

LACEY - KEOSAUQUA

NATURE

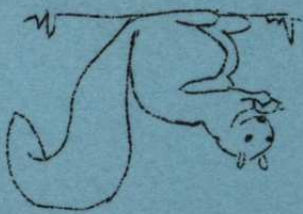
NOTES



Keosauqua, Iowa July 1, 1940

July 1, 1970

Illustrations by Lorene E. Trump
Prepared by Richard F. Trump, Park Naturalist



"It is prepared for your information in order that the recreational and educational opportunities of an unspoiled primitive area may be more fully appreciated, utilized, and protected."

"The Iowa State Conservation Commission and the Work Projects Administration-- Division of Recreation, in cooperation with the Iowa State College, present this circular for the information of the guests of Lacey-Keosauqua State Park.

NATURE NOTES
of
Lacey-Keosauqua State Park

BIRDS THAT ⁻²⁻KILL TO LIVE

Just before sunlight brightened the corner of the meadow at Ely's Ford, I heard the desperate flutter of a mourning dove's wings. I looked up in time to see it disappear into the safer cover of the woods. A woodchuck that had been feeding cautiously in the meadow rose momentarily to a sitting position, then scrambled for the thickets. The red-tailed hawk flapped heavily to the bor-

In a sense all birds kill to live. The mourning dove, picking up waste grain from the field, is killing embryonic wheat plants. The woodpecker of the orchard is killing the larvae of boring beetles. The yellow-billed cuckoo devours woolly caterpillars that feed on the walnut leaves.

Strictly, then, these birds are predators. Why has man marked for special persecution certain birds that are large and feed on larger forms of life? This article is about the destiny of a few of these birds.

der of the woods and perched on a jutting limb. Several Baltimore Orioles dashed fretfully at the intruder. But after scanning the meadow with his keen eyes, the predator flew again, and with a thin squealing whistle was off in search of better hunting grounds.

In another place and another time, there might have been someone ready with a gun, and that hawk would have died with lead in its breast. There would have been no particular reason, but no particular reason is necessary. The bird was large. It might be dangerous. It might eat a bird or kill someone's chicken. And then, the bird was an easy shot--slow-flying, with wide wing-spread--so

(Continued on page 7)

TIPS ON POISON IVY



If you'd like a first class case of poison ivy, just take these tips from M. L. Jones, Chief Naturalist for the Iowa State Parks:

1. Don't bother to stay on the trails; poison ivy doesn't grow there.
2. Pick all the flowers you can find that are associated with 3-leaved plants. (It's not legal, but you will receive punishment by due process of natural law.)
3. Wear peek-a-boo shoes and no socks (Ivy likes ankles).
4. Play Tarzan on a poison ivy vine and then wipe the perspiration from your brow with your bare hands.
5. If blisters begin to itch a day or so after a hike, scratch vigorously. This is guaranteed to spread it all over your body.



!!

After taking all this friendly advice, you'll want to know what to do next. Friends can give you cures by the car-load, but if none of them work, here is a treatment found dependable after a great many trials throughout the country: Ask your druggist to mix alcohol and water, half and half, and then add iron chloride until he has a five percent solution. Bathe the affected parts.

This solution is said to be effective also in preventing poisoning if applied to the skin before you go to the woods.

TO MAKE A LONG STORY SHORT

W. Ray Salt, Canadian naturalist, who has banded a great many hawks and owls: "I don't think there is enough bad in any species to warrant its extermination. For individuals, yes, especially in the human race; but the species, no!"

W. C. Lowdermilk of the Soil Conservation Service, concerning man-made deserts: "Gullies started which swept boulders and debris down onto the fertile lowlands. The streams had gradually dried up. Thus the forests were gone; the streams were gone; the soils were gone; and when the soils go, man either starves or migrates to other regions."

The late J. E. Guthrie in THE SNAKES OF IOWA: "The fact that a snake rattles does not necessarily prove it a rattlesnake. Many snakes, such as the fox-snake and bull-snake, vibrate the tail violently when excited, and thus produce a very realistic rattle when in contact with a board or among dry leaves or in the sand. A rattlesnake alone has rattles on its tail."

R. F. Hammatt of the U. S. Forest Service: "Wood in some form enters into most daily lives, from the cradle to the grave. Births and deaths are published in newspapers that, in the U.S., require close to 4,500,000 cords of pulpwood annually for their manufacture."

-5-

KNOW YOUR HAWKS

I. **BUTEO HAWKS:** Large size; short wide tail; wide wings. Slow fliers, often soaring high in air in wide circles. Rather tame, perching in plain sight on open limbs.

1. Red-tailed hawk--Largest, heaviest hawk common here. Dark streaks on belly. Adults are red on upper side of tail.

2. Red-shouldered hawk--A little slimmer than the Red-tailed. Dark bands across under side of tail. No streaks on belly, except on young.

II. **ACCIPITER HAWKS:** Smaller size; long tail, plainly banded beneath; short blunt wings. Don't soar, but fly by alternate flapping and gliding. Generally perch in cover of woods, and fly rapidly after their prey.

1. Sharp-shinned hawk--About the size of a dove. Has a square-tipped tail.

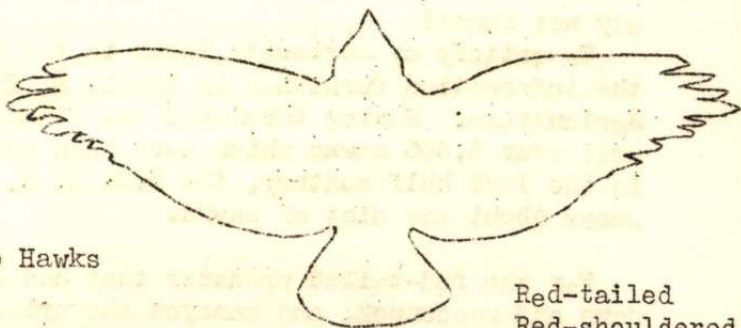
2. Cooper's hawk--A bit larger than the Sharp-shinned, and its tail is rounded at tip.

III. **FALCONS:** Small size; long pointed wings; long tail. Flight with rapid wing-beats.

1. Sparrow hawk--Slightly larger than Robin. Red tail (Note that this bird is much smaller than the Buteo with the red tail). Seen commonly along roads. Hovers in the air in one place while hunting.

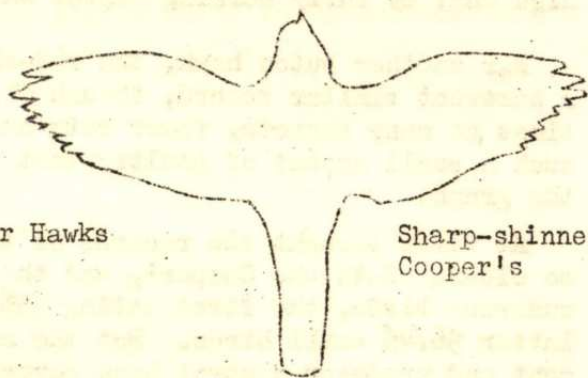
2. The Duck Hawk, a good deal larger than the Sparrow hawk, is no longer seen in Iowa.

Whose hawk?...The next time you talk with a fellow who considers it his duty to shoot hawks, ask him whose hawk he is killing. Does he know what kind it is before he shoots? Does he know what it eats?...See the article beginning on page 2.



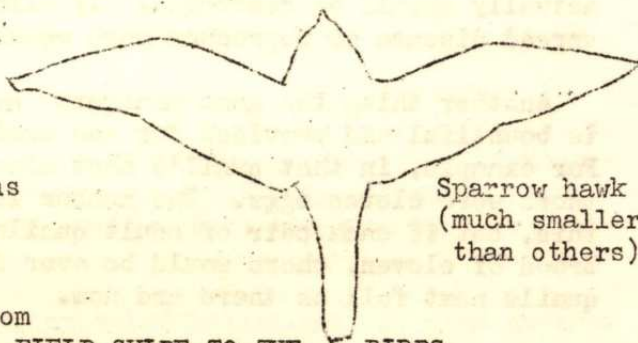
I. Buteo Hawks

Red-tailed
Red-shouldered



II. Accipiter Hawks

Sharp-shinned
Cooper's



III. Falcons

Sparrow hawk
(much smaller
than others)

(Sketches from
Peterson - A FIELD GUIDE TO THE BIRDS.)

why not shoot?

To satisfy my curiosity later in the day, I reexamined the information furnished by the U. S. Department of Agriculture. Having tabulated the stomach contents of well over 5,000 hawks which have been sent to Washington in the last half century, the U.S. D. A. does not have to guess about the diet of hawks.

For the red-tailed predator that had frightened the dove and woodchuck, and annoyed the orioles, I found the following figures: Rats and mice, 55%; insects, 10.5%; rabbits, etc., 9.3%; small birds, 9.2%; poultry, 6.3%; and other miscellaneous food, 9.7%. So the chances are high that my early morning hunter was looking for mice!

For another buteo hawk, the red-shouldered, there was a somewhat similar record, though its diet included three times as many insects, fewer rats and mice, more frogs, and such a small amount of poultry that this item was not in the graph.

At first thought the records of the accipiter hawks no so clear. Both the Cooper's and the sharp-shinned take numerous birds, the first eating 55% small birds, and the latter 96.4% small birds. But the experts in game management and predator control have several things to say about the effects of these bird-eating hawks. One is that they take chiefly the diseased, underfed, or crippled birds which actually should be destroyed. If allowed to live, they spread disease or reproduce more weaklings.

Another thing the game managers argue is that nature is bountiful and provides for the accipiters' appetites. For example, in that quail's nest along the Woods Trail there were eleven eggs. The number is often greater than this, but if each pair of adult quails reared only one brood of eleven, there would be over five times as many quails next fall as there are now.

What then? The amount of protective cover of brush

and the amount of food available would not support them through the winter. With the severe competition for food and shelter, great numbers would die of starvation, disease, or exposure. And so, according to the biologists, the predators are useful, maintaining a healthy population of small birds which the land can support.

The value of the big buteos is even more obvious. Dr. T. E. Musselman points out that if a red-tailed hawk were to eat only one rat each week, and if each rat des-

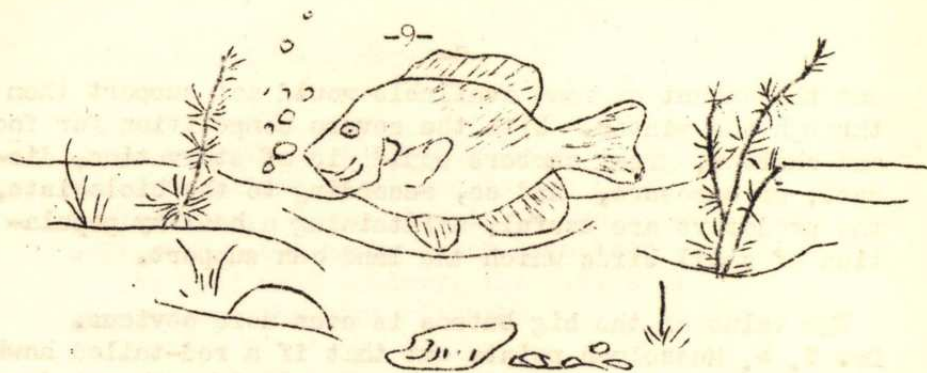
TRIBUTE TO A MAN WITH AN OPEN MIND:

When Mr. Boone Long of Keosauqua wanted to know what the great horned owl eats, he captured a family of the young owls, put them in a cage with slats wide enough that the parents could still feed them, and watched the results. Although the diet of these birds might not be typical of all members of the species, Mr. Long found not a single feathered victim up to the time the young were full grown, when he released them.

troys one bushel of corn per year, then at a price of 50¢ per bushel, the hawk is worth \$26 per year on a rat basis alone. Actually it destroys many other harmful rodents.

The little sparrow hawk so common along the roads is, of course, misnamed. It might better have been called the grasshopper hawk, for over half its food is insect life, and the remainder mostly rats and mice. For that matter, most of our hawks are misnamed: They are all called "chicken hawks." Observers say that hawks are far more likely to eat a dead chicken, thrown into the field instead of being buried, than they are to take a live one.

And so, after my brief investigation, I've decided that a chicken hawk is any big bird that a gunner can hit but can't identify!



PARK PERSONALITIES

FIGHTER...Hikers along the Lake a few weeks ago saw the blue-gill sunfishes guarding their nests in the shallow water. Along the beach especially there were dozens of little craters in the sand, the largest about a foot across. And in each crater a male blue-gill pugnaciously guarded the eggs layed there by the female. If frightened away, he always came back--to the same nest. His work serves not only to keep other fish from intruding, but also it is probable that the constant fanning of his fins helps to keep fresh water, with a good supply of oxygen, flowing over the eggs.

LIVING FOSSIL...Another jealous guardian of the nest is the common dogfish or bowfin, found in the Des Moines River. This is the only surviving species of a whole family of fishes that lived thousands of years ago. Zoologists suggest that the male bowfin's unusual care of the eggs and young may have helped the species survive. Another advantage over most other fishes is the bowfin's large lung-like air bladder, through which it can take part of its oxygen directly from the air. It can live several hours out of water.

FISH-FEEDER...The gizzard shad or skipjack of the Des Moines is mostly bones and is ignored by fisherman. It is decidedly useful because it feeds on tiny plants, and in turn becomes important food for the more highly prized meat-eating fishes without taking any of their food.

FORECAST

SUNDAYS...

2:00. Settle your picnic lunch by a short hike down the River Trail. Meet at the East Shelter—the one nearest the bridge.

3:00. Prepare for your evening picnic with a hike on the Lake Trail. Meet at the Bathhouse.

OTHER DAYS...

Special hikes and programs may be arranged by any group or individual interested in the Park Naturalist's activities. See the custodian, W. R. Chastain, or call Richard Trump, 197-A.

OTHER GUIDES...

Guest leaders are being featured on some of the Sunday hikes. Watch the papers for details.

PRIVATE...

If you prefer to hike without a guide, but are still interested in natural history, try the trail around the Lake and the River Trail between the Lodge and the West Shelter. They are marked with quiz-labels and signs pointing out some features that most people miss.

IT'S STILL FREE...

Despite numerous announcements, visitors continue to ask how much it costs to go on the nature hikes or to arrange special programs in conservation or nature study. There is no charge.