

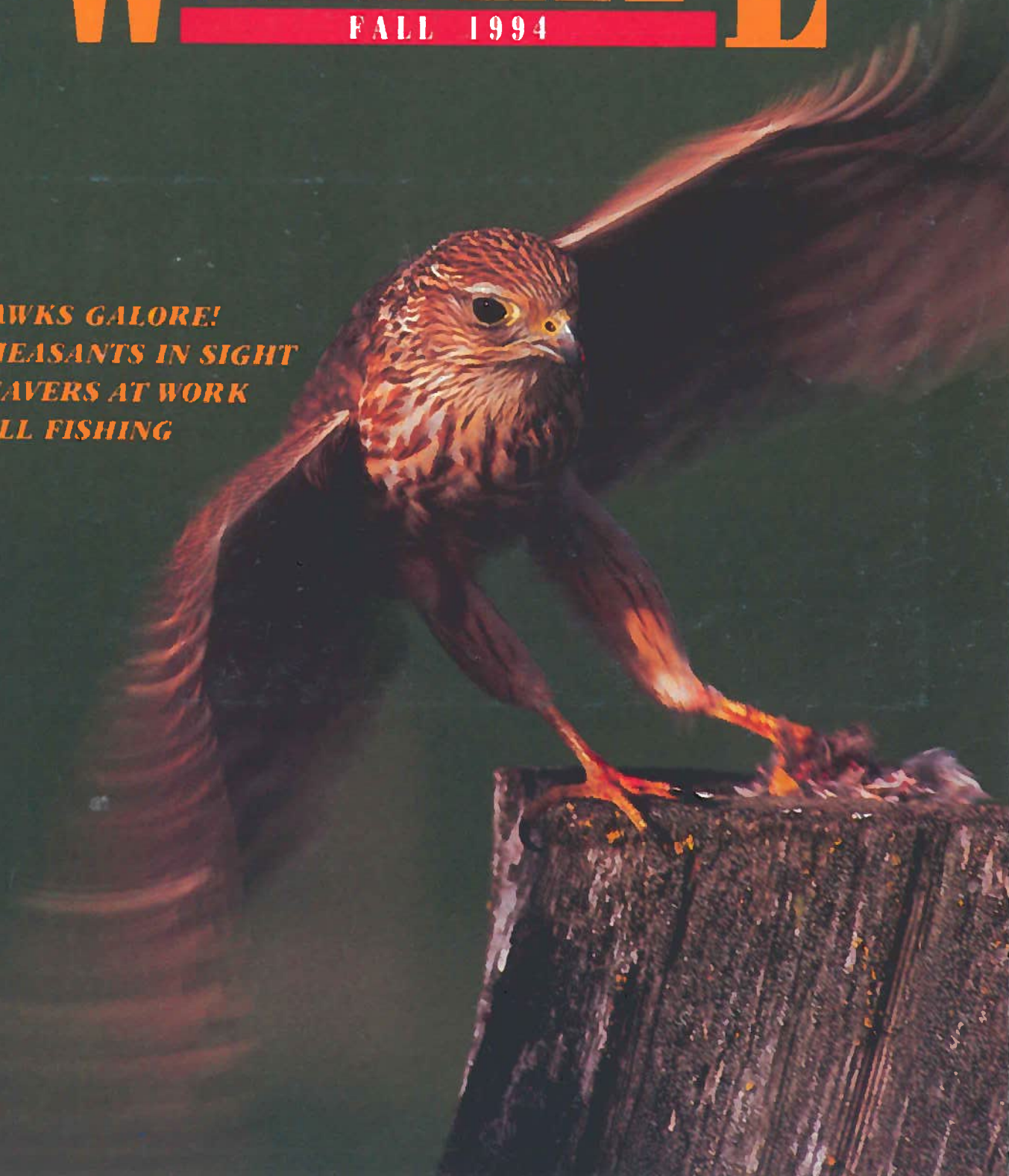
I D A H O

WILDLIFE

FALL 1994

- *HAWKS GALORE!*
- *PHEASANTS IN SIGHT*
- *BEAVERS AT WORK*
- *FALL FISHING*

\$2.50



HAWKS GALORE!

by Greg Kaltenecker and Kirk Bates

One of Boise's claims to fame is raptors. Southern Idaho is home to more birds of prey than almost anywhere else in the United States. Just minutes from the city, the Snake River Birds of Prey National Conservation Area boasts the densest population of cliff-nesting raptors in the world. Boise is also home to the World Center for Birds of Prey, headquarters of the Peregrine Fund Inc. This private nonprofit international group focuses on avian conservation through captive breeding, research and education. And Boise State University offers the only graduate degree program in the country devoted specifically to birds of prey.

The newest discovery to excite raptor enthusiasts is that Boise sits almost directly beneath a major raptor migration flyway. A fall visit to one of several viewing sites will give you ample opportunity to watch these exciting birds in flight.

WHERE RAPTORS GO

Many of North America's birds of prey migrate each fall from their breeding grounds to spend the winter in the southern United States, Mexico, Central America or even as far away as South America. Bird species that migrate to Mexico or farther south are called "neotropical" migrants. Scientists assume birds of prey migrate along a broad front instead of following particular routes. Raptors get the lift they need to travel long distances by making use of thermals, which are pockets of rising warm air created by the sun heating the ground, or by winds deflected upward by mountains or ridges. Everyone has seen soaring hawks gain altitude without ever flapping their wings. They can do this because they are being pushed upward by warm, rising air currents.

During migration, hawks become concentrated by the surrounding topography at certain places along the way. Long north-south trending mountain ridges, coastlines, or peninsulas tend to force migrating hawks together. At these places, watchers can see hundreds, even thousands of raptors streaming past in a day. Many such hawkwatch sites are maintained in the eastern United States. Places like Hawk Mountain, Penn., Hawk Ridge, Minn., Cape May Point, N.J., and numerous locations around the Great Lakes are well known to veteran hawkwatchers. Thousands of people each year visit these sites to watch migrating raptors and learn about the

environmental factors affecting these predators and their prey.

Not only are these sites great places for the public to view birds of prey, but they are excellent places to conduct scientific research. In the East, counting raptors during migration at a network of various sites is a good way to detect changes in their populations. Raptors banded during migration at these sites reveal information about migratory routes, wintering areas and mortality factors. If metal leg bands placed on the birds are returned to the U.S. Fish and Wildlife Service, numeric codes on the bands will reveal where and when the bird was banded. Banding has revealed that in Mexico and farther south, shooting is the primary cause of death among birds whose band numbers are reported.

We know less about raptor migration in the western part of the country than in the East. The inaccessibility of many mountain ranges in the West and fewer people interested in hawk migration mean only a small number of hawkwatching sites have been located. Most information collected on western raptor migration has come from the Goshutes Mountains in Nevada and the Marin Headlands near San Francisco. Very little was known about migrating raptors in Idaho until recently.

During the past two fall migration seasons, students and faculty from Boise State University's Raptor Biology Program—and interested volunteers—have spent countless hours searching southern Idaho for places where raptors become concentrated during migration. These hawkwatchers have seen migrating raptors at just about every site they went to, supporting the theory that raptors migrate in a broad front. Last fall, however, they hit the jackpot. Observers counted up to 30 hawks per hour passing by a spot only 30 minutes from Boise! On several occasions, more than 150 hawks per day were counted soaring over the Boise Ridge, making this the best Idaho viewing site so far. The Boise Ridge is the crest of the Boise Front, the foothills north of Boise that rise into the mountains of central Idaho.

In addition to observations, an experimental banding station was established on the Boise Front. This also met with great success: almost 250 migrating raptors were banded and released unharmed. The banding is already paying off. A band from a sharp-shinned hawk trapped on Boise Ridge in early September 1993 was returned to the

PRAIRIE FALCON—BOCK KLINE



OSPREY—LANE V. LINDKOVN



BALD EAGLE—MUSTALE WICKES



TURKEY VULTURE—COLLEEN SWENNEY



MIGRATING RAPTORS OBSERVED SEPT. 5-OCT. 5, 1993

Observation Points

1. Squaw Butte
2. Black Mountain
3. Bennett Mountain
4. Snowbank Peak
5. Shafer Butte
6. Boise Peak
7. Lucky Peak



Species	Number Counted
American kestrel	287
Sharp-shinned hawk	226
Red-tailed hawk	221
Cooper's hawk	212
Golden eagle	74
Turkey vulture	70
Northern harrier	28
Northern goshawk*	23
Osprey	19
Prairie falcon	7
Merlin*	2
Bald eagle	1
Unidentified accipiter	45
Unidentified buteo	13
Unidentified raptor	10
Unidentified falcon	9
Unidentified eagle	1

Total 1,248

*Assume these species migrate later, since 50 to 100 birds were trapped and banded after Oct. 5.



RED-TAILED HAWK—COLLEEN SWENNEY



FEMALE HOODED—COLLEEN SWENNEY



CHUCK SCHEER/BSU



CHUCK SCHEER/BSU



CHUCK SCHEER/BSU



KIRK BATES/USFWS

U.S. Fish and Wildlife Service early in 1994. Unfortunately, the bird had been shot near Sinaloa, Mexico, in December.

Why do we see so many hawks near Boise? Large, flat, treeless plains and deserts such as the Snake River Plain are common throughout the Intermountain West. Scientists suspect they may act as barriers to many hawk species during migration, especially to forest-dwellers such as sharp-shinned and Cooper's hawks and northern goshawks that like lots of trees and eat small birds, both of which are scarce across much of the Snake River Plain. Therefore, they may avoid plains and deserts by skirting around the edges over nearby mountains, or crossing them at the narrowest point. This appears to be happening along the Boise Ridge. When hawks leaving the mountain ranges north of Boise reach the edge of the plain, they turn and follow the Boise Front, heading to the southeast. We don't know exactly where hawks cross the Snake River Plain or how, but great concentrations of them can be seen in early fall following the Boise Front southward.

Although our Boise Ridge hawkwatch was only part-time in 1993, more than 1,000 raptors were reported. The most commonly seen were American kestrels, sharp-shinned hawks, Cooper's hawks, red-tailed hawks, golden eagles and turkey vultures. Northern goshawks were common, too, but migrated later in the fall.

The exploratory research conducted in 1993 was so fruitful that scientists are seeking long-term funding to continue the project. Researchers have formed a cooperative team—Boise State University, U.S. Forest Service, U.S. Bureau of Land Management, National Biological Survey and Idaho Department of Fish and Game—to monitor numbers of migrating raptors throughout the fall, conduct banding research and pursue public education and involvement. If flights are counted daily, an estimated 5,000 to 10,000 raptors could be tallied at the site during the 1994 fall migration season. That would make the Boise Ridge one of the largest known flyways in the West.

Researchers also could band about 1,000 hawks during the migration, adding greatly to our knowledge of western migratory raptors.

At their Boise Ridge capture site, the authors lured migrating raptors into a fine net, then took various measurements to establish age and sex (female hawks are larger than males), banded the birds and released them. (below) Greg Kaltenecker holds a northern goshawk, a Category 2 candidate species classified as sensitive by federal land management agencies. (left) Kirk Bates holds a sharp-shinned hawk.

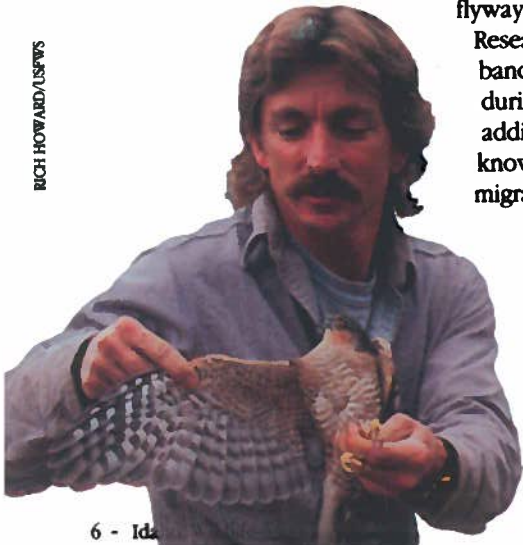
WATCHABLE WILDLIFE POTENTIAL

The proximity of the site to Boise, its accessibility and the quality of the viewing experience make it a natural for birdwatching. IDFG and BSU personnel are working on establishing a "Watchable Wildlife Site" with interpretive signs to teach the public about raptor identification and conservation. It will be ideal for visits by school or youth groups, birders or anyone interested in seeing lots of raptors. Biologists are developing programs to teach youngsters about conservation and involve them in daily research activities associated with the project. Intern programs for high school and undergraduate students are also planned.

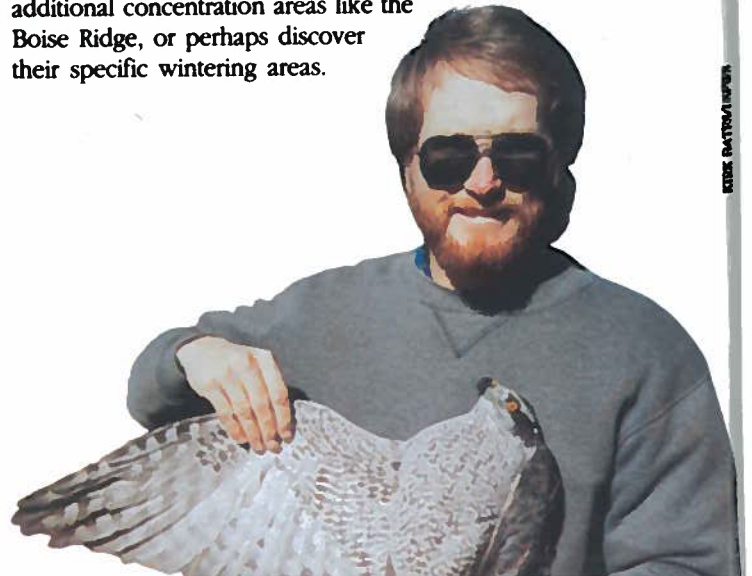
Eventually, we hope to secure the funding necessary for long-term research. In addition to fall monitoring, banding and public education, we would like to include springtime observations. Preliminary sightings in spring 1994 indicate raptors not only migrate south along the Boise Front in fall, but north in spring. This was not a given, since many migratory birds, including raptors, use different routes for fall and spring migration because weather patterns and food availability usually differ between the two seasons.

The potential for future research is promising. With a research station established, graduate students and other biologists will have the opportunity to answer important questions about hawk migration. Using radio-telemetry, we can learn about raptors' habitat use during migration, find additional concentration areas like the Boise Ridge, or perhaps discover their specific wintering areas.

RICH HOWARD/USFWS



KIRK BATES/USFWS



SEEING RAPTORS YOURSELF

Fall hawk migration begins in late August and continues through mid-November, peaking from mid-September to mid-October. Observers in 1993 explored many sites along the Boise Ridge including Shafer Butte, Boise Peak and Shaw Mountain. The greatest concentrations of migrating hawks were observed from Shaw Mountain, above Lucky Peak Reservoir, much of which is located on the IDFG Boise River Wildlife Management Area. This is the southernmost mountain on the Boise Front containing dense stands of conifer trees—habitat that offers perhaps the last opportunity for many hawks to find food before pushing farther south. Shaw Mountain is near Aldape Summit. To get there from Boise, follow Reserve Street north along the east edge of Fort Boise Community Center and continue uphill onto Shaw Mountain Road, then left onto Rocky Canyon Road. Just before the ridge crest, turn east and find your viewing spot.

Shafer Butte would also be a good choice. Take Bogus Basin Road from Boise past the ski area up to the Forest Service picnic area. Park and walk up to the radio towers atop the butte. For a more strenuous hike, approach the towers from the upper lodge at Bogus Basin Ski Resort. Another place to see hawks migrating is at the top of 8th Street Extension, just below timberline.

Choose a warm, sunny day during September or early October to view migrating hawks. Hawks fly best in the afternoon when rising thermals are strongest. Sit where you have good visibility, face northwest and start watching the sky. Don't forget to bring your binoculars, because the birds are not always close. Raptors move directly over the ridge or out over the valley, depending on the strength and direction of the daily winds.

Seeing dozens of raptors stream by throughout the day with the city of Boise as a backdrop is a spectacular sight. Where are they going? Mexico? Panama? Argentina? Thanks to this research, maybe someday we'll know.

Greg Kaltenecker is a graduate student in Raptor Biology at Boise State University. Kirk Bates works as a fish and wildlife biologist for the U.S. Fish and Wildlife Service, Boise Field Office.

HOW YOU CAN GET INVOLVED

Cooperating agencies and organizations have generously provided use of vehicles, equipment, labor, administration and limited financial support. In addition to those mentioned above, contributors to date include the Hawk Migration Association of North America, the Golden Eagle Chapter of the Audubon Society, HawkWatch International and Idaho Power Company.

The Boise State University Cooperative Raptor Migration Project is carried out almost entirely by volunteers. To continue and expand the program and offer the public a quality educational experience, additional support is needed. Individuals or organizations interested in contributing funds or getting involved in other ways should contact Greg Kaltenecker, Biology Department, Boise State University, Boise, ID 83725 (208-377-1440) or Wayne Melquist, State Nongame Manager, IDFG, Box 25, Boise, ID 83707 (208-334-2920).

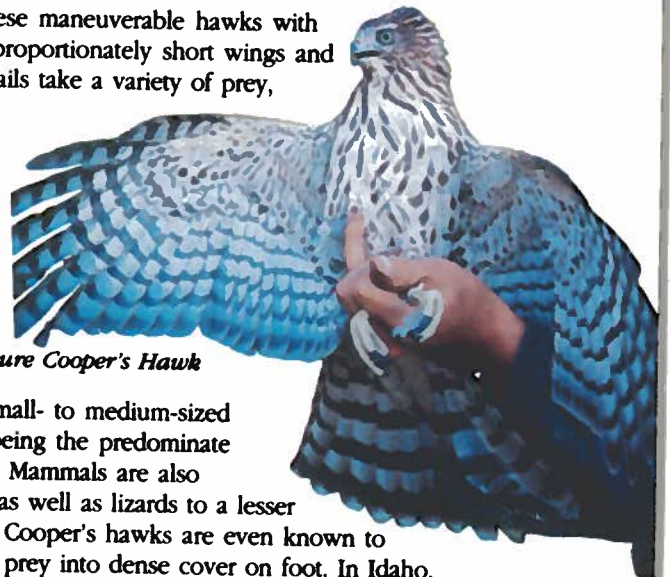
ABOUT ACCIPITERS

Order Falconiformes
Family Accipitridae

Cooper's Hawk
Accipiter cooperii

The Cooper's hawk is a crow-sized accipiter with powerful legs and feet. Females are noticeably larger than males and immatures differ from adults in plumage. This species ranges from southern Canada to northern Mexico. Individuals from western populations are smaller than those in eastern North America.

These maneuverable hawks with their proportionately short wings and long tails take a variety of prey,



KIRK BATES/USFWS

Immature Cooper's Hawk

with small- to medium-sized birds being the predominate choice. Mammals are also taken, as well as lizards to a lesser extent. Cooper's hawks are even known to pursue prey into dense cover on foot. In Idaho, these hawks generally nest in deciduous or coniferous habitats, frequently associated with riparian areas. They build their nests on horizontal limbs against the trunk and usually lay three to six eggs. Nestlings make their first flights from the nest when they're about 30 to 34 days old, and start hunting for themselves by the age of about eight weeks.

Cooper's hawks are "facultative migrants," meaning that only some individuals of the species migrate long distances. Those that migrate go as far south as Mexico and possibly farther. Bands recovered from more than 50 western sharp-shinned and Cooper's hawks banded in the Goshutes Mountains of Nevada indicate that nearly 90 percent of them wintered in western Mexico.

The **sharp-shinned hawk** (*Accipiter striatus*) is a closely related but smaller species of accipiter that looks very similar to the Cooper's hawk in both immature and adult plumages. It ranges from Alaska and northern Canada to Mexico.

Sharp-shinned hawks generally take a higher percentage of avian prey than Cooper's hawks. They are also facultative migrants, possibly journeying even farther south into Central and South America.

The migratory habits of both these species make them valuable indicators of the status and health of neotropical avian migrants and the habitats they depend on in the United States and elsewhere.—Kirk Bates, U.S. Fish and Wildlife Service