Wildfires have significant short- and long-term effects on the availability and quality of wildlife habitats.

Immediately after a fire, reduced cover and lack of food will force most wildlife out of an area. Within a few weeks – depending upon the time of the fire, soil moisture, and precipitation – many species of herbaceous plants and sprouting shrubs resume growth and provide forage for grazing wildlife. If the fire occurs late in the year, limited resprouting will take place that year.

**Seek Food and Habitat**

Larger animals, primarily deer, will move into populated areas seeking food and habitat. Landowners could see increased damage to landscape plants in autumn and winter, notably trees and shrubs, and should take precautions to prevent browsing and rubbing. A simple and effective way to prevent damage is to put three to four steel posts in the ground around the trees and shrubs in question at equal spacing about 4 feet away from the tree. Wrap with landscape fabric or poly plastic snow fence to form an enclosure. Take the enclosure down in April or May.

**Predators Could Move In**

Mountain lions, bobcats, and coyotes often follow deer and could also be a concern. Although rare, mountain lions have been known to stalk humans, but the real concern is pet predation. Coyotes, too, can prey upon pets. The Wyoming Game and Fish Department has direct authority regulating mountain lions and other wildlife. If mountain lions are seen in human-populated areas, call your local Wyoming Game and Fish Department office.

While not abundant initially, vegetation regrowth can attract deer and elk. Eventually, these plant species will often become more abundant than before the fire, thus improving the habitat quality for all grazing wildlife species. Use of burned habitat by these animals should increase compared to before a fire.

Wildfires generally remove fuels like grasses, forbs, shrubs, and small limbs on trees. The remaining tree trunks provide only a little cover but may be sufficient for elk, deer, and large predators such as mountain lions, bears, and coyotes.

**Wildlife Needing Mature Habitat May Leave**

Some wildlife find improved habitat after wildfire; however, wildlife needing mature forest and shrub lands will leave. Birds and small mammals with stricter habitat requirements may not return because of the loss of nesting sites and food resources. Cavity-nesting birds (flickers, kestrels, and chickadees), those that prefer open areas
TO GRAZE OR NOT TO GRAZE…

Determining when to graze livestock after a fire can be a controversial and sometimes difficult decision. Much of the post-fire consideration depends upon site characteristics (percent slope, soil type), plants that grew in the area burned, and intensity of the fire.

As recovery starts and vegetation begins growing, emerging plants will be very attractive to grazing animals. Monitor such areas to prevent overuse of vulnerable plants when they are trying to recover from wildfire. Newly germinated plants, or existing ones putting out new foliage, need to collect and store enough energy to develop healthy root systems.

Land managers may decide to delay or limit grazing in burned areas due to these factors; however, in some instances, allowing animals to graze the year after the fire may not be detrimental. One way to limit the effects of grazing is to graze burned areas during the dormant season (late summer or fall). The plants have set seed and are no longer actively growing so the impact of grazing on the plants will be minimal.

Limiting grazing to light or moderate levels after the fire will ensure there is adequate plant material (stubble) for continued sustainability of that plant community.

Rachel Mealor is a UW Extension range specialist. She can be reached at 307-766-4139 or at rdmealor@uwyo.edu.

(western bluebirds, mountain bluebirds, and robins), and those that eat insects that infest dead timber (such as woodpeckers) may increase following fires. Those preferring more densely vegetated areas (such as goshawks and hermit thrushes) may decrease.

Unburned habitat areas provide a refuge for species requiring more mature plant communities. These areas can increase the diversity of habitat and wildlife.

Sage Grouse and Sagebrush

The sage grouse is a common bird in sagebrush habitats in the state. In the short-term, sage grouse will be unable to use the burned area except for the edges of the burn due to their need for the overhead cover sagebrush provides. Only after sagebrush returns to the site in sufficient height and cover will it be satisfactory sage grouse habitat. In some areas, the return of sufficient sagebrush could take decades.

Michael Smith is a professor and extension range specialist in the Department of Ecosystem Science and Management in the University of Wyoming’s College of Agriculture and Natural Resources. He can be reached at 307-766-2337 or pearl@uwyo.edu.