

**Key Checklist for use with herbarium -- ES&P 400 -- answer as many as you can and then try key**

**Your name:** \_\_\_\_\_ **Specimen ID #:** \_\_\_\_\_

Your specimen is:

\_\_\_\_\_ tree \_\_\_\_\_ large shrub \_\_\_\_\_ small shrub \_\_\_\_\_ subshrub perennial \_\_\_\_\_ small forb  
\_\_\_\_\_ succulent (including cactus) \_\_\_\_\_ grass or grass-like plant

How tall is your specimen? \_\_\_\_\_ m \_\_\_\_\_ cm (circle one)

Leaves are: \_\_\_\_\_ simple \_\_\_\_\_ compound \_\_\_\_\_ miniscule/scale-like/missing \_\_\_\_\_ replaced by  
spines (cactus)

Leaves are: \_\_\_\_\_ basal (all in a rosette at the base) \_\_\_\_\_ cauline (on stems) \_\_\_\_\_ mixture of both

Leaves are: \_\_\_\_\_ missing \_\_\_\_\_ alternate \_\_\_\_\_ opposite \_\_\_\_\_ whorled \_\_\_\_\_ very hard to tell

Maximum length of leaf in cm: \_\_\_\_\_ Maximum width of leaf in cm: \_\_\_\_\_

Top of leaf surface is: \_\_\_\_\_ glabrous \_\_\_\_\_ glaucous \_\_\_\_\_ fuzzy/hairy/woolly \_\_\_\_\_ nettlesome

Underside of leaf is: \_\_\_\_\_ glabrous \_\_\_\_\_ glaucous \_\_\_\_\_ fuzzy/hairy/woolly \_\_\_\_\_ nettlesome

Color of top of leaf is: \_\_\_\_\_ yellow-green/bright green \_\_\_\_\_ light green \_\_\_\_\_ medium green  
\_\_\_\_\_ dark or olive green \_\_\_\_\_ silver-green/greyish/whitish \_\_\_\_\_ leaves dry/dead  
\_\_\_\_\_ no leaves

Color of underside of leaf is: \_\_\_\_\_ same as topside \_\_\_\_\_ noticeably lighter than topside

The leaf margins are: \_\_\_\_\_ entire (may be wavy) \_\_\_\_\_ lobed \_\_\_\_\_ crenulate \_\_\_\_\_ toothed  
\_\_\_\_\_ spinose

The leaf is: \_\_\_\_\_ more or less flat \_\_\_\_\_ rolled or curled backward/under \_\_\_\_\_ folded or rolled  
inward/upward

The overall shape of the leaf is:

\_\_\_\_\_ linear (much thinner than long)  
\_\_\_\_\_ lanceolate (much longer than wide, but not as much so as linear; often a bit wider at base)  
\_\_\_\_\_ oblanceolate (like lanceolate, but wider toward the tip)  
\_\_\_\_\_ spatulate (much wider at the tip than the base)  
\_\_\_\_\_ elliptical (symmetrical oval, with the widest part in the middle)  
\_\_\_\_\_ oblong (elliptical, but with roughly parallel sides in the middle, a flattened oval)  
\_\_\_\_\_ ovate (elliptical, but wider toward the base, like an egg)  
\_\_\_\_\_ obovate (elliptical, but wider toward the tip)  
\_\_\_\_\_ cordate (heart-shaped, with a notch in the base where the petiole attaches)  
\_\_\_\_\_ obcordate (heart-shaped, but with the notch at the rounded, wide tip)  
\_\_\_\_\_ deltoid (triangular, with the base wide and the tip narrow)  
\_\_\_\_\_ cuneate (wedge-shaped, but with the tip wide and the base narrow)  
\_\_\_\_\_ reniform (kidney-shaped, noticeably wider than long)

- \_\_\_\_\_ lobed
- \_\_\_\_\_ palmate (lobed like a hand and its fingers)
- \_\_\_\_\_ pinnatisect (lobed perpendicularly along the axis, like many mustards)
- \_\_\_\_\_ hastate (a triangularly lobed leaf, basal lobes more or less perpendicular to the axis)
- \_\_\_\_\_ sagittate (spear-like, with the base barbed back over the petiole, almost parallel to it)
- \_\_\_\_\_ flabellate (fan-shaped, with a base perpendicular to the axis)
- \_\_\_\_\_ rhomboid (diamond-shaped, with the widest part in the middle)
- \_\_\_\_\_ orbicular (almost perfectly round)
- \_\_\_\_\_ falcate (sickle-shaped, a narrow leaf with a crooked axis)

How long is the petiole or leaf stalk/stem? \_\_\_\_\_ no petiole (sessile) \_\_\_\_\_ cm mm (circle one)  
 Does the petiole have “wings” running down it or stipules (small leaf like structures)? \_\_\_\_\_

If the leaf is compound, how many leaflets does it have? \_\_\_\_\_ (it can be a range, e.g., 3-7)  
 How are the leaflets arranged? \_\_\_\_\_ palmately (all coming from one point of origin)  
 \_\_\_\_\_ pinnately (branching out from a single main rib)

How are the veins on the leaf arranged? \_\_\_\_\_ palmately \_\_\_\_\_ pinnately \_\_\_\_\_ in parallel

If there are flowers:

How many sepals are there? \_\_\_\_\_ Are they fused at the base or separate?  
 \_\_\_\_\_

If there are petals, how many? \_\_\_\_\_ Are they fused at the base or separate?  
 \_\_\_\_\_

Might this be a composite flower (like a daisy or sunflower)? \_\_\_\_\_ If so, how many ray  
 flowers (look like petals)? How many disk flowers (look like a dense collection of  
 stamens/pistils forming a disk)

Might the flowers be catkins or stalks lined with stamens, giving them a fuzzy appearance. There  
 are usually no petals or very small, inconspicuous ones. The whole structure usually  
 droops. \_\_\_\_\_

If there are stamens, how many? \_\_\_\_\_ Can you make out pistils? \_\_\_\_\_ How many?  
 \_\_\_\_\_

Are pistils separate structures, each with its own ovule, style, and stigma, or are they at least  
 partly fused? \_\_\_\_\_

How long is the corolla (flower parts above the calyx (or sepal structures)? How wide across is  
 the corolla?

What color are the flowers? \_\_\_\_\_

If the plant has an obvious smell, describe it in terms of whether it's pleasantly fragrant or unpleasantly  
 stinky and anything else that might help you remember the smell (e.g., mint-like, sage-like,  
 lemony, like a dead animal, or whatever): \_\_\_\_\_  
 \_\_\_\_\_