Conservation

Klamath Basin River Restoration at the Black Drake Ranch/By Glenn Zinkus

Black Drake Ranch is perched in the hills on the east edge of Oregon's Klamath Basin, overlooking the mountains, forests, and rivers of this expansive countryside. The North Fork Sprague River flows from the slopes of Gearhart Mountain

and forms the eastern property line of the ranch, and Fivemile Creek meanders through meadows, bisecting the ranch. Both streams are home to surprisingly large wild redband rainbow and brown trout.

The owners of Black Drake Ranch serendipitously became the stewards of the waters that run through the ranch. Greg Bulkley and his wife, Jacqui, pursued their dream of retiring to a property with some accessible trout water in the West. Greg hadn't envisioned a working ranch as part of retirement, and his first question to the real estate agent was just what they would do with 1,000 acres. The response from the agent was that they would raise cattle. Greg's eyes widened when he asked, "Do you mean cows?" As Greg explains, "Although Jacqui and I had no real intention of getting into watershed restoration, nor did we have any illusions about running a cattle ranch during retirement, we have sort of gone with the flow, and the restoration project has become a full-time job, and quite gratifying to us both."

Greg and Jacqui enthusiastically dove into learning about their new home waters and soon discovered that Fivemile Creek, a major tributary to the North Fork Sprague, is the passageway to 26 miles of trout and sucker spawning and rearing habitat. However, for decades a diversion dam raised the creek during the growing season to provide irrigation water for Black Drake Ranch and other surrounding ranches. This dam was a year-round barrier to fish passage. Removal of this barrier, while preserving the water rights of the neighboring ranches, was a priority project. The diversion-dam replacement involved rerouting the stream for 600 feet over a series of stepped riffles and pools through an old, natural channel revealed by aerial contour mapping. Other key improvements included getting the cattle off the stream banks through a combination of riparian fencing and rotational grazing, the placement of spawning gravel and in-stream masses of wood to provide shade and protection, and the stabilization of cattle-trod



banks with plantings of native alders, willows, and aspens. Stream-bank head-cut repairs also improved water retention and reduced irrigation-water diversions.

While there is more to do on the ranch, the improvements on Fivemile Creek have reestablished access to those 26 miles of spawning and rearing habitat, and improved the overall wildlife habitat. The Oregon Department of Fish and Wildlife staff has observed increased spawning upstream from the restoration, and there's evidence that the improved habitat has resulted in more and larger trout.

Funding for the restoration was provided by state, federal, and private conservation organizations, and the project has provided a boost to the economically distressed area.

Historically, the politics of water in the Klamath Basin have been contentious. The ranching community traditionally focuses on its own business and has been fiercely protective of its water and property rights. As Greg explains, "Restoration efforts that respect and sustain the legitimate property rights of these ranchers are not just good politics. They can succeed in getting a great deal more done in the 95 percent of the watershed that's privately owned than a conventional, confrontational approach."

It was soon after the Bulkleys learned that these waters are a key fish passageway that they met Sue Mattenberger of the U.S. Fish and Wildlife Service in Klamath Falls. Mattenberger is a hydrologist and high-caliber project manager who was instrumental in lifting the restoration projects off the ground by identifying the funding sources and gaining consensus amongst the various water interests in the basin. Mattenberger's integrity and respect for the interests of the various factions, along with her success at Black Drake Ranch, are what opened the gates to the other properties and ranches. Forty contiguous miles of the Sprague River and its tributaries are now under restoration. These restoration efforts are improving fish habitat and are continuing to provide projects and the resultant jobs in the Klamath Basin.