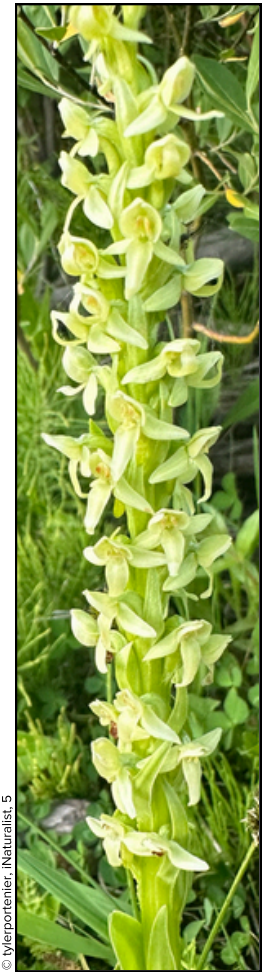
Platanthera huronensis Lindl.

Huron green orchid

Orchidaceae



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Anther sacs vertical, pollinia remain in sacs



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Flowers outward facing



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 6
Duration: Perennial
Synonyms: *Habenaria hyperborea* var. *huronensis* (Nutt.) Farw.
USDA PLANTS symbol: PLHU2

Key characteristics:

- Stems slender or stout, leafy, 15-100 cm tall
- **Flowers greenish white**, usually fragrant; **outward facing**
- Flower lip wide at the top, then tapers abruptly at the base
- **Two anther sacs are positioned nearly vertically**, with the tips and bases at equal distances
- Pollinia remain in the anther sacs until disturbed by an insect pollinator

Similar species: *P. dilatata* is most similar but has white flowers and the lip widens abruptly at the base, forming a squarish shape. *P. aquilonis* has yellow-green, downward facing flowers with diagonally positioned anther sacs and pollinia falling out.

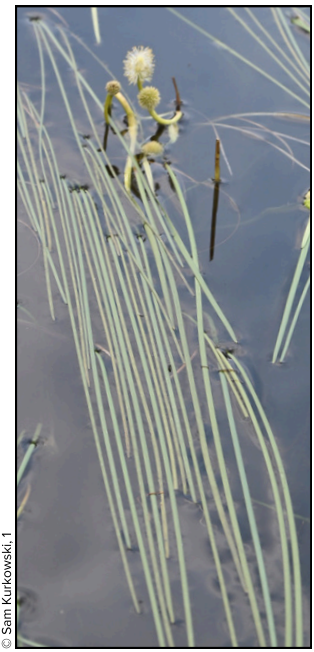
Habitat and ecology: Uncommon in fens, wet meadows, stream banks, seeps, and other wet places; 6,500-10,000 ft.

Comments: This species has a **strong sweet scent**.

Sparganium angustifolium Michx.

narrowleaf bur-reed

Typhaceae



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S. angustifolium



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S. natans



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S. emersum



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SPAN2

Key characteristics:

- Stems emergent or floating, 10-40 cm tall
- Leaves flat, most floating, 1-8 mm wide
- Flower clusters unbranched, usually **2-5 male heads crowded at the tip** of the stem and 2-4 female heads below
- Fruiting heads 1-2 cm wide, **fruit with straight beaks 1.5-2 mm long**, shorter than the body

Similar species: *S. natans* is rare and smaller with a single male head at the stem tip and fruit with short, stubby beaks >1.5 mm long. *S. emersum* has fruit with beaks 3-4 mm long, sometimes with floating leaves but mostly with erect or aerial leaves.

Habitat and ecology: Most likely to be seen in pools within or adjacent to fens. Occasional, floating or submersed in the shallow water of pools, ponds, and lake margins; 8,700-10,500 ft.

Spiranthes romanzoffiana Cham.

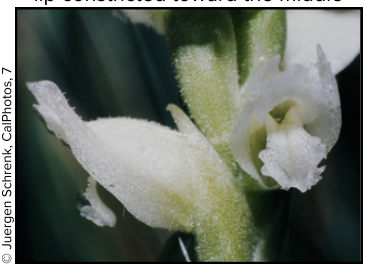
hooded lady's tresses

Orchidaceae



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S. romanzoffiana:
lip constricted toward the middle



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S. diluvialis:
larger, ovate shaped lip



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SPRO

Key characteristics:

- Stems one to several, arising from basal leaves, typically 8-55 cm tall
- Leaves mostly basal, linear to oblong, glabrous and waxy; leaves extending up the stem are sheathing and often lack a leaf blade
- Flowers are cream to greenish white, upcurved, and spirally arranged in a dense spike
- Flowers have glandular hairy sepals that come together and form a tubular hood
- The lip of the petal is **sharply deflexed** away from the hood, recurved, and **constricted toward the middle (violin shaped)**, typically with 3 veins

Similar species: *S. diluvialis* is rare and found below 7,500 ft in elevation and has a larger, ovate shaped lip (lacking the violin shape) that is not recurved.

Habitat and ecology: Occasional in wet meadows, fens, open woods, and alpine tundra communities at elevations over 7,500 ft.

Comments: Differentiating species by flower morphology and elevation range are reliable. Plants known from above 7,500 ft is a key break.

Streptopus amplexifolius (L.) DC.

claspleaf twistedstalk

Liliaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: STAM2

Key characteristics:

- Stems usually branched, 30-100 cm tall
- Leaves auriculate-clasping, ovate, 5-15 cm long
- Flowers 1-2 from leaf axils on peduncles 1-5 cm long
- Flowers cup-shaped with segments recurved or spreading
- Fruit ovoid 10-18 mm long, yellowish white to red

Similar species: None of note. This is the only one of its genus in Utah and is quite distinct.

Habitat and ecology: In fens where woodlands meets sphagnum, and it moves into the sphagnum. Occasional along streams, usually in aspen and coniferous woods; 7,300-10,600 ft.

Toxicoscordion venenosum (S.Watson) Rydb.

meadow deathcamas

Melanthiaceae



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: *Zigadenus venenosus* S.Watson
USDA PLANTS symbol: ZIVEV

Key characteristics:

- Stems erect, 15-70 cm tall
- Leaves mostly basal, blades 10-35 cm long and keeled; reduced upward
- **Inflorescence a raceme of many densely packed flowers**
- Flowers cream, **3-7 mm long**, bearing an entire gland at the base of each petal
- Petals with a claw to 1 mm or more

Similar species: *Anticlea elegans* has a more open raceme and larger flowers (petals 7-11 mm long) with obcordate glands.

Habitat and ecology: Common in ephemerally wet or moist meadows and at the edges of permanently wet meadows at 7,560-8,000 ft.

Triglochin palustris L.

marsh arrowgrass

Juncaginaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2S3
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: TRPA28

Key characteristics:

- Stems erect and arising singly from short rhizomes; **15-30 cm tall**
- Leaves mostly basal, linear and threadlike to somewhat folded, 2-28 cm long
- Inflorescence a narrow, sparse raceme with many flowers
- Flowers yellowish or greenish and rotund with a small tuft of pinkish or purplish hairs at the apex
- **Fruit linear**, forming an elongated oval **5-9 mm long** with the carpels making up segments of the fruit

Similar species: *T. maritima* is larger and more robust at 30-100 cm tall, with fruit more oblong than linear, 3-6 mm long, and rounded instead of tapered at the base.

Habitat and ecology: Occasional in fens, wet meadows, and along streams; 8,000-9,800 ft.

Veratrum californicum Durand

corn lily

Melanthiaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VECA2

Key characteristics:

- Stems 1.5-2 m tall, glabrous below, becoming tomentose above
- Leaves cauline, ovate and sheathing basally, 10-30 cm long; creased throughout
- Panicle many-flowered, 20-60 cm long, branches spreading
- Flowers white, greenish at the base, with 6 petals
- Capsules 2-3 cm long, seeds broadly winged

Similar species: None of note. This is the only one of its genus in Utah and is quite distinct.

Habitat and ecology: Common in meadows and wet places, or stream banks in tall forb, aspen, and spruce-fir communities; 7,500-11,000 ft. Less likely to be seen in fens.

Agrostis scabra Willd.

ticklegrass

Poaceae



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glumes with a scabrous keel



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 S3
C-Value: 3
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: AGSC5

Key characteristics:

- Culms solitary or tufted, 15-60 cm tall
- Leaves basal and cauline, up to 2 mm wide and flat
- Panicle open to diffuse, often over 2 cm wide; branches ascending to widely spreading, rebranching at or above mid-length
- **Spikelets small with a single floret**, mostly purple at maturity
- Palea less than half as long as the lemma, glumes not equal in length and exceeding the lemma; **lemmas occasionally with awns 0.5-2 mm long from about mid-length; glumes with a scabrous keel**

Similar species: *Deschampsia cespitosa* is similar in structure but has 2-3 florets in each spikelet and lemmas are awned from below the middle. *A. stolonifera* has a palea more than ½ as long as the lemma.

Habitat and ecology: Occasional in a variety of plant communities in wet to rather dry places, including disturbed habitats; 6,100-10,800 ft. Plants mostly growing above 9,500 ft is key break.

Comments: This plant has the appearance of a pink cloud when in large clumps in early summer.

Alopecurus aequalis Sobol.

short awn foxtail

Poaceae



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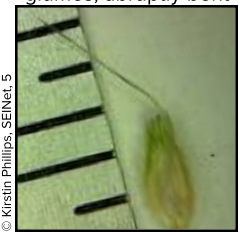
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A. aequalis: awn shorter or scarcely exceeding the glumes



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A. geniculatus: awn longer than the glumes, abruptly bent



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 3
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ALAE

Key characteristics:

- Culms 8-60 cm tall, bending abruptly in places, occasionally rooting at the lower nodes
- Leaves flat, to 6 mm wide, glabrous or scabrous with a membranous ligule
- Panicle spikelike, cylindrical, 1.5-8 cm long and less than 7 mm wide
- Spikelets densely packed and strongly flattened, pale green
- **Awn shorter than or scarcely exceeding the glumes, 0.7-2.5 mm long, nearly straight**

Similar species: *A. geniculatus* is an introduced species with awns exserted beyond the glumes, 5-8 mm long and abruptly bent, giving the spike a fluffier appearance.

Habitat and ecology: Common in wet places, primarily pond and lake margins and marshes; 7,000-10,500 ft. Can be partly submerged for some of the season and often grows outward, over or into open water.

Alopecurus magellanicus Lam.

alpine foxtail

Poaceae



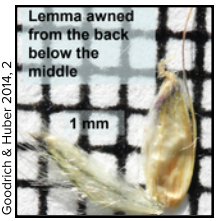
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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2S3
C-Value: 6
Duration: Perennial
Synonyms: *Alopecurus alpinus* Sm.
USDA PLANTS symbol: ALMA8

Key characteristics:

- Rhizomatous, with culms 10-80 cm tall, bending slightly but mostly straight; solitary or in small tufts
- Leaves flat, 1-7 mm wide, glabrous or scabrous with a membranous ligule; **ligules < 3 mm**
- Panicle spikeline, ovoid, 1-4 cm long and ~16 mm wide
- Spikelets densely packed and flattened, pale and tinged with purple; disarticulating below the glumes.
- **Glumes pubescent throughout; awn arising below midpoint of the lemma**, 3.5-7 mm long

Similar species: *Phleum alpinum* has a similarly shaped inflorescence but its lemmas lack awns and the glumes are awn-pointed; spikelets disarticulate above the glumes (glumes stay attached to the rachis)

Habitat and ecology: Occasional in mesic to wet meadows and along streams; 7,600-10,200 ft.

Comments: This species has an arctic-alpine to subalpine circumpolar distribution, and the purple tint of the plant increases to the north.

Anthoxanthum nitens (Weber) Y. Schouten and Veldkamp

sweetgrass

Poaceae


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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: *Hierochloe hirta* (Schrank) Borbás, *Anthoxanthum hirtum* (Schrank) Y. Schouten & Veldkamp, *Hierochloe odorata* (L.) Beauv.
USDA PLANTS symbol: ANNI3

Key characteristics:

- Culms solitary or few together from slender rhizomes, 20-50 cm tall
- Leaf sheaths open, blades of the culm reduced upward; upper most blade triangular and not over 1 cm long
- Leaves of sterile shoots are longer and **sweet smelling**
- Panicle open; **branches wavy** and spikelets spread widely or compressed
- Glumes almost as long as the spikelet, lemmas barely longer than the glumes; translucent or greenish, maturing to yellow-brown

Similar species: None of note. This species has distinctive looking wavy branching and bulbous spikelets, and the sweet smell of the leaves is unique.

Habitat and ecology: Occasional in fens, wet meadows, moist slopes, and streambanks; 7,400-11,500 ft.

Calamagrostis canadensis (Michx.) P.Beauv.

bluejoint

Poaceae


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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CACA4

Key characteristics:

- **Rhizomatous, colony forming**; culms 0.5-1.5 m tall with conspicuous joints or bends
- **Leaves flat and lax, 3-10 mm wide**, scabrous; ligule 3-10 mm long
- **Panicle open and generally > 3 cm wide**, occasionally dense and narrow; branches strongly ascending or spreading, to 5 cm long
- **Awns** of lemmas mostly straight, included within the glumes and **attached near the middle of the lemma**; glumes purple tinged
- Callus hairs 1/2 to as long as the lemmas

Similar species: *C. stricta* has leaves ascending and firm, sometimes involute, 3-6 mm wide; ligule 1-5 mm long. The panicle is contracted and generally less than 3 cm wide with branches up to 3 cm long; awns attaching below the middle of the lemma. Plants more tufted and shortly rhizomatous, also from moist to wet places.

Habitat and ecology: Common in wet meadows, fen edges, along stream banks, in thickets, and moist woods; 7,400-11,000 ft.

Comments: This species is the dominant wetland grass in some moist to wet areas, forming large dense patches.

Catabrosa aquatica (L.) P.Beauv.

water whorlgrass

Poaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAAQ3

Key characteristics:

- Culms erect or decumbent, freely rooting at the lower nodes, 5-70 cm tall; stoloniferous or rhizomatous
- Leaves lax, typically prow shaped at the tips, 3-8 mm wide; sheaths glabrous
- Panicle open, the branches ascending to widely spreading
- Spikelets with 1-3 flowers, **without hairs**
- **Glumes blunt and erose, both averaging shorter than the lowermost lemma**, if only slightly

Similar species: This species is the only one of its genus in Utah but mildly resembles *Calamagrosis species*. It is best distinguished by its lack of hairs on each spikelet, glumes shorter than the lowest lemma, and its tendency to root at the nodes.

Habitat and ecology: Aquatic grass growing on the edge of or out into water bodies. Most likely to be seen on the edges of open water pools in fens. Common in springs, slow-moving streams, marshes, and wet meadows; 4,300-10,600 ft.

Danthonia intermedia Vasey

timber oatgrass

Poaceae



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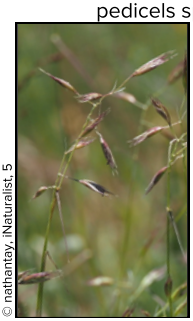


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D. californica: pedicels spreading



© nathantay, iNaturalist, 5



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D. intermedia: pedicels erect



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: DAIN

Key characteristics:

- Culms **densely tufted**, 10-50 cm tall
- Leaves 1-4 mm wide, stiffly erect and spreading; glaborous or with sparse long hairs; **ligule of hairs ~1 mm long**
- Panicle narrow, 3-6 cm long with 4-12 spikelets
- **Pedicels short and erect**, lowermost somewhat spreading
- Glumes often purple tinged

Similar species: The inflorescence of *D. californica* has 2-5 spikelets with spreading pedicels 5-30 mm long; it is a strictly dry meadow species that is found below 9,700 ft.

Habitat and ecology: Generally grows in drier habitat but may come up in fen margins. Common in subalpine meadows, along streams, open coniferous forests, and alpine up to 11,200 ft.

Deschampsia cespitosa (L.) P.Beauv.

tufted hairgrass

Poaceae



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early season color



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late season color



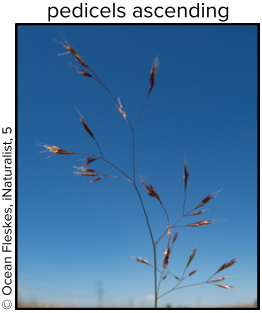
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D. elongata:
pedicels very appressed



© Peter Zika, iNaturalist, 5

D. danthonoides:
pedicels ascending



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: DECE

Key characteristics:

- Stems tufted, 20-80 cm tall
- Leaf sheaths open, ligules membranous 3-7.5 mm long; leaves mostly basal, blades flat or folded, 1-3 mm wide
- **Panicle an open pyramid, at times nodding**; branches erect to ultimately widely spreading
- Florets green with purple tinge in early season, and purple with gold tinge in late season
- **Spikelets usually with 2 fertile florets** (ranging 1-3), disarticulating above the glumes
- Glumes becomes silvery, tawny, or purplish at the tip; **lemmas awned from mid-length, 1-5 mm long**

Similar species: The pedicels of *D. elongata* and *D. danthonioides* are somewhat appressed or ascending, forming a narrow inflorescence. *Agrostis scabra* has only one fertile florets in each spikelet and lemmas occasionally have awns 0.5-2 mm long.

Habitat and ecology: Common in fens and along their margins. Common in moist to wet meadows, in alpine, along streams, and in coniferous woods 7,000-12,500 ft.

Comments: This is a very commonly encountered plant in the alpine, and occurs in many different plant communities with a wide variety of soil moisture from wet to very dry.

Glyceria borealis (Nash) Batch.

northern managrass

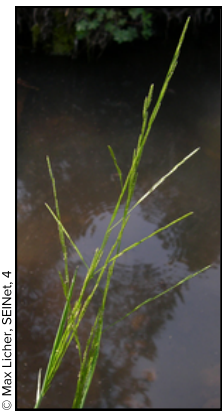
Poaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GLBO

Key characteristics:

- Culms rhizomatous and erect or decumbent; 60-150 cm tall
- Leaf sheaths open 1-4 cm; blades flat or folded and glabrous to papillose on the upper surface; ligule 4-12 mm long
- Panicle narrow with **erect branches, spikelets appressed** to the branches
- **Spikelets linear, 4-5 times longer than wide**
- Glumes blunt; lemmas more or less flattened on the back, prominently nerved and green or tawny with **membranous margin at the tip**

Similar species: *G. striata* has an open panicle with drooping branches and much rounder spikelets. *G. grandis* also has an open, drooping panicle but its narrower spikelets are purple at maturity, not membranous, and not as long.

Habitat and ecology: On wet edges or in pools within fens. Widespread in wet places and in standing water up to 1 ft deep; 7,360-10,760 ft. More common on the south slope of the Uintas.

Comments: This species can have its early leaves floating on the surface of water. These leaves are abruptly tapered and have a prominent midvein.

Glyceria grandis S.Watson

American managrass

Poaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GLGR

Key characteristics:

- Culms rhizomatous, erect or decumbent, 50-200 cm tall
- Leaves sheaths closed; blades flat, glaberous to scaberulous; ligules of upper stem leaves 4-9 mm long
- Panicle open, **branches often drooping**
- **Spikelets lanceolate, appearing narrower and more pointed**
- Glumes acute; lemmas elliptic and purple at maturity, **not distinctly membranous at the tips**

Similar species: Similar to *G. striata*, but averaging somewhat taller and with spikelets darker purple at maturity, appearing narrower and more pointed due to narrower, acute glumes.

Habitat and ecology: Occasional in meadows, along streams, seeps, and springs, occasionally partially submerged; 5,500-8,000 ft.

Glyceria striata (Lam.) Hitchc.

fowl managrass

Poaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GLST

Key characteristics:

- Culms rhizomatous and erect or decumbent; 30-100 cm tall
- Leaf sheaths closed; blades flat and glaberous; ligule 1-4 mm long
- Panicle open, **branches usually drooping**
- **Spikelets ovate, less than 3 times longer than wide**
- Glumes blunt; lemmas obovate, green or purple tinged with **membranous margin at the tip**

Similar species: *G. grandis* has narrower spikelets that are purple at maturity and not membranous, with ligules 4-9 mm long. *G. borealis* has a narrower panicle with much narrower, appressed spikelets that are distinctly nerved.

Habitat and ecology: Common in wet places and along stream banks in woods; 7,000-10,500 ft.

Muhlenbergia andina (Nutt.) Hitchc.

foxtail muhly

Poaceae



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M. andina: early and late season panicles



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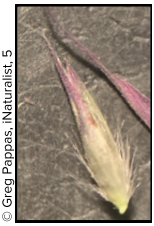


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M. glomerata

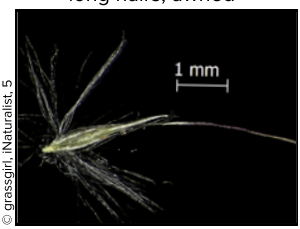


M. glomerata: short hairs



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M. andina: long hairs, awned



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Wetland indicator status: FAC
Native status: Native
Conservation status: G4 S3
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: MUAN

Key characteristics:

- Culms round, rhizomatous; 25-60 cm tall
- Leaves 5-15 cm long; ligule truncate, 0.5-1.3 mm long
- **Panicle spikelike**, often compact and interrupted or lobed; branches erect-appressed
- Spikelets 1-flowered, whitish to gray green, occasionally purple tinged
- **Lemmas with hairs at least as long as the lemma; awn of lemma 2-8 mm long**

Similar species: *M. glomerata* has hairs much shorter than the lemmas, which are awnless or awn tipped.

Habitat and ecology: Uncommon adjacent to streams, in riparian communities and seeps; 4,900-10,080 ft.

Muhlenbergia filiformis (Thurb.) Rydb.

pullup muhly

Poaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: MUFI2

Key characteristics:

- **Culms flat**, slender, 2-30 cm tall; **roots fibrous and forming clumps, rhizomes lacking; plants annual**
- Leaves rarely more than 3 cm long; ligule obtuse, 1-3.5 mm long
- **Panicle linear, usually interrupted**, short branches erect
- Spikelets 1-flowered, greenish to pale dark gray
- Glumes much shorter than the lemma; **lemma with sparse short hairs laterally or along the midrib**

Similar species: *M. richardsonis* is from sagebrush and rocky habitats; similar in size and panicle but is perennial and rhizomatous, although it does form mats; lemmas glabrous. *Podagrostis humilis* has a similar panicle but has round culms and glumes about as long as the lemma.

Habitat and ecology: Occasional in wet meadows, fens, stream sides, and other wet places; less frequent in rather dry coniferous woods or sagebrush-grass communities; 7,500-10,500 ft.

Phleum alpinum L.

alpine timothy

Poaceae


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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PHAL2

Key characteristics:

- Culms often solitary, not bulblike at the base; 10-50 cm tall
- Sheath of the uppermost leaf inflated; **ligules > 3 mm long**
- Panicle often less than 4 cm long and 1 cm wide or wider; purplish
- **Glumes with spreading hairs on the keel, awn pointed;** to 1 mm long, awns 1.5-3.5 mm long; disarticulating above the glumes
- **Lemmas awnless**

Similar species: *Alopecurus magellanicus* has a similarly shaped inflorescence but its lemmas have awns 3.5-7 mm long from below the midpoint, and its glumes are awnless; spikelets disarticulate below the glumes (glumes do not stay attached to the rachis).

Habitat and ecology: Most likely to be seen on fen margins. Common in meadows, woods, along streams, and above timberline; 7,500-11,500 ft.

Poa cusickii Vasey

Cusick's bluegrass

Poaceae



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P. cusickii: lemmas glabrous



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P. fendleriana: lemmas pubescent

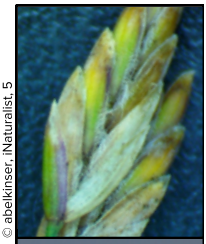


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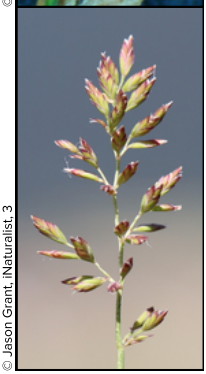


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P. compressa: open panicle



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Wetland indicator status: UPL
Native status: Native
Conservation status: G5 S1S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: POCU3

Key characteristics:

- **Culms strongly tufted** but rhizomatous, 20-50 cm tall
- Basal leaves usually abundant; leaf sheaths closed about half their length, often papery
- **Panicle ovoid and compact**, 2-3 cm long, branches less than 1 cm long
- **Panicle pale and shining**, sometimes with a purplish tinge
- Glumes and lemmas keeled; **lemmas glabrous**

Similar species: *P. fendleriana* is of lower, drier places and is pubescent on the keel of the lemmas. *P. compressa* is of moist places with culms arising singly, strongly flattened, and a more open panicle with erect branches, lemmas usually bronze-tipped and pubescent.

Habitat and ecology: Most likely to be seen on fen margins or hummocks. Infrequent in subalpine meadows and on alpine ridges, to around timberline.

Comments: There are three varieties known in the Uinta Mountains. Plants known from hummocks of peatlands are likely *P. cusickii* var. *pallida*.

Poa leptocoma Trin.

marsh bluegrass

Poaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: POLE2

Key characteristics:

- Culms few in a tuft or solitary, 15-55 cm tall; rhizomes lacking, occasionally decumbent and rooting at nodes
- Leaf sheaths closed about half their length
- **Panicle open with spreading branches**, bearing spikelets on the outer half
- **Spikelets 4-7.5 mm long**
- Glumes and lemmas keeled; **lemmas with a tuft of cobweb-like hairs at the base but otherwise glabrous, 3-5 mm long**

Similar species: *P. reflexa* is of similar size and panicle shape, but has lemmas 2-3 mm long and sparsely hairy between the keel and marginal nerves; spikelets 3-4 mm long; lower panicle branches often reflexed.

Habitat and ecology: Occasional in fens, streambanks, moist and wet meadows, from subalpine to alpine elevations; 9,000-11,000 ft.

Comments: *P. leptocoma* and *P. reflexa* are very similar and it has been debated whether they should be recognized at the varietal level, instead of separate species.

Poa reflexa Vasey and Scribn.

nodding bluegrass

Poaceae



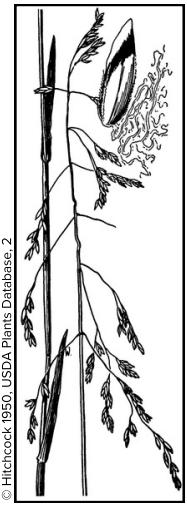
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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: PORE

Key characteristics:

- Culms solitary or loosely tufted, 5-50 cm tall
- Leaf sheaths open from 1/3 to 2/3 their length
- **Panicle open with spreading or reflexed branches**, bearing spikelets on the outer half
- **Spikelets 3-4 mm long**
- Lemmas **2-3 mm long**, some **sparsely hairy between the keel and nerves**; palea ciliate, sometimes minutely so

Similar species: *P. leptocoma* is of similar size and panicle shape, but has lemmas 3-5 mm long, glabrous between the keel and the nerves, and palea glabrous; spikelets 4-7.5 mm long.

Habitat and ecology: Occasional along streams in coniferous forests and meadows, and in alpine; 10,000-12,400 ft. Less likely to be seen in fens.

Comments: *P. leptocoma* and *P. reflexa* are very similar and it has been debated whether they should be recognized at the varietal level, instead of separate species.

Podagrostis humilis (Vasey) Björkman

alpine bentgrass

Poaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G4 SNR
C-Value: 8
Duration: Perennial
Synonyms: *Agrostis humilis* Vasey
USDA PLANTS symbol: POHU

Key characteristics:

- Tufted, culms mostly **less than 15 cm tall**
- Leaves mostly basal, blades up to 2 mm wide, rolled or flat
- **Panicle linear to narrowly pyramidal, 1-6 cm long**, branches erect, pedicels often spreading
- Spikelets purple or purple-tinged
- **Palea more than half as long as the lemma**, glumes barely exceeding the lemmas

Similar species: *P. thurberiana* is similar in structure but distinguished by longer culms, wider leaves, and larger panicle. *Agrostis verabilis* is intermediate in size between *P. thurberiana* and *P. humilis*, distinguished by size and palea less than half as long as the lemmas. *Muhlenbergia filiformis* is also small with a linear panicle but has a flat culm and glumes much shorter than the lemma.

Habitat and ecology: Occasional to common in wet meadows, fens, and on moist slopes; 9,700-11,500 ft.

Comments: Plants with somewhat open panicles are occasionally mistaken for the smaller phase of *Agrostis scabra*, distinguished by the length of palea.

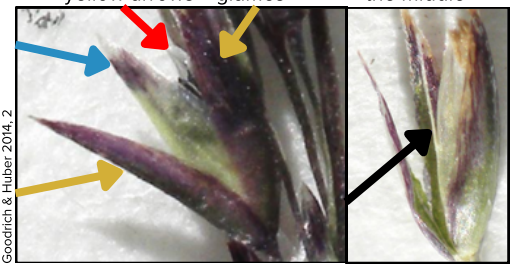
Podagrostis thurberiana (Hitchc.) Hultén

Thurber's bentgrass

Poaceae

P. thurberiana:
red arrow = palea
blue arrow = lemma
yellow arrows = glumes

Agrostis verabilis:
some lemmas have an awn attached near the middle



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: *Agrostis thurberiana* Hitchc.
USDA PLANTS symbol: POTH3

Key characteristics:

- Tufted, culms **15-35 cm tall**
- Leaves mostly basal, blades flat and 1-4 mm wide
- **Panicle linear to narrowly oblong, 1.5-15 cm long**, branches typically angled and scabrous
- Spikelets pale green to purple
- **Palea more than half as long as the lemma**, glumes barely exceeding the lemma

Similar species: *P. humilis* is similar in structure but distinguished by shorter culms, narrower leaves, and a smaller panicle. *Agrostis verabilis* is intermediate in size between *P. thurberiana* and *P. humilis*, distinguished by the palea less than half as long as the lemmas.

Habitat and ecology: Infrequent in wet meadows and wet places in aspen and coniferous forests; 10,000-11,000 ft.

Comments: This species is sometimes lumped with *P. humilis* as they are mainly different in size, and it was thought that their differences were driven by site conditions. However, both species have been found growing together and were able to be differentiated following keys.

Juncus alpinoarticulatus Chaix

northern green rush

Juncaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 8
Duration: Perennial
Synonyms: *Juncus alpinus* Vill.
USDA PLANTS symbol: JUAL4

Key characteristics:

- Stems **loosely tufted** from rhizomes; 5-40 cm tall
- **Leaves terete, hollow**, scarious sheath margins lead into auricles; borne on the lower 1/2 of stem
- Involucral bract 1-7 cm long, sometimes leaflike
- **Inflorescence openly branched, branches strongly ascending** with 3-25 small heads, each with 2-6 flowers
- Capsules slightly longer than the tepals, rounded at the tip

Similar species: *J. filiformis* and *J. arcticus* have leaves reduced to bladeless leaf sheaths and inflorescence with less elongated open branching.

Habitat and ecology: Infrequent in seeps, fens, lake margins, and along streams; 6,100-9,500 ft. Often occurring on limestone or other basic substrates.

Juncus arcticus Willd.

arctic rush

Juncaceae


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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 3
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUAR2

Key characteristics:

- Stems terete, **arising singly, few together, or tightly clustered from rhizomes**; 20-105 cm tall
- **Leaves reduced to bladeless sheaths**, occasionally tipped with a tiny bristle
- Involucral 4-20 cm long, appearing as a continuation of the stem; **inflorescence appearing well above the middle of the plant**
- Inflorescence branched, **loose and paniculate but sometimes headlike** with up to 75 flowers
- Tepals pale to dark brown, acute, 3.5-5 mm long; capsules equaling or exceeding the tepals

Similar species: *J. filiformis* has spherical capsules and a long involucral bract so the inflorescence appears at the middle of the plant. *J. alpinoarticulatus* has well developed leaves with a much more branched inflorescence.

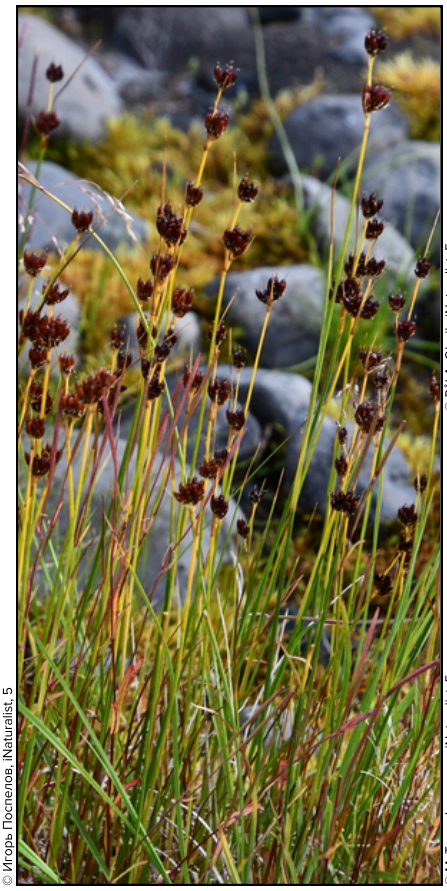
Habitat and ecology: Not as likely to be seen in fens but possible. Common throughout wetlands from the lowest elevations up to about 9,000 ft and rarely above.

Comments: Tolerant of alkali, persistent under heavy grazing. Very common in low elevation wetlands.

Juncus castaneus Sm.

chestnut rush

Juncaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S1
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUCA6

Key characteristics:

- **Stems arising singly or 2 together** from rhizomes; 7-22 cm tall
- Leaves folded below, channeled in the middle, and terete hollow at the top; sheaths poorly differentiated from blades, **without hyaline margins**; auricles lacking
- Involucral bract 1.5-3.5 cm long, **extending past the head**; scarious and broadly expanded below, then coming to a point
- **Inflorescence with 1-4 heads, each with 3-10 flowers**; chestnut to purple brown
- **Capsules longer than the tepals**, oblong, tapering into a stylar beak

Similar species: *J. triglumis* is densely clumped, has one solitary head with 2-5 flowers and capsules shorter or equaling the tepals; its leaf sheaths also have hyaline margins leading into auricles and the involucral bract extends well past the heads.

Habitat and ecology: Rare in moist and wet meadows and seeps of talus slopes; 11,200-11,800 ft.

Comments: This species is primarily found in Alaska and the Canadian arctic with disjunct populations scattered throughout the Rocky Mountains.

Juncus confusus Coville

Colorado rush

Juncaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUCO2

Key characteristics:

- Stems terete, **densely cespitose**; 8-50 cm tall
- Leaves basal or on lower 1/4 of stem, **channeled blades 5-15 cm long**; hyaline sheath margins lead into rounded auricles
- Involucral bract 1-10 cm long
- Inflorescence branched with **3-40 flowers, congested** but the flowers borne singly
- **Tepals light brown with hyaline margins extending to the tip**, 3-5 mm long; capsule slightly shorter than the tepals

Similar species: *J. drummondii* has 2-3 flowers, chestnut colored tepals with gold mid-stripes, and leaves reduced to bladeless sheaths. *J. arcticus* is rhizomatous instead of cespitose, and has up to 75 flowers on loose to compact branches and leaves as bladeless sheaths.

Habitat and ecology: Occasional in wet places in meadows, coniferous forests, and willow communities; 7,000-9,800 ft.

Juncus drummondii E.Mey.

Drummond's rush

Juncaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUDR

Key characteristics:

- Stems terete, **densely cespitose**; 8-40 cm tall
- Leaves on lower 1/4 of stem, **reduced to bladeless sheaths**
- Involucral bract shorter than or exceeding the inflorescence by 2 cm
- Inflorescence with **2-3 flowers borne on separate pedicels**, appearing well above the middle of the plant
- **Tepals chestnut colored with greenish gold midstripe**, 5-8 mm long; capsule about equaling the tepals

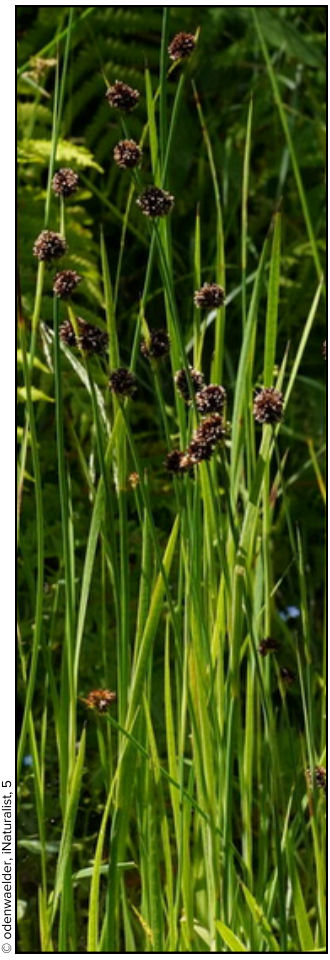
Similar species: *J. confusus* has many flowers borne on congested branches, tepals lighter in color with hyaline margins, and well developed channeled leaf blades. *J. hallii* has tan colored tepals and 3-loculed capsules.

Habitat and ecology: Most likely to be seen on fen margins or rocky areas. Common in wet and dry meadows, open slopes of the spruce-pine belt, and alpine communities in wet to dry rocky places; 9,000-11,400 ft.

Juncus ensifolius Wikstr.

swordleaf rush

Juncaceae


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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S5
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUEN

Key characteristics:

- **Stems flattened**, arising singly or loosely to densely tufted from rhizomes; 21-72 cm tall
- Leaves clustered on lower 1/2 of stem, **strongly folded and flattened**, the narrow edge toward the stem
- Broad scarious margins of the leaf sheaths extending onto the blade; auricles mostly lacking
- Involucral bract much reduced or leaflike, shorter than the inflorescence
- Inflorescence with **3 or more heads**, brown to nearly black in color
- Capsules shorter than or equaling the tepals

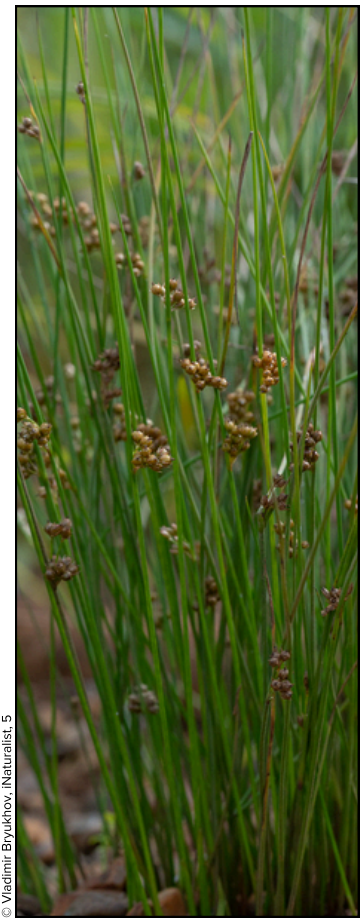
Similar species: *J. mertensianus* has leaves that are terete and hollow their whole length, and usually only 1 flower head.

Habitat and ecology: Common in wet places including seeps, pond margins, marshes, meadows, fens, and along streams; 7,000-10,500 ft.

Juncus filiformis L.

thread rush

Juncaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2S3
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUFI

Key characteristics:

- Stems terete, rarely over 1 mm in diameter; arising singly or in tufts from rhizomes; 5-40 cm tall
- **Leaves reduced to bladeless sheaths**, the upper one often tipped with a bristle <5 mm long
- **Involucral bract about as long as or longer than the stem**, appearing as a continuation of the stem
- Inflorescence compact with 5-20 flowers borne singly, **appearing at or below the middle of the plant**
- **Capsules spherical**, tapered to a stylar beak; tepals greenish to light brown

Similar species: All other rushes, including *J. arcticus*, have the inflorescence appearing near the top of the stem instead of near the middle. *J. alpinoarticulatus* also has well developed leaves and a much more branched inflorescence. The spherical capsules are also unique to this species.

Habitat and ecology: Occasional in wet meadows, stream banks, and other moist places; 9,000-10,500 ft.

Juncus hallii Engelm.

Hall's rush

Juncaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G4 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUHA

Key characteristics:

- Stems cespitose, rhizomes lacking; 20-40 cm tall
- Leaves basal or on lower 1/5 of stem, only the uppermost cauline leaf with a blade, lower ones often with a bristle
- Involucral bract 0.7-2.5 cm long, extending past the inflorescence
- Inflorescence with 2-7 flowers, rather congested but borne singly and not in heads
- **Capsules 3-loculed, retuse at the apex,** slightly emerging from the perianth
- **Tepals tan to light brown**, 4-5 mm long

Similar species: *J. triglumis* but has retuse, 3-loculed capsules and the flowers are borne singly, despite being congested and appearing as a head. *J. drummondii* has chestnut and gold tepals.

Habitat and ecology: Occasional at the edge of moist meadows along streams and pond margins, and in open woods in the lodgepole pine-Engelmann spruce belt; 9,700-11,000 ft.

Juncus mertensianus Bong.

Merten's rush

Juncaceae









All photos - © Sam Kurkowski, 1

Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUME3

Key characteristics:

- Stems arising singly or loosely to tightly clustered from rhizomes; 13-42 cm tall
- **Leaves terete their whole length, hollow**, blade distinct from sheath, the sheath with hyaline margins; auricles well developed
- Involucral bract 0.8-3.2 cm long, often awnlike and caudate
- **Inflorescence with 1 (rarely 2) heads**, blackish-purple in color
- **Capsules equaling or shorter than the tepals**

Similar species: *J. ensifolius* has leaves that are strongly folded and flattened, a flattened stem, and 3 or more flower heads. *J. castaneus* has capsules well exerted beyond the tepals and no hyaline sheath margins.

Habitat and ecology: Most likely to be seen on fen margins in rocky areas with shallow water. Occasional in open moist woods, streamside and wet meadows in the pine-spruce belt and alpine; 8,000-11,400 ft.

Juncus nevadensis S.Watson

Nevada rush

Juncaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUNE

Key characteristics:

- Stems arising singly or few together from rhizomes; 12-35 cm tall
- Leaves basal and cauline with well-developed, terete blades; sheaths have scarious margins projected into ligulelike auricles
- Involucral bract 1-3 cm long, bractlike to leaflike, rarely exceeding the inflorescence
- **Inflorescence with 2-13 heads, often branching somewhat widely**, each head with 6-13 flowers
- **Tepals 3-5 mm long**, light brown to purplish black; anthers 1-2 mm long, longer than the filaments; **capsules equal to or shorter than the perianth**

Similar species: *J. nevadensis* is best distinguished by its branching inflorescence, tepals 3-5 mm long, and capsules equaling or shorter than the perianth. *J. alpinoarticulatus* has similar inflorescence branching structure but has the capsules exceeding the perianth, with the tepals only 1.5-2.5 mm long.

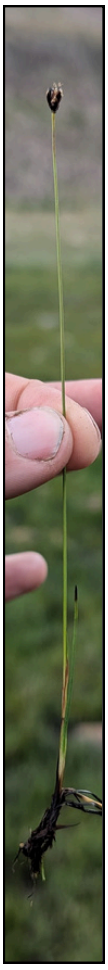
Habitat and ecology: Occasional in wet and dry meadows and along streams; 7,600-10,000 ft.

Juncus triglumis L.

three-hulled rush

Juncaceae











All photos - © Sam Kurkowski, 1

Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: JUTR4

Key characteristics:

- Stems **densely cespitose**; 4-19 cm tall
- Leaves basal or on lower 1/4 of stem, blades hollow, sheath **with hyaline margins** leading into rounded auricles
- Involucral bracts 2, about **equaling or slightly exceeding the head, spathe-like**, often purplish
- **Inflorescence a solitary head with 2-5 flowers**; tepals cream or yellowish, often marked with purple
- **Capsules shorter or 1 mm longer than the tepals, a squat oval with a small nub**

Similar species: *J. castaneus* has rhizomatous solitary stems, often multiple heads with 3-10 flowers and capsules longer than the tepals; its leaf sheaths lack hyaline margins and auricles, and the involucral bracts extend well past the heads.

Habitat and ecology: Uncommon in fens and wet and boggy meadows, near or above timberline; 9,200-12,500 ft.

Luzula campestris (L.) DC.

hairy woodrush

Juncaceae











All photos - © Sam Kurkowski, 1

Wetland indicator status: FAC
Native status: Introduced
Conservation status: G5 SNR
C-Value: 0
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: LUCA2

Key characteristics:

- Stems 13-42 cm tall, forming tufted clumps
- Leaves basal and cauline; blades flat with moderately **dense shaggy hairs on the margins**
- **Inflorescence made of congested head-like spikes with lateral spikes in addition to the terminal one,** forming a firework-like shape
- Spikes can have a shaggy, spikey appearance due to numerous bracts
- Capsules round, shiny, and black; equal to or shorter than the perianth

Similar species: Key difference is the inflorescence structure. *L. parviflora* has a slender, drooping, sparse inflorescence. *L. spicata* has a dense, shaggy, nodding, terminal compound spike.

Habitat and ecology: Less frequent in fens. Occasional in woods and in moist places mostly along streams; 8,000-11,000 ft.

Comments: This is a non-native species but is not considered invasive.

Luzula parviflora (Ehrh.) Desv.

millet woodrush

Juncaceae











All photos - © Sam Kurkowski, 1

Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: LUPA4

Key characteristics:

- Stems 22-77 cm tall, often solitary or few together on short rhizomes
- Leaves basal and cauline; blades flat and glaborous with **few shaggy hairs**, especially near the collar
- **Inflorescence a drooping, open panicle with slender branches**, does not form a dense head; flowers borne singly on longer pedicels or 2-3 on shorter pedicels
- Panicle looks rather minimal and sparse due to shorter bracts
- Capsules round, shiny, and black; slightly longer than the perianth

Similar species: Key difference is the inflorescence structure. *L. campestris* inflorescence has numerous branching spikes forming a firework-like shape. *L. spicata* has a dense, shaggy, nodding, terminal compound spike.

Habitat and ecology: Regularly seen on fen margins with Sphagnum moss. Occasional in moist and wet places along streams, in wet meadows, and in woodlands; 7,500- 11,400 ft.

Luzula spicata (L.) DC.

spike woodrush

Juncaceae







All photos - © Sam Kurkowski, 1

Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: LUSP4

Key characteristics:

- Stems 5-40 cm tall, more or less cespitose with rhizomes apparently lacking
- Leaves basal and cauline; blades flat with moderately dense shaggy hairs on the margins
- **Inflorescence a terminal compound spike, often nodding**; flowers congested into the dense, head-like spike
- Spikes have a shaggy appearance due to long protruding bracts
- Capsules round, shiny, and black; slightly shorter than the perianth

Similar species: Key difference is the inflorescence structure. *L. parviflora* has a slender, drooping, sparse inflorescence. *L. campestris* has numerous branching spikes forming a firework-like shape.

Habitat and ecology: Occasional in wet and dry meadows and subalpine coniferous forests; more common in open, rocky, grassy places above timberline, including alpine fell fields, tundra, and talus; 10,400-12,500 ft. Less common in fens.

Carex aquatilis Wahlenb.

water sedge

Cyperaceae


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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAAQ

Key characteristics:

- Culms arising singly from **long rhizomes**; 15-95 cm tall
- **Leaves 1.5-5.5 mm wide**, **tips usually tinged blue green**, sometimes becoming brown with age
- Inflorescence with 1-2 staminate spikes above 2-3 pistillate spikes 1.5-4.5 cm long; transitional ones often androgynous
- Pistillate scales black purple with green to scale colored midrib with **midrib non-excurrent**, shorter to longer and narrower than the perigynia, lanceolate to ovate
- **Perigynia more or less flattened**, upright, light green to straw colored with age, **nerveless**, 2-3.3 mm long; stigmas 2; achenes lenticular

Similar species: *C. nebrascensis* pistillate scales have excurrent midribs, wider leaves that are blue-green glaucous the entire length, and perigynia that are nerved and slightly more inflated. *C. kelloggii* is cespitose with narrower spikes with tightly packed, nerved perigynia; scales with the green midrib not reaching the tip. *C. magellanica* and *C. limosa* can also have blue-tipped leaves.

Habitat and ecology: Extremely common in wet and boggy meadows, fens, and riparian communities, often associated with plane leaf willow; 9,000 ft to above timberline.

Comments: This is the dominant sedge in wet areas of alpine and morainal basins and is found in most fens. It almost always forms large rhizomatous patches.

Carex athrostachya Olney

slenderbeak sedge

Cyperaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S3
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAAT3

Key characteristics:

- Culms densely cespitose, rhizomes lacking or very short; 10-52 cm tall
- Leaves basal and on lower culms, 1-3 mm wide, flat or channeled; **bract often surpassing the inflorescence but sometimes shorter**
- Inflorescence headlike with 3-15 gynecandrous spikes 5-10 mm long, sessile and tightly aggregated, exserted beyond the leaves
- Pistillate scales brown with a green midstripe, equal to and as wide as the perigynia
- Perigynia greenish, flattened with winged margins, **serrulate in the distal 1/2**, tapered into a terete often brown beak, lanceolate, 3.5-4.5 mm long, 1-1.5 mm wide; stigmas 2; achenes lenticular

Similar species: The defining character of this species is its long lower bracts, but this character is variable, with not every flowering culm having bracts that exceed the inflorescence. Plants with reduced bracts resemble *C. microptera*, but the perigynia are narrower on *C. athrostachya*.

Habitat and ecology: Found in somewhat drier or marginally wet places. Occasional in seasonally moist meadows, marshes, pond and lake margins, and pine or spruce-aspen stands; 7,500-9,500 ft.

Carex aurea Nutt.

golden sedge

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAAU3

Key characteristics:

- Culms tufted or arising singly or few together from rhizomes; 4-40 cm tall
- Leaves flat, 1-4 mm wide, remaining fairly light green in color
- Terminal spike staminate or gynaecandrous; 1-3 lateral spikes pistillate, well-spaced, pedunculate, **lowest spike often borne on the lower half of the culm**
- Pistillate scales greenish or brown with a pale green center, shorter than the perigynia
- **Perigynia nearly globose, pale green to golden with age**, 1.7-3 mm long; stigmas 2, rarely 3; achenes lenticular

Similar species: This species is fairly unique. *C. livida* has less round perigynia that do not turn golden with age.

Habitat and ecology: Common along streams, around seeps, springs, and other wet places; 7,000-11,000 ft. Not seen as often in fens.

Comments: This species is quite small and often growing amongst other vegetation.

Carex bella L.H.Bailey

beautiful sedge

Cyperaceae


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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 S3
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CABE3

Key characteristics:

- Culms tufted and often arcing gracefully, rhizomes lacking; 20-68 cm tall
- Leaves basal, 1-5 mm wide; bracts leaflike, with a sheathing base 3-4 mm long
- Inflorescence with 3-4 spikes, **flexuous and somewhat nodding**; spikes cylindric, 1-3 cm long, often gynecandrous
- Pistillate scales shorter than the pergynia, black purple with a pale midrib
- Perigynia broadly oval, flat but swollen by the ripe achene, light green contrasting the dark scales, 2.8-4 mm long; stigmas 3; achenes trigonous

Similar species: This species is fairly unique and easily identified by its drier habitat, tufted form, and rather long, skinny perigynia on gently nodding peduncles.

Habitat and ecology: Drier species, usually on well-drained soil. Infrequent in lodgepole pine, spruce-fir, alpine communities, or streamside; 8,000 ft to above timberline.

Carex brunnescens (Pers.) Poir.

brownish sedge

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CABR15

Key characteristics:

- Culms tufted, 20-60 cm tall, **inflorescence culms often lax and much above the leaves**; rhizomes lacking or short
- Inflorescence with 4-9 gynecandrous spikes, sessile, 5-10 perigynia; **spikes more spread out on the rachis**
- Pistillate **scales mostly hyaline** except for the green or brownish midstripe, much shorter than the perigynia
- **Perigynia somewhat spreading**, 5-10 per spike, 1.7-2.5 mm long; stigmas 2; achenes lenticular
- Perigynia elliptic, green or brownish with age, **smooth** or nearly so except for the serrulate beak

Similar species: *C. praeceptorum* and *C. canescens* have spikes more compact on the rachis, appressed perigynia that are serrulate distally, and have less hyaline scales.

Habitat and ecology: Infrequent in wet meadows and other wet places at 7,300-9,500 ft.

Comments: Can be difficult to distinguish from *C. praeceptorum* and *C. canescens* but its culms are longer and more lax, and the spikes are more spread out on the rachis.

Carex buxbaumii Wahlenb.

Buxbaum's sedge

Cyperaceae


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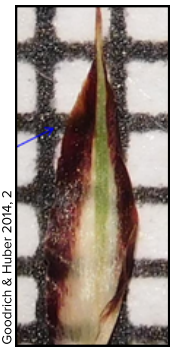

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Stigmas 3


Goodrich & Huber 2014, 2



Goodrich & Huber 2014, 2


Goodrich & Huber 2014, 2


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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CABU6

Key characteristics:

- Culms arising singly or few together from long rhizomes; 30-55 cm tall
- Leaves cauline, the lower ones reduced to bladeless sheaths, blades 1-3 mm wide
- Inflorescence with 3-4 spikes, the terminal one gynecandrous and lower ones pistillate
- **Pistillate scale brownish purple with a greenish midrib, a bristly awn tip 1-2 mm long exceeding the perigynia**
- Perigynia elliptic and papillate, 2.5-4 mm long; stigmas 3; achenes trigonous

Similar species: This species is fairly unique and has distinctive spikes. *C. magellanica* has similarly long, striped pistillate scales but lacks awns and its spikes are nodding on long peduncles.

Habitat and ecology: Rare in wet or marshy meadows and fens; 7,600-9,800 ft.

Carex canescens L.

silvery sedge

Cyperaceae



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early season colors



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late season colors



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perigynia

achene



Goodrich & Huber 2014, 2



Goodrich & Huber 2014, 2



Goodrich & Huber 2014, 2

C. praeceptorum: greenish brown

C. canescens: pale green

Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CACA11

Key characteristics:

- Culms densely cespitose, rhizomes lacking or very short; 18-50 cm tall
- Inflorescence with 4-8 androgynous spikes, sessile, 15-32 perigynia; **spikes more compact on the rachis**
- **Pistillate scales pale green or silvery** with broad hyaline margins except for green midstripe, much shorter than the perigynia
- **Perigynia appressed**, 15-32 per spike, 1.8-2.5 mm long stigmas 2; achenes lenticular
- Perigynia elliptic, greenish, yellow, or grayish green, **serrulate distally**, the nerves greenish or pale

Similar species: *C. praeceptorum* has scales and perigynia that are brown instead of pale green and are often not serrulate. *C. brunnescens* has spikes more spread out on the rachis, perigynia somewhat spreading, and the inflorescence is often above the leaves.

Habitat and ecology: Infrequent in wet and boggy meadows, at edges of ponds and lakes, streams, and springs; 6,300-11,400 ft.

Comments: Can be difficult to distinguish from *C. praeceptorum* as its main differences are in the lighter more vibrant green of the inflorescence. Less common than *C. praeceptorum*.

Carex capillaris L.

hair-like sedge

Cyperaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2S3
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CACA12

Key characteristics:

- Culms slender and rather weak, **densely cespitose** from short rhizomes; 5-70 cm tall
- Leaves basal and on lower culms, 1-3 mm wide; lowest bract strongly sheathing, sheath closed for 9-20 mm
- Inflorescence surpassing the leaves, terminal spike staminate and lateral spikes pistillate 6-11 mm long **on gently nodding peduncles**
- **Pistillate scales mostly hyaline with a greenish midstripe**, shorter than the perigynia
- Perigynia lance-ovate, green at first then turning a glossy brown, more or less rounded, 2.4-3.3 mm long; stigmas 3; achenes trigonous

Similar species: *C. magellanica* and *C. limosa* both have similarly nodding pistillate spikes but are differentiated by their rhizomatous growth forms and greenish or purplish pistillate scales.

Habitat and ecology: Associated with moist or somewhat wet places. Infrequent in shady seeps, open meadows, mesic to moist tundra, fens, and moist woods; 7,300-9,300 ft.

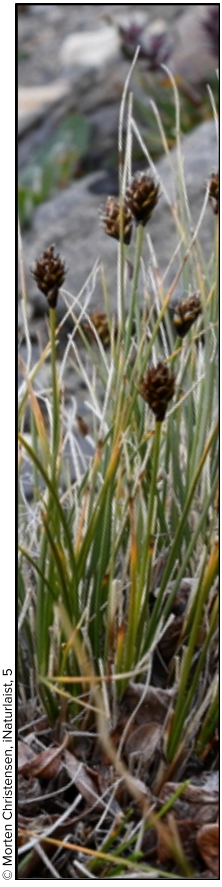
Carex capitata Sol.

capitate sedge

Cyperaceae



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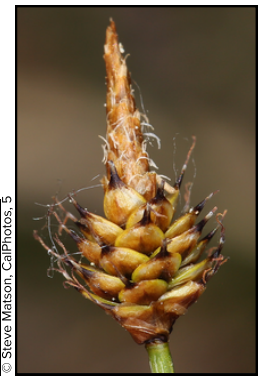
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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 S2
C-Value: 10
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CACA13

Key characteristics:

- Culms closely spaced on short rhizomes; 5-20 cm tall
- Leaves on the lower 1/4 of the culms, involute and threadlike to 1 mm wide, lower ones often reduced to bladeless sheaths; bracts lacking
- Inflorescence an erect, **solitary spike**, 4-10 mm long; androgynous, the staminate part short or elongated
- Pistillate scales shorter and narrower than the perigynia, dark brown with hyaline margins
- **Perigynia** ovate and conspicuously beaked, **rather flattened and tightly packed together**, 2-3.5 mm long; stigmas 3; achenes trigonous, not filling the perigynia

Similar species: *C. nigricans* has a similar inflorescence but is differentiated by its more elongated and inflated perigynia that have a spikier appearance and are flexed downward at maturity.

Habitat and ecology: Locally abundant but regionally rare, in wet meadows and snow beds, primarily on calcareous substrates; 12,000-12,400 ft.

Comments: This species is best identified by its rather flat perigynia that are stacked tightly and flexed slightly upward, almost resembling a pineapple. This is the dominant in a minor alpine plant community type in the Uinta Mtns.

Carex dioica L.

yellow bog sedge

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2S3
C-Value: 9
Duration: Perennial
Synonyms: *Carex gynocrates* Wormsk. ex Drejer
USDA PLANTS symbol: CAGY2

Key characteristics:

- Culms arising singly from long rhizomes; **2-20 cm tall**
- Leaves on the lower culm, 0.4-0.9 mm wide and narrowly involute
- **Spike solitary and androgynous**, 1-1.5 cm long; can be nearly all staminate to nearly all pistillate
- Pistillate scales light brown, shorter and broader than the perigynia
- Perigynia chestnut brown at maturity, **plump and abruptly contracted to a short beak, strongly spreading**, ribbed and spongy at the base, 3-3.5 mm long; **stigmas 2**; achenes lenticular

Similar species: *C. nigricans* has a similar inflorescence but has 3 stigmas and more elongated and flattened perigynia. *C. microglochin* is also small and wiry, but is differentiated by its slender, pointy perigynia that are strongly deflexed at maturity.

Habitat and ecology: Found in openings in conifer-hardwood forests, wet and boggy meadows, and occasionally on more well-drained subalpine meadows or gravely areas; 8,900-10,260 ft.

Carex disperma Dewey

softleaf sedge

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CADI6

Key characteristics:

- Culms densely tufted from short rhizomes, rather flexulous; 10-45 cm tall
- Leaves basal and on lower culms, 0.5-2 mm
- **Inflorescence interrupted**, spikes sessile, androgynous with 1-2 inconspicuous staminate flowers and 1-3 perigynia
- Pistillate scales shorter than the perigynia, pale green, **largely hyaline and scarious**
- **Perigynia elliptic and abruptly contracted into a nub-like beak, 2-3 mm long**; stigmas 2; achenes lenticular

Similar species: This species is fairly unique in its interrupted inflorescence with small, bean shaped perigynia and hyaline scales. The inflorescence vaguely resembles *C. brunnescens* but is shorter, with much finer leaves and smaller perigynia.

Habitat and ecology: Infrequent in fens and seeps, often in shade; from about 7,500 ft to near timberline.

Carex ebenea Rydb.

ebony sedge

Cyperaceae



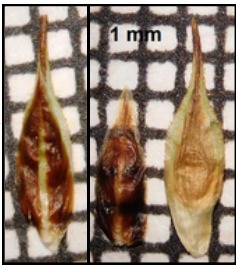
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Wetland indicator status: UPL
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAEB

Key characteristics:

- Culms densely cespitose, rhizomes lacking or short; 19-59 cm tall
- Leaves basal and on lower culms, 1-4.5 mm wide, flat; **lowest bract lacking or much shorter than the inflorescence**
- Inflorescence headlike and **cuneate (angled) at the base**; 6-12 gynecandrous spikes 9-15 mm long, sessile and tightly aggregated, exserted beyond the leaves
- **Pistillate scales darker than the perigynia**, blackish brown, slightly shorter and narrower than the perigynia
- Perigynia long and narrow **(4-6x longer than wide), dark brown in the center with narrow greenish wings**, serrulate except near the apex of the prominent slender beak, 5.2-7.1 mm long, 1-2 mm wide; stigmas 2; achenes lenticular

Similar species: *C. microptera* is truncate at the base of the inflorescence with perigynia 2-3 times as long as wide and more spreading. *C. leporinella* has pistillate scales equal to and wide as the perigynia, inflorescence pale green to light brown and rarely bicolored (perigynia similar coloring to the scales), and less congested spikes. *C. athrostachya* has bracts surpassing the inflorescence in at least several flowering culms.

Habitat and ecology: This is a drier species occurring on well-drained soil, streamside, and in moist meadows. Common in the edges of meadows, open coniferous woods, along streams, and on well-drained slopes in conifer forests; 9,500-11,700 ft. Less likely to see in fens.

Comments: This is one of the most common and widespread sedges in Utah. There is debate about the break between *C. microptera*, *C. ebenea*, and *C. haydeniana*; they are sometimes regarded as varieties of the same species.

Carex echinata Murray

star sedge

Cyperaceae



C. echinata:
beak longer (> 1/2 of body)





C. interior:
beak shorter (~1/4 of body)









Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAEC

Key characteristics:

- **Culms densely cespitose**, rhizomes lacking or very short; 10-30 cm tall
- Spikes gynaecandrous, the terminal spike usually with more staminate flowers, 2-3 lateral spikes with few staminate flowers and 5-10 perigynia
- Pistillate scales pale green or brown with a green midstripe and broad hyaline margins, shorter than the perigynia
- **Perigynia widely spreading and conspicuously beaked (appearing like a star)**, 2.8-3.5 mm long; stigmas 2; achenes lenticular
- Perigynium **beak 1/2 or more the length of the body**, conspicuously bidentate, the teeth narrow

Similar species: This species has a fairly unique bristly starburst appearance. *C. interior* are found around 7,000 ft and have perigynia with beaks 1/4-1/3 the length of the body, inconspicuously bidentate with broad short teeth.

Habitat and ecology: Abundant in boggy meadows and seeps at 9,500-10,400 ft.

Carex epapillosa Mack.

different nerve sedge

Cyperaceae


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Wetland indicator status: UPL
Native status: Native
Conservation status: G5 SNR
C-Value: 9
Duration: Perennial
Synonyms: *Carex heteroneura* var. *epapillosa* (Mack.) F.J.Herm.
USDA PLANTS symbol: CAEP3

Key characteristics:

- Culms tufted, rhizomes lacking or short; 25-100 cm tall
- Inflorescence with 3-5 spikes 1-2.5 cm long, the **terminal spike gynecandrous** and the rest pistillate, **upper spikes crowded and the lowest one separated from the others on a peduncle to 4.5 cm long**
- Leaves basal and on lower culm, 1.5-10 mm wide
- Pistillate scales dark brownish purple, shorter or longer than the perigynia
- **Perigynia flattened, yellow brown and often suffused with dark purple**, oblong or nearly orbicular, 2-5 mm long; stigmas 3; achenes trigonous

Similar species: The terminal spike of *C. paysonis* is staminate instead of gynecandrous. *C. nova* has similarly flattened, congested perigynia but its spikes are rounder, not on long peduncles, and the lowest spike is not largely separated from the rest.

Habitat and ecology: Occasional on stream margins in open forest and in moist subalpine and alpine meadows; 7,500-12,700 ft.

Comments: This taxon used to be considered a variety of *C. heteroneura*, but molecular work has shown that Pacific Coast plants are *C. heteroneura* and Rocky Mountain plants are *C. epeapillosa*.

Carex illota L.H.Bailey

sheep sedge

Cyperaceae



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perigynia



Goodrich & Huber 2014, 2

pistillate scale



Goodrich & Huber 2014, 2

spikes are gynecandrous (female flowers above male flowers)



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAIL

Key characteristics:

- Culms densely tufted, 10-42 cm tall; rhizomes lacking or short
- Leaves basal, flat, 0.5-3 mm wide
- Inflorescence **headlike** with 3-6 sessile, **gynecandrous spikes**; spikes scarcely evident from one another in the dense head; 1-1.5 cm long
- Pistillate scales 1/2 as long as the perigynia, blackish with a greenish midstripe
- Perigynia lanceolate, greenish brown to blackish, **2.5-3 mm long**; stigmas 2; achenes lenticular

Similar species: *C. jonesii* is nearly identical but has androgynous spikes (male flowers above female flowers). Two species are found in drier places: *C. pachystachya* has perigynia 3.5-4.5 mm long, and *C. hoodii* has androgenous spikes.

Habitat and ecology: Common in fens, wet meadows, along streams and around shores of ponds; 9,500-11,500 ft.

Comments: This is one of the dominant species in a minor alpine plant community type in the Uinta Mountains. It is seen often in fens. While culms are often tufted, it is common to see it forming large patches and it can be seen growing singly or few together as well.

Carex kelloggii W.Boott

lakeshore sedge

Cyperaceae



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perigynia nerved, blackish beak



Goodrich & Huber 2014, 2

Base of perigynium is difficult to peel away from the achene



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: *Carex lenticularis* Michx.
USDA PLANTS symbol: CALE8

Key characteristics:

- Culms **cespitose** from fibrous **roots covered with feltlike yellowish hairs**; 15-61 cm tall
- Leaves green, lacking tinged tips, **1-2.6 mm wide**
- Terminal spike staminate, above 2-4 narrow, **cylindrical, tightly packed pistillate spikes**, 0.6-4 cm long
- Pistillate scales shorter and narrower than the perigynia, black purple with a **green midrib not reaching the tip of the scale**
- Perigynia tightly packed in a regular pattern, **nerved, green except for the blackish beak**, 2-3 mm long; stigmas 2; achenes lenticular

Similar species: *C. aquatilis* is rhizomatous, leaf tips often tinged blue-green, perignia nerveless and less tightly packed. *C. nebrascensis* is rhizomatous, leaves blue-green-glaucous and 3-11 mm wide, the green midrib of the pistillate scale excurrent, and perigynia slightly more inflated.

Habitat and ecology: Occasional in wet meadows, pond margins, seeps, and springs; 7,000-11,000 ft.

Carex lasiocarpa Ehrh.

wiregrass sedge

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CALA11

Key characteristics:

- Culms loosely cespitose from long rhizomes, reddish or purplish at the base; 30-80 cm tall
- Leaves less than 2 mm wide, **flat at the base and involute folded toward the tip**; lower ones reduced to bladeless sheaths
- Terminal spike staminate, subtended by a smaller staminate spike; 2-3 cyllindric pistillate spikes
- Pistillate scales narrower than the perigynia with a long, slender-awned tip
- **Perigynia pubescent**, broadly obovoid and somewhat inflated with a bidentate beak, 2.5-5 mm long; stigmas 3; achenes trigonous

Similar species: *C. pellita* also has pubescent perigynia but its leaves are mostly flat and 2-6 mm wide; it is found at lower elevations (4,800-9,500 ft). *C. vesicaria* is cespitose with similarly shaped pistillate spikes but has glossy perigynia.

Habitat and ecology: Common in swampy meadows and margins of small ponds, sometimes forming floating mats in peatlands, typically in standing water up to 30 cm deep; 9,700-9,900 ft.

Comments: This species is often associated with *C. utriculata*, but does not extend into as deep of water.

Carex leporinella Mack.

Sierra hare sedge

Cyperaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CALE9

Key characteristics:

- Culms densely cespitose, rhizomes lacking or short; 11-28 cm tall
- Leaves basal and on lower culms, 1-2 mm wide, flat or channeled; **lowest bract lacking or shorter than the inflorescence**
- Inflorescence headlike with 3-6 gynecandrous spikes 5-11 mm long, sessile and tightly aggregated, the lower ones sometimes somewhat separated
- Pistillate **scales similar color to the perigynia**, brown with a green midrib and hyaline margins, **equal to and as wide as the perigynia**
- **Perigynia greenish to brownish**, sharp edged but scarcely winged, serrulate, elliptic, gradually tapering to an ill-defined beak, 3-4.3 mm long; stigmas 2; achenes lenticular

Similar species: *C. ebenea* has pistillate scales shorter and narrower than the perigynia, inflorescence darker and bicolored (perigynia lighter than the scales), and more congested spikes. *C. athrostachya* has bracts surpassing the inflorescence in at least several flowering culms.

Habitat and ecology: Common in certain areas in wet and drying meadows, drying mud of ephemeral pools, and at the margins of ponds and lakes; 9,000-10,200 ft.

Carex leptalea Wahlenb.

bristlystalked sedge

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CALE10

Key characteristics:

- Culms densely cespitose, 16-35 cm tall; rhizomes obscured by the matted habit
- Leaves rather lax, flat or somewhat folded, 0.4-1 mm wide
- **Spike solitary and androgynous**, the staminate part included in or barely exceeding the pistillate part; 4-6 mm long
- Pistillate scales greenish, pale brown, and hyaline; shorter than the perigynia
- **Perigynia pale green, notched at the beakless tip**, 1-3 mm long; stigmas 3; achenes trigonous

Similar species: None of note. This species is fairly unique with its small, rice shaped perigynia and small solitary spikes on a densely cespitose plant.

Habitat and ecology: Rare in and around sphagnum fens, seeps, and other wet places; 7,200-9,300 ft.

Carex limosa L.

mud sedge

Cyperaceae


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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CALI7

Key characteristics:

- Culms arising singly or few together from slender rhizomes; 13-26 cm tall
- Leaves 0.5-1.5 mm wide, lower leaves often bladeless; tips sometimes tinged blue-green
- Terminal spike staminate; **1-2 lateral spikes, nodding on long peduncles**, pistillate or with few staminate flowers
- **Pistillate scales obtuse, mostly shorter than and equal width to the perigynia**, greenish to dark **reddish brown with a green center**
- **Perigynia pale green** with a very short conspicuous beak, 2.9-3.5 mm long; stigmas 3; achenes trigonous

Similar species: *C. magellanica* and *C. cpaillaris* also have spikes on nodding peduncles. *C. magellanica* has pointier acuminate pistillate scales longer and narrower than the perigynia. *C. capillaris* has narrower spikes, rounder more inflated perigynia, and pistillate scales 1/2 the length of the perigynia with broad hyaline margins.

Habitat and ecology: Occasional in fens and wet meadows at 9,300-11,000 ft.

Carex livida (Wahlenb.) Willd.

livid sedge

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2S3
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CALI7

Key characteristics:

- Culms strongly glaucous from slender rhizomes; 10-30 cm tall
- Leaves often channeled, 1-3.5 mm wide; vibrant blue-green, tips often tinged lighter
- Terminal spike staminate; 1-3 lateral spikes pistillate with 5-15 flowers, pedunculate
- Pistillate scales equal or short than the perigynia, **pale green midstripe with dark brown or hyaline margins**
- **Perigynia elliptic and somewhat inflated, light green, densely papillate glaucous**, 3.5-4.5 mm long; stigmas 3; achenes trigonous

Similar species: This species is fairly unique and has distinct spikes. *C. aurea* has more inflated globose perigynia that are not glaucous and become golden with age.

Habitat and ecology: Rare in subalpine boggy meadows where soil is saturated to the surface for much of the growing season; 9,600-11,000 ft.

Comments: The pale green color of the perigynia and leaves can make patches of this plant stand out as a vibrant light green patch.

Carex luzulina Olney

woodrush sedge

Cyperaceae


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Wetland indicator status: OBL
Native status: Native
Conservation status: G5T4T5 S1
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CALU7

Key characteristics:

- Culms tufted, rhizomes short or lacking; 50-80 cm tall
- Leaves basal and few cauline with **closed sheaths 3-5 cm long**, blades 3-9 mm wide and flat
- Inflorescence surpassing the leaves, terminal spike staminate; 4-5 lateral pistillate spikes 1-3 cm long, **the upper few crowded with the staminate spike, lower ones on long slender peduncles**
- Pistillate scales dark brown with broad hyaline margins, sometimes minutely ciliate, equal to the perigynia but not covering the beak
- **Perigynia lanceolate and compressed, ascending upward, gradually tapering to a beak**, 3-5 mm long; stigmas 3; achenes trigonous

Similar species: This species is fairly unique and best identified by its long closed leaf sheaths, and pointed, compressed, and ascending pistillate spikes, arranged close to the staminate spike above and on long peduncles below.

Habitat and ecology: Rare in wet or moist places in meadows, spruce forests, and along streams; 8,500-11,000 ft.

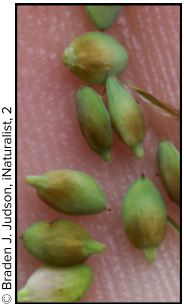
Carex magellanica Lam.

boreal bog sedge

Cyperaceae


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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAMA12

Key characteristics:

- Culms arising singly or few together from long rhizomes; 15-30 cm tall
- Leaves mostly with well developed blades 1-2 mm wide
- Terminal spike staminate or nearly so; **lateral spikes 1-4, nodding on long peduncles**, pistillate or with few staminate flowers at the base
- **Pistillate scales acuminate, longer and slightly narrower than the perigynia**, **purplish brown with a green midstripe**
- **Perigynia light green**, beak nearly obsolete, 2.2-2.9 mm long; stigmas 3; achenes trigonous

Similar species: *C. limosa* has wider obtuse scales, often shorter and as wide as the perigynia and lighter in color. *C. bella* has a similarly nodding inflorescence but is larger, with tufted stems, longer tube-shaped spikes, and blackish scales shorter than the perigynia.

Habitat and ecology: Relatively common in fens and along stream banks, particularly where sphagnum is present; 9,000-10,400 ft.

Carex microglochin Wahlenb.

fewseed bog sedge

Cyperaceae


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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAMI6

Key characteristics:

- Culms arising few together from rhizomes, 15-25 cm tall
- **Leaves few and wiry**, arising toward the base, channeled or nearly terete, 0.5-0.8 mm wide
- Spike solitary and androgynous, staminate portion about as long as the perigynia
- Pistillate scales brownish, 1/2 as long as the perigynia
- **Perigynia strongly spreading and deflexed**, linear laceolate and **strongly pointed**, 3-5 mm long; stigmas 3; achenes elongate

Similar species: This species is quite distinct. It mildly resembles *C. nigricans*, but has strongly deflexed and very pointed perigynia, with few wiry leaves.

Habitat and ecology: Rare in calcareous fens and boggy meadows; 9,000-10,600 ft.

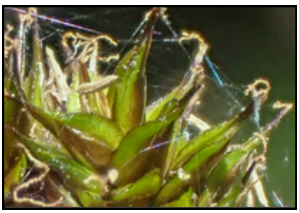
Carex microptera Mack.

smallwing sedge

Cyperaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 S1
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAMI7

Key characteristics:

- Culms densely cespitose, rhizomes lacking or short; 20-80 cm tall
- Leaves basal and on lower culm, 1-5 mm wide; **lowest bract mostly lacking**, rarely to 1/2 as long as inflorescence
- Inflorescence a head 1.2-2.5 cm long, orbicular in outline, usually **truncate at the base (flatter across the bottom)**; spikes gynecandrous, difficult to distinguish in the head
- Pistillate scales shorter and narrower than the perigynia, brownish
- **Perigynia 2-3 times longer than wide, strongly flattened**, green to dark brown with **winged green margins**, 3.2-5 mm long, 1-2 mm wide; stigmas 2; achenes lenticular

Similar species: *C. ebenea* has inflorescence cuneate at the base, perigynia 4-6 times longer than wide, and perigynia more appressed. *C. haydeniana* has perigynia more than 2 mm wide, and generally more brown but can have green margins. Both found in somewhat drier habitats.

Habitat and ecology: Most likely to be seen on fen margins where the soil is more well-drained. Common along streams, moist but usually not wet meadows, and aspen and coniferous woods; 7,200-11,200 ft.

Comments: This is one of the most common and widespread sedges in Utah. There is debate about the break between *C. microptera*, *C. ebenea*, and *C. haydeniana*; they are sometimes regarded as varieties of the same species.

Carex nebrascensis Dewey

Nebraska sedge

Cyperaceae



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Goodrich & Huber 2014, 2

scales dark with a green midrib that extends beyond the tip of the scale

perigynia nerved, rounder



Goodrich & Huber 2014, 2



Goodrich & Huber 2014, 2



Goodrich & Huber 2014, 2



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CANE2

Key characteristics:

- Culms arising singly or somewhat tufted from **long rhizomes**; 20-115 cm tall
- Leaves more **blue green and glaucous their entire length, broader** at **3-11 mm wide**
- Inflorescence with 1-3 staminate spikes above 2-4 pistillate spikes, 2-6 cm long; transitional ones often androgynous
- Pistillate scales longer and narrower than the perigynia, black purple with a **green, excurrent midrib** (extending past the rest of the scale)
- **Perigynia conspicuously nerved and less flattened** than C. aquatilis, 2.6-4.1 mm long; stigmas 2; achenes lenticular

Similar species: *C. aquatilis* has only leaf tips tinged blue-green, flatter nerveless perigynia, and scales without an excurrent midrib. *C. kelloggii* is cespitose with narrower spikes with tightly packed, nerved perigynia; scales with the green midrib not reaching the tip.

Habitat and ecology: Common in wet meadows, marshy places, in seeps and springs, and along ditches; can act somewhat weedy in disturbed environments; 4,800-9,000 ft.

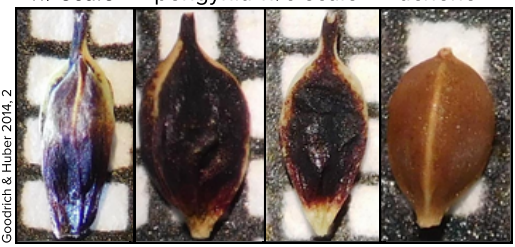
Carex nelsonii Mack.

Nelson's sedge

Cyperaceae



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w/ scale | perigynia w/o scale | achene

Goodrich & Huber 2014, 2



Goodrich & Huber 2014, 2



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Wetland indicator status: FAC
Native status: Native
Conservation status: G3 S2
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CANE3

Key characteristics:

- Culms cespitose, rhizomes lacking or short; 10-35 cm tall
- Leaves basal and on lower culm, 1-2.5 mm wide, not over 12 cm long
- Inflorescence with 2-3 sessile, congested spikes, **the terminal one gynecandrous and larger than the pistillate ones**
- Pistillate scales often shorter than the perigynia, blackish, occasionally with a pale midrib and narrow hyaline margins
- **Perigynia inflated and rounded, green when young and blackish with age**, narrowly ovate, gradually tapered to a beak, 3-3.8 mm long, **1-1.8 mm wide**; stigmas 3; achenes sharply trigonous, nearly filling the perigynia when mature

Similar species: *C. nova* can be difficult to differentiate, but has flattened perigynia 2-3 mm wide and culms somewhat flexuous and nodding.

Habitat and ecology: Occasional in wet and dry meadows, along streams, and on rather dry, rocky alpine slopes; mostly above timberline from 9,300-12,300 ft. Likely less common in fens.

Carex neurophora Mack.

alpine nerve sedge

Cyperaceae



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C. neurophora: not winged



Goodrich & Huber 2014, 2



Goodrich & Huber 2014, 2

C. hoodii: winged



Goodrich & Huber 2014, 2



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CANE6

Key characteristics:

- Culms cespitose with short rhizomes, 30-70 cm tall
- Leaves on the lower 1/2 of the culm, lower leaves bladeless, the upper leaves with flat blades 3-3.5 mm wide; **sheaths conspicuously laterally wrinkled**
- Pistillate scales 1/2 as long as the perigynia but as wide, brownish with a green midrib
- Inflorescence **headlike** with 5-10 sessile, **androgynous spikes** with inconspicuous staminate flowers; 1.5-2.5 cm long
- Perigynia tapered to a beak, not or inconspicuously serrulate, **lacking wings, 3-4 mm long**; stigmas 2; achenes lenticular

Similar species: *C. illota* is quite similar but has gynecandrous spikes (female flowers above male flowers) and perigynia 2.5-3 mm long. Two species are found in drier places: *C. hoodii* has winged perigynia with a serrate, bidentate beak, and *C. pachystachya* has gynecandrous spikes.

Habitat and ecology: Uncommon in wet meadows, fens and along streams; 8,200-9,800 ft.

Comments: Whitish filaments often remain after the anthers have fallen, and can indicate the androgynous feature. However, they are more difficult to see than the anthers.

Carex nigricans C.A.Mey.

black alpine sedge

Cyperaceae

C. nigricans: young





C. nigricans: mature





C. subnigricans













Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CANI2

Key characteristics:

- Culms arising few together from short to long rhizomes; 7-21 cm tall
- **Leaves 1-3 mm wide**, mostly borne toward the base
- Spike solitary and androgynous, **the staminate portion 1/4-1/2 as long as the pistillate**
- Pistillate scales blackish purple with scarous margins, soon deciduous
- **Perigynia strongly spreading to declined**, lanceolate and flattish, greenish and black purple on the beak, 3-4.5 cm long; **stigmas 3**; achenes trigonous

Similar species: *C. subnigricans* is similarly androgynous but with perigynia not spreading or declined, the staminate portion blending with the pistillate, and leaves thin and wiry like the culms. *C. dioica* is also androgynous but has 2 stigmas and more plump perigynia.

Habitat and ecology: Occasional in dry to boggy meadows, along streams, and in moist coniferous forests, perhaps along ecotones between meadows and forest communities; 9,000-12,100 ft.

Carex nova L.H.Bailey

black sedge

Cyperaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 10
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CANO3

Key characteristics:

- **Culms flexuous and nodding** to erect, densely **cespitose**, rhizomes lacking or short; 16-72 cm tall
- Leaves basal and on lower culm, 1-5.5 mm wide
- Inflorescence a **head with 3-4 spikes** 5-15 mm long, **roundish in shape**, terminal spike gynecandrous and the rest pistillate
- Pistillate scales narrower and slightly shorter than the perigynia, purple black and glossy
- **Perigynia flattened, greenish at first but soon blackish purple and more or less glossy**, obovate, 3.5-4.9 mm long, **2-3 mm wide**; stigmas 3; achenes trigonous, the perigynia conspicuously wider than the mature achene

Similar species: *C. nelsonii* is difficult to differentiate but has inflated perigynia 1-1.8 mm wide and lacks flexuous and nodding culms. *C. epapillosa* has similarly flattened, congested perigynia but the lowest spike is separated from the rest on a long peduncle to 4.5 cm long.

Habitat and ecology: Generally a drier species appearing in moist to well-drained soils. Found in moist and wet subalpine areas, alpine meadows, and in well drained soils along streams and in talus; 9,200-12,200 ft.

Carex oederi Retz.

little green sedge

Cyperaceae













Wetland indicator status: OBL
Native status: Native
Conservation status: GNR SNR
C-Value: 9
Duration: Perennial
Synonyms: *Carex viridula* Michx.
USDA PLANTS symbol: CAVI5

Key characteristics:

- Culms densely cespitose, rhizomes lacking; 12-33 cm tall
- Leaves 1-3 mm wide and flat, basal and on lower culm; leafy bracts exceeding the inflorescence
- Inflorescence with a **staminate terminal spike** and 2-4 lateral pistillate spikes 0.5-1 cm long, often clustered together
- **Pistillate scales pale green and mostly hyaline, much shorter than the perigynia**
- **Perigynia pale or vibrant green, obovoid with a conspicuous beak**, strongly ribbed, 2.2-3.5 mm long; stigmas 3; achenes trigonous

Similar species: This species is fairly unique and is best identified by its tufted growth form and densely packed, inflated, spreading perigynia. *C. stevenii* can have somewhat inflated perigynia that makes it look similar but it has almost black scales and the nub-like beak is blackish.

Habitat and ecology: Rare or infrequent along streams and other moist to wet places; 5,800-9,320 ft.

Carex pachystachya Cham. ex Steud.

chamisso sedge

Cyperaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAPA14

Key characteristics:

- Culms densely cespitose, rhizomes lacking; 30-100 cm tall
- Leaves on the lower 1/2 of the culm, lower leaves bladeless sheaths
- **Inflorescence headlike but somewhat elongated** (oblong but sometimes ovoid) with **internodes sometimes visible**; spikes 4-12, gynecandrous
- Pistillate scales shorter and narrower than the perigynia, brown with or without hyaline margins
- **Perigynia more or less bulbous**, usually widely spreading at maturity, winged margins rather narrow, 3.5-4.5 mm long, 1-2 mm wide; stigmas 2; achenes lenticular

Similar species: *C. microptera* is similar but more common, with the head more orbicular and perigynia that are strongly flattened and less readily deciduous. *C. illota* has smaller perigynia 2.5-3 mm long that are hardly wing-margined, and a slightly narrower inflorescence.

Habitat and ecology: Infrequent in wet and boggy meadows, streams, seeps and wet places in woods; 7, 000-9,000 ft.

Comments: Differentiating between species is difficult and will likely require very mature specimens and detailed measurements of the perigynia.

Carex paysonis Clokey

Payson's sedge

Cyperaceae



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Wetland indicator status: FACU
Native status: Native
Conservation status: G4G5 S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAPA31

Key characteristics:

- Culms cespitose with short rhizomes; 22-40 cm tall
- Leaves basal and on lower culm, 2-6 mm wide
- Inflorescence with a **terminal staminate spike** and 2-5 lateral **pistillate spikes rather crowded or the lower separated**, 1.2-2 cm long
- Pistillate scales purple black, sometimes with a pale midrib, margins not or scarcely hyaline, shorter than the perigynia
- Perigynia rather fragile and thin, **strongly flattened, blackish or purple brown**, broadly elliptic and abruptly contracted to the beak, 3.3-4.4 mm long; stimgas 3; achenes trigonous, not filling the perignia

Similar species: The terminal spike of *C. epapillosa* is gynecandrous instead of staminate. *C. nova* has similarly flattened, congested perigynia but its spikes are rounder and more congested, and the lowest spike is not largely separated from the rest.

Habitat and ecology: This is a drier species often on more well drained soils. Occasional and common in certain areas in subalpine and alpine meadows; 11,000- 12,400 ft.

Comments: This species is the dominant in a minor alpine plant community type in the Uinta Mtns.

Carex praeceptorum Mack.

teacher's sedge

Cyperaceae


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Wetland indicator status: OBL
Native status: Native
Conservation status: G4G5 S2
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAPR22

Key characteristics:

- Culms densely to loosely tufted with short or long rhizomes; 10-30 cm tall
- Inflorescence with 4-6 gynecandrous spikes, sessile, 15-32 perigynia; **spikes more compact on the rachis**
- Pistillate **scales brown** with a green midstripe and usually narrow hyaline margins, scales shorter than the perigynia
- **Perigynia appressed**, 15-25 per spike, 1.7-2.2 mm long; stigmas 2; achenes lenticular
- Perigynia elliptic, yellow green or brownish green, **often not serrulate distally**, the nerves often reddish

Similar species: *C. canescens* has scales and perigynia that are pale green or silvery instead of brown and are serrulate distally. *C. brunnescens* has spikes more spread out on the rachis, perigynia somewhat spreading, and the inflorescence is often much above the leaves.

Habitat and ecology: Common in wet and boggy meadows, margins of lakes and ponds, seeps, and springs, often associated with sphagnum moss; 10,600-11,200 ft.

Comments: Can be difficult to distinguish from *C. canescens* as its main differences are in the more brown color of the inflorescence. *C. praeceptorum* is more common than *C. canescens.*

Carex praegracilis W.Boott

clustered field sedge

Cyperaceae



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C. diandra



C. praegracilis



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAPR5

Key characteristics:

- Plants dioecious or monoecious, culms mostly arising singly from **long blackish rhizomes**; 15-70 cm tall
- Leaves 1-3.5 mm wide, lower ones reduced to bladeless sheaths often dark brown or blackish
- Inflorescence headlike, linear, crowded, with spikes unisexual or androgynous
- Pistillate scales as long and wide as the perigynia, brown with hyaline margins
- **Perigynia ovate with a conspicuous beak** 0.6-1.3 mm long, shiny brown, 2.8-3.5 mm long; stigmas 2; achenes lenticular

Similar species: *C. simulata* has rounder orbicular perigynia with a nub-like beak, and blackish rhizomes; found in somewhat wetter areas. *C. diandra* is cespitose with perigynia more spreading, lanceolate with a particularly pointy beak; uncommon in fens and continuously wet places.

Habitat and ecology: Less likely to be seen in fens but common elsewhere, including marshy places, irrigated pastures, along ditches, occasionally in rather dry places; tolerant of alkali; 4,700-8,000 ft.

Comments: Crumble the seed heads into your hand to get a closer look at the shape of the perigynia to differentiate between species.

Carex saxatilis L.

russet sedge

Cyperaceae





mid-season color



late-season color



perigynia left, achene right





leaf sheath V shaped



Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CASA10

Key characteristics:

- Culms arising singly or closely spaced on creeping rhizomes; 21-40 cm tall
- Leaves 1.5-3 mm wide, flat, **lowest sheath V-shaped at the apex**
- **Pistillate scales very dark brown**, sometimes with a thin pale midstripe, **shorter than the perigynia**, acute
- Inflorescence with 1-2 staminate spikes above 1-2 pistillate spikes
- **Perigynia slightly inflated, nerved**, lanceolate to nearly orbicular, **soon glossy dark brown to blackish purple but green when young**, 3.2-5.2 mm long
- **Stigmas 2 or occasionally 3**; achenes lenticular or trigonous, **with a persistent style**

Similar species: The lowest leaf sheath of *C. scopulorum* is U-shaped at the apex and it has smaller, nerveless, somewhat flattened perigynia 1.8-3.3 mm long, also glossy dark brown when mature.

Habitat and ecology: Common in shallow water around ponds and lakes, wet meadows and fens; 9,000-12,500 ft.

Comments: This species is most easily identified by the perigynia being a dark glossy brown (as dark as the scales at maturity), and slightly inflated. Use leaf sheath as confirming character.

Carex scopulorum Holm

mountain sedge

Cyperaceae



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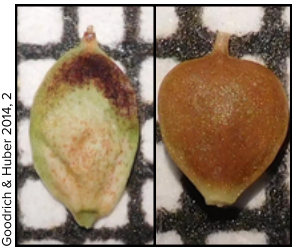
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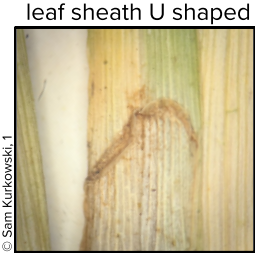


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leaf sheath U shaped



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 T3T5 S2
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CASC12

Key characteristics:

- Culms arising singly to somewhat tufted from robust rhizomes; 22-67 cm tall
- Leaves basal and on lower culm, 3-7 mm wide, flat, **lowest sheath U-shaped at the apex**
- Inflorescence with 1-2 staminate spikes above 2-4 cylindrical pistillate spikes 1-3 cm long
- Pistillate scales purple black, shorter or longer than the perigynia and usually narrower
- **Perigynia blackish to dark reddish brown, nerveless** except for two marginal nerves, elliptic, **not inflated**, the beak nearly obsolete, 1.8-3.3 mm long; stigmas 2 or rarely 3; achenes lenticular

Similar species: The lowest leaf sheath of *C. saxatilis* is V-shaped at the apex and it has larger, nerved, more inflated perigynia 3.2-5.2 mm long, also glossy dark brown when mature.

Habitat and ecology: Common in certain areas, found in moist and wet subalpine meadows and along streams; 8,040-8,200 ft.

Carex simpliciuscula Wahlenb.

simple bog sedge

Cyperaceae



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C simpliciuscula: 3-12 spikes



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C. borealipolaris (L), C. myosuroides (R): one spike



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S2
C-Value: 9
Duration: Perennial
Synonyms: *Kobresia simpliciuscula* (Wahlenb.) Mack.
USDA PLANTS symbol: KOSI2

Key characteristics:

- **Culms densely cespitose**, without rhizomes, **25-35 cm tall**
- Leaves basal on the lower 1/5 of the stem, sheaths open
- **Spikes 3-12** and 0.5-1.5 cm long; sessile or on short peduncles
- **Perigynia with open margins and not closed around the achene**

Similar species: *C. myosuroides* and *C. borealipolaris* are from drier alpine slopes and ridges and are 5-20 cm tall with a solitary spike. But beware, *C. simpliciuscula* spikes are compressed closely together and can easily be confused as a single spike. *C. myosuroides* spike is less than 3 mm wide and *C. borealipolaris* spike is greater than 3 mm wide.

Habitat and ecology: Rare in fens and boggy meadows, usually found on or near limestone; 8,500-9.860 ft.

Comments: *C. simpliciuscula*, *C. myosuroides*, and *C. borealipolaris* all used to belong to the *Kobresia* genus. They are unique from other *Carex* in that the perigynia does not entirely enclose the achene. *C. simpliscuscula* is the most common.

Carex simulata Mack.

analogue sedge

Cyperaceae



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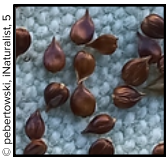
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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CASI2

Key characteristics:

- Plants dioecious or monoecious, culms mostly arising singly from **long whitish rhizomes**; 22-45 cm tall
- Leaves 1.5-4 mm wide, lower ones reduced to bladeless sheaths
- Inflorescence headlike, linear, crowded, with spikes unisexual or androgynous
- Pistillate scales longer than the perigynia, brownish with a hyaline margin
- **Perigynia nearly orbicular with a short nub-like beak**, shiny brown, 1.7-2.6 mm long; stigmas 2; achenes lenticular

Similar species: *C. praegracilis* has ovate perigynia with a conspicuous beak, resembling a raindrop, and blackish rhizomes; found in somewhat drier areas. *C. diandra* is cespitose with perigynia more spreading and lanceolate with a particularly pointy beak; uncommon in fens and continuously wet places.

Habitat and ecology: Common in wet, marshy, and boggy meadows, perhaps more-common in calcareous than noncalcareous places; 6,000-9,400 ft.

Comments: Crumble the seed heads into you hand to get a closer look at the shape of the perigynia to differentiate between species.

Carex stevenii (Holm) Kalela

Steven's sedge

Cyperaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G4 SNR
C-Value: 7
Duration: Perennial
Synonyms: *Carex norvegica* ssp. *stevenii* (Holm) D.F. Murray
USDA PLANTS symbol: CAST22

Key characteristics:

- Culms loosely to densely cespitose; 15-60 cm tall
- Leaves 3-4 mm wide, basal and on the lower culm
- Inflorescence with 2-3 **pistillate spikes overlapping but distinct; terminal spike gynecandrous**
- **Pistillate scales dark brown to black** with hyaline margins, as broad as and **much shorter than the perigynia**
- Perigynia ascending, **green** becoming dark brown at maturity, **gradually beaked with beak blackish**, elliptic, veinless, 2-2.5 mm long; stigmas 3; achenes trigonous, nearly filling the body of the perigynia

Similar species: This species is fairly unique and is best identified by its light green perigynia with a dark beak and short, dark pistillate scales, and its distinct but crowded together spikes.

Habitat and ecology: Open forests, moist meadows, stream banks, occasionally reaching lower alpine tundra

Comments: *C. stevenii* has been considered a subspecies of *C. norvegica* but is geographically separate and ecologically distinct, with *C. stevenii* occurring in the Intermountain West.

Carex utriculata Boott

Northwest Territory sedge

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 4
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAUT

Key characteristics:

- Culms arising singly or few together **from long rhizomes**; 60-140 cm tall
- **Leaves 3-12 mm wide** and flat, **bottom most sheath U-shaped at the apex**, with many crosswalls between veins, **appearing like brickwork**
- Inflorescence with 2-4 staminate spikes above 2-3 pistillate spikes; pistillate spikes cylindrical and 2.5-10.5 cm long
- Pistillate scales shorter and narrower than the perigynia, greenish turning red brown with pale midstripe, narrowly acute
- **Perigynia inflated with a conspicuous beak, strongly spreading (90° to rachis)**, light green to dark brown, 4-7 mm long
- Stigmas 3; achenes trigonous, much smaller than the perigynia, **style is bony and persistent**

Similar species: *C. vesicaria* is tufted with short rhizomes, leaves 2-4 mm wide; the bottom most leaf sheath V-shaped at the apex, lacking crosswalls. *C. atherodes* has pubescent leaf sheaths and perigynia facing forward (45° to rachis); lacks a bony, persistent style beak on the achene.

Habitat and ecology: Common in and around ponds, wetlands of canyon bottoms, subalpine wet meadows, and standing water up to 1-2 ft deep; 7,100-10,500 ft.

Comments: This species is a common pioneer in hydrarch succession and is often the first to grow in shallow standing water. It often forms large patches and is generally a large, beefy plant.

Carex vesicaria L.

blister sedge

Cyperaceae



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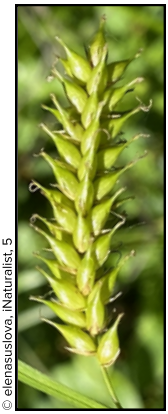


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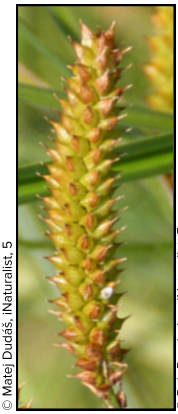


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C. lasiocarpa: hairy perigynia



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Wetland indicator status: OBL
Native status: Native
Conservation status: GNR SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: CAVE6

Key characteristics:

- Culms **cespitose**, rhizomes mostly short; 30-75 cm tall
- Leaves 2-4 mm wide, **bottom most sheath V-shaped at the apex**, lacking crosswalls, **not appearing like brickwork**; leafy bracts subtend pistillate spikes, often exceeding the inflorescence
- Inflorescence has 2-3 staminate spikes above 2-3 cylindric pistillate spikes, 2-3 cm long
- **Pistillate scales shorter and narrower than the perigynia**, light to reddish brown and acuminate
- **Perigynia glossy, ascending not spreading**, lanceolate and inflated with a conspicuous bidentate beak, 5-6 mm long; stigmas 3; achenes trigonous, much smaller than the perigynia

Similar species: *C. utriculata* is rhizomatous, the bottom most leaf sheath U-shaped at the apex with many crosswalls between veins, appearing like brickwork. *C. lasiocarpa* is loosely cespitose with similar shaped pistillate spikes but has pubescent perigynia.

Habitat and ecology: From a variety of habitats with moist to quite wet soil. Found in marshes, sedge meadows, fens, wet thickets or depressions in forests, margins of water bodies, or sites inundated in spring and dry during summer; 9,850-10,000 ft.

Eleocharis acicularis (L.) Roem. and Schult.

needle spikerush

Cyperaceae



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E. acicularis



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E. parvula



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ELAC

Key characteristics:

- **Culms very small, 2-15 cm tall** and 0.3-0.5 mm thick; tufted
- Spikelet 2-8 mm long; **stigmas 3**
- Scales blackish purple with a green midstripe and hyaline margin; the lowest one bearing a flower, not much if any broader than the upper ones
- **Achenes trigonous, longitudinally ribbed, with cross ridges between the ribs; tubercle basally constricted**
- Perianth bristles 3-4, equaling or surpassing the achene

Similar species: *E. acicularis* and *E. parvula* are much smaller and finer than other *Eleocharis* spp. *E. parvula* does not have an enlarged style, and lacks a cap on its achene. *E. bolanderi* has a broad, depressed tubercle and is lacking the longitudinal ribs and cross ridges on its achenes.

Habitat and ecology: Occasional, mostly in wet places, often on mud flats of drying ponds, stream sides, and wet meadows; 7,200-10,500 ft.

Eleocharis bolanderi A.Gray

Bolander's spikerush

Cyperaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G4 S2S3
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ELBO

Key characteristics:

- Culms moderately sized, **8-30 cm tall** and 0.5 mm thick; strongly tufted
- Spikelet 3-8 mm long; **stigmas 3**
- **Scales blackish purple with a hyaline tip, lacking a pale midstripe**; the lower sterile ones mostly much wider than the upper ones
- **Achenes trigonous, 3-ribbed**, the surface cellular roughened; **tubercle broad and depressed, not constricted at the base**
- Perianth bristles 3-4, minutely barbed, shorter than the achene

Similar species: Both *E. acicularis* and *E. bolanderi* have tufted stems, but *E. acicularis* is much smaller and its achenes have a constricted tubercle, longitudinal ribs, and cross ridges. *E. quinqueflora* is not tufted and its tubercle is confluent with the achene, not forming a cap at all.

Habitat and ecology: Occasional in wet and ephemerally wet meadows; 8,100-8,500 ft.

Eleocharis palustris (L.) Roem. and Schult.

common spikerush

Cyperaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 3
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ELPA3

Key characteristics:

- Culms larger, **10-70 cm tall and 0.5-3 mm thick**; arising singly or few together from creeping rhizomes
- Spikelet 5-25 mm long; **stigmas 2**
- Scales brownish purple with a green midstripe and hyaline margins; the lower 1 or 2 empty
- **Achenes lenticular**, with a well differentiated tubercle that is constricted at the base
- Perianth bristles typically 4-5, barbed, longer than the achene

Similar species: *E. palustris* is the only species with lenticular achenes and 2 stigmas. Other *Eleocharis* have trigonous achenes and 3 stigmas. It is also generally taller and larger. *E. rostellata,* is similar in size but has flattened culms, some arching and rooting at the tip.

Habitat and ecology: Common in wetlands, margins of ponds and lakes, and in swampy meadows; from the bottom of the Uinta Basin to about 10,500 ft.

Comments: This is an extremely widespread and common circumboreal species, occurring in a wide variety of wet places and plant communities. Less common in high elevation Uinta fens.

Eleocharis quinqueflora (Hartmann) O.Schwarz

fewflower spikerush

Cyperaceae



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tubercle confluent with the achene



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ELQU2

Key characteristics:

- Culms moderately sized, **7-20 cm tall and 0.5-1 mm thick; rhizoming**, occasionally forming loose tufts
- Spikelet 4-8 mm long; **stigmas 3**
- Scales purple black with hyaline margins, often lacking a green midstripe; the lowest scale not empty
- **Achenes trigonous, tubercle confluent with the achene**, not constricted
- Perianth bristles equaling or surpassing the achene, finely barbed

Similar species: The tubercle on *E. quinqueflora* is uniquely confluent with the achene, not constricted into a bulb. Its combination of rhizoming habit and moderate size is also unique.

Habitat and ecology: Abundant in fens, wet meadows, and other wet places; 6,840-11,100 ft.

Comments: This is the most common spikerush in Uinta fens and is found often and in great abundance.

Eriophorum angustifolium Honck.

manyhead cottongrass

Cyperaceae


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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S1S2
C-Value: 9
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ERAN6

Key characteristics:

- Culms rhizoming, mostly arising singly, 20-60 cm tall
- **Leaf blades usually well developed**, flat to narrowed, 2-6 mm wide
- Lowest involucral bract leaflike, 2.5-5.5 cm long, often dark purple at the base
- Inflorescence resembles cotton balls, with **2-6 spikelets on slender peduncles** to 2.5 cm long
- Scales greenish, brownish, or purplish with hyaline margins

Similar species: *E. scheuchzeri* has one cottonball-like spikelet and leaf blades are often lacking or very narrow (1 mm wide).

Habitat and ecology: Common in fens, wet and boggy meadows, and along streams at 8,990-11,800 ft.

Comments: *Eriophorum* spp. are circumboreal species that are very characteristic of peatland environments.

Eriophorum scheuchzeri Hoppe

onehead cottongrass

Cyperaceae


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E. scheuchzeri


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E. chamissonis


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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 10
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: ERSC2

Key characteristics:

- Culms rhizoming, mostly arising singly, 13-40 cm tall
- **Leaf blades often reduced or lacking**, channeled or triangular; to 8 cm long and 1 mm wide
- Involucral bracts scalelike, black purple, 3-8 mm long
- Inflorescence resembles cotton balls, with **1 spikelet sessile at the top of the culm;** perianth bristles (fluff) bright white
- Scales blackish with hyaline margins < 1 mm wide

Similar species: *E. angustifolium* has 2-6 cottonball-like spikelets on peduncles and has well developed leaf blades. *E. chamissonis* has not been found in Utah but also has 1 spikelet with red-brown to white perianth bristles, and broad blunt scales with hyaline margins > 1 mm wide.

Habitat and ecology: Common in fens, wet and boggy meadows, along streams, and in wet rocky places at 10,900-12,500 ft.

Comments: *Eriophorum* spp. are circumboreal species that are very characteristic of peatland environments.

Scirpus cespitosus L.

tufted bulrush

Cyperaceae













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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2S3
C-Value: 10
Duration: Perennial
Synonyms: *Trichophorum cespitosum* (L.) Hartm.
USDA PLANTS symbol: TRCE3

Key characteristics:

- **Culms densely tufted**, with persistent leaf sheaths at the base, 4-20 cm tall
- Basal leaves bladeless sheaths, the uppermost with a small blade 4-7 mm long
- Inflorescence a solitary spikelet, light to medium brown
- Involucre bracts consist of 2-3 empty scales <1 cm long
- Achenes trigonous ~1.5 mm long; perianth bristles 6, white, longer than the achene

Similar species: This species can be confused with *Eleocharis quinqueflora* but has very different achenes, is densely cespitose instead of spreading rhizomatous, and has a small blade on the uppermost leaf sheath.

Habitat and ecology: Common in subalpine fens and boggy meadows; 9,500-11,200 ft.

Betula glandulosa Michx.

dwarf birch

Betulaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: BEGL

Key characteristics:

- Shrub, mostly **less than 2 m tall** with 1 to several main stems
- Bark not peeling, gray to brown or purplish, mostly without conspicuous lenticels
- **Leaves orbicular with crenate margins, glabrous to waxy; not over 2 cm long**
- Catkins cylindrical, 7-20 mm long

Similar species: *B. occidentalis* (river birch) is usually greater than 2 m tall and has larger, serrate leaves, 2-5 cm long. It is widespread below 9,000 ft, growing on river banks and around seeps.

Habitat and ecology: Occasional in streamside meadows, boggy meadows, and well-drained soil in snowbank areas; 9,000-11,000 ft.

Comments: Plants known from above 8,500 ft is a key break.

Dasiphora fruticosa (L.) Rydb.

shrubby cinquefoil

Rosaceae











All photos - © Sam Kurkowski, 1

Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 5
Duration: Perennial
Synonyms: *Potentilla fruticosa* L., *Pentaphylloides fruticosa* (L.) O.Schwarz
USDA PLANTS symbol: DAFR6

Key characteristics:

- Shrubby bush up to 1 m tall, bark shredding
- Leaves 1-5 cm long; **pinnate with 3-7 leaflets; green and sparsely hairy above, grayish and silvery hairy below**
- Flowers 1 to several, with **5 yellow petals**
- Seed receptacle hairy and round; achenes 1.5-2 mm long, white hairy

Similar species: None of note. This species was removed from the *Potentilla* genus and is the only shrub that resembles *Potentilla* leaves and flowers.

Habitat and ecology: Occasional in fens. Common in wet meadows, open woods, in the alpine, and along streams; 7,000-12,000 ft.

Comments: This is a widespread circumboreal species.

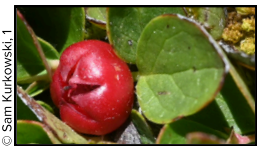
Gaultheria humifusa (Graham) Rydb.

alpine wintergreen

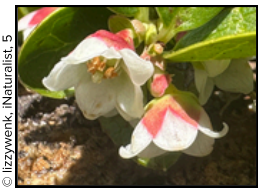
Ericaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S1
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: GAHU

Key characteristics:

- Very small evergreen shrub, scarcely woody with creeping, rooting stems; often less than 5 cm tall
- Leaves alternate, 6-15 mm long; orbicular to ovate with lightly serrulate margins; thick and waxy
- Flowers solitary, coming from the leaf axils
- Petals white or pink, forming a cup with five lobes; anthers nestled in the bottom, filaments flattened
- Fruit 5-7 mm across, round, and bright red

Similar species: None of Note. Only one of its genus in Utah and is quite distinct.

Habitat and ecology: Typically in rocky areas on fen margins. Occasional in moist coniferous woods and meadows, often growing in shallow soils and on rocks; 9,000-11,000 ft.

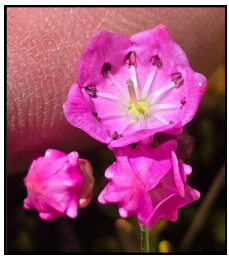
Kalmia microphylla (Hook.) A.Heller

alpine laurel

Ericaceae













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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S2
C-Value: 8
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: KAMI

Key characteristics:

- Low evergreen shrub with erect stems, 7-15 cm tall
- Leaves opposite 6-18 mm long, elliptic to oblong; shining and dark green above, grayish beneath
- Flowers mostly 2-6, protuduing from the top of the stem on long pedicles
- Petals pink, forming a cup with five lobes
- Fruit a 5-valved capsule on long pedicle, red-brown in color

Similar species: None of Note. Only one of its genus in Utah and is quite distinct.

Habitat and ecology: Occurring on hummocks or with Sphagnum moss in fens. Occasional in moist and wet meadows, along streams and lake margins, and in wet places in coniferous forests; 9,650-11,450 ft.

Rhododendron columbianum (Piper) Harmaja

western Labrador tea

Ericaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 S3
C-Value: 8
Duration: Perennial
Synonyms: *Ledum glandulosum* Nutt., *Rhododendron neoglandulosum* Harm.
USDA PLANTS symbol: RHCO18

Key characteristics:

- Upright evergreen shrub to 1 m tall, forming a bush
- Leaves 1-4 cm long, dark green above and pale below; thick and leathery, glabrous
- Flowers numerous on long pedicles, forming an umbel
- Petals white, 5 per flower; stamens often longer than the petals and protruding
- Fruit capsule 2-5 mm long; round and puberulent

Similar species: None of Note. Only one of its genus in Utah and is quite distinct.

Habitat and ecology: Occasional in wet soil in woods, sphagnum fens, and along stream banks; 7,400-11,000 ft.

Salix boothii Dorn

Booth's willow

Salicaceae



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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SABO2

Key characteristics:

- Shrubs or small trees, **2-4 m tall**
- **Twigs bright yellow to chestnut brown**, young twigs finely hairy
- Leaves elliptical; **somewhat pubescent to glabrous with age, not glaucous beneath**; more or less **green on both surfaces**
- Bracts persistent, dark brown to blackish, often lighter at the base; with hairs on both sides exceeding the bract by 1-2 mm
- Stamens 2 per flower; catkins 2-5 cm long, with dense villous, tangled hairs; **capsules glabrous**

Similar species: *S. geyeriana* is most similar but has narrower glaucous leaves beneath, pubescent capsules, and often redder twigs. Some plants tend toward *S. wolfii* in their leaf pubesence but *S. wolfii* leaves are very pubescent on both sides.

Habitat and ecology: Less likely to be seen in fens. Common to dominant along water courses and other wet places; 7,000-9,000 ft.

Comments: The bright orange-yellow of mid-elevation willow stands in winter is characteristic of *S. boothii*. This is a common willow of the area in streams at lower elevations.

Salix geyeriana Andersson

Geyer willow

Salicaceae



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Left - © Matt Lavin, iNaturalist, 3; Right - Peter Zika, iNaturalist, 5



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 6
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SAGE2

Key characteristics:

- Shrubs or small trees, **1.5-4.5 m tall** at maturity
- **Twigs yellow to red-brown, strongly glaucous**; stems dull gray-purple
- Leaves narrow elliptical; **glaucous and sericeous beneath**, although sparsely sericeous at maturity
- Bracts persistent, dark at the tip and pale below; sericeous pillose on both sides with hairs exceeding the bract by < 1 mm
- Stamens 2 per flower; pistillate catkins 1-2 cm long; **capsules densely pubescent**

Similar species: *S. boothii* is most similar but has wider leaves that are not glaucous beneath, glabrous capsules, and brighter yellow twigs.

Habitat and ecology: Less likely to be seen in fens. Common along water courses and other wet places; 7,200-9,500 ft.

Salix planifolia Pursh

diamondleaf willow

Salicaceae

















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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SAPL2

Key characteristics:

- **Shrubs less than 1.5 m tall**, occasionally greater
- **Twigs lustrous dark chestnut** to purplish black, glabrous (rarely glaucous)
- Leaves elliptical; glabrous, **shiny, dark green above**; glabrous to moderately pubescent, **glaucous, pale beneath**
- Bracts persistent, blackish, scattered to densely villous hair usually exceeding the bract by ~2 mm
- Stamens 2 per flower; pistillate catkins 2-4 cm long; **capsules glabrate, pubescent at least near the base**

Similar species: This is a fairly distinct species with vibrant red twigs, leaves bright green above and glaucous below, and is most common in wet soils.

Habitat and ecology: Common in fens, along streams in subalpine meadows, and wet meadows; 9,500-12,000 ft.

Comments: This species is by far the most common in Uinta fens. In over 40 sites visited across the Uinta Mtns., this was the only species we observed within surveyed sites.

Salix wolfii Bebb

Wolf's willow

Salicaceae



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Wetland indicator status: OBL
Native status: Native
Conservation status: G5 S3
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: SAWO

Key characteristics:

- Shrubs **less than 1.5 m tall**
- **Twigs yellow when young, chestnut brown with age**; twigs of the season thinly puberulent
- Leaves narrowly elliptical; **more sage green in color; pubescent on both surfaces, even when mature**
- Bracts persistent, blackish or pale at the very base, pilose sericeous with hairs exceeding the bract by ~1 mm
- Stamens 2 per flower; pistillate catkins 1-2 cm long; **capsules almost always glabrous**

Similar species: *S. glauca* and *S. brachycarpa* are not pubescent on upper leaf surfaces. *S. glauca* pubescent below when young with glaucous branches and a tuft of pilose hairs at the nodes. *S. brachycarpa* strongly glaucous beneath with pubescent branches. Both in more well drained soils.

Habitat and ecology: Common especially on the north slope of the Uinta Mtns.; along water courses and other wet places; 9,000-10,100 ft.

Comments: Although this species is common, it is found infrequently in fens when compared to *S. planifolia*.

Vaccinium cespitosum Michx.

dwarf bilberry

Ericaceae



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Wetland indicator status: FAC
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VACE

Key characteristics:

- Stems 10-30 cm tall
- **Twigs brownish, densely branched,** puberulent or glabrous
- Leaves green, oblanceolate, **1.5-3.5 cm long; margins serrulate** and sometimes tinged with red
- Flowers whitish to pink, bell-shaped, solitary from the leaf axils
- Berries blue glaucous, subglobose, 5-8 mm broad

Similar species: *V. uliginosum* has paler blueish green leaves with entire margins, and a thinner, less waxy texture. *V. membranaceum* has larger leaves and is a larger, less common plant with looser branching structure. *V. myrtillus* has bright green twigs.

Habitat and ecology: Less likely to be seen in fens, but may appear on the margins. Common in mixed spruce-fir and lodgepole pine forests, and lower alpine; 7,300-11,200 ft.

Vaccinium membranaceum Douglas ex Torr.

thinleaf huckleberry

Ericaceae



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 S2S3
C-Value: 5
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VAME

Key characteristics:

- Stems 30-70 cm tall
- **Twigs brownish** yellow or red, glabrous or pubescent in lines
- Leaves bright green, elliptic, **3-7 cm long**, 2-3.5 cm wide; **margins serrate**
- Flowers yellowish pink, bell-shaped, solitary from the leaf axils
- Berries blue-purple, **often not glaucous**; squished globe shape, 7-9 mm broad

Similar species: *V. cespitosum* has smaller, waxier leaves and is a smaller, more common plant with denser branching structure. *V. myrtillus* has bright green twigs.

Habitat and ecology: Less likely to be seen in fens, but may appear on the margins. Uncommon in aspen and coniferous woods; 8,200-10,300 ft.

Vaccinium myrtillus L.

whortleberry

Ericaceae



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VAMY2

Key characteristics:

- Stems 5-30 cm tall
- **Twigs bright green**, sharply angled, seldom broomlike, **usually puberulent**
- Leaves bright green, ovate, **1.5-4 cm long; margins serrulate** to the base
- Flowers vibrant pink, bell-shaped, solitary from the leaf axils
- **Berries bluish black or red**, usually not glaucous, 5-9 mm broad

Similar species: *V. scoparium* has smaller leaves and glabrous stems with an erect, broomlike branching structure and red berries.

Habitat and ecology: Less likely to be seen in fens, but may appear on the margins. Occasional along narrow streamside meadows in the pine-spruce belt, and at the ecotone between meadows and woods.

Vaccinium scoparium Leiberg ex Coville

grouse whortleberry

Ericaceae



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Wetland indicator status: FACU
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VASC

Key characteristics:

- Stems 10-25 cm tall
- **Twigs bright green, broomlike** with numerous erect branching, **usually glabrous**
- Leaves bright green, lance-ovate, **0.5-1.5 cm long; margins serrulate** throughout
- Flowers pinkish to white, bell-shaped, solitary from the leaf axils
- **Berries bright red** or orange, drying purple, 4-6 mm broad

Similar species: *V. myrtillus* has larger leaves and puberulent stems with a less erect, broomlike branching structure.

Habitat and ecology: Quite unlikely to be seen in fens, may occur nearby. Common under lodgepole pine and Engelmann spruce, occasionally lower alpine; often forming a dense ground cover; 8,900-11,200 ft.

Vaccinium uliginosum L.

bog bilberry

Ericaceae















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Wetland indicator status: FACW
Native status: Native
Conservation status: G5 SNR
C-Value: 7
Duration: Perennial
Synonyms: None of Note
USDA PLANTS symbol: VAUL

Key characteristics:

- Stems 20-60 cm tall
- **Twigs pale greenish brown**, somewhat glaucous
- **Leaves bluish green**, oblanceolate, 0.5-2 cm long; **margins entire**
- Flowers pinkish, 2-4 clustered in the leaf axils, less common solitary
- Berries blue glaucous, globose, 4-6 mm broad

Similar species: *V. cespitosum* has serrulate margins and darker or more lime green leaves that are slightly more waxy. *V. membranaceum* has larger leaves and is a larger, less common plant with looser branching structure.

Habitat and ecology: Most likely to be seen growing in fens, often on hummocks or margins. Common in fens, wet meadows, and along streams; more often in the western Uinta Mtns.; 9,000-11,500 ft.

Glossary

Adapted from *Plant Identification Terminology - An Illustrated Glossary* (Harris and Harris, 2001)

Achene: a small dry fruit with a single seed that does not open at maturity

Acuminate: gradually tapering to a sharp point and forming concave sides along the tip

Acute: gradually tapering to a pointed tip with more or less straight sides

Alternate: borne singly at each node, as opposed to in a pair, such as a stem with only one leaf per node (compare opposite)

Androgynous: with staminate flowers borne above the pistilate, as in the inflorescence of some *Carex* species (compare gynecandrous)

Anther: the pollen bearing portion of the stamen

Apex: the tip; the point farthest from the point of attachment

Appressed: pressed close or flat against another organ

Ascending: growing or directed in an upward direction, usually curved

Auricle: a small appendage shaped like an ear or earlobe

Auriculate: bearing an auricle or auricles

Awn: a narrow, stiff bristle, usually at the tip of a leaf or perianth segment or, in grasses, at or near the tip of a glume or lemma

Axil: the upper angle formed between the axis of a stem and any part (usually a leaf) arising from it

Axillary: located in or arising in an axil

Barbed: with short, sharp, rigid, reflexed points like the barb of a fishhook

Basal: positioned at or arising from the base, as leaves arising from the base of the stem

Beak: a narrow or prolonged tip, as on some fruits and seeds

Beaked: bearing a beak

Bearded: bearing one or more tufts of long hairs

Bidentate: having two teeth

Bipinnate: twice pinnate; with the divisions again pinnately divided

Blade: the broad part of a leaf or petal

Borne: carried, held up, or supported by

Bract: a reduced leaf or leaflike structure at the base of a flower or inflorescence

Bracteole: a small bract, often secondary in nature; a bractlet

Bristle: a short, stiff hair or hairlike structure

Bud: an undeveloped shoot or flower

Bulblet: a small bulb; a bulblike structure borne above ground, usually in a leaf axil

Cespitose: growing in dense tufts

Calcareous: containing calcium carbonate, as in soils containing or from limestone

Callus: the thickened basal extension of the lemma in many grasses

Calyx: outer whorl of flowering parts; collective term for all the sepals of a flower

Canescent: gray or white in color due to a covering of short, fine gray or white hairs

Capsule: a dry fruit that opens at maturity to release seeds

Catkin: an inflorescence consisting of a dense spike or raceme of unisexual flowers that lack petals, as in Salicaceae and Betulaceae

Caudate: with a tail-like appendage

Caudex: the persistent and often woody base of a herbaceous perennial

Cauline: belonging to or on the stem

Ciliate: with a marginal fringe of hairs

Clasping: wholly or partly surrounding the stem

Compound: with two or more similar parts in one organ, such as leaflets on a compound leaf (compare simple)

Congested: densely crowded

Conspicuous: standing out so as to be clearly visible

Constricted: drawn together or narrowed

Glossary

Contracted: abruptly narrowed or reduced

Cordate: heart-shaped, with the notch at the base

Corolla: the collective name for all of the petals of a flower; the inner perianth whorl

Corymb: a flat-topped or round-topped inflorescence, raceme-like, but with the lower pedicels longer than the upper

Corymbose: having flowers in corymbs

Crenate: with rounded teeth along the margin

Culm: the stalk or stem of grasses, sedges, and rushes; hollow or filled with spongy tissue

Cuspidate: tipped with a sharp, abrupt point

Cylindric: cylinder-shaped, or elongate and round in cross section

Cyme: a flat-topped or round-topped paniculate inflorescence, in which the terminal flower blooms first

Deciduous: a leaf or plant that falls off after performing its function, often seasonally

Declined: curved downward

Decumbent: reclining on the ground but with the tip ascending

Deflexed: bent abruptly downward

Dentate: toothed along the margin, the teeth directed outward rather than forward

Denticulate: dentate with very small teeth

Diffuse: widely or loosely spreading

Dioecious: flowers imperfect, the staminate and pistillate flowers borne on different plants (compare **monoecious**)

Disarticulating: separating at maturity at a joint

Disjunct: occurring in widely separated geographic areas

Disk flower: flower in Asteraceae where all parts are similar in size and arrangement (compare **ray flower**)

Dissected: deeply divided into many narrow segments

Distal: toward the tip or end of the organ, opposite the end of attachment (compare **proximal**)

Elliptic: in the shape of a flattened circle, or narrow oval; broadest at the middle and narrower at the two equal ends

Entire: not toothed, notched, or divided, as the smooth margin of some leaves

Erect: vertical, not declining or spreading

Erose: with the margin irregularly toothed, as if gnawed

Evergreen: having green leaves through the winter; not deciduous

Excurrent: extending beyond the apex or end of a structure

Filament: a thread-like structure, particularly the stalk of an anther

Flexuous: with curves or bends; somewhat zigzagged

Floret: a single flower, usually small and one of several to many in a cluster, as a grass flower in a spikelet

Follicle: a dry, dehiscent fruit composed of a single pistil and opening along a single side, as a milkweed pod

Funnelform: gradually widening from base to apex; funnel-shaped

Glabrate: becoming glabrous; almost glabrous

Glabrous: smooth; hairless

Gland: a depression, protuberance, or appendage which can secrete a usually sticky fluid

Glandular: of or pertaining to a gland; gland-like; bearing glands

Glaucous: covered with a whitish or bluish waxy coating (bloom), as on the surface of a plum

Globose: globe-shaped; spherical or nearly so

Glume: one of the paired bracts at the base of a grass spikelet

Gynecandrous: with the pistillate flowers borne above the staminate, as in the inflorescence of some *Carex* species (compare **androgynous**)

Glossary

Head: a dense cluster of sessile flowers; the inflorescence subtended by and involucre in Asteraceae

Hyaline: thin, membranous and translucent or transparent

Imbricate: overlapping, like tiles or shingles on a roof

Incised: cut sharply, deeply, and usually irregularly

Inflated: swollen or expanded

Inflorescence: the flowering part of a plant; a flower cluster; the arrangement of the flowers on the flowering axis

Interrupted: not continuous

Involucral: of or pertaining to an involucre

Involucre: a whorl of bracts subtending a flower or flower cluster

Involute: with the edged rolled inward toward the upper side

Keel: a prominent longitudinal ridge, like the keel of a boat

Lanceolate: lance-shaped; much longer than wide, with the widest point below the middle

Leaf sheath: a sheathing stipule

Leaflet: a segment of a compound leaf

Lemma: the lower of the two bracts (lemma and palea) in grasses immediately enclosing the floret

Lenticel: a slightly raised, somewhat corky, often lens-shaped area on the surface of a young stem

Lenticular: lens-shaped; two sided with the faces convex

Ligule: the membranous appendage arising from the inner surface of the leaf at the junction with the leaf sheath, in many grasses and some sedges

Linear: resembling a line; long and narrow with more or less parallel sides

Lip: a projection or segment of an irregular, two-lipped corolla

Lobe: a rounded division or segment of an organ, as of a leaf

Margin: the edge, as in the edge of a leaf blade

Membranous: thin, soft, flexible, and more or less translucent, like a membrane

Mericarp: a section of a schizocarp; one of the two halves of the fruit in Apiaceae

Monoecious: flowers imperfect, the staminate and pistillate flowers borne on the same plant (compare **dioecious**)

Nerve: a simple vein or rib of a leaf or other organ

Node: the position on the stem where leaves or branches originate

Obcordate: in reference to leaves or petals that are inversely cordate, with the notch part at the tip and tapering to a wedge-shaped base

Oblanceolate: inversely lanceolate, with the attachment at the narrower end

Oblong: much longer than broad with nearly parallel sides

Obovate: inversely ovate, with the broadest part near the tip (applied to plane surfaces)

Obovoid: inversely ovoid, with the broadest part near the tip (applied to three-dimensional structures)

Obsolete: an organ or structure that is much reduced

Obtuse: blunt or rounded at the apex

Opposite: borne across from one another at the same node, as in a stem with two leaves per node (compare **alternate**)

Orbicular: approximately circular in outline

Ovary: the expanded portion of the pistil that contains the ovules (the part that becomes a seed)

Ovate: egg-shaped in outline with the narrowest part at the tip (applied to plane surfaces)

Ovoid: egg shaped, with the narrowest part at the tip (applied to three-dimensional structures)

Palate: a raised, typically flat portion on the lower lip of a corolla

Glossary

Palea: the uppermost of the two bracts (lemma and palea) which subtend a grass floret, often partially surrounded by the lemma

Palmate: lobed or veined where the branches arise from a common point, like the fingers of a hand

Panicle: a branched, raceme-like inflorescence with flowers maturing from the bottom upward

Paniculate: having flowers in panicles

Papilla: a short, rounded nipple-like bump or projection

Papillose: having minute papillae

Pappus: the modified calyx of Asteraceae, consisting of awns, scales, or bristles at the apex of the achene

Pedicel: the stalk of a single flower in an inflorescence, or of a grass spikelet

Peduncle: the stalk of a solitary flower or of an inflorescence

Pedunculate: with a peduncle

Perianth: the clayx and corolla of a flower, collectively, especially when they are similar in appearance

Perigynia: the often-inflated sac enclosing the achene in *Carex* species

Petal: an individual segment of the corolla, usually colored or white

Petaloid: petal-like in appearance

Petiole: a leaf stalk

Pilose: bearing long, soft, straight hairs

Pinnate: resembling a feather, as in a compound leaf with leaflets arranged on opposite sides of an elongated axis

Pinnatifid: pinnately cleft into narrow lobes that do not reach the midrib

Pistil: the female reproductive organ of a flower, typically consisting of a stigma, style, and ovary

Pistillate: bearing a pistil or pistils but lacing stamens (compare staminate)

Pollinia: a mass of waxy pollen grains transported as a unit in many members of Orchidaceae

Prostrate: lying flat on the ground

Proximal: toward the base or the end of the organ to which it is attached

Puberulent: minutely pubescent; with fine, short hairs

Pubescent: covered with short, soft hairs; bearing any kind of hairs

Raceme: an unbranched, elongated inflorescence with pedicellate flowers maturing from the bottom upward

Rachis: the main axis of a structure, such as a compound leaf or an inflorescence

Ray flower: flower in Asteraceae where part of the corolla is enlarged into a ray (compare **disk flower**)

Recurved: curved backward

Reflexed: bent backward or downward

Reniform: kidney-shaped

Resinous: bearing resin and often, therefore, sticky

Retrorse: directed downward or backward (adv. retrorsely)

Revolute: with the margins rolled backward toward the underside

Rhizomatous: having rhizomes

Rhizome: a horizontal underground stem with nodes and short to elongate internodes

Rosette: a crowded cluster of radiating leaves arising from a shortened stem at or near ground level

Scabrous: rough to the touch, due to the structure of the epidermal cells, or to the presence of short stiff hairs

Scale: a thin, dry, membranous bract, usually a much reduced leaf bract, or perianth segment; in Cyperaceae, a small bract that subtends each flower

Scape: a leafless peduncle arising from ground level (usually from a basal rosette)

Scapose: with flowers borne on a scape

Scarious: thin, dry, and membranous in texture, not green

Glossary

Schizocarp: a dry fruit which splits into separate one-seeded segments (carpels) at maturity

Sepal: a segment of the calyx

Sericeous: silky, with long, soft, slender, somewhat appressed hairs

Serrate: saw-like; toothed along the margin with sharp teeth pointing forward

Serrulate: toothed along the margin with minute, sharp, forward-pointing teeth

Sessile: attached directly, without a supporting stalk, as a leaf without a petiole

Sheath: the tubular basal part of the leaf that encloses the stem, as in grasses and sedges

Simple: unbranched, as a stem or hair; not compound, as a leaf (compare **compound**)

Solitary: occurring singly and not borne in a cluster or group

Spathe: a large bract or pair of bracts subtending and often enclosing an inflorescence

Spatulate: like a spatula in shape, with a rounded blade above gradually tapering to the base

Spike: an unbranched, elongated inflorescence with sessile or subsessile flowers or spikelet maturing from the bottom upward

Spikelet: a small spike or secondary spike; in grasses, the unit consisting of one to many flowers subtended by two bracts (glumes)

Sporangium: a spore-bearing case or sac (pl. sporangia)

Spreading: extending nearly to the horizontal

Stamen: the male reproductive organ of a flower, consisting of an anther and filament

Staminate: flower or inflorescence with stamen but lacking pistils, hence not seed-bearing (compare **pistillate**)

Sterile: infertile, as a stamen that does not bear pollen, or a flower that does not bear seed

Stigma: the portion of the pistil which is receptive to pollen

Stolon: an elongate, horizontal stem creeping along the ground and rooting at the nodes or at the tip and giving rise to a new plant

Stoloniferous: bearing stolons

Stylar: pertaining to a style

Style: the usually narrowed portion of the pistil connecting the stigma to the ovary

Subcordate: almost cordate

Suborbicular: almost orbicular in shape

Subtend: in reference to any structure situated at the base of another structure

Succulent: juicy and fleshy, as the stem of a cactus or the leaves of *Aloe*

Superior: attached above, as an ovary that is attached above the point of attachment of the other floral whorls

Taproot: the primary, central, downwardly growing root from which smaller secondary roots originate

Tepal: a segment of a perianth which is not differentiated into calyx and corolla; a sepal or petal

Terete: round in cross section; cylindrical

Terminal: at the tip or apex

Tomentose: with a covering of short, matted or tangled, soft, wooly hairs; with tomentum

Trifoliate: with three leaves or three leaflets

Trigonous: three-angled

Truncate: with the apex or base squared at the end as if cut off

Tuber: a thickened portion of a rhizome bearing nodes and buds; underground stem modified for food storage

Tubercle: a small tuber-like swelling or projection; the base of the style in some members of the Cyperaceae

Tubular: with the form of a tube or cylinder

Tufted: arranged in a dense cluster

Glossary

Turion: a small shoot which often over winters, as in some species of *Epilobium* and *Potamogeton*

Umbel: a flat-topped or convex inflorescence with the pedicels arising more or less from a common point, like the struts of an umbrella; a highly condensed raceme

Unisexual: a flower with either male or female reproductive parts, but not both; a term also applied to plants possessing such flowers

Vein: a vascular bundle of a leaf or other flat organ

Venation: the pattern of veining on a leaf

Villous: bearing long, soft, shaggy, but unmatted, hairs

Whorl: an arrangement of three or more organs at a single node, such as three leaves at the same node on a stem

Wing: a thing, usually dry extension bordering an organ

Wolly: having long, soft, entangled or matted hairs

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Hitchcock and Chase (1950)
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References

Anderton, L. K., & Barkworth, M. E. (2000). *Grasses of the Intermountain West.* Utah State University Press.

Britton, N. L., & Brown, A. (1913). An illustrated flora of the northern United States, Canada, and the British Possessions (3 Vol.), In *PLANTS database: Plant list of attributes, names, taxonomy, and symbols.* Kentucky Native Plant Society, Natural Resources Conservation Service, and U. S. Department of Agriculture. http://plants.usda.gov

Cronquist, A., Holmgren, A .H., Holmgren, N. H., & Reveal, J. L. (Eds.). (1972). *Intermountain flora — vascular plants of the intermountain West* (Vol. 1). Hanger Publishing Company.

Culver, D., & Lemly, J. (2013). *Field guide to Colorado's wetland plants — identification, ecology and conservation.* Natural Heritage Program, Colorado State University.

Flora of Newfoundland and Labrador. (2026). *Glossary.* Accessed March 2026, from https://newfoundland-labradorflora.ca/glossary/

Flora of North America Editorial Committee (Eds.). (1993). *Flora of North America* north of Mexico. Oxford. Accessed March 10, 2026, from https://newfoundland-labradorflora.ca/glossary/

Goodrich, S., & Huber, A. (2014). *Uinta flora.* U. S. Forest Service, Intermountain Region, Ogden, UT.

Gray, A. (1880). *Gray's lessons in botany and vegetable physiology vision.* Blackman, Taylor & Co.

Hansen, W. R. (1969). *The geologic story of the Uinta Mountains* [Bulletin 1291]. U. S. Geologic Survey. https://doi.org/10.3133/b1291

Harris, J. G., & Harris, M. W. (2001). *Plant identification terminology — an illustrated glossary.* Spring Lake Publishing.

Hitchcock, A. S., & Chase, A. (1950). Manual of the grasses of the United States (2nd ed.). In *PLANTS database: Plant list of attributes, names, taxonomy, and symbols.* USDA-NRCS Wetland Science Institute (WSI), Natural Resources Conservation Service, and U.S. Department of Agriculture. http://plants.usda.gov

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]. U. S. Forest Service Rocky Mountain Research Station.

Hurd, E. G., Goodrich, S., & Shaw, N. L. (1997). *Field guide to intermountain rushes* [General Technical Report INT-306]. U. S. Forest Service Intermountain Research Station.

Master, L. L., Faber-Langendoen, D., Bittman, R., Hammerson, G. A., Heidel, B., Ramsay, L., Snow, K., Teucher, A., & Tomaino, A. (2012). *NatureServe conservation status assessments — factors for evaluating species and ecosystem risk.* NatureServe.

McCoy-Sulentic, M., Menuz, D., & Lee, R. (2021). *Central Basin and Range ecoregion wetland assessment and landscape analysis* [Open-File Report 738]. Utah Geological Survey.

References

McCoy-Sulentic, M., Menuz, D., Culver, D., & Stimmel, E. (2024). *Common wetland plants of Utah's central basin and range ecoregion* [Miscellaneous Publication 178]. Utah Geological Survey. https://doi.org/10.34191/MP-178

Nakano, M. (2020). Red seal landscape horticulturist identify plants and plant *requirements* (F2– 1 & 2), Kwantlen Polytechnic University.

National Water and Climate Center. (2024, February 29). *Air and water database.* Natural Resource Conservation Service and U.S. Department of Agriculture. https://nwcc-apps.sc.egov.usda.gov/

Plants of the World Online (POWO). (2026). Royal Botanic Gardens, Kew. Accessed March 10, 2026, from https://powo.science.kew.org/

Rink, G., & Licher, M. (2015). *Vascular plants of Arizona: Cyperaceae sedge family part 1: Family description*, *key to the genera, and* Carex L. CANOTIA, 11,1–97.

Sarangi, D., & Jhala, A. (2017). *Identification of grass weeds commonly found in agronomic crops in Nebraska.* Division of the Institute of Agriculture and Natural Resources, University of Nebraska–Lincoln Extension.

Smith, G., & Lemly, J. (2017). *Fen mapping for the Ashley National Forest.* Colorado Natural Heritage Program, Colorado State University.

Smith, G. (2023). *Fen mapping for the Uinta-Wasatch-Cache National Forest.* Colorado Natural Heritage Program, Colorado State University.

U. S. Environmental Protection Agency (EPA). (2024). *National wetland condition assessment 2021* [Technical Support Document, EPA 843-B-24-003].

U. S. Department of Agriculture-Natural Resource Conservation Service (USDA-NRCS). (2022). *PLANTS Database.* http://plants.usda.gov

Van Buren, R., Cooper, J. G., Shultz, L. M., & Harper, K. T. (2011). *Woody plants of Utah.* Utah State University Press.

Welsh, S. L., Atwood, N. D., Goodrich, S., & Higgins, L. C. (2015). *A Utah flora* (5th ed., revised). Monte L. Bean Life Science Museum, Brigham Young University.

Wilhelm, G., & Rericha, L. (2017). *Illustrated glossary of botanical terms, flora of the Chicago region: A floristic and ecological synthesis.* Indiana Academy of Science, Conservation Research Institute.

Index

A

Achillea millefolium 25
Agrostis scabra 111
Alopecurus aequalis 112
Alopecurus magellanicus 113
alpine bentgrass 128
alpine bistort 33
alpine foxtail 113
alpine laurel 196
alpine meadow-rue 91
alpine nerve sedge 171
alpine shootingstar 73
alpine speedwell 95
alpine timothy 124
alpine wintergreen 195
American bistort 32
American globeflower 92
American managrass 120
analogue sedge 182
Angelica pinnata 26
Antennaria corymbosa 27
Antennaria pulcherrima 28
Anthoxanthum nitens 114
Anticlea elegans 98
arctic rush 131
Arnica chamissonis 29
Arnica longifolia 30
Arnica mollis 31
arrowleaf ragwort 84

B

ballhead ragwort 83
beautiful sedge 147
Betula glandulosa 193
Bistorta bistortoides 32
Bistorta vivipara 33
black alpine sedge 172
black sedge 173
blister sedge 185
blue camas 99
bluejoint 115
blueleaf cinquefoil 70
bog bilberry 206
bog St. Johnswort 59
Bolander's spikerush 187
Booth's willow 198
boreal bog sedge 166
boreal starwort 85
Botrychium lunaria 23
bristlystalked sedge 162
brook saxifrage 66
brownish sedge 148
buckbean 65
bulbous woodland star 63
Buxbaum's sedge 149

C

Calamagrostis canadensis 115
Caltha leptosepala 34
Camassia quamash 99
Canada thistle 35
capitate sedge 152
Carex aquatilis 144
Carex athrostachya 145
Carex aurea 146
Carex bella 147
Carex brunnescens 148
Carex buxbaumii 149
Carex canescens 150
Carex capillaris 151
Carex capitata 152
Carex dioica 153
Carex disperma 154
Carex ebenea 155
Carex echinata 156
Carex epapillosa 157
Carex illota 158
Carex kelloggii 159
Carex lasiocarpa 160
Carex leporinella 161
Carex leptalea 162
Carex limosa 163
Carex livida 164
Carex luzulina 165
Carex magellanica 166
Carex microglochin 167
Carex microptera 168
Carex nebrascensis 169
Carex nelsonii 170
Carex neurophora 171
Carex nigricans 172
Carex nova 173
Carex oederi 174
Carex pachystachya 175
Carex paysonis 176
Carex praeceptorum 177
Carex praegracilis 178
Carex saxatilis 179
Carex scopulorum 180
Carex simpliciuscula 181
Carex simulata 182
Carex stevenii 183
Carex utriculata 184
Carex vesicaria 185
Catabrosa aquatica 116
Chamisso arnica 29
Chamisso sedge 175
chestnut rush 132
Cirsium arvense 35
claspleaf twistedstalk 107
clustered field sedge 178
Colorado rush 133
Comarum palustre 36
common moonwort 23
common selfheal 74
common spikerush 188
common yarrow 25
Conioselinum scopulorum 37
corn lily 110
cotton-batting cudweed 75
creeping spearwort 79
Cusick's bluegrass 125

D

Danthonia intermedia 117
Dasiphora fruticosa 194
Deschampsia cespitosa 118
diamondleaf willow 200
different nerve sedge 157
Drosera anglica 38
Drummond's rush 134
dwarf bilberry 202
dwarf birch 193
dwarf hesperochiron 58

E

ebony sedge 155
Eleocharis acicularis 186
Eleocharis bolanderi 187
Eleocharis palustris 188
Eleocharis quinqueflora 189
elephant's head 69
English sundew 38
Epilobium hornemannii 39
Epilobium palustre 40
Equisetum arvense 24
Erigeron lonchophyllus 41
Erigeron speciosus 42
Eriophorum angustifolium 190
Eriophorum scheuchzeri 191
Erythranthe guttata 43
Erythranthe lewisii 44
Erythranthe moschata 45
Erythranthe primuloides 46
Erythranthe tilingii 47

Index

F

felwort 89
fewflower spikerush 189
fewseed bog sedge 167
field horsetail 24
five star miterwort 67
flat-top pussytoes 27
fleshy starwort 87
fowl managrass 121
foxtail muhly 122
fragrant bedstraw 51
fringed grass-of-Parnassus 68

G

Galium bifolium 48
Galium boreale 49
Galium trifidum 50
Galium triflorum 51
Gaultheria humifusa 195
Gentiana algida 52
Gentiana calycosa 53
Gentiana prostrata 54
Gentianella tenella 55
Geranium richardsonii 56
Geum macrophyllum 57
Geyer willow 199
Glyceria borealis 119
Glyceria grandis 120
Glyceria striata 121
golden sedge 146
greenflowered wintergreen 77
grouse whortleberry 205

H

hair-like sedge 151
hairy arnica 31
hairy woodrush 141
Hall's rush 137
heartleaf twayblade 101
Hesperochiron pumilus 58
high northern buttercup 80
hooded lady's tresses 106
Hornemann's willowherb 39
Huron green orchid 104
Hypericum anagalloides 59
Hypericum scouleri 60

J

Juncus alpinoarticulatus 130
Juncus arcticus 131
Juncus castaneus 132
Juncus confusus 133
Juncus drummondii 134
Juncus ensifolius 135
Juncus filiformis 136
Juncus hallii 137
Juncus mertensianus 138
Juncus nevadensis 139
Juncus triglumis 140

K

Kalmia microphylla 196

L

lakeshore sedge 159
Lapland gentian 55
largeleaf avens 57
Ligusticum tenuifolium 61
Limosella aquatica 62
Lithophragma glabrum 63
little green sedge 174
liverleaf wintergreen 76
livid sedge 164
Lomatogonium rotatum 64
longleaf arnica 30
longstalk starwort 88
Luzula campestris 141
Luzula parviflora 142
Luzula spicata 143

M

manyhead cottongrass 190
Marchantia polymorpha 21
marsh arrowgrass 109
marsh bluegrass 126
marsh cinquefoil 36
marsh felwort 64
marsh violet 97
marsh willowherb 40
meadow deathcamas 108
Menyanthes trifoliata 65
Merten's rush 138
Micranthes odontoloma 66
millet woodrush 142
Mitella pentandra 67
moss gentian 54
mountain deathcamas 98
mountain sedge 180
mud sedge 163
Muhlenbergia andina 122
Muhlenbergia filiformis 123
musk monkey-flower 45

N

narrowleaf bur-reed 105
Nebraska sedge 169
needle spikerush 186
Nelson's sedge 170
Neottia borealis 100
Neottia cordata 101
Nevada rush 139
nodding bluegrass 127
northern bedstraw 49
northern bog violet 96
northern green orchid 102
northern green rush 130
northern managrass 119
northern starwort 86
northern twayblade 100
Northwest Territory sedge 184

O

onehead cottongrass 191

P

Parnassia fimbriata 68
Payson's sedge 176
Pedicularis groenlandica 69
Phleum alpinum 124
pink stonecrop 81
plainleaf buttercup 78
Platanthera aquilonis 102
Platanthera dilatata 103
Platanthera huronensis 104
Poa cusickii 125
Poa leptocoma 126
Poa reflexa 127
Podagrostis humilis 128
Podagrostis thurberiana 129
Potentilla glaucophylla 70
Potentilla gracilis 71
primrose monkey-flower 46
Primula incana 72
Primula tetrandra 73
Prunella vulgaris 74
Pseudognaphalium stramineum 75
pullup muhly 123
purple monkey-flower 44
Pyrola asarifolia 76
Pyrola chlorantha 77

R

Rainier pleated gentian 53
Ranunculus alismifolius 78
Ranunculus flammula 79
Ranunculus hyperboreus 80
Rhodiola rhodantha 81
Rhododendron columbianum 197
Richardson geranium 56
Rocky Mountain hemlock parsley 37
russet sedge 179

S

Salix boothii 198
Salix geyeriana 199
Salix planifolia 200
Salix wolfii 201
Saxifraga hirculus 82
Scirpus cespitosus 192
Scouler's St. Johnswort 60
seep monkey-flower 43
Senecio sphaerocephalus 83
Senecio triangularis 84
sheep sedge 158
short awn foxtail 112
shortray fleabane 41
showy fleabane 42
showy pussytoes 28
shrubby cinquefoil 194
Sierra hare sedge 161
silvery primrose 72
silvery sedge 150
simple bog sedge 181
slender cinquefoil 71
slender-leafed ligusticum 61
slenderbeak sedge 145
small-leaf angelica 26
smallwing sedge 168
softleaf sedge 154
Sparganium angustifolium 105
Sphagnum 22
spike woodrush 143
Spiranthes romanzoffiana 106
star sedge 156
Stellaria borealis 85
Stellaria calycantha 86
Stellaria crassifolia 87
Stellaria longipes 88
Steven's sedge 183
Streptopus amplexifolius 107
swordleaf rush 135
Symphyotrichum spathulatum 90

T

teacher's sedge 177
Thalictrum alpinum 91
thinleaf huckleberry 203
thread rush 136
three-hulled rush 140
threepetal bedstraw 50
Thurber's bentgrass 129
thyme-leaf speedwell 94
ticklegrass 111
Tiling monkey-flower 47
timber oatgrass 117
tobacco root 93
Toxicoscordion venenosum 108
Triglochin palustris 109
Trollius albiflorus 92
tufted bulrush 192
tufted hairgrass 118
twinleaf bedstraw 48

U

umbrella liverwort 21

V

Vaccinium cespitosum 202
Vaccinium membranaceum 203
Vaccinium myrtillus 204
Vaccinium scoparium 205
Vaccinium uliginosum 206
Valeriana edulis 93
Veratrum californicum 110
Veronica serpyllifolia 94
Veronica wormskjoldii 95
Viola nephrophylla 96
Viola palustris 97

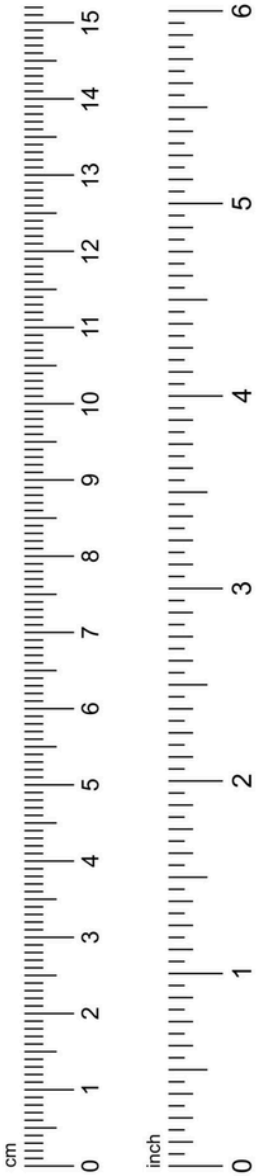
W

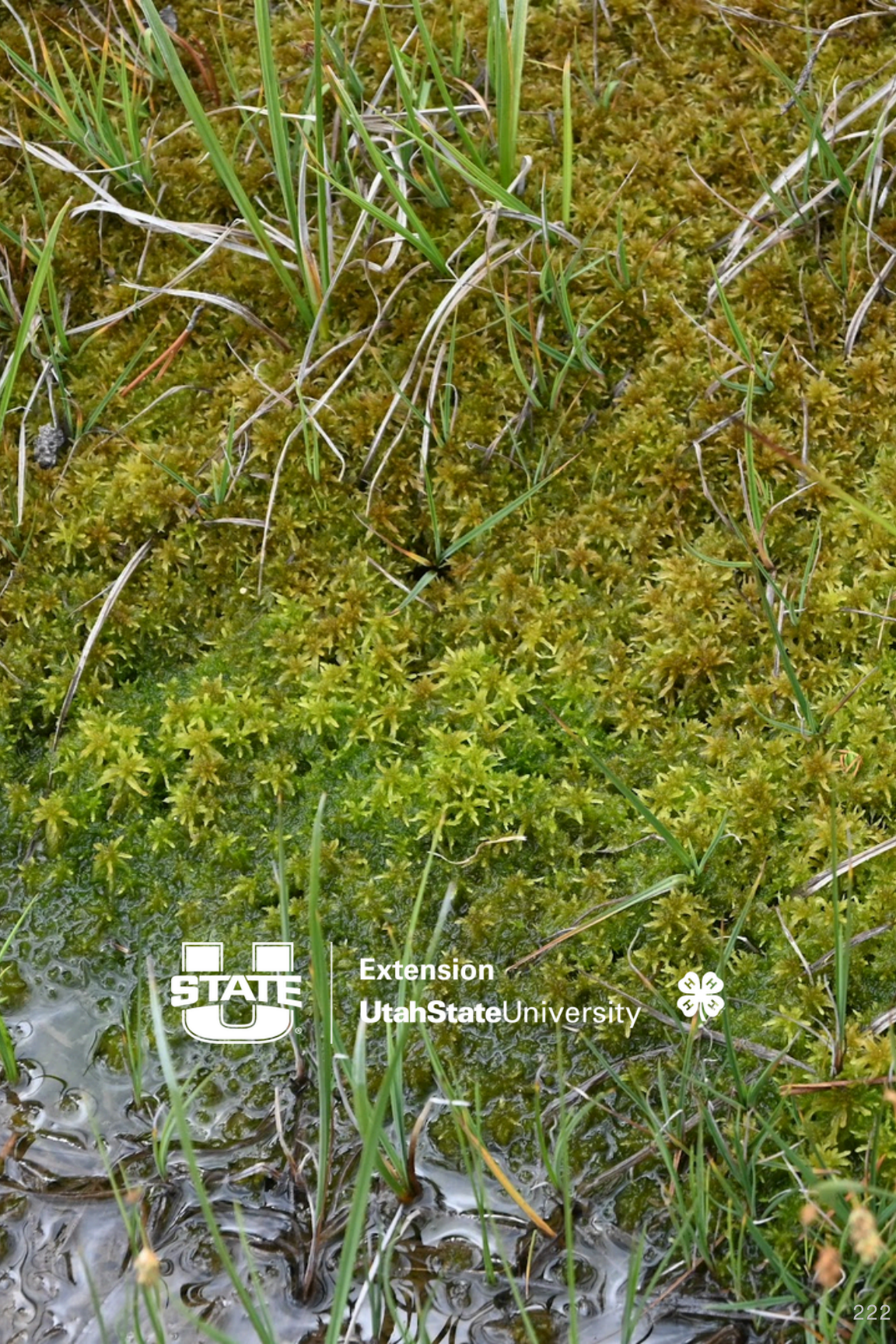
water mudwort 62
water sedge 144
water whorlgrass 116
western Labrador tea 197
western mountain aster 90
white bog orchid 103
musk monkey-flower 45
whitish gentian 52
whortleberry 204
wiregrass sedge 160
Wolf's willow 201
woodrush sedge 165

Y

yellow bog sedge 153
yellow marsh saxifrage 82

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