

MACRO

and MICRO?



FWP sees populations. The public sees individual animals. Can the difference be resolved? BY TOM DICKSON

Last spring a pair of barn swallows built a nest in Ken McDonald's garage. "We couldn't close the door all summer because they needed to get in and out to feed their four chicks," says McDonald, head of the Wildlife Division for Montana Fish, Wildlife & Parks. "Their death wouldn't have affected the barn swallow population in the slightest, but I knew those two adults had flown 5,000 miles from their wintering grounds in South America to get here. From a personal standpoint, I just couldn't do it."

Very few people are immune to the plight of animals—the pronghorn tangled in barbed twine, the black bear cubs bawling next to their dead mother along a mountain highway. Even hunters care about suffering. They practice marksmanship to ensure a quick, clean kill and diligently track

animals they accidentally injure. As the South Dakota author Kent Meyers writes, "When we wound an animal, we are responsible for its pain."

The sociobiologist E.O. Wilson calls this universal need to identify with wildlife "biophilia," or our innate tendency to affiliate with other living things.

It's a paradox, then, that the employees of Montana Fish, Wildlife & Parks who are responsible for managing the state's wildlife can't always relate to animals as most people expect. They certainly care about wildlife; that's their job. But out of necessity they must, in their professional capacity, attend less to individual animals and more to wildlife populations.

That often puts FWP biologists and others in a tough position when someone brings them a sparrow with a broken wing or a seemingly orphaned fawn. "Unfortunately, we often have to tell people

LEFT TO RIGHT: DENVER BRYAN/IMAGES ON THE WILDSIDE; SHUTTERSTOCK

we just can't help," says McDonald. That can create an impression of a cold-hearted agency indifferent to wildlife—when in fact caring about wildlife, though at a different scale, is the department's primary concern.

Looking at the big picture

FWP's responsibility is to provide for the stewardship of Montana's wildlife. That means ensuring there is enough now and in the future for people to see, hunt, and otherwise enjoy, but not too much to create undue problems for landowners and others. Maintaining that balance is known as wildlife management—the science of manipulating wildlife populations and habitat to maintain a surplus for harvest, reduce private land depredation, recover endangered species, and meet other public needs.

For this to work, FWP must not consider one deer or duck at a time but rather entire populations of hundreds or thousands of deer and ducks. "It's about scale," says McDonald. "The most effective way to allocate our limited resources is to work at the population level."

Each FWP wildlife biologist is responsible for managing all wildlife species—game and nongame—in an area covering an average of 4,000 square miles. Managing so much wildlife over such a vast area requires large-scale activities, such as monitoring entire populations and protecting critical habitat, that benefit entire populations of

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multiple species for generations.

This macro approach works. In Montana, most wildlife populations—including large carnivores such as mountain lions, black bears, and wolves—are thriving in large part because biologists take a big-picture perspective. That's good for wildlife populations and all the individual animals within the populations.

Return to the wild

McDonald says that FWP recognizes both the

macro and micro perspectives of wildlife. "Both views are valuable and necessary," he says. "And we continue to work on incorporating both into our overall management while considering our limited resources."

Though responsible for managing wildlife on a large scale, FWP Wildlife Division employees understand that people care about the plight of individual animals. And they recognize that a single porcupine or owl, when viewed up close by school kids and others, can inspire wonder and create

an interest in the natural world that can develop into a conservation ethic. "Many of us got into this business because of memorable experiences with individual animals," McDonald says.

Realizing that many Montanans want the department to do more to alleviate animal suffering, FWP's Wildlife Center in Helena rehabilitates black bear cubs, injured birds of prey, and several other species. Orphaned by hunting or vehicle collisions, young bears are rehabilitated, with minimal human contact, for several months before release back into the wild. Rehabilitated raptors also are released. Those too injured to survive in the wild are kept as "ambassador birds" for school groups and others to appreciate up close. (To prevent the spread of disease common among crowded wild ungulates, the center does not take in young or wounded elk, deer, or moose. Nor does it accept abundant, common species such as rabbits, squirrels, and songbirds.)

Another way FWP attends to the welfare of individual animals is by carefully regulating hunting. For example, the spring black bear season is structured to reduce the chance that a mother black bear will be shot and her cubs orphaned. State law makes it illegal to hunt any game animal with a spotlight, from an airplane, using bait, or employing other unfair methods. It's also illegal to harvest a spotted (young) mountain lion, or hunt elk before August 15 (to prevent orphaning dependent calves).

Responding to public concerns about the welfare of wildlife is not just empathy; it's also a prudent move by an agency responsible to a base of Montanans broader than hunters and anglers. As FWP looks for new sources of funding beyond traditional hunting and fishing license fees to meet growing management demands, it will need to demonstrate its relevance to people who care about wildlife but don't care to hunt.

Could FWP do more to address the welfare of individual animals? "We could," says McDonald, "but what we hear from most people is that they want us to continue putting most of our resources into protecting habitat and managing game and nongame populations." That way, FWP can continue to benefit far more wildlife than it ever could by addressing one animal at a time. 🐾



ONE AT A TIME Though FWP focuses mainly on landscape-level habitat and wildlife populations, it attends to some individual animals. At the FWP Wildlife Center in Helena (above), volunteer veterinarians and vet technicians help care for wounded eagles and other raptors. Below: After a rancher found this sick golden eagle, it was healed at the center and returned to the natural world. Left: The center also rehabilitates orphaned bear cubs for release back into the wild.



LIFE, SHORT-LIVED

Wild animals, even cute babies, die. If they didn't, towns and neighborhoods would soon be overrun with wildlife. And the animals, exceeding available food supplies, would starve.

Nature is a place of tender wonders. It's also the scene of violence and death, where animals must kill other animals to survive. Ecologically, species like mice, voles, and rabbits that produce multiple litters each year provide predators with a steady supply of food. A "rescued" baby cottontail released back into the wild will likely be eaten by a predator within a few weeks. That's bad luck for the bunny but good news for the bobcat or hawk that brings the meal home to its young.

Because animals die with such regularity, from a biological perspective regulated hunting is simply another form of wildlife mortality. And because regulated hunting is based on sound science, wildlife biologists can ensure that it won't reduce populations except in cases where the goal is to lower numbers. That's true for all game species, including large carnivores. "Hunting doesn't threaten wolf, lion, or bear populations," says Ken McDonald, head of the FWP Wildlife Division. "That was the case 100 years ago, before the use of science-based quotas, seasons, and other strict regulations, but not anymore." ■



Adorable to us, but essential food to a hungry predator.

LEFT TO RIGHT: MICHAEL H. FRANCIS; MICHAEL HIRING

CLOCKWISE FROM TOP: JESSE LEE VARNADO; DONALD M. JONES; JESSE LEE VARNADO

THE PARADOX OF "CARE"

Despite the good intentions, taking care of an individual animal is often not in its or the caregiver's best interests. That's why it's illegal for people to capture and care for wounded or orphaned animals. A mountain lion kitten or bear cub hand-fed until adulthood and then released will associate humans with food. It will be unable to survive in the wild and could pose a danger to people as it scrounges for meals, requiring its removal. Wildlife also carry diseases they can transmit to pets or humans.



Mom is probably nearby, watching.

So-called "orphaned" animals usually aren't. A doe, for instance, regularly leaves its fawn hidden so it can feed nearby. Chicks often tumble out of nests to the ground for a few days before flying off. Removal of that fawn or chick, even temporarily, causes the mother stress and often results in the baby dying when it might have survived had it been left alone. ■