

**List of Plant Identification Terms (Biology 488)**  
**Be able to identify and define these terms**

**Trees and tall shrubs**

- Broadleaf vs. Needleleaf trees
- Deciduous vs. Evergreen trees

**Shrub growth forms**

- Tall shrub (>2 m tall)
- Low shrub (40-200 cm tall)
- Dwarf shrub (<40 cm tall)
- Hemi-prostrate dwarf (somewhat creeping, 15-25 cm)
- Prostrate dwarf shrub (creeping, <15 cm tall)

**Herbaceous growth forms:**

- Graminoids
- Forbs

**Graminoid growth forms:**

- Caespitose (bunch forming)
- Rhizomatous
- Stolonifersous
- Turf forming (fibrous root systems)

**Forb growth forms:**

- Erect forb
- Cushion form
- Mat form
- Perennial vs. annual
- Rosette forb

**Roots and belowground parts, and descriptions**

- Fibrous root system
- Rhizome
- Stolon

**Stems (woody plants)**

- Internode
- Leaf node
- Leaf scar

**Stems and leaves (graminoids):**

- Auricle
- Bract
- Internode
- Ligule
- Node
- Sheath

**Leaf parts:**

- Blade
- Leaflets and Rachis (in compound leaves)

- Ligule (in grasses)
- Margin
- Midrib
- Petiole
- Stipule (know various forms of stipules, e.g. Free Stipules of *Salix*, Persistent Basal Stipules of *Oxytropis* and *Dasiphora fruticosa* and Interpetiolar Stipules of the Rubiaceae family)
- Veins

### **Leaf descriptions**

- Arrangement of leaves (Alternate, Fascicles, Opposite, Whorled)
- Base of leaves at juncture with petiole or stem (Acuminate, Acute, Cordate, Cuneate, Rounded, Sessile, Truncated)
- Compound leaf forms (Palmate, Pinnate, Odd Pinnate, Even Pinnate, Trifoliolate, Twice Pinnately Compound (or bipinnate))
- Deciduous vs. Evergreen leaves
- Leaf surfaces (Coriaceous, Glaucous, Pubescent, Rugose, Scrufty)
- Hairiness of leaves (Ciliate, Glandular, Lanate, Pilose, Pubescent, Rugose, Scabrous, Scrufty, Stellate Hairs, Vilous, Woolly)
- Margins of leaves (Entire, Ciliated, Crenate, Denticulate, Glabrous, Glandular, Involute, Papillose, Scabrous, Serrate, Tomentose, Toothed, Undulate)
- Shape of leaves (Cordate, Cuneate, Elliptical, Hastate, Incised, Lanceolate, Linear, Needleleaf, Oblanceolate, Oblong, Obovate, Orbiculate, Ovate, Palmate, Reniform, Serrulate, Spatulate)
- Winter-persistent dead leaves (as in *Salix pulchra*, *Alnus viridis*)
- Simple vs. Compound Leaves
- Tips of leaves (Acuminate, Acute, Blunt, Mucronate, Rounded)
- Venation of leaves (Dichotomous, Palmate, Parallel, Pinnate, Reticulate)

### **Inflorescence arrangement:**

- Catkin
- Corymb
- Cyme
- Panicle
- Raceme
- Spike
- Umbel and Compound Umbel

### **Flowers: parts and descriptions**

- Apetalous (without petals)
- Composite flowers (of Asteraceae)
- Dioecious vs. Monoecious plants
- Female floral parts (Carpels, Follicle, Ovary, Pistle, Stigma)
- Hypanthium
- Inferior Ovary vs. Superior Ovary
- Male floral parts (Stamen, Anther, and Filament)
- Pedicel

- Perfect (male & female) vs. Imperfect (Unisexual) Flowers
- Petals and Corolla
- Petal Shape and Arrangement (Connate, Fused, Lobed, Urceolate, Campanulate, Zygomorphic)
- Precocious Flowering (before leafout) and Precocious (early) Ripening of Fruit
- Reflexed Sepals
- Sepals and Calyx

**Grass inflorescence:**

- Awn
- Caryopsis (seed)
- Floret
- Glumes (outer and inner glume)
- Lemma
- Palea
- Pedicel
- Spikelet
- Graminoid inflorescence arrangements
  - Panicle (as in *Calamagrostis Canadensis*)
  - Spike (as in *Alopecurus alpinus*)

**Sedge flower parts and descriptors:**

- Dioecious vs. monoecious
- Terminal spikelet
- Lateral spikelet
- Position of female and. male flowers within spikelets.
- Bract or Scale
- Perigynia
- Anthers

**Fruit types:**

- Fruit types (Achene, Aggregate, Berry, Capsule (know various forms of capsules in, for example, *Salix*, *Draba*, *Saxifraga*), Drupe, Hip, Nuts, Pome, Samara (as in *Betula* and *Acer*))