

Wildlife habitat yielding to weeds.

By Bill Papich for the Grand County Weed Department.

Ranchers know how noxious weeds can ruin rangeland and sometimes poison livestock, but wildlife biologists have more to learn about what plants do to wildlife.

Noxious weeds such as yellow starthistle, African rue, black henbane and others have been known to kill livestock that grazed on them, but there's never been a documented case of a wild animal that died from eating weeds.

Noxious weeds are invasive plants from Asia, Europe and Africa that grow out of control when they arrive in North America---- away from insects and plant disease that control spread of the plants in their native lands.

"When you've got health cow one day and she's dead the next day, then you investigate," says Leroy Mead, a habitat biologist for the Utah Division of Wildlife Resources office in Price.

"With deer or basically any wildlife, they die and no one even knows, so it's kind of an unknown area."

Grand County extension agent Mike Johnson notes, however, that even without proof of wildlife poisoned by noxious weeds, damage the plants do to wildlife habitat is obvious.

"I don't think there's a great enough understanding of how weeds replace native vegetation," Johnson said. "If weeds displace native foods wildlife needs, then it's harmful to wildlife."

An example is in the Book Cliffs mountains in Grand County, where wet meadow areas along streams that elk grazed now are overrun with salt cedar, a tree-sized weed that arrived in North America from Asia in the 1800s.

Greasewood, though a busy weed native to North America has in the past 50 years invaded wet areas of the Book Cliffs bottom lands, crowding out plants elk desire for food.

"The elk population has not been harmed overall by noxious weed, but we're losing elk habitat," says Bill Christensen, Utah field director for the Rocky Mountain Elk Foundation.

"The public understands something about fire, they understand something about water pollution and air pollution, they understand a little bit about wildlife habitat, but they don't understand what noxious weeds are doing."

The Rocky Mountain Elk Foundation has helped fund weed control programs in elk habitat areas of the Book Cliffs mountains. The control programs include burning and spraying weeds with herbicides.

Christensen said control of noxious weeds can depend on the plants being noticed when they first growing, so the weed can be killed quickly before they become infestations.

"People need to learn to identify plants," Christensen said. "If you recognize them, you can report them to people who can do something about it."

Sheep may die after eating 2 pounds of fallen greasewood leaves. Cattle have died from eating 3 to 4 pounds of the leaves.

When noxious weeds crowd out native vegetation rodents require for habitat ---- and the rodents die or leave ---- coyotes that need rodents for food may kill cattle instead, according to studies of coyote behavior in Wyoming.

Rich Olson, a rangeland wildlife habitat specialist and an associate professor at the University of Wyoming, studied rodents in a noxious weed infested area of Wyoming and in an

area of the same size of native vegetation.

Olson's studies show that Russian Knapweed infestations reduce rodent populations and limit diversity of rodent species, which in turn lessens the food supply for birds of prey. Russian Knapweed infests large areas of Grand and San Juan counties.

In Olson's studies he notes that monocultures of Russian knapweed ---- where whole fields of the weed are plants of the same height---- become off limits to wildlife. If there's nothing but Russian knapweed, there is no plant "interspersion" or the proportional areas of different plant communities represented within a larger landscape, Olson said.

"High interspersion is very attractive to wildlife," he said, adding rodents were studied because of their extreme sensitivity to change in the environment. Birds that require "structural diversity" won't land in field without vegetation of varied heights, Olson said.

Mead of the Division of Wildlife Resources, says the continual spread of salt cedar and its extensive root system will mean less water for a variety of wildlife.

"It drains your water supply so it affects fish, beaver, any water dwelling wildlife," Mead said.

"Birds don't use it much. Deer can disappear in salt cedar, use it for escape value, but there is no forage value and they have to come out of it to eat."

In Grand County, invasive plants growing in the greatest number are salt cedar, Russian knapweed and Russian olive. Mead said, however, that Russian olive trees can benefit wildlife.

"They have very high wildlife value. Nearly all small birds, even coyotes, eat the olives on Russian olive trees," he said.

Except for their flowering beauty and their shade, however, thorny Russian olive trees are to humans among the least desirable plants.

"They're very aggressive, very invasive, very hard to kill" Mead said. "Those thorns will puncture you, your tires. The trees are fast growing and they can spring up in a meadow or pasture in just a couple of years can already be a nuisance."

Salt cedar and Russian olive trees can be killed by cutting their trunks and applying herbicide to the stumps.