

New Forest Meadows Provide Forage for Wildlife

Toolbox Meadow was no longer living up to its name. The clearing had once been a haven for birds and bird-watchers alike, but it had become very overgrown after decades of conifer encroachment. When members of a local chapter of the Audubon Society tracked a sharp decline in songbird use over many years, they proposed that the meadow be restored to its historic form.



Before: Toolbox Meadow was overgrown with encroaching conifers.

Located in the Diamond Lake Ranger District of Oregon's Umpqua National Forest, Toolbox Meadow is one of many areas being opened up for game animals and other wildlife under the Big Game Forage Enhancement Project. However, it is one of the largest; most of the clearings being created are only small pockets. But the idea for all of them is the same: to establish spaces that let in sunlight and foster new plant growth for wildlife to eat.



After: The slash piles in Toolbox Meadow will be burned to clear them and fertilize the soil.

“Animals need these clearings because the forest is their pantry, and if sunlight can't reach the ground to stimulate new plant growth, then there aren't any groceries,” explained Tod Lum, a wildlife biologist for the Oregon Department of Fish and Wildlife (ODFW). “For example, under good conditions with plenty of nutritious forage, elk cows are capable of birthing calves every year, even twins. But females in the local elk population are usually giving birth only every other year; that shows that this area isn't providing enough nourishment. That's why we started this program.”

Biologists describe such conditions as “early seral habitat.” It refers to the state of early regrowth after a disturbance such as a wildfire, though it can also be simulated by manual clearing techniques. Such disturbances to the woodland may seem destructive at first, but the plant regeneration that follows is welcomed by hungry wildlife.



After a few years of regrowth, Toolbox Meadow will look like this one near Fish Creek. Tod Lum of ODFW checks on its regeneration.

Besides the ODFW, the Umpqua NF partnered with the Rocky Mountain Elk Foundation to launch the project. It was funded in part by Title II of the Secure Rural Schools and Community Self-Determination Act, which helps provide employment opportunities for local citizens on initiatives that improve public lands. The restoration work on Toolbox Meadow was performed by members of the Douglas County Forestry Crew.



The Douglas County Forestry Crew working at Toolbox Meadow.

Another goal of the Big Game Forage Enhancement Project is to increase the nutritional content of plants in established open spaces where wildlife is known to browse. Four fields located on private lands adjacent to the forest were identified. With permission from the owners, the grasses in these fields were fertilized, which can make them about 30% more nutritious to grazing animals. “It’s like eating fortified bread,” said Jeff Bohler, a district wildlife biologist for the Umpqua who worked on the project. The fields were also seeded with deer and elk forage, and some were planted with serviceberry shrubs, which appeal to big game species as well as birds like cedar waxwings and hummingbirds.

As the new plant growth breaks through, a variety of animals have been quick to take advantage of it. Deer and elk can already be seen enjoying the new grasses and buds, but wildlife watchers who tour the area often view many other species as well. They might see flocks of turkeys grazing on grass flowers, or other game fowl such as grouse. Birdwatchers enjoy sightings of migratory species like mountain bluebirds. Vibrant tiger swallowtails and other butterflies flit through sunbeams. There are large predators too, though these are rarely glimpsed. Cougars leave traces of their presence in their spoor and scratch markings, and ODFW wildlife technician Ben Cate recently spotted a black bear. “We definitely see a lot more animal use out of areas that have been treated,” he said.



This field at Boundary Ranch was fertilized and seeded for deer and elk.

Project Stats: Big Game Forage Enhancement

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