

U.S. Department of the Interior Bureau of Land Management

A Fish and Wildlife Plan for Public Lands in Colorado

Blueprint for the Future

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#### **Overview**

In the 1800's, Colorado settlers awoke to the sounds of bugling elk and shared the range with grazing buffalo. Such experiences were common for pioneers, but became almost unknown to subsequent generations.

As the settlers moved in. the wildlife moved out. Animals such as buffalo and elk were hunted as food for railroad workers and miners. Constant pressure from hunters, combined with growing numbers of settlers, forced many animals higher into the mountains — away from their traditional food sources and breeding areas. For many game animals, such as the buffalo, pronghorn antelope, and elk, the increased stress meant imminent extinction.

In the early 1800's, the Federal Government owned over 70 percent of the land in Colorado. Much land was given away to settlers, while other parcels were allotted for Indian reservations, military reservations, or railroads. Even with the establishment of national forests and parks in the early 1900's, many Coloradans

did not realize the importance of preserving lands for public enjoyment and wildlife protection. However, these reserves marked the beginning of a new era — an era of managing public land rather than disposing of it.

Today, the Federal Government owns 29 percent of the total land in Colorado, or nearly 20 million acres. The Bureau of Land Management (BLM) administers and manages



8.3 million acres of these lands to serve the diverse needs of the public. These varied resource programs include recreation, rangeland, forest, minerals, watershed, fish and wildlife, wilderness, and cultural resources.

The management strategy for BLM's diverse fish and wildlife habitats is summarized in the "Fish and Wildlife Plan for Colorado." These diverse habitats, scattered over 8.3 million acres, are home to more than 600 wildlife species. With proper planning and cooperation, fish and wildlife habitats can be effectively managed in cooperation with the development of commodity resources such as domestic energy. One example is in Piceance Basin of northwestern Colorado, where extensive energy development coexists with wildlife and livestock. Mule deer can be seen browsing, undisturbed by oil-pumping operations around them.

Effective resource management, as in the Piceance Basin, is not accomplished solely by BLM. The responsibility requires cooperative partnerships among other land management agencies such as the Colorado Division of Wildlife (CDOW), the Forest Service, and the Fish

Carolyn Z. Roth



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and Wildlife Service, along with ranchers and adjoining landowners, conservation groups, and the general public.
Generally, the CDOW is responsible for managing fish and wildlife populations while BLM manages the diverse and abundant wildlife habitats on the public lands. The management responsibility for Federally listed threatened and endangered species and migratory birds is shared between BLM and the Fish and Wildlife Service.

Public lands are vital in maintaining these valuable fish

and wildlife resources as a heritage for future generations. The variety of geographic areas and plant communities matches the diversity of animals. Extensive sagebrush panoramas, desert plateaus, red-walled canyons, alpine forests, and lush wetlands are all found on public land. These unique landscapes enhance healthy habitats for a variety of animals, birds, and fish, as well as specially protected populations of both plants and animals.





## Riparian Areas

For Colorado's wildlife. riparian areas are the oases in the midst of a desert. They are the lush, green vegetation areas along the banks of rivers or streams, and around springs, bogs, wet meadows, lakes, and ponds. Although riparian areas and wetlands represent less than 1 percent of BLM-managed lands in Colorado, the values and demands on these small areas are extremely high.

Healthy riparian systems:

- serve as a filter by removing sediment from water as it flows through vegetation,
- act like a sponge to retain water in streambanks.
- recharge underground water aquifers,
- reduce flood damage by slowing water flows, and
- prevent channel erosion along streams and rivers.

BLM lands in Colorado contain over 29,000 acres of riparian vegetation along 4,800 miles of perennial and intermittent streams. These zones are critically important for fish — especially for trout in mountain streams where the vegetation provides escape cover and shade. Improvement

techniques for damaged watersheds feature planting trees, shrubs, and other plants to stabilize streambanks, trap sediments, raise water tables, and increase water flows.

One riparian improvement program at Badger Creek, northeast of Canon City, protects the future of valuable land resources. Poor land management practices through the early 1900's damaged the Badger Creek watershed, which drains into the Arkansas River. Increased streambank erosion caused sediment to muddy the water, cover rocks, and disrupt spawning areas for fish. Currently Badger Creek is being restored to its original condition through the cooperative efforts of Federal, State, and county agencies; private landowners; and conservation groups. Livestock management and streambank stabilization in Badger Creek is bringing about improved water quality and fisheries habitat conditions in the Arkansas River.

There are 21,000 acres of wetlands associated with marshes, seeps, and springs on BLM lands. The Unaweep Seep east of Gateway, Colorado, is an example of a protected wetland area for the threatened Nikomos butterfly. The 36-acre site is surrounded by a livestock fence to protect the fragile habitat from damage caused by trampling and grazing.

Benefits of properly managed riparian areas are gained by more than just the fish and wildlife. Adjacent landowners appreciate the reduced threat of flood damage and increased production of water and forage. Sportsmen enjoy the increased numbers of wildlife that add to their fishing and hunting experiences. Nature enthusiasts love to discover the expanded diversity of plants and animals in their natural riparian environments. Even people who just come to relax and enjoy the back country will find their visit more enjoyable in the lush, healthy surroundings.







#### **Fisheries**

No family fishing trip is complete without the catch. BLM is working to provide good fishing opportunities for future generations of anglers while ensuring good habitat for over 100 native and introduced fish species in Colorado.

The 1,200 miles of streams and 8,900 acres of lakes and reservoirs on public lands have helped make Colorado nationally renowned for superb cold water fisheries. Visitors travel hundreds of miles to experience the thrill of catching a brown trout in the Gunnison Gorge or a rainbow trout in the Upper Colorado River.

Every year, anglers fishing in rivers and lakes on public lands add over \$800 million to Colorado's economy. Cooperative management efforts between BLM, Forest Service, Colorado Division of Wildlife. and groups such as Trout Unlimited. The Nature Conservancy, and the Colorado Riparian Association are aimed at improving the quality of fisheries and riparian resources. For example, check dams and log structures have been designed and installed to create

Tom E. Myers/Tom Stack & Associates



pools and spawning areas and to restore vegetation for shelter and shade.

Other cooperative efforts are aimed toward obtaining public access to sportfishing waters on

BLM lands. The Bureau is working with private landowners, concerned land management agencies, and conservation organizations to identify access problem areas and to



cooperatively develop solutions. Recently, a very successful three-way land exchange between public and private interests opened a 22-acre riverfront section of the Roaring Fork River

east of Carbondale. This segment is classified as a "gold medal" trout fishery.





#### Wildlife

The benefits from wildlife on public lands are significant, but often difficult to measure. Though big game hunters spend thousands of dollars to hunt on public lands every year, outdoor enthusiasts treasure a glimpse of a black bear as well. It is impossible to place a dollar value on the aesthetics of watching two bull elk fight for dominance of a herd or the opportunity to record a sighting of an endangered species like the peregrine falcon and bald eagle. For the photographer who catches a bighorn ewe and her lamb on film, these experiences provide lifelong memories.

Because wildlife provide a valuable recreational experience for public land users, as well as add to the economies of the business community, they require special management practices for their protection. Regardless of how wildlife may be valued, BLM's "Fish and Wildlife Plan for Colorado" lays the future management foundation for maintaining and improving the quantity and quality of habitat for all wildlife species.

A majority of big game animals spend some of their winter months on BLM land.

Thomas Kitchin/Tom Stack & Associate



Generally, big game animals stay high in the mountains until the first snowfall when they migrate to the lower elevations. As they come down from the mountains, many big game animals cross or winter on BLM land. In the spring, when plants "green up," they return to the higher elevations.

More than 240,000 mule deer browse on 2.9 million acres of

BLM rangeland. Approximately 50,000 elk are year-long residents, with the population doubling during the winter months. Other big game animals, including Rocky Mountain bighorn sheep, moose, black bear, desert bighorn sheep, and pronghorn antelope, winter on BLM lands.

Projects to improve wintering habitat for these big game animals may include creating grassy







seasonal use conflicts, and modifying livestock fences to allow wildlife to pass. By increasing edible plants, the BLM and cooperating agencies ensure more animals will survive the winter.

Other wildlife species or groups of species, such as upland birds and waterfowl, can be found

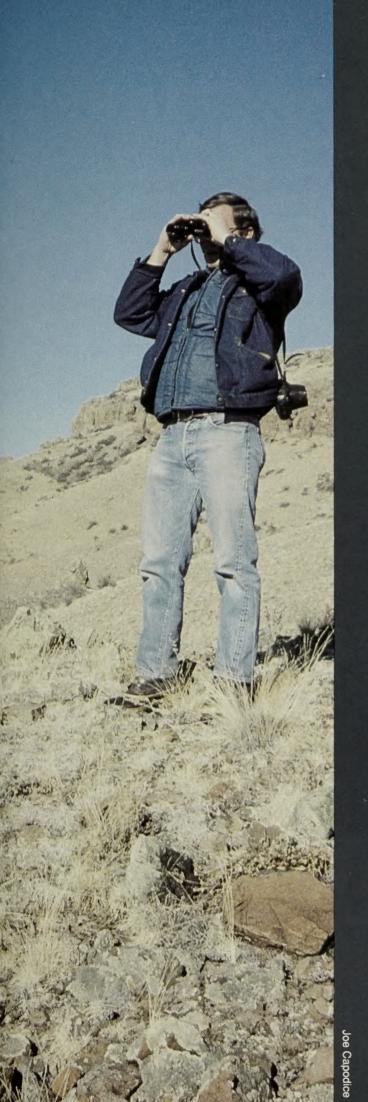
openings through selective timber cutting and prescribed burning. These actions make the grasses "green up" or mature faster in the spring. Other management techniques encompass reseeding and fertilizing to increase the number of edible shrubs and grasses, designing livestock grazing systems to reduce



in abundance on public lands. The more common upland birds are sage grouse found in lowland sagebrush habitat; wild turkey found in ponderosa pine and oak brush; and blue grouse associated with conifer trees in the higher elevations. Waterfowl, primarily ducks and geese, are common to wetland and open-water areas

during the spring and summer breeding seasons. Two important waterfowl production areas on public land are Blanca Wildlife Area in south-central Colorado and Hebron Slough Area in north-central Colorado.





# Watchable Wildlife

Many habitat areas provide opportunities to view wildlife and to learn about them in their natural setting. These sites, known as watchable wildlife areas, are being cooperatively developed with other land management agencies.

A Rocky Mountain bighorn sheep interpretive center is located on the bank of Georgetown Lake just off Interstate 70. Visitors here have the opportunity to view a herd of about 175 bighorn sheep on public land. The facility was built with the cooperation of BLM, Colorado Division of Wildlife, Forest Service, town of Georgetown, and the Rocky Mountain Bighorn Sheep Society.

Other areas on BLM's public lands provide similar opportunities to photograph, study, or simply watch a variety of wildlife in a natural environment. For example, the banks of the Colorado River and Blue Mesa Reservoir provide wintering areas for bald eagles. In northwestern Colorado, prairie dogs and pronghorn antelope are plentiful, and



strutting male sage grouse try to "impress" the females with their puffing and dancing each spring.

A driving tour presents many opportunities to view wildlife in diverse scenery ranging from river canyons to alpine mountain parks. The Gold Belt Tour National Back Country Byway along the Front Range in southern Colorado offers abundant wild flowers and trees, along with

pinon jays, porcupines, mule deer, turkeys, squirrels, marmots, and broad-tailed hummingbirds. Axial Basin near Craig is another driving tour area that offers exciting views of large herds of antelope, mule deer, and elk during the later winter and early spring seasons.

Visitors wanting to take a break from driving can bicycle along a trail parallel to the



Dolores River or take a raft trip to view wildlife. Here, bald and golden eagles share the skies with peregrine falcons while river otters frolic along the riverbanks. Other wildlife found along the banks of the Dolores River include chukar, turkey, elk, mule deer, and desert bighorn sheep.

For bird and waterfowl enthusiasts, the Blanca Wildlife Habitat Area in the San Luis

Valley offers the chance to see over 50 species of birds. It is the perfect place to enjoy the sounds of shore birds, such as the great blue heron and killdeer, while watching the various geese and ducks on the 5,400-acre site.





# Special Status Species

An avid fisherman would like the opportunity to catch one of the 10-12 pound yellowfin cutthroat that was once thought to live in Twin Lakes near Leadville. Unfortunately, the yellowfin cutthroat became extinct during the turn of the century due to competition from nonnative rainbow trout.

As the saying goes, "You don't know what you have till it's gone." Although BLM can't do anything to bring back the yellowfin cutthroat, the agency does exercise special management practices to protect 91 plants and 39 animals listed as special status species in Colorado. For some of these animals, such as the peregrine falcon, special management efforts are beginning to pay off. During the late 1960's, breeding pairs of peregrine falcons remained critically low in Colorado. But thanks to the cooperative efforts of BLM, Colorado Division of Wildlife. and Peregrine Fund Inc., 15 breeding pairs of peregrine falcons have been reestablished into historical nesting areas on BLM public lands.

The black-footed ferret is another endangered animal that will hopefully be reestablished in Colorado by the year 2000. Currently, prairie dog colonies in Moffat County are being studied as possible reintroduction sites for the black-footed ferrets. Black-footed ferrets are dependent upon prairie dogs for food. A successful reintroduction will mean that people will have the opportunity to see these animals in Colorado for the first time since the mid-1940's.

Special status plants are also being protected to ensure their survival. One way BLM is accomplishing the survival objective is by designating special habitat areas to protect endangered species from competing land uses, such as mineral development. Without protection, visitors to Colorado's public lands might never see the

blue violet flowers of the endangered North Park Phacelia. Half of these plants known to still exist are located on the 340-acre North Park Natural Area located in north-central Colorado near Walden. These fragile plants are only found in small numbers in isolated areas. To protect other endangered plants, such as the Mesa Verde cactus or Uinta Basin Hookless cactus, BLM may restrict off-highway vehicle use and fence selected areas.

A major goal in BLM's "Fish and Wildlife Plan for Colorado" is to recover or establish population levels for special status species so these populations will no longer need legislative protection under the Endangered Species Act. Maintaining protected habitats for special status plants and animals will help ensure their survival for future generations.





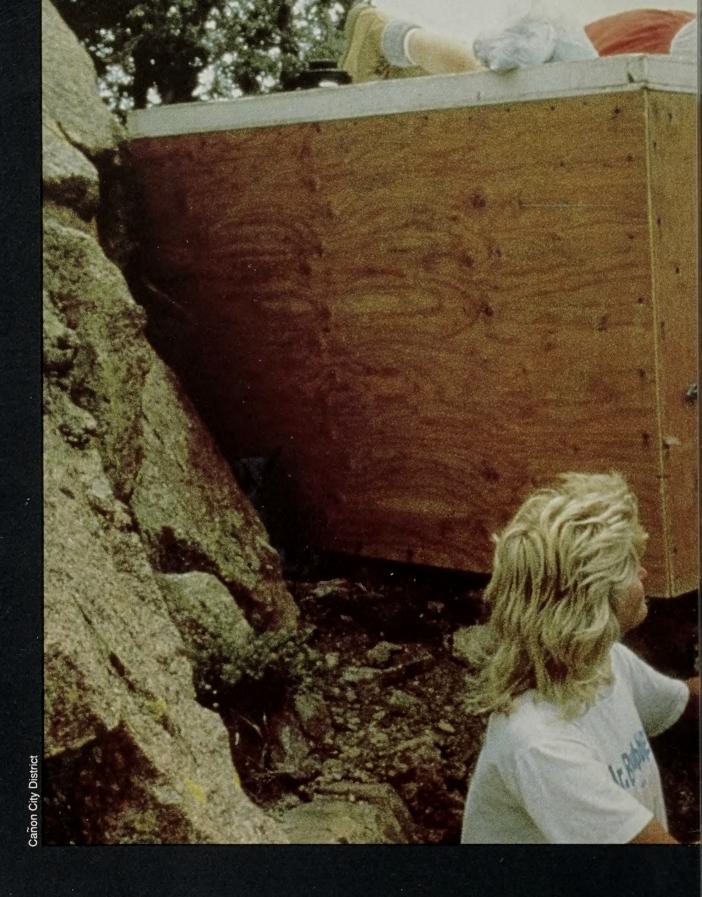




## Summary

As we move into the 1990's, meeting the goals and objectives of BLM's "Fish and Wildlife Plan for Colorado" may become more difficult. Today, more and more Americans are turning to the outdoors for leisure activities such as fishing, wildlife viewing, photography, mountain biking, hiking, hunting, and motorized off-road use. Currently outdoor enthusiasts log more than 900,000 visits a year on BLM's public lands in Colorado. As Colorado's population reaches the predicted 4.2 million by the year 2000, the number of visits will steadily increase recreational demands from the public lands.

To ensure effective management practices that will provide quality fish and wildlife habitat on public lands in Colorado, BLM must have additional capabilities in terms of work force and funding. Cost sharing programs, the use of volunteers, and cooperative management agreements with nonprofit organizations and agencies, all assist us in making the fish and wildlife program a success.



If you would like to receive more details or a copy of BLM's "Fish and Wildlife Plan for Colorado," contact the BLM Colorado State Office, 2850 Youngfield Street, Lakewood, CO 80215.



