Entire wildlife areas have been destroyed and endangered populations of animals gravely depleted by wildfires burning in Eastern Washington.

Much of the area burned east of the mountains included shrub-steppe habitat. The assemblage of sage and other plants is critical to the survival of the pygmy rabbit, sage grouse and sharp-tailed grouse.

It is still the early days in understanding the extent of the damage from the fires and how it unfolded. But wildlife managers think the Pearl Hill fire may cause a population decline of anywhere from 30% to 70% in sage grouse, bringing the statewide population to dangerously low levels.

The Pearl Hill fire is still burning, so the damage could be worse than presently understood. But managers already know that half of the sage grouse leks, or breeding areas, in the heart of the state's endangered population in Douglas County have burned. Likely also lost is the struggling reintroduced population of sage grouse in Lincoln County.

The Pearl Hill fire started Sept. 7 near Bridgeport and burned about 224,000 acres. It was mostly contained as of Tuesday.

Some, and even many of the sage grouse, may have escaped the fire. But some birds are known to have been killed. Birds forced to move also are more vulnerable to predators, because they are in new and unfamiliar territory.

Managers are working to determine the impact to the sage grouse population—and how to support the survivors through the winter, said Hannah Anderson, manager of wildlife diversity for the Washington Department of Fish and Wildlife (WDFW).

For the tiny pygmy rabbit, weighing only a pound and standing not even a foot tall at maturity, the situation is grim.

One of three recovery areas for the rabbits, a federally listed endangered species, was entirely burned. Managers had learned from previous fires to disperse released rabbits to multiple areas to guard against total loss in a wildfire. But the impact to recovery is still significant.

Fire overtook breeding enclosures with a total of about 20 rabbits, as well as four release-and-acclimation pens with about 40 rabbits.

Managers are still assessing how bad the losses were for wild and free-ranging rabbits. But losses surely wiped out years of stewardship and conservation work. About half the population may be lost.

"It's devastating," Anderson said. "A catastrophic loss and a significant loss in recovery.

"The Pearl Hill area is where we have been putting
most of our effort, and we were seeing good productivity. This year we were hoping to see a bump in population so this is pretty sad."

Examination of the most intensely burned areas has revealed a stark reality.

"There is no refugia, no nothing, no salvage," Anderson said.

Some habitat areas were so torched they resemble a moonscape, said Amy Windrope, WDFW deputy director.

Three wildlife area units burned completely—Chester Butte, Dormaier, and Swanson Lakes. The Jameson Lake wildlife water access area was completely burned.

Staff still need to assess damage at West Foster Creek, Bridgeport, Wells, Wenas and Oak Creek wildlife areas.

In all, about 90,000 acres of WDFW-managed lands burned in the fires that have swept over Eastern Washington since Labor Day—about 9% of the department's total lands in the state.

But that seemingly small fraction belies the rarity of what was burned.

Since the mid-19th century, the state has lost 80% of the 10.4 million acres of shrub-steppe estimated to have naturally occurred in the state. And many more thousands of acres were lost in just the last few days.

The windswept, sunbaked sage lands are home to animals and plants seen nowhere else. The open, rolling plains of dryland grasses with their overstory of sagebrush and other woody shrubs are a signature landscape of the West.

The plants characteristic of these lands, with their pungent, aromatic foliage and soft colors, are a vanishing world of bitterbrush, sagebrush varieties and grasses, including bluebunch wheatgrass, Thurber's needlesgrass and Idaho fescue.

While these lands endure severe, sere conditions, they are among the most diverse habitats in the state, home to the burrowing owl, sagebrush sparrow, strutting sage grouse and the sweet-faced pygmy rabbit.

Sagelands are characterized by a community of microscopic organisms that form a distinctive crust on the soil, sealing moisture and preventing erosion. The crust is fragile and if destroyed by fire is slow to regrow. Meanwhile, soils are vulnerable, especially to invasive weeds.

Fire is natural to shrub-steppe. But invasive weeds, such as cheatgrass, set the stage for hotter, bigger fires as they grow into continuous swaths of vegetation that dries out early in the season, tempting fire.

Sagebrush steppe is also very slow to regenerate, taking 10 to 20 years and very prone to being taken over by weeds that just stoke bigger fires, such as cheatgrass. Revegetation and weed management are needed for healthy regrowth, Windrope said.

Weed control is always important on public lands in the best of circumstances. "Truly, now preserving what we have left is going to be the challenge," said Margen Carlson, habitat program director for WDFW.

Also burned in the fires were substantial amounts winter range habitat for mule deer and elk.

Assessment of the damage will continue over the winter and into next spring, and plans already are under discussion to regroup and rebuild.

"We are still reeling, trying to understand the magnitude of these impacts," Carlson said. "This is so incredibly serious, and we need to persevere."

©2020 The Seattle Times
Distributed by Tribune Content Agency, LLC.