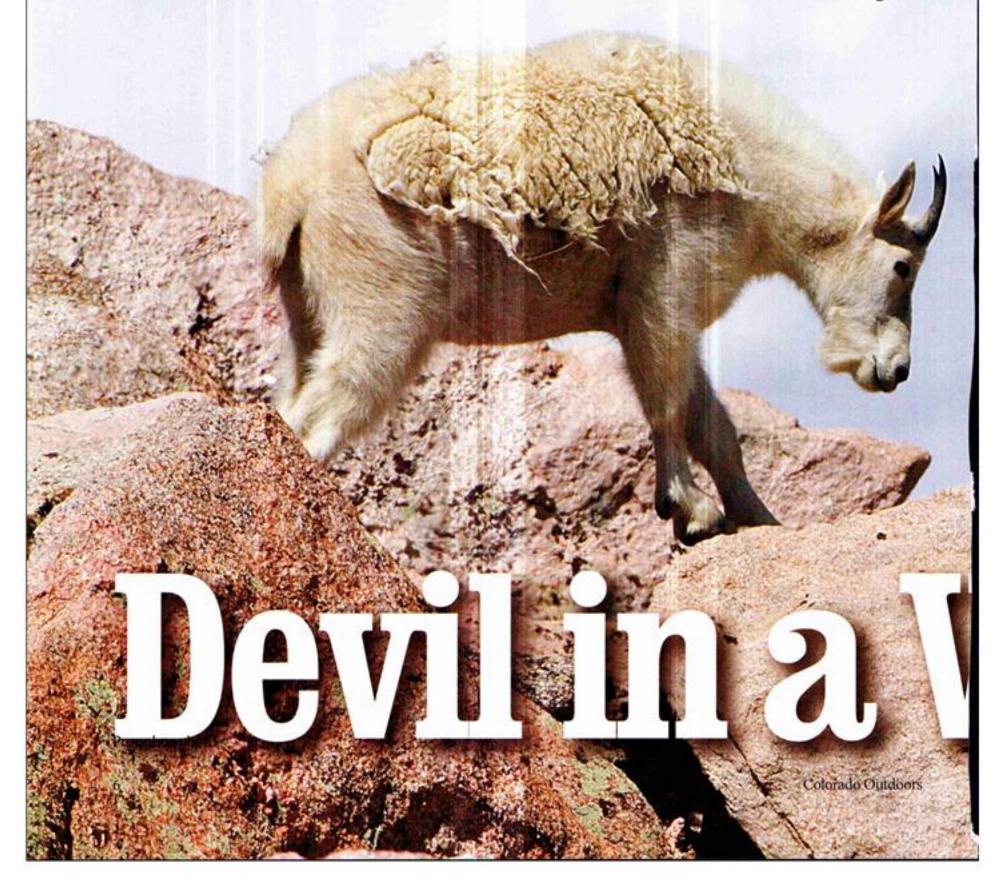
two small letters in the English alphabet, but two large letters in the world of wildlife conservation, politics and policy. If you place the word "introduced" after the letters "re," you get reintroduced, and that can mean the difference between good or bad. Reintroduced means that you once lived in a place, vanished and then either returned on your own or returned with help. In other words, you are native and good. Introduced to some folks means you are unnatural and ecologically bad. This seems fairly straightforward, but the devil is always in the details, and perhaps no Colorado mammal is more devilish than the mountain goat.



Understanding how mountain goats became a devil in a white coat requires a brief trip back in time. One of the earliest controversies surrounding mountain goats occurred during the 1980s in Olympic National Park. In the mid 1920s, about a dozen mountain goats were introduced into what was to become Olympic National Park. They were introduced to provide recreation for big game hunters and fascination for wildlife viewers. The goats were "fruitful and multiplied," and by 1937 the population had doubled to 25 animals. Mountain goats continued to thrive, increasing in number and expanding their distribution throughout the next three decades. By 1980, they occupied nearly every mountain range in Olympic National Park

and numbered nearly 1,000 animals. Within a few years of their introduction into the Olympic Peninsula, the mountain goats became a major tourist attraction which Park managers considered to be a valued asset.

But the winds of change were transforming National Park management policies. An earlier emphasis on tourism shifted to an emphasis on nature conservation. Preservation of native plants and animals and natural processes became a priority throughout the National Park system. Under the new preservation policies, mountain goats were now a liability. They became aliens that threatened ecosystem processes, native plants and animals. The goats, it seemed, enjoyed dust bathing both to cool themselves in the heat of summer and to discourage biting insects. This seemed harmless enough, but as their numbers increased, the damage caused by dust bathing began expanding. Extensive areas of alpine tundra were converted to gravel patter that no longer supported vegetation, including uncommon and rare native plants.

According to new Park Service policy, the alien mountain goats could be removed by whatever means was required, especially if they threatened native species. Armed with a new policy and renewed righteousness, officials in Olympic National Park determined to remove the pesky goats.

The first plan was simply to shoot the

Mountain goats are very aggressive and establish dominance relationships where the older goats dominate the younger ones, which in turn dominate the youngest. The aggressive dominating behavior encourages mountain goats to disperse into new habitats. **Bruce Gill** January/February 2010

goats from the ground and from helicopters until there were too few goats to sustain a population. Once the public got wind of the plan, however, a maelstrom of public outrage erupted. Always sensitive to their public image, Park officials changed plans and began live-trapping and transporting the goats to locales outside Olympic National Park. After about 300 of the goats had been removed by livetrapping, the remainder became trap-wise. So, Park officials proposed to dart them from helicopters with immobilizing drugs or sterilants and if that failed, shoot the rest. Fund for Animals threatened to sue if Park officials tried to implement any lethal shooting program. Consequently, plans to remove mountain goats from Olympic National Park have been put on hold for the last several years.

No sooner had the flames of the Olympic National Park mountain goat controversy begun to extinguish, they reignited in Yellowstone National Park. Mountain goats, introduced into mountain ranges on the north, east and south boundaries of Yellowstone National Park, began to expand and colonize vacant habitats within the Park boundaries. These mountain goats, of course, are aliens and unwelcome within the Park. However, another group of goats, possibly natives, began to colonize the Gallatin Mountains near the northwestern boundary of the Park. These goats may have originated from native populations in the Bitterroot Range or the Beaverhead Range of eastern Idaho. No one knows their place of origin for sure but if this population of goats becomes established inside the Park, they may be natives in which case they would be considered welcome additions. To make matters more confusing, once the presumed natives intermingle with the colonizing aliens, it will be virtually impossible to tell which goats are devils and which are angels. So far National Park officials have not decided how they will deal with their mountain goat invasion, but concern is definitely mounting.

All of which brings us to Colorado, Mountain goats were absent from Colorado's lofty peaks for the first four decades of the 20th century. That status changed in 1948 when nine mountain goats were brought from Montana and released into the Collegiate Range near Buena Vista, Subsequently, 46 more goats were brought to Colorado between 1950 and 1975 and released into the Gore Range, the San Juan Mountains and Mount Evans. Today

mountain goats are firmly entrenched in portions of the San Juan Mountains, Gore Range, Collegiate Range and the Front Range on Mount Evans. The distribution of Colorado mountain goats has expanded in two ways. Goats were captured from existing populations and moved to new locales, and they expanded naturally into unoccupied areas.

It is not difficult to understand why mountain goats colonize new areas. When it comes to aggression against its own, few grazing animals can outdo the mountain goat. Typically, a mountain goat is involved in a conflict with another goat three to four times every hour. This point was brought home to me awhile back as I watched a group mountain goats interact.

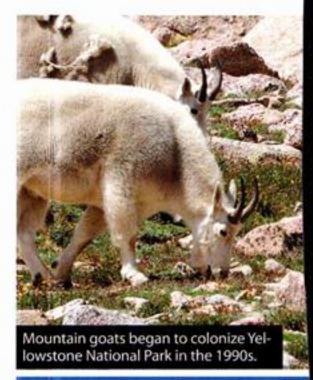
While I watched, a series of conflicts developed. At first two kids were playing king of the mountain on a large granite boulder. They traded mock blows as each tried to push the other off the boulder. Their play ceased when a young male climbed the rock, menaced the kids with his horns and drove them from the summit. Each kid fled to the nearby protection of its mother with the young male in hot pursuit. As he approached one of the mothers, she whirled and lunged at him, thrusting her horns upward while she lunged. The young male leaped sideways to avoid the mother goat only to find himself in the private space of another adult female. She too charged and thrust at him with her horns. In less than a minute, three separate one-on-one conflicts occurred. Although no blows were actually struck, the fracas disrupted the tranquility of the entire group.

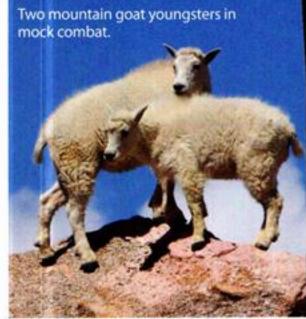
Aggressiveness in mountain goats is thought to be a mechanism to hinder the formation of large groups. At the interface of cliffs that goats use to escape predators and alpine tundra where they find food, vegetation is patchily distributed. As groups grow larger, competition for the limited food increases until it becomes detrimental to lower ranking individuals and disturbs group cohesiveness.

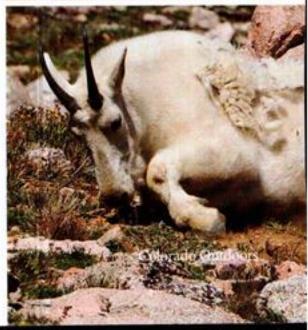
As a population of mountain goats grows, groups will inevitably enlarge without some mechanism to rid the population of excess members. That mechanism is dispersal. One- and 2-year-old males and 2- and 3-year-old female goats tend to be smaller than adults. In the hierarchy of group social relationships, smaller animals bear the brunt of the aggression. As the size of the population increases, aggression increases to the point where some of

these younger animals decide to disperse to greener and more peaceful pastures. In this way, mountain goats gradually expand their distribution outward from the original home area. And it is this expansion that can bring mountain goats into conflict with human beings.

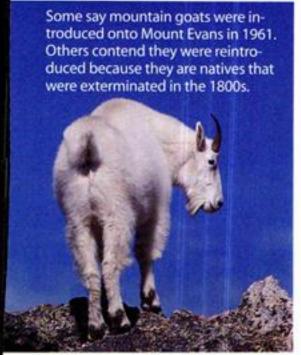
Take the case of Colorado's Front Range.

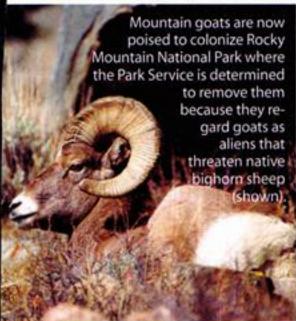


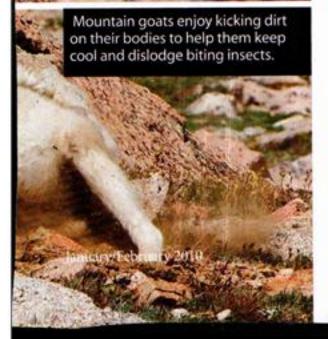




Mountain goats were first introduced into the Front Range in July 1961 with the release of six males and nine females on Mt. Evans. Within ten years, there were reports of mountain goats on Gray's and Torrey's peaks to the west of Mt. Evans, and throughout the 1970s there were reports of mountain goats in the Never Summer







Range north of Rocky Mountain National Park that presumably emigrated from Mt. Evans. Still, the introduction of mountain goats was generally regarded as a good thing. Wildlife viewers thrilled at the site of the stunning white goats as they navigated steep cliffs with apparent ease. And hunters enjoyed pursuing a new, challenging, big game animal.

Then, early in the 1990s, two events collided to place mountain goats squarely in the crosshairs of controversy. First, the Park Service began to receive reports that mountain goats were dispersing into Rocky Mountain National Park, presumably from southern populations that had established in the Jones Pass-Rollins Pass areas. In June 1997 those reports were confirmed when the Division of Wildlife and the Park Service collaborated to remove two male goats from terrain around Chasm lake near Longs Peak. Both were radio-collared and released on Mount Evans. One of the radio-collared goats remained on Mount Evans, but the other soon returned to the Rollins Pass area.

On March 11, 1993, the second event occurred. The Colorado Wildlife Commission passed a resolution that declared the mountain goat was a native Colorado wildlife species. The action by the Wildlife Commission resulted from the converging interests of two enthusiastic mountain goat boosters. Alex Chappell, wildlife conservation officer from Breckenridge (now retired) was fascinated by the mountain goats in the Gore Range of his district. He read everything about goats he could get his hands on. In the course of his readings he came across articles that suggested mountain goats were formerly native to Colorado. Those same articles suggested that goats were exterminated by market hunters during Colorado's gold and silver rushes of the 1800s.

Arch Andrews, retired chief of public relations of the Division of Wildlife, also was fascinated by mountain goats and read many of the same articles that Chappell did. Like Chappell, Andrews became convinced that mountain goats were Colorado natives. Fate brought the two together and Andrews, by then president of the Rocky Mountain Goat Foundation, offered to fund a literature study to prove that mountain goats lived in Colorado long before they were reintroduced by the Division of Wildlife in 1948. LaNette Irby, a graduate student at the University of Northern Colorado was hired to conduct the research. Irby and Chappell produced

a report that concluded mountain goat populations were present in Colorado prior to 1900 and therefore native to the state.

In March 1993, Andrews took the report to the Wildlife Commission and petitioned them to relist the goat as a native species. After a lively debate, against the advice of Division of Wildlife staff, the Commission voted 7 to 1 to officially designate the mountain goat as a native Colorado wildlife species.

After that, the issue seemed to die away, that is until the two mountain goats showed up at Chasm Lake in Rocky Mountain National Park in the summer of 1997. This event stimulated Rocky Mountain National Park to contract another study. They selected Dr. Bruce Wunder, mammalogist from Colorado State University. Wunder teamed up with other scientists at Colorado State University and not only reviewed the goat's status as natives, but also evaluated the potential ecological impacts if mountain goats became established in Rocky Mountain National Park. They concluded goats were not native to Colorado, goats would outcompete resident bighorn sheep, and if goats became concentrated, they could be destructive to native vegetation.

Conflict resolution experts would readily recognize this situation. They even have a name for it. They call it "dueling PhDs". They will also tell you that scientific studies alone rarely resolve public policy disputes. For that you need open, honest discourse and dialogue among all of the interests who have a stake in the issue.

Some day in the not too distant future mountain goats will return and cross that invisible boundary between national forest and national park. At first, they will go unnoticed. But when they are, once again mountain goat scholars, managers, bedevilers and beatifiers will be swept into the strong current of public controversy because, left unmanaged, old controversies seldom die. They just seem to stay even long after the original players fade away.

Bruce Gill retired from the Division of Wildlife in 2001 after working 35 years in its research section. As the mammals research leader, he was involved in studies of mule deer, elk, mountain goat, bighorn sheep, pronghorn, black bear, moose, lynx, swift fox, kit fox, mountain lion and other wildlife. This article is copyrighted by the author.