

Spring in the Harney Basin Brings Hope

As everything awakens from the cold winter, water and warmer temperatures bring the landscape to life

By Lauren Brown Photography by Susan Doverspike

April 2021

The spring season is always welcomed with open arms in the

Harney Basin. We put the cold, dark winter days in the rearview and watch as the landscape transforms from brown to green. It is a time when everything comes to life.

Spring on the ranch

For ranchers, warmer weather makes working outside a little more pleasant. However, it is a busy time with a lot of work that must be done. Harney County rancher Mitch Baker said while he is still feeding cows in the spring, he is also prepping pastures and fields for the summer. Manure and hay can build up in the pastures. Baker uses pasture harrows to drag his fields. Irrigation ditches are cleaned out and fences are inspected for snow or wildlife damage. Baker said he also attends bulls sales to purchase replacement bulls.

In addition, calves must be branded and cows must be vaccinated before they are turned out onto their summer range, which Baker said usually happens around April 15.

While there is much to do, Baker enjoys seeing everything come alive in the spring. "You watch your calves grow and you watch the grass and your fields grow. It's a pretty enjoyable time," he said. "Everything goes from dormant and dry in the winter, and you watch the whole landscape start to blossom or bloom."



Pictured: A classic Harney Basin spring scene. Ross's Geese in the meadow, behind them cattle, bales of meadow hay the cattle feed on during the winter and into spring and the Steens Mountain carrying snowpack.

Plants awaken

For plants in the basin, spring is the crucial season that determines how much growth will occur. Warmer temperatures and the flow of surface water combine to create an opportunity for growth. Tony Svejcar, a consultant for the Harney Basin Wetlands Collaborative and a retired rangeland scientist and research leader with the U.S. Department of Agriculture, noted that spring is when soil temperatures start to rise and the growing points in many plant species will burst bud. "The meadow plants have buds that are below ground. They are growing points, and so those will break dormancy. You'll begin to get this growth, and you'll start to see green shoots coming up," Svejcar explained.

According to Svejcar, in the spring, the soil moisture is high enough that once the temperatures come up, those perennial meadow grasses are going to start growing whether they get surface water or not. If the surface water is present, the grasses will continue to grow and produce enough hay to harvest. "But if they don't get that free-flowing surface water, there doesn't tend to be enough production later in the season to harvest," Svejcar said. Low producing areas can still be grazed.

"April and May are the time of life in the basin where all the plants are waking up," said Esther Lev, the former executive director of The Wetlands Conservancy and a wetlands consultant for the Harney Basin Wetlands Collaborative. "It's really this period of time where water is telling the story of everything that's going to happen in the plant world for the rest of the year."

The spring growth in the Harney Basin takes place in a short time period between late April and mid June because the high desert climate doesn't usually provide much precipitation during the summer months. "This is the period when we have the water and we have the warmer temperatures, and that's when everything goes nuts from a growth standpoint," Svejcar said.

Lev and Svejcar agree that as the wildlife and plants come to life, the rate of change is a fascinating part of witnessing spring in the Harney Basin. "Every couple of days, there's something new to look at and see. The days are longer, it's warmer and this is the time to live. It's neat getting to be a human that participates in it," Lev said. "I think especially after this last year where people have felt really constrained and confined, I actually think that spring equates hope for people."

Fish seek spawning habitat

During the winter, Malheur Lake is mostly frozen. In early spring, the ice begins to crack and melt. Malheur National Wildlife Refuge Fish Biologist James Pearson said this is also when the lake begins to expand in size thanks to snowmelt from Steens Mountain. The carp, which have been overwintering in the lake and the lower Blitzen River, begin to feed and their activity increases. The feed is better in areas of the lake that are newly inundated with snowmelt or surface water. As the fish get bigger and stronger, they start to look for spawning habitat.

Suitable habitat would include areas with submergent aquatic vegetation or inundated terrestrial vegetation, and large groups of carp will gather in these areas to spawn. The eggs must adhere to the vegetation to successfully hatch in the future. Those eggs that fail to adhere to vegetation, fall to the sediment and die off as a result of the lack of oxygen. "That water that comes off the mountain, which inundates this vegetation, is really important for their spawning success," Pearson said. "If you don't get that large pulse of water off the mountain, they won't have that much spawning habitat."

The redband trout that overwinter in the lower Blitzen River also spawn in the spring, however, they swim upstream seeking cooler water. "They actually travel from the lower Blitzen and head up, sometimes 30 or 40

miles, into the upper Blitzen watershed where there is good spawning habitat and where there are cold springs that will help them survive through the warm summer," Pearson said.

Pearson said the Harney Basin is a beautiful place to be in the spring. "When we get this pulse of water, it's giving life to the basin and everything starts to green up. The grasses start sprouting up. The fish and the wildlife start perking up and start moving and you also get the migration. All the birds that have been overwintering in California and the southern states are starting to move up, and they utilize our basin when we have this greening up period to refuel themselves on their journey."

Birds on a journey

In fact, the Harney Basin transforms into a bird thoroughfare in the spring as it is a major stop for migrating birds on the Pacific Flyway. Many birders come to the Harney Basin to see the large flocks of Ross' and snow geese in March and April. High concentrations of cranes and waterfowl are also coming through at that time.



According to Teresa Wicks, the Eastern Oregon Coordinator for the Portland Audubon Society, in early April, the long-billed curlews arrive as well as other shorebirds. The white-faced Ibis also arrive in large numbers starting in mid-April.

In May, after the geese and waterfowl have moved on, the songbirds will arrive. Wicks noted that mid-May is a good time to view woodpeckers, songbirds and rare warblers in the basin, and many birders visit the basin over Memorial Day weekend to see these migrants.

Pictured: A flood irrigated wet

meadow at sunrise with an island of geese and others coming to join.

Wicks said that the Lewis' woodpecker in particular is a notable bird to see in the basin during this time. She said they have green backs, pink breasts and red masks. "They're very brightly colored. They migrate through the refuge, and their numbers tend to peak right around the second or third week in May before they move on to the John Day and Malheur National Forest," she said. "I don't think of them as a high desert bird, so it's very fun to see a big group of them every May."

The songbirds will often feast on insects as they pass through. In fact, in 2019, when there was a flush of painted lady butterflies at the Malheur National Wildlife Refuge headquarters, there were a variety of songbirds including cedar waxwings, black-headed grosbeaks, Western tanagers and Cassin's vireos eating butterflies.

Wicks said that even birds that normally feast on seeds or fruit will eat butterflies, caterpillars, spiders and larvae during the spring migration.

While winter is notable for its absence of bird sounds, Wicks said spring in the Harney Basin is the exact opposite. "There's this thing that happens in the spring when all the plants are starting to bud and flowers are blooming and then the basin goes from being fairly quiet to loud all the time. I love when the basin is so full of bird song." She also noted that the diversity of the habitat within the basin allows one to see a plethora of

wildlife in a single outing. "There are birds singing everywhere, and you can go and see so many cool birds on a day trip. It makes spring feel extra magical," she said.

Since 2011, the Harney Basin Wetlands Collaborative is finding ways to improve the aquatic health and sustainability of Malheur Lake, and wild, flood-irrigated wet meadows across the Harney Basin. This effort is led by a diverse group of stakeholders, including local ranchers, conservation organizations, the Sovereign Nation of the Burns Paiute Tribe, government agencies, technical experts, scientists, area residents, nonprofit partners, and others who share a love and concern for the Harney Basin. For more information about HBWC go online to highdesertpartnership.org.

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

