



Water Availability and How Ranchers and Birds Respond

By Amy S. Morfas

According to the U.S. Drought Monitor, 100% of Harney County is in a severe drought. What does this mean for the local ranchers earning a living here who depend on water to sustain and grow the hay needed to feed their livestock? What does it mean for resident and migrating birds who rely on the Harney Basin to fuel and rest?

Dan Nichols has called Harney County home since the mid 1970s, where he is a rancher and business owner at McCoy Creek Ranch. Nichols is also a board member of High Desert Partnership and a former county commissioner. With decades of ranching experience, he has seen his share of weather conditions and considers fluctuating water supplies and the resulting challenges to be a part of ranching and farming in the unpredictable Harney Basin. "We turned [cattle] out six weeks later this year than what we normally do," said Nichols. As ranchers must hold their cattle on private lands longer, costs from hay consumption increase to keep them fed. Nichols said that they've also had to put cattle in other locales across the state to graze. While this is not unprecedented, Nichols conceded that it is "not the norm."

Assuming very limited grass and feed, many ranchers are looking toward decreasing their herd sizes, a common strategy during a prolonged drought. But as more cattle are sold across the range, the markets naturally drop, making the cull less profitable.



Rancher Mitch Baker, manager of the family ranch, which his grandparents bought in 1918, shares that "everything revolves around water". Decisions are made and actions are adjusted on a daily basis as always. Water levels and availability "play a big role in our operations and most everybody's." This is true among ranchers and farmers in the area coping with the drought. "Without it, or with very little water as in the last few years, we've had to make some hard decisions on what we can produce or how we need to change or downsize our practices to still be in business," Baker added.

Pictured: Rancher Mitch Baker cutting native meadow hay July 2020.

Baker explained that everything to do with the operations of the ranch are tied to the bigger picture of the surrounding ecosystem and the birds that either call Harney County home, or migrate through. "The birds depend on what we do," said Baker. He added, "One complements the other. If we [ranchers] are not around, the ecosystem won't be either."

Each ranch is managed independently, so there are no universal solutions. Historical knowledge and experience, as well as adaptability, are crucial to success. "You sink or swim on your own," joked Nichols. While each ranch must respond differently in response to their location and available water sources, coming together at collaborative tables, like the Harney Basin Wetlands Collaborative, provides the opportunities to address challenges. Challenges, like the uncertainty of weather, that affect us all. "The best thing about the collaborative and the diversity of participation is the opportunity to get to know people, answer questions, point things out, offer ranch visits, and share perspectives," added Nichols. "When you see

something for yourself, and it gets explained why it's done that way, that puts a whole different perspective on things. That's been a wonderful attribute of the collaborative."

Baker has learned over the years how to work with less water and appreciates being able to share that knowledge, and learn from others, too, through the collaborative. "It also helps educate people outside of the agricultural industry and understand it better," he added.

With the drought, Baker plans to rotate their cattle around based on where there's available water. Even so, given the high price of hay, Baker is anticipating the need to divest a meaningful portion of cattle for the first time in the history of the ranch. "That's what you gotta do to stay in business," said Baker. Ranchers work for years to build and maintain the best genetic stock to produce a consistently high-quality product. But they must calculate how much they can invest to maintain the stock they have and remain viable. It becomes a matter of economics on whether to keep cattle or take them to market.



Pictured: Greater Sandhill Cranes in wild flood irrigated wet meadow March 2022. Photo by Brandon McMullen.

The lack of water also impacts Malheur Lake and surrounding wetlands which serve as both a crucial stopover on the Pacific Flyway for migratory birds and as well as habitat for the non-migratory population in eastern Oregon. Teresa Wicks, Eastern Oregon Field Coordinator with Audubon Society of Portland and

Harney Basin Wetlands Collaborative participant explains that just as ranchers respond to water availability, so do birds. Many bird species will only nest in places that are surrounded by water, often in the wet meadows with emergent vegetation in Harney Basin. This helps protect their nests from predators. In low water years, fewer meadows and fields are flooded, limiting nesting options. "Most bird populations can handle a few scarce years where there's not a lot of successful breeding," said Wicks. "But if the trend continues, then you'll see a population decline down the road."

Migratory birds are impacted in a different way. They're looking for areas that have adequate fuel sources to recover and build strength on each stop of their long migration. If they're underweight after not getting adequate fuel in the Harney Basin, then they're less likely to have a successful nesting season.

And while Harney County is in a drought, the Basin still offers some of the best habitat along the Pacific Flyway. Still, said Wicks, "If we start losing habitat here as well, then the birds don't really have another place to go."

This article is provided by High Desert Partnership; a Harney County nonprofit convening and supporting six collaboratives including the Harney Basin Wetlands Collaborative.

