

Elk hoof disease research in hands of Washington State

Deformities found in Wallowa and Blue mountains

By RICH LANDERS
for The Spokesman-Review

Washington State University is poised to take over inconclusive research on elk hoof disease that's been plaguing elk west of the Cascades in Washington and Oregon.

The disease also has been found in elk in portions of the Blue Mountains and the Wallowa Mountains near the Idaho border.

The scientist selected to lead the WSU research will have years of state-collected data with which to work.

The Legislature allocated \$3 million to WSU for two years of work on elk hoof disease, said Charlie Powell, spokesman for the WSU College of Veterinary Medicine.

The school created a lengthy job description in July for a new research scientist to head the program. The original deadline for applications was Monday. A selection from applicants could be made by February, "but we plan to accept applications as long as it takes to get a fully qualified person," Powell said.

As of this week, seven applications were being reviewed.

Wildlife scientists are still many steps behind the advancement of the disease, which is similar to hoof rot found and reasonably controlled in livestock. But even if a treatment is found, it would be difficult to deliver to free-roaming elk, state officials say.

The outbreak of painful elk hoof deformities ramped up in 2007 within two of Washington's 10 elk populations — the Willapa Hills and Mount St. Helens herds.

"Well over half" of the elk in this hardest-hit region of southwestern Washington appear to have hoof disease, said Brock Hoenes, Washington Department of Fish and Wildlife statewide elk specialist.

In the past two years, elk hoof disease has begun advancing into the Olympic Peninsula herd in the Skokomish River Valley and the North Cascades herd in the Skagit River Valley.

A 16-member Technical Advisory Committee of experts from multiple states, agencies and universities agreed in 2014 the disease is associated with treponeme bacteria, which are known to cause digital dermatitis in cattle, sheep and goats.

Critics of the state's inability to



An elk shot during an August hunting season near Vader, Washington, had a hoof deformed by foot rot. Courtesy of Larry Gitch via Spokesman Review

"The debilitating effects of TAHD have contributed to the proportion of diseased elk dying from malnutrition."

— Brock Hoenes,

Washington Department of Fish and Wildlife elk specialist

find a treatment for the disease have wanted the Washington Department of Fish and Wildlife to look into environmental factors, such as the possible impacts of aerial spraying practices used by the timber industry.

"It's difficult to tease out other environmental factors separate from the disease," said Kyle Garrison, who became WDFW's hoof disease coordinator in July. "How it manifests itself remains uncertain."

Finding a cure and applying a treatment to a wild elk population seems even further out of reach, he said.

While state researchers are learning more about the disease they call "treponeme-associated hoof disease" (TAHD), little of it is encouraging.

"It progresses pretty rapidly," said Dr. Kristin Mansfield, state wildlife veterinarian.

Citing four years of research with radio-collared elk, some of which have been recaptured for evaluation, she said no cases convincingly indicate that elk can recover after being infected.

"In the past two years," she said,

"we've confirmed that affected animals produce an immune response, but it doesn't seem to be protective."

No evidence suggests TAHD poses a risk to humans, officials say. Tests of muscle tissue of affected game have found the disease in the hooves does not extend to the meat or organs.

How the disease spreads is not clear, Mansfield said. Scientists speculate that the bacteria are transferred in moist soil via the hooves of elk or other animals such as sheep and cows.

Other states are watching the progress of the disease.

"We were pretty keenly interested in a couple reports (of hoof disease) last winter that we investigated," said Jon Rachael, Idaho Fish and Game Department state game manager. "They were tested at the Idaho Health Lab and turned out to be an entirely different, noncontagious situations. To this point, we have not had any confirmed hoof rot cases in Idaho."

A 35 percent decline in the Mount St. Helens herd — one of Washington's two largest elk

herds — has been documented over the past four to five years, said Hoenes, the state's elk specialist. The role of hoof disease is difficult to calculate since the state had been orchestrating a hunter harvest of more than 1,000 cow elk in the core area to bring the herd into balance with habitat capacity, he said. Poor nutrition also played a role in the decline, he said.

"Some people are drawing a cause-and-result relationship with TAHD," Hoenes said, but the role of the disease in the herd's decline couldn't be ascertained.

"A lot of wildlife questions take a long time to answer," Garrison said.

More than 200 volunteers were recruited in 2015 to drive southwestern Washington survey routes in an effort to quantify prevalence and distribution of the disease.

The volunteers found at least one limping elk in 48 percent of the elk groups surveyed, Hoenes said, although he noted that TAHD isn't the only factor that could make an elk appear to be limping.

A spring 2017 aerial survey over the same areas detected a limper in 42 percent of the elk groups found, he said, noting that number "increased to approximately 75 percent within the endemic area."

Of the 2,500 respondents to a 2016 survey of Western Washington elk hunters, 6 percent said they harvested elk with deformed hooves. The number increased in the Willapa Hills to 15 percent

and up to 22 percent overall in the Mount St. Helens area.

Reports of hunters killing elk with deformed hooves increased up to 53 percent in a hot spot in the northwest portion of the Mount St. Helens herd and the southeast corner of the Willapa Hills elk herd area.

Through two years of monitoring, annual survival rates have ranged 59-68 percent for radio-collared elk with hoof disease as compared with 78-79 percent for non-TAHD elk, Hoenes said.

Researchers have attributed 44 percent of mortalities for diseased elk to malnutrition and have attributed an additional 20 percent to cougar predation. In comparison, only 9 percent of mortalities for nondiseased elk have been attributed to malnutrition and 9 percent to cougar predation, Hoenes said.

"The leading cause of death for nondiseased elk has been human harvest — 55 percent — whereas just 9 percent for diseased elk," he said. "Undoubtedly, the debilitating effects of TAHD have contributed to the proportion of diseased elk dying of malnutrition."

All of the elk in the hardest-hit area are faced with serious nutritional limitations, resulting in strongly depressed pregnancy rates, he said.

Seeking a cure that wildlife scientists haven't been able to deliver, the 2017 Washington Legislature passed a bill sponsored by Sen. Kirk Pearson, R-Monroe, that shifted authority for elk hoof disease research from the WDFW to Washington State University.

WDFW had appropriated \$480,000 to elk hoof disease efforts in the past two years, with \$87,000 from the legislature and the rest from federal funds and proceeds of an elk tag auction and raffles.

It will be up to the new WSU research leader to determine whether studies would look into the possible connection of hoof disease to forestry practices and chemicals, said Powell, WSU's spokesman.

So far, WSU's new role has involved preparing lab space, building a new website in addition to the one maintained by WDFW, and planning public outreach and social media training.

"We want to communicate with stakeholders and satisfy public interest in the effort to find a cure for this debilitating disease," Powell said.

"It's a huge job. It's a multifaceted disease, not just a simple infection. It's going to require a person at WSU with ability to look at epidemiology and all the data and information gathered in order to chart a path forward."



AP Photo/Don Ryan

In this Dec. 13 photo, a female barred owl sits on a branch in the wooded hills outside Philomath. A federal appeals court in San Francisco has upheld a plan by wildlife officials to kill one type of owl to study its effect on another type of owl.

Court OKs killing a type of owl to see effect on other owls

SAN FRANCISCO (AP) — A federal appeals court in San Francisco has upheld a plan by wildlife officials to kill one type of owl to study its effect on another type of owl.

The 9th U.S. Circuit Court of Appeals said Wednesday that the experiment by the U.S. Fish and Wildlife Service didn't violate a federal law aimed at protecting migratory birds. The court says that law doesn't prevent killing one species to advance the

scientific understanding of another.

The ruling came in a lawsuit filed by advocacy groups Friends of Animals and Predator Defense challenging the agency's plan to kill barred owls to assess their effect on the threatened northern spotted owl.

The barred owl may be displacing the spotted owl in the Northwest.

Emails to the advocacy groups weren't immediately returned.

Wolves kill calves in Southwest Oregon

Attributed to Rogue pack started by OR-7

By GEORGE PLAVERN
EO Media Group

Oregon wolves have notched their first confirmed depredation of livestock in 2018.

A 250-pound calf was found dead and partially eaten Jan. 4 at Mill-Mar Ranch in Jackson County, which wildlife officials attributed Monday to wolves from the Rogue pack in southwest Oregon.

The Rogue pack was established by Oregon's famous wandering wolf, OR-7, which traveled more than 1,000 miles from northeast Oregon to California and into southern Oregon before finding a mate in 2014. The pack now has between seven and 12 individuals, according to John Stephenson, Oregon wolf coordinator for the U.S. Fish and Wildlife Service.

Wolves remain listed as a federally endangered species in western Oregon.

GPS collar data shows OR-54, a female member of the Rogue pack that biologists believe is directly related to OR-7, was less than a mile from the dead calf the morning it was found. Investigators also



ODFW

A young female wolf, designated OR-54, recovers after being caught and fitted with a tracking collar. The wolf belongs to the Rogue wolfpack and was detected near a dead calf found on a Jackson County ranch.

documented numerous wolf tracks and bite marks consistent with a wolf attack.

Ted Birdseye, who purchased Mill-Mar Ranch near Boundary Butte about two years ago, said wolf activity is not unusual around the area, but until recently the predators had kept to hunting deer and elk.

Birdseye said he is fascinated by wolf behavior — he even hand-raised a pup years ago. At the same time, the animals are capable of causing serious damage, he added.

"They are major apex predators, and eat a lot of meat," Birdseye said. "They still fascinate me, but I have to make a living and the way I do that is by selling these

calves."

Birdseye, a sixth-generation rancher, sold the historic Birdseye Ranch in Jackson County to Del Rio Vineyards. He looked to continue in the cattle business, mulling land in British Columbia, Canada before returning to southern Oregon and buying the Mill-Mar Ranch.

"We knew wolves were out here," Birdseye said.

Birdseye used a combination of fladry fencing and flashing lights to haze wolves from his fields. Stephenson, with the USFWS, said wolves have been visiting the Mill-Mar Ranch for years, but until recently had not preyed on livestock.

Stephenson said the agency will be ramping up use of nonlethal deterrents to prevent wolf attacks from becoming a chronic problem at the ranch.

The Rogue pack was also involved in a confirmed depredation in the fall of 2016 on private land in adjacent Klamath County. Stephenson said the pack tends to travel back and forth between the two counties.

The Oregon Department of Fish & Wildlife is in the home stretch of updating its Wolf Conservation and Management Plan. The plan is scheduled for adoption at the Fish and Wildlife Commission meeting April 19-20 in Astoria.

SKI REPORT

Spout Springs
Tollgate, Ore.
CLOSED FOR SEASON

Anthony Lakes
North Powder, Ore.
New snow: 7"
Base depth: 24"
Conditions: Snowed hard Thursday and Friday.

Ski Bluewood
Dayton, Wash.
New snow: 5"

Base depth: 24"
Conditions: Strong storm dumped more than 9" in last 72 hours.

Ski Fergi
Joseph, Ore.
CLOSED UNTIL CONDITIONS IMPROVE
Mt. Hood Meadows
Government Camp, Ore.
New snow: Snow/rain mix Thursday, snow Friday.

Have an outdoor adventure you'd love to share? Email ttrainor@eastoregonian.com or call Tim at 541-966-0835.

ODFW sets meeting for Wolf Plan adoption for April 19

Proposal has drawn criticism from ranchers, environmentalists

By GEORGE PLAVERN
EO Media Group

The Oregon Fish and Wildlife Commission will consider adopting a long-awaited update to the state's Wolf Conservation and Management Plan at its April 19-20 meeting in Astoria.

A decision was scheduled for Jan. 19

in Salem, but the commission decided more time was needed to work on the proposal after drawing criticism from ranchers and environmentalists alike.

At the last commission meeting in December, environmental groups argued the plan would move to lethal control of wolves too quickly in cases of livestock predation. Cattlemen, on

the other hand, said they would like to see management zones for wolves across the state, with population caps.

The Oregon wolf plan was last updated in 2010, and a scheduled five-year update is now three years overdue.

Public testimony about the plan will be taken at the Astoria meeting, or can be submitted via email at odfw.commission.state.or.us.