

March EcoQuest: Tracking Townsendia



T. exscapa, [clyde joelle](#), some rights reserved, CC BY-NC.



T. hookeri, [christian nunes](#), some rights reserved, CC BY-NC.

Townsendia, or Easter daisy, are 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 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 among a rosette of leaves, protecting them from potentially cold conditions.

There are two species of *Townsendia* in the metro area that you might 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.

What is an EcoQuest?

EcoQuests, part of the Denver EcoFlora project, challenge citizens to become citizen scientists and observe, study and conserve the native plants of the City 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 ok if they are weeds! But avoid taking photos of cultivated plants in gardens or in your home.
3. If you are concerned about revealing the location of sensitive organisms 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. You can add an identification to your photo when you post your findings on iNaturalist, or leave it blank for others to identify.

What is the Goal?

The 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