

March EcoQuest – *Townsendia* Tracking

Townsendia, or Easter daisy, is one of the first plants to bloom in the foothills. Like their common name suggests, you will typically begin seeing them bloom around Easter. Although the weather can be quite cold this time of year, Easter daisy is adapted to withstand freezing conditions and blankets of snow – these plants form low mounds close to the ground, a successful strategy that helps to maximize heat retention during colder periods.

As a member of the Compositae (Asteraceae), or aster family, these “flowers” are not all that they appear at first glance. Indeed, what looks like a single flower is actually a composite of many flowers arranged in an inflorescence called a head. Inside of this head, there are even two different types of flowers present – ray flowers, which are petal-like, on the outer periphery of the head and disk flowers in the center. These heads are nested amongst a rosette of leaves, protecting them from potentially cold conditions.

There are two species of *Townsendia* in the metro area that you will see flowering – *T. exscapa* and *T. hookeri*. These two species can be very difficult to tell apart – the main difference being that *T. exscapa* has larger heads with disk flowers over 6.5 mm while *T. hookeri* has smaller heads with disk flowers under 6 mm in length.

Documenting the flowering period of species such as these can ultimately aid our understanding of plant responses to a warming climate. By comparing observations, in combination with natural history collections dating back over 100 years, we can better understand how seasonal patterns are changing, and even make predictions for the future.

See if you can locate some Easter daisies and help Denver Botanic Gardens document their flowering period by photographing as many plants as possible in the month of March. Post your findings to [iNaturalist](#) so they will automatically be added to the [Denver EcoFlora Project](#).



Townsendia exscapa, [chummymeg](#) some rights reserved, CC BY-NC



Townsendia hookeri, [dlehle](#) some rights reserved, CC BY-NC

February EcoQuest Results – Ponderosa pine

Three observations of ponderosa pine were made in the month of February. We now have over 1,500 observations of ponderosa pine for the Denver-metro area.

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.

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.



Photo by Scott Dressel-Martin