Plant Morphology: Keys for Grassland Plant Identification

Jacob Knapek, MS Biology Student, University of North Dakota

<u>jacob.knapek@und.edu</u>



Plant groups

Grasses:

Hollow stems
Slender leaf blades
Flowers not showy

Note: sedges and rushes are grass-like but not actually grasses



Broad-leaved plants: Large, broad leaves

Showy flowers

Forbs

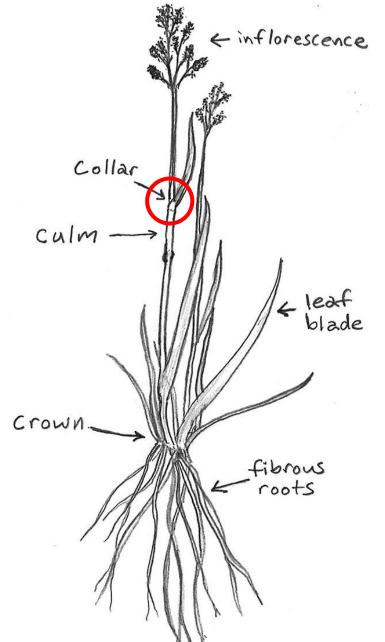
Legumes

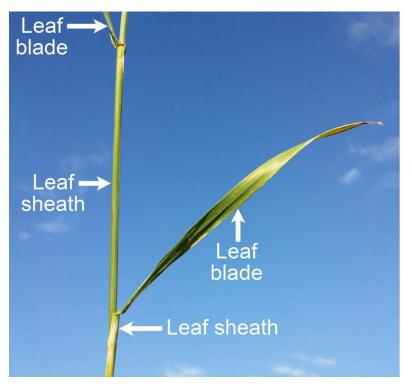
Shrubs

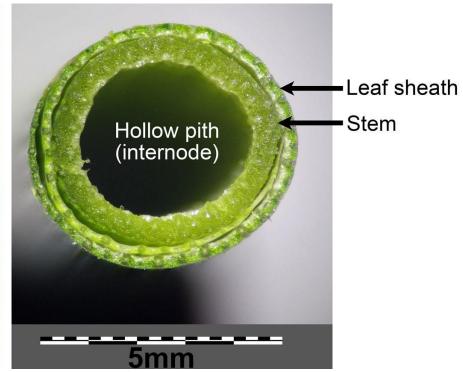
Trees



Grass identification

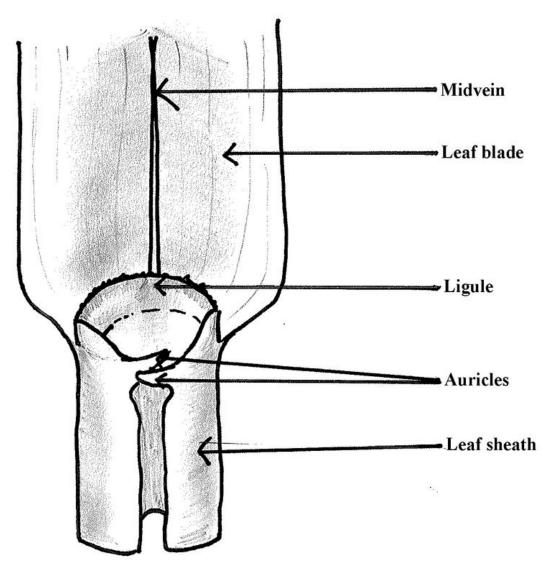


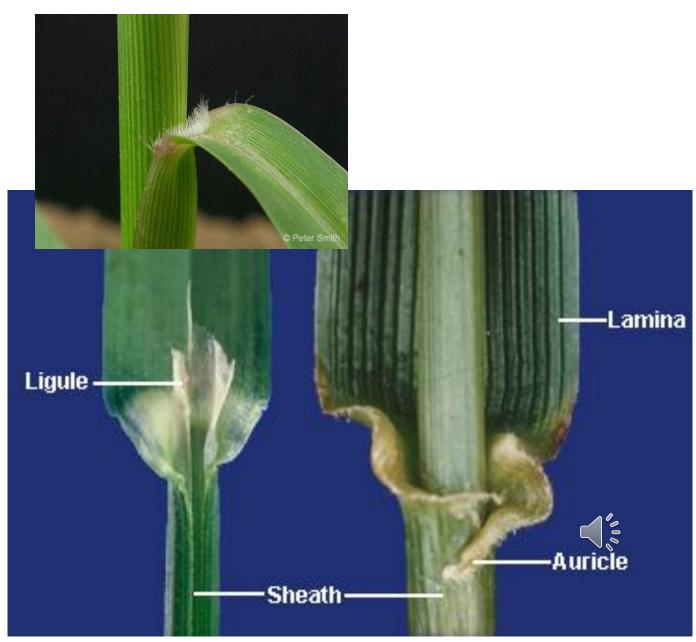




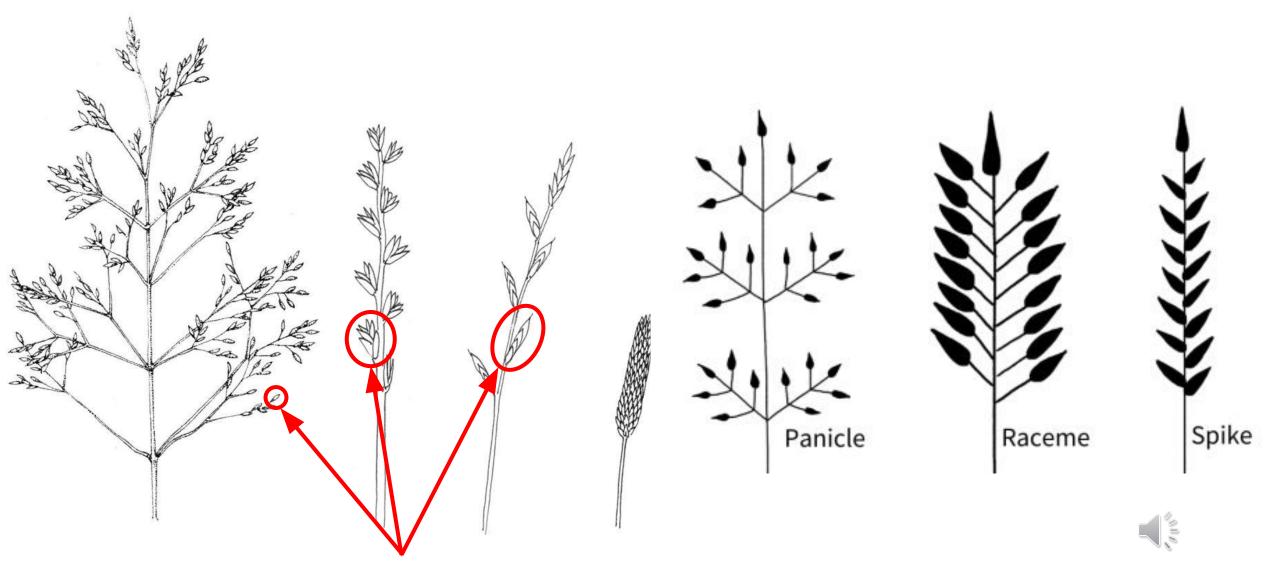


Collar area





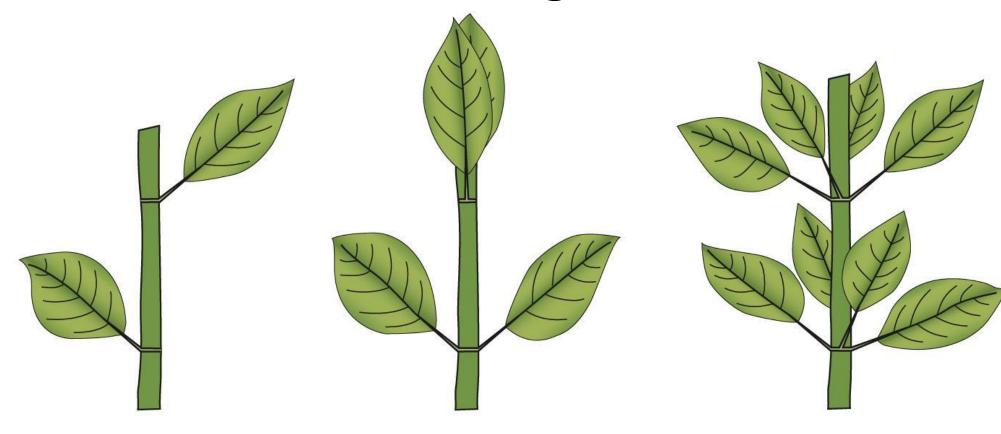
Inflorescences



Spikelet = flowering unit of grasses

Leaf types Simple Leaf **Compound Leaf Pinnately** Leaflet **Palmately**

Leaf arrangement



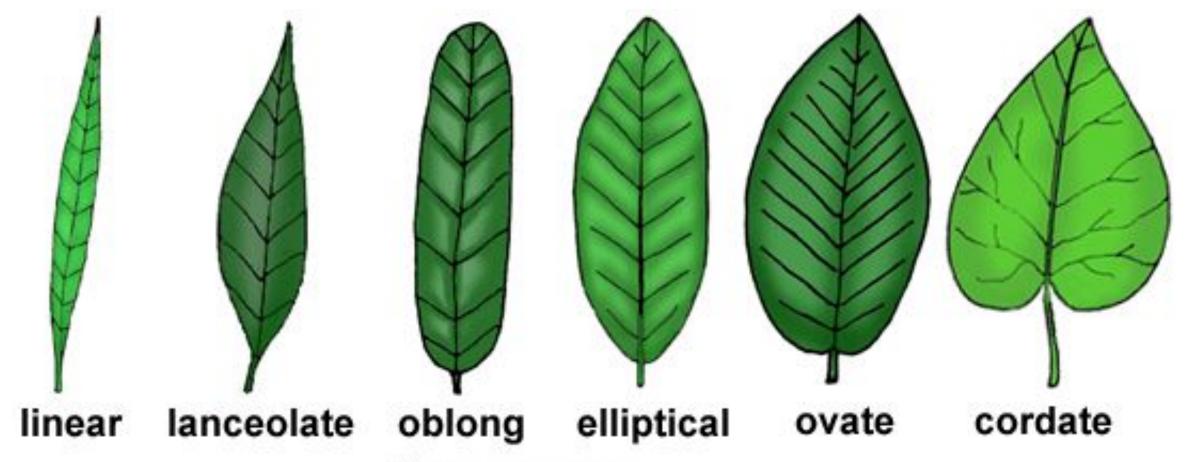
Alternate (1 leaf/node)

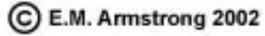
Opposite (2 leaves/node, placed on opposite sides of the stem)

Whorled (3 or more leaves/node)



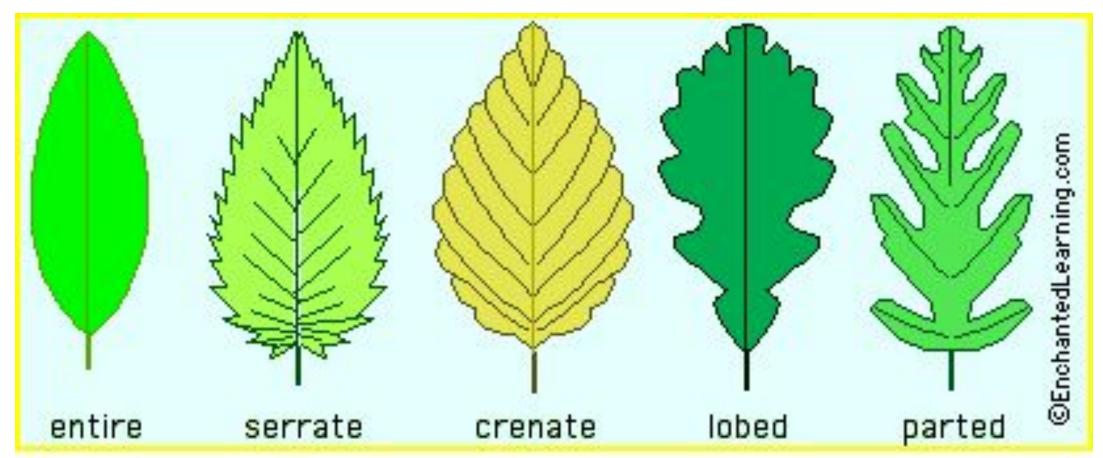
Leaf shapes





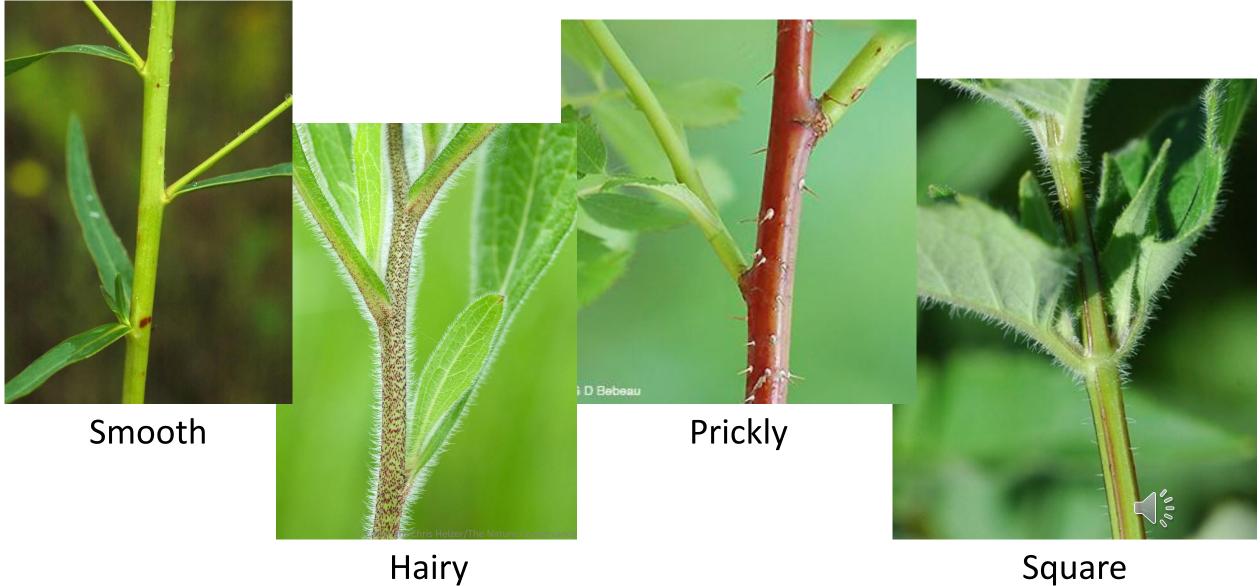


Leaf edges (margins)



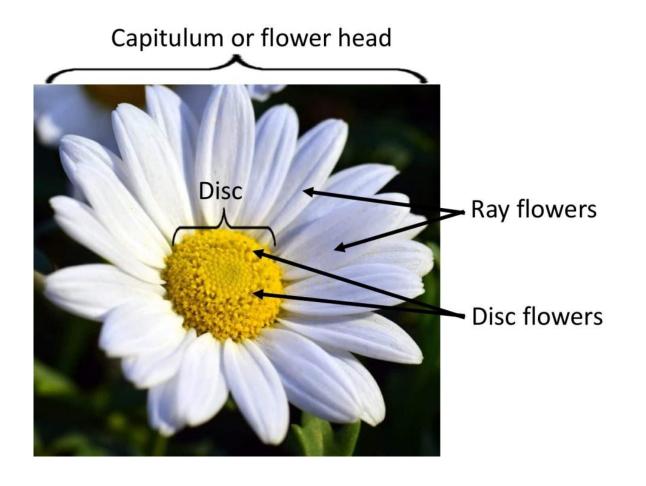


Stem and leaf texture

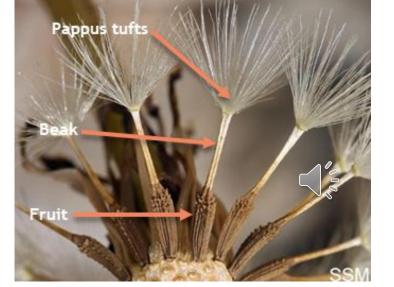


Square

Flowering structure







Additional resources

- This post in the biodiversity blog provides more information on leaves
 - https://biodiversity.utexas.edu/news/entry/leaves

