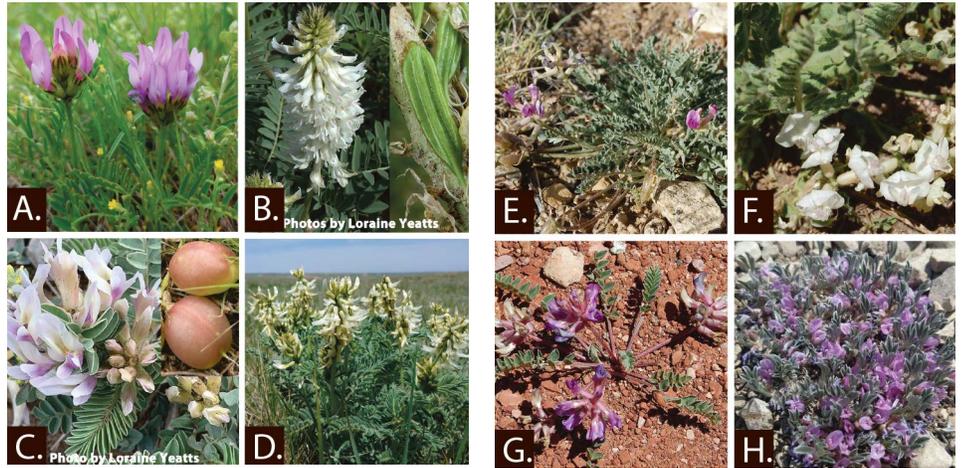


Aghast – An *Astragalus*!

One of the most speciose genera in the world is that of *Astragalus*, with an estimated 3,000 species globally. *Astragalus* is also a common member of the western landscape, with an estimated 117 species present in Colorado alone – and within the greater Denver metro area, 28 different *Astragalus* species have been documented.

Astragalus is a member of the pea, or Fabaceae, family. It exhibits typical characteristics of this family such as bilaterally symmetrical flowers with the petals comprised of three parts – an erect banner, two lateral wings and a keel (two petals fused together, resembling a keel boat). These plants often have pinnately compound leaves as well. *Astragalus* differs from the closely related genus *Oxytropis* by the shape of the keel petal – in *Oxytropis*, the keel petal is narrowed and beak-like at the tip, but only tapered to a point in *Astragalus* flowers. As with all members of the pea family, the fruit type for *Astragalus* is a legume.

Although 28 species of *Astragalus* have been documented from the greater metro



All images taken by Jennifer Ackerfield, except images B and C, which were taken by Loraine Yeatts.

area, some of our most common species found blooming in the spring are: (A.) *A. agrestis*, (B.) *A. bisulcatus*, (C.) *A. crassicaarpus*, (D.) *A. drummondii*, (E.) *A. missouriensis*, (F.) *A. parryi*, (G.) *A. shortianus*, and (H.) *A. tridactylicus*. *Astragalus bisulcatus*, or two-grooved milkvetch (named for the two grooves on the top of each legume), can even hyperaccumulate selenium (a heavy metal found in the soil) in its tissues. *Astragalus crassicaarpus*, or ground plum, gets its name from the plum-like legumes produced.

There is even one *Astragalus* that has not been seen in Colorado for over 100 years – *A. americanus*. This *Astragalus* is only known from two historical collections made in 1874 and 1892. It should be sought after in moist pine forests of the southwestern part of greater metro area, most likely in the Pike National Forest.

Locate an *Astragalus* or two by photographing as many plants as possible in the month of May. Post your findings to [iNaturalist](#) so they will automatically be added to the [Denver EcoFlora Project](#).

April EcoQuest – Pasque Flowers and City Nature Challenge

Forty-four observations of pasque flowers (*Pulsatilla nuttalliana*) were made during the month of April! The City Nature Challenge resulted in over 1850 observations of plants and fungi in the greater Denver metro area. Great work everyone!

What is an EcoQuest?

EcoQuests are part of the Denver EcoFlora Project. These monthly quests challenge citizens to become citizen scientists and observe, study and conserve the native plants of the Denver – Boulder metro area via iNaturalist, an easy-to-use mobile app.

How Do I Get Started?

1. Download the iNaturalist app or register online at [iNaturalist.org](#).
2. Take photos of the plants in bloom that you find on your daily neighborhood walk. It is okay if they are weeds! Avoid taking photos of cultivated plants in gardens or in your home.

3. If you are concerned about revealing the location of sensitive plants or observations at your own house, you can hide the exact location from the public by changing the “geoprivacy” of the observation to “obscured.”
4. Post your findings on iNaturalist via the app.
5. Your observations will automatically be added to the Denver EcoFlora Project.
6. Sign up to be a member of the [Denver EcoFlora Project](#) on iNaturalist to receive updates and additional information.

How Do I Participate Given COVID-19?

As a participant, it is up to you how much or how little you take part. Please stay close to home and maintain a social distance of 6 feet from others. Wear a cloth mask in public areas. Respect closures and avoid places of high use. Do only what feels safe for you and your family and is in accordance with your local regulations.

What is the Goal?

The Denver EcoFlora Project is designed to meaningfully connect citizens with biodiversity and to assemble novel observations and data on the metro area’s flora to better inform policy decisions and conservation strategies.