August 2022

Notes of a Naturalist

A newsletter bringing you the species, landscape, history, and happenings of the Taft-Nicholson Center

Berries Abound

The appearance of wild berries is one of the first signs of summer nearing an end. The ripening of these fruits coincides with the timing of animals preparing for winter. Bears are now in hyperphagia, and spend large portions of their day eating berries and other plant foods. During this physiological phase, they consume as many calories as possible to fuel them through five months of hibernation when they are living solely off of fat reserves. Meanwhile, many birds are preparing for their long journeys ahead by fueling up on berries. Humans may also be eagerly searching out edible berries. Stumbling upon a patch of thimbleberries or huckleberries while hiking is always a pleasant surprise. There are, of course, a few popular and commonly sought out berry plants, but southwest Montana is home to many other edible berries that have been used by Indigenous peoples of the region for thousands of years.

Huckleberry

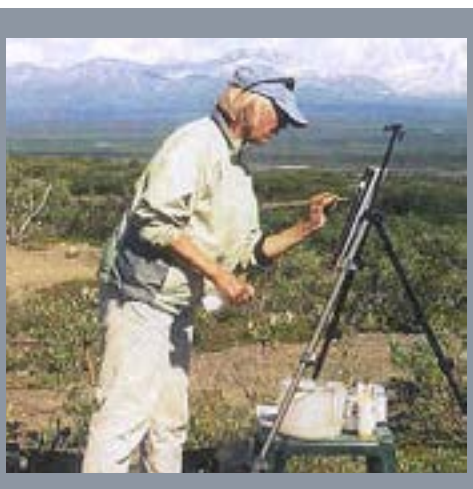
If you find yourself foraging for berries, remember to be very cautious, consult field guides, and be certain to have a positive ID before consuming. While there are many edible berries, others can cause allergic reactions, and some are highly toxic. Some otherwise-edible berries even contain toxins in their seeds. Chokecherry, rose hips, and serviceberries are great examples. These plants are all members of the rose family, and their seeds all contain amygdalin, a compound also found in the seeds of many other species in that family, including apples and peaches. Amygdalin breaks down into cyanide toxins when the seeds are crushed and digested. So while these wild berries are edible, it's best to avoid the seeds. This is especially true for rose hips, whose seeds are covered in hairs that can cause irritation and discomfort. By surrounding seeds with irritating hairs or potentially toxic compounds, plants can ensure that, while the fruit will be consumed by animals, the seeds themselves will be more likely to remain intact.

Rose Hips

The bright red fruits of the aptly-named baneberry are one of the most toxic fruits found in this region. In fact, the entire plant is poisonous. In addition to causing nausea and gastrointestinal upset, ingesting baneberry can lead to cardiac arrest. These plants are members of the buttercup family – one of the common traits of this family is the presence of ranunculin, an unstable compound that breaks down into glucose and protoanemonin when the plant is injured or ingested. Protoanemonin the toxin responsible for the sometimes fatal reactions to consuming baneberry.

Baneberry

If berries are a means for seed dispersal, why are some so toxic? Answering this question requires asking another – who are the primary seed dispersers for these plants? Plants that are considerably toxic to humans and other mammals are often not so for birds. Baneberry's bright red fruits attract many birds, especially songbirds, who seem unbothered by ranunculin – in fact, these birds are the main seed dispersers for this plant.



Meet the Artist: Sue Tyler

"My work reflects the Western landscape: specifically, the heritage and inhabitants of the Mountain West. My subjects are landscapes, historical structures and wildlife. My acrylics and mixed media pieces are meant to inspire and appreciate a unique mountain environment. The goal is conservation and dialogue with the natural world."

Lakeview Happenings

It was great to host the Environmental Humanities graduate students once again!

The second year Environmental Humanities cohort got to visit the Taft-Nicholson Center for the first time. Their introduction to Centennial Valley included canoeing, birding, plant walks, and a hike up Odell Creek. The incoming cohort joined soon after for their program orientation.

The Dee Artists' Colony, led by Jackie Osherow, spent a week at the Taft-Nicholson Center writing poetry and prose and took time each day to find inspiration from the landscape.

Science Wednesdays have been a huge hit this summer, after a two year hiatus. This month we heard from experts talking about bugs, the search for extra terrestrial life, high alpine moths and the grizzlies who feed on them, and the representation of cowboys in western films.