June 2022

Notes of a Naturalist

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

A Spring Chorus

June mornings in Lakeview are filled with a stunning chorus. Featured songs include those of white-crowned sparrows, mountain chickadees, ruby-crowned kinglets, olive-sided flycatchers, and even the raucous calls of sandhill cranes. While songs tend to be longer and more complex than calls, the main difference between a call and a song boils down to what it's used for. Songs are mostly used to attract mates or defend territory. Calls, on the other hand, communicate a variety of things including information about food location, warnings about predators, and pair or flock bonding.

Most birds vocalize, but what we think of as song is mostly found in passerines, or perching birds, a group that is further divided into Suboscines and Oscines. Oscines are the true songbirds. A special organ called the syrinx, similar to our voicebox, allows them to produce complicated vocalizations. The syrinx is located at the base of the trachea where it branches into the lungs. Sound is produced by air being forced over the syrinx, which creates vibrations. The actual structure of the syrinx can vary between bird species. For songbirds, it can be quite complex. Some songbirds can even make two completely different sounds at once by controlling two sides of their syrinx, one in each bronchus, separately. For most birds, vocalizations are ingrained. Songbirds are the main exception. They learn songs like we learn to talk. They listen to and memorize the songs of a parent or other birds of the same species. Then they stumble through practice songs until they get it right.

Some birds make unique sounds produced by other means. An example is the

Ruffed Grouse's drumming display. In these displays, males find a stump or log to perch on and then rapidly beat their wings, which creates mini air vacuums. This in turn creates deep vibrations that can be heard up to a quarter of a mile away. The sound can be heard rumbling through the forests of this bird's range during May and June.

Another stunning example of a non-vocalized bird sound is that of the Wilson's Snipe. Often thought of as imaginary creatures that are the subject of an old prank, these very real birds are more likely to be heard than seen. Their winnowing displays are a part of the spring wetland soundscape. The winnowing sound is produced by air rushing over their tail feathers as they fly.





Lakeview Happenings



We kicked off the season with a course led by Wilderness Medicine Training Center to get our staff and neighbors up to date on our Wilderness First Aid certifications.



After two summers of not hosting classes, it's been great to be running at full capacity once again. Our first group of the season was the Masters of Science for Secondary School Teachers geology class, who went into the field to explore the geologic story of Centennial Valley.



Wilflower Spotlight: Shooting Star



Shooting stars (*Dodecatheon pulchellum* or *Primula pauciflora*) are currently blooming in the wetlands and surrounding meadows of Centennial Valley. These flowers require buzz pollination - pollen will only be released when the flower's anthers are vibrated. Bees accomplish this by rapidly moving their flight muscles while holding onto the flower. Only some species of native bees, such as bumble bees, can do this. Introduced honey bees are incapable of buzz pollination.

We also hosted the Honors College Ecology and Legacy class as they gained a sense of place in the Greater Yellowstone Ecosystem.



Meet the Artist: Sam Nelson

Sam Nelson is a teacher and writer. He recently graduated from the University of Utah's Environmental Humanities graduate program where he studied the use of plants in children's literature and education. In the past, he wrote short stories, local news stories, and essays for adults. Now, he's focused on writing plantcentered informational fiction for children. Sam is from Richmond, Virginia but now lives in Salt Lake City.



