

IOWA CONSERVATIONIST

Volume 9

SEPTEMBER 15, 1950

Number 9

THE BRIDGE TO CONSERVATION

THE CAROLINA OTTER

By Rod Amundson

Like other water-loving fur bearers such as the beaver, the mink, and the muskrat, otters have played an important part in the development of America. They did not play the role to the extent beavers did, for example, but otters were sought after eagerly by early day trappers, and these trappers spearheaded the westward push of civilization.

Because of the superior quality of their furs, otters have always brought high prices in the fur market. And because of the high prices paid for furs, otters became almost extinct.

Not many years ago otters were extremely rare in North Carolina. It is pleasing to report that these beautiful, valuable, and fascinatingly interesting animals, under strict protection by law, have become sufficiently numerous in the eastern part of the state to warrant an open season for trapping.

Careful protection and a reasonable harvest of furs will insure the continued existence of otters in North Carolina, and profit in the pockets of trappers.

One cannot observe and study otters without falling in love with them. In the first place, they are among the most beautiful and graceful of mammals, with their gleaming fur, intelligent features, and the long grace of their bodies. In addition to comeliness, otters are intelligent, playful, and almost without sin. The only thing that can be said against them is that they compete with fishermen for fish.

The Carolina otter is the largest resident member of the weasel family, with fullgrown males reaching a length of 40 to 45 inches, and a weight of about 20 pounds. The body is elongated, like that of the mink, with a long, slender, neck and a long, thick, powerfully-muscled tail. The feet are webbed, both fore and hind.

(Continued on page 69)



Jim Sherman Photo.

The generations that are destined to enter a world of expanding populations and overtaxed resources must be prepared through education for conservation-restoration.

IOWA'S STRIPED SNAKES

By Robert B. Moorman and
Kenneth D. Carlander
Iowa State College

Most Iowa snakes are harmless. Many of them directly benefit agriculture by helping control injurious rodents. All of them have a place in the complex picture of wild creatures, the foods they eat and their effect on man and man's own surroundings.

Some of our best known snakes are included in a group loosely described as "striped snakes." Iowa

has five such, four of them being true garter snakes, the fifth belonging to a different genus. All of the five snakes are marked with three light-colored stripes that run lengthwise from head to tail. None of them are poisonous. In all five the parent snakes give birth to living young whereas most snakes lay eggs.

The striped swamp snake, *Tropidoclonion lineatum*, at first glance appears to be true garter snake,

(Continued on page 68)

By Michael Hudoba

(This article was adapted from an address given by Mr. Hudoba before delegates to the annual meeting of the National Association of Conservation Education and Publicity at Gulfport, Mississippi, last September. Mike Hudoba has been the Washington Editor for *Sports Afield* magazine for the past several years and is recognized as one of the ablest reporters in the nation's capital.)

Conservation of the nation's resources is still in the infant stage. The major problem to aid in its growth is to get the correct story across to the public.

Another generation is maturing and it is to this generation that the appeal must be made.

They are the ones who must be reached to help save our resources, to build legislative and administrative supports for progress designed to continue and restore the resources. An appeal must be made to their consciences.

The generations that are destined to enter a world of expanding populations, pressuring overtaxed resources, must be prepared for conservation-restoration as one of their basic educational factors.

An informed public aroused to the urgency of conservation need can help to realize constructive laws expanding conservation effort. Such a public can give impetus to progressive administration to form conservation programs and can pave the way to bring preservation education into school curricula. Finally, this understanding of the problem would create the urge to realize and practice conservation.

There is much room for pioneering. Unfortunately too much effort has been expended in treating the symptoms of resource waste and abuse, and not enough importance placed on treatment of the cause. The problem of the natural sequence, which is the restoration of renewable resources, has barely been attacked.

We have scientists and technicians ferreting out the secrets of conservation, along with the administrators who must make the decisions and operate the programs.

On the other hand, we have the

(Continued on page 72)

Iowa Conservationist

Published Monthly By The
IOWA CONSERVATION COMMISSION
914 Grand Avenue—Des Moines, Iowa
(No Rights Reserved)

WM. S. BEARDSLEY, Governor of Iowa
BRUCE F. STILES, Director
JAMES R. HARLAN, Editor
LOIS RECKNOR, Associate Editor

MEMBERS OF THE COMMISSION
E. G. TROST, Chairman.....Fort Dodge
E. B. GAUNITZ.....Lansing
ARTHUR C. GINGERICH.....Wellman
F. J. POYNEER.....Cedar Rapids
J. D. REYNOLDS.....Creston
C. A. DINGES.....Emmetsburg
MRS. DAVID S. KRUIDENIER.....Des Moines

CIRCULATION THIS ISSUE.....48,000

Entered as second class matter at the post office at Des Moines, Iowa, September 22, 1947, under the Act of March 24, 1912. Subscription rate.....40c per year

3 years for \$1.00

Subscriptions received at Conservation Commission, 914 Grand Avenue, Des Moines, Iowa. Send cash, check or money order.

TAKE IT EASY IF YOU'RE 50

By Dr. S. C. Whitlock

Game Division, Michigan Conservation Department

So you used to run the 440 in record time for ol' Sod City High? So you can take it? So you're tough? Well, that is, you used to be 25 years ago. Now you are 40 years plus. You polish the seat of your pants on good, solid, varnished oak eight hours a day about 50 weeks out of the year. You had a little spell of dizziness on that hot day during the pheasant season. You puffed a lot after running the neighbor's pooch out of your pet tomato plants last summer. You have been complaining to the little woman lately about feeling unusually tired. *Brother take it easy on that hunt this fall!* That old bony gent with the hollow eyes, wearing the babushka and carrying the big curved knife on a handle, may be looking your way.

Seriously, though, every fall during the season the papers are full of stories about fatalities among



Jim Sherman Photo.

Take it easy on your hunts this fall if you're over 50. Surprisingly, some 40 per cent of hunting fatalities result from heart failure.

HERE TODAY, GONE TOMORROW

Today nearly everyone knows that the gathering of swallows, waterfowl, blackbirds, and doves in huge flocks is a prelude to their southward flight.

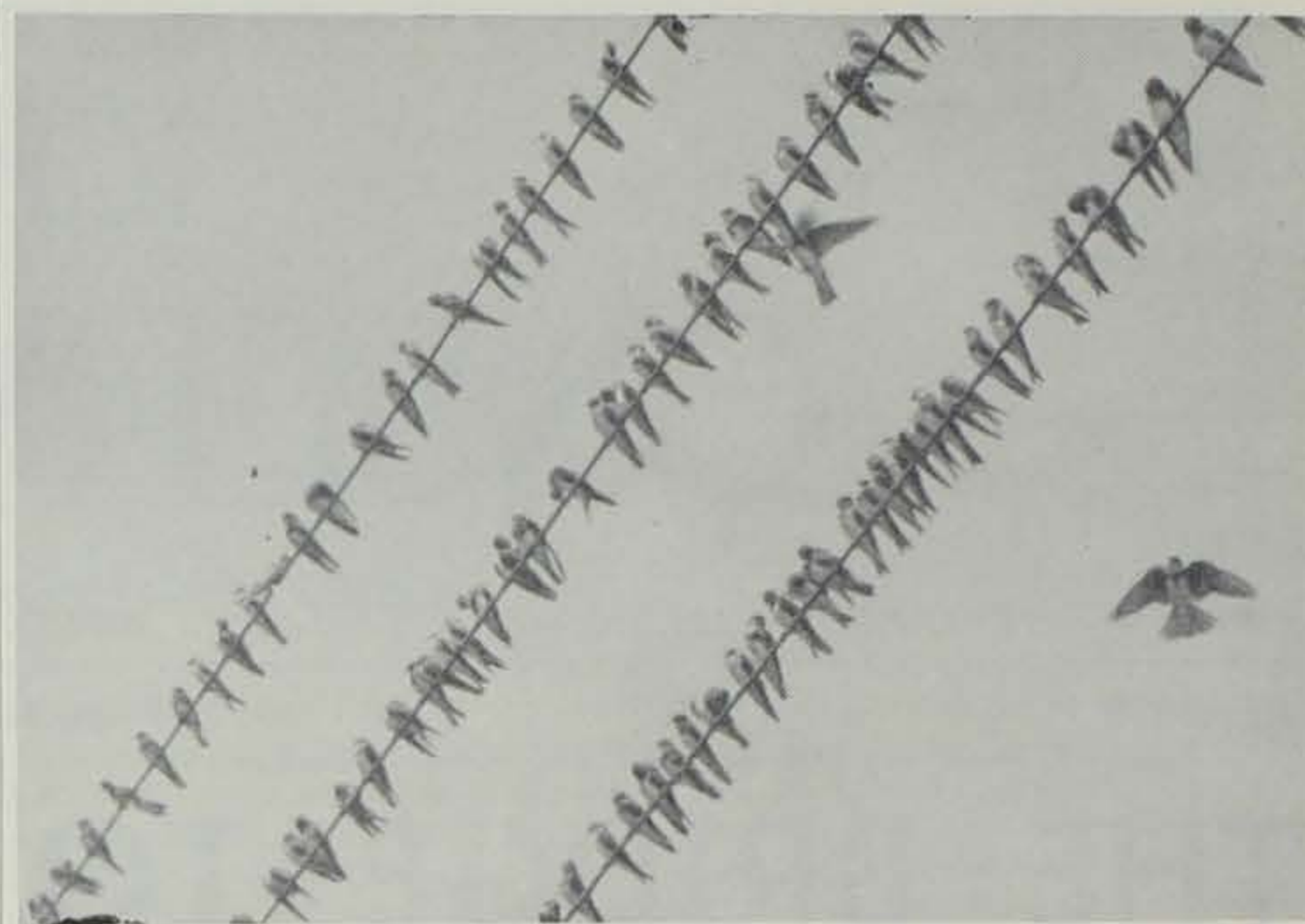
The sudden disappearance of these autumn flocks has not always been so well understood. For hundreds of years men wondered, guessed, and argued about this annual display of nature's "magic."

Some argued that birds hibernated in hollow trees or caves or even under water and mud. In 1878 Dr. Elliott Coues, a noted authority on birds, listed many references to the hibernation of swallows in mud. The following are taken from Dr. Coues' report:

"Dr. Wallerius, the distinguished Swedish scientist, wrote in 1748 that he had more than once seen swallows assembling on a reed till they were all immersed, and that he had likewise seen a swallow caught in a net under water, revived in a warm room, where it fluttered around and then died."

hunters. Checking them over carefully reveals the surprising fact that a fairly high percentage of them (about 40 per cent according to one authority) result from heart failure. Flying lead and drunken drivers are not the only menace to the health of Michigan's deer hunting army. Many a nimrod has hit the forest floor with a dull thud simply because of over-exerting an aging heart.

The number one killer in these United States today is heart disease. Of course, that is to be expected because of our aging population. More persons are living long enough to die with heart disease due to the success of the medicos in combating some of the old-time killers such as tuberculosis, smallpox, diphtheria, typhoid



Jim Sherman Photo.

Gathering of bank swallows preparatory to departure to South America, where they will spend the winter months.

"In 1794 . . . in Vermont . . . a man digging up roots of the pond lily found several swallows enclosed in the mud, alive, but in a torpid state."

Aristotle explained the sudden disappearance of birds in autumn

fever, etc. Modern medicine is saving people in their early years only to see them succumb later to the new champion killer—heart disease.

But many of these heart deaths are preventable or at least could be delayed for a few years if we would learn to live with moderation. Living a sedentary life for 50 weeks out of the year and then going out during the deer season and walking 10 or 15 miles the first day, or dragging a big buck a mile out of the swamp all by yourself, is simply inviting disaster. Men in their forties or early fifties are the most frequent victims, since they are likely to forget or ignore the inexorable fact that they are no longer young. Not many of them keep themselves in shape for the strain of sudden and severe physical exertion which is likely to occur during a hunting trip. It is this sort of thing that's tough on the middle-aged heart.

How do you know whether or not you have heart disease? A trip to your doctor is apt to give you the best tip, but even he can't be sure 100 per cent of the time. Some of the danger signals you yourself may recognize are: (1) increasing breathlessness on sudden exertion, (2) dizzy spells, (3) chest discomfort or pain after exertion, a heavy meal or excitement—sometimes the pain is in the shoulder or arm, usually the left, (4) increasing fatigue after ordinary tasks, (5) vague stomach aches after exertion, (6) noticeable change in the rate and rhythm of your heartbeat, and (7) possibly a tendency for a ankle swelling after a tough day at the office. All these, Mister Would-Be-Deer-Slayer, may be Nature's warning to take things a little easier this fall—OR ELSE!

by suggesting that summer and winter birds were the same—they had merely changed plumage.

In 1703 one who signed himself "A Person of Learning and Piety" went to great pains to prove that birds spent their winters on the moon.

When you see the flocks which herald the great annual pageant of bird migration, give thanks. Man has learned another of Nature's secrets. You can tell the curious why "they are here today and gone tomorrow."

STATE IZAAK WALTONS TO MEET AT CLINTON

Conservationists from all over Iowa meet in Clinton September 23 and 24 for the annual State Izaak Walton League Convention.

Saturday, September 23, will be devoted to business, followed by an evening banquet. Governor William S. Beardsley will be banquet speaker. Saturday's agenda will also include a boat ride on the Mississippi for delegates' wives.

Field events will be held Sunday and will include trapshooting, horseshoe pitching, retriever trials, skish, archery, greyhound races with a mechanical rabbit, the State Izaak Walton League bowling tournament, and a children's dog and pet show.

THE LAKES PATROLMAN

We haven't had the pleasure of meeting the boat patrolman on North Twin Lake, but we have observed a great improvement in the attitude of speedboat operators toward various boating regulations.

Speed boats no longer churn the waters as close to bathers and smaller boats as had been the custom for some years. Also, there seems to be more consideration given to proper lighting of boats after sundown.

No doubt some boat operators have taken a dim view of more strict enforcement, but the general public seems to favor it. Congratulations to the patrolman. He may be saving some lives.—Rockwell City Advocate.



George Worley Photo.

Teachers developed a new appreciation of the interrelation of soil, woods, waters and wildlife and will be able to transfer this interest and understanding to their pupils.

CONSERVATION CAMP FOR IOWA TEACHERS

The Story of 50 Teachers Who Got "Down to Earth"

A "grass roots" approach to the "grass roots" of Iowa and our nation might fittingly describe the work of the Iowa teachers' conservation camp which was conducted at Springbrook Park, near Guthrie Center, June 5 to July 14.

Its sponsors—Iowa State Teachers College, the State Department of Public Instruction, and the Iowa State Conservation Commission—frankly called it an experimental approach to teacher training in conservation. But the workshop was so successful that plans are already going forward to hold a "bigger and better" camp next year.

The majority of the 50 teachers who attended the workshop attended for two reasons: First, to earn credit to maintain their teaching certificates (five quarter hours of college credit at ISTC) and secondly, to develop a new appreciation of our soil, woods, waters, and wildlife and to learn how to transfer this interest and understanding to the students in their classrooms.

The school quarters were the permanent buildings of Springbrook State Park, built originally as a civilian conservation camp. Besides the cabins, there was a central dining hall (with a superb cook for famished conservationists, we are told) and central hot and cold showers. When rain chased the students out of their sun-and-airconditioned classroom they found ample lecture room and laboratory space in the administration building.

All work and recreation proceeded on a definite schedule. A typical camp day began with an early awakening, not by a bugle call, but by a loud speaker broadcast of bird or frog calls. If a bird walk was

only, to develop a new appreciation of our soil, woods, waters, and wildlife and to learn how to transfer this interest and understanding to the students in their classrooms.



George Worley Photo.

With understanding, the bedlam of early morning bird music is translated into a symphony arranged by the Supreme Composer.

scheduled, teachers and instructors were trailing through shady glens at 5:30 a.m. And only a few days had passed before 60 different kinds of birds had been seen or heard—and 18 different nests discovered.

Geology of Iowa, biology, geography, and the conservation of soil, water, woods, and wildlife were the general areas of study which were given intensive study during the two three-week periods.

A permanent staff from Iowa State Teachers College, together with daily guest instructors, gave special instruction in various fields of conservation. Displays of attractive teaching materials helped to make the course stimulating. Field trips, experiments, and moving pictures added to the day's events. Recreation included picnicking, swimming, softball, boating, fishing, hikes, and nature study.

Staff members were Dr. G. W. Mouser, Dr. Dorothy Miller, and Miss Pauline Sauer from ISTC; Miss Ivah Green of the State Department of Public Instruction; and G. W. Worley of the State Conservation Commission.

A camp bulletin entitled "Springbrook Murmurings," published daily, contained a few news murmurs that were unusually revealing of camp life. Here are some pretty good examples:

"An abandoned coal mine was visited and the refuse pile analyzed, only to discover that the stuff was what some rural teachers had been burning in their stoves all winter. The question: How can one bucket of coal turn into **two buckets of clinkers?** was not answered satisfactorily.

"Much noise and commotion over pounding nails, cutting tin, sawing wire screen, and cracking rocks went on after supper. This period is listed on the agenda as 'free time,' now newly defined thus: 'Free time'—that period of the camp day in which students are **free** to work harder than any other time, doing the things they don't have time to do in their **working** time.

"Our little Iowa Teachers Conservation Camp is proving to be a health camp as well. We quote from a student who attended our first session and came back for more, without credit, the second session:

"I came here a sick woman, hardly able to drag one foot ahead of the other. I climbed precipitous cliffs, I leaped over dangerous crevasses, I walked 20 miles a day, I chased butterflies. And I put on 10 pounds extra weight and I slept like a hibernating bear. Now I've thrown away my medicines. This camp really **conserved** me."

After all, what more could be asked of a "conservation" camp?—Midland Schools.

20-YEAR EMPLOYEE DIES

O. J. Koch, Supervisor of Rough Fish Control, died of a heart attack at the Spirit Lake Hatchery August 5. He was 60 years old.

Otto, for many years a Mississippi River commercial fisherman, was first employed in August, 1930, to supervise rough fish removal in state-owned waters. He is survived by his wife and four children.

The average beaver colony contains but five animals; however, the colony may extend over a mile or more of stream and have several bank dens, lodges, dams and slides.

Wardens Tales

Shop Talk From the Field

C. H. Updegraff, Superintendent of the State Game Farm, Boone, writes:

"One evening Mrs. Harold Adams, who lives near here, was driving to the Ledges when she saw an animal turning flip-flops in the road. Stopping to investigate, she discovered a young ground hog about three-fourths grown with its head caught in a No. 2 salmon can. Not wishing to leave the animal to suffer, she picked it up by the tail, placed it can and all in the trunk of her car, and brought it to the Game Farm.

"I got the ground hog by the nape of the neck and finally dislodged the can, and the animal seemed none the worse for the experience. I told Mrs. Adams it was the first time I had ever been presented with canned live ground hog."

Each year prior to the State Fair members of the field force help to assemble the commission's fair exhibits by collecting live Iowa wildlife specimens to place on display. The snake cages are particularly popular with the fair-goers, and each year a diligent effort is made by the field men to collect as many species of Iowa snakes as possible.

Glen Sanderson of Marion, game biologist, came into the office one day and left on the editor's desk a box which he said contained his contribution to the snake exhibit, a fox-snake. When opened, however, the box was found to be empty.

On August 8, approximately a month later, Sanderson wrote:

"Dear Jim: Do you remember the fox-snake that wasn't in the box I left on your desk? Well, on July 14 I opened the trunk of my car and there was the snake looking out at me. I caught it and returned it to the cage I had made for it, and I'll bring it next time I come into the office.

"But that isn't all—yesterday I left my car in Cedar Rapids to have some work done on it, work that necessitated cleaning out the trunk. When I got home I opened the trunk and there, right on top of the usual collection of junk one always accumulates in the trunk of a car, were 14 snake eggs. Apparently the snake had laid them under the sack I keep wrapped around my tire chains. I just wonder what the mechanic thought when he came across 14 snake eggs in the trunk of a car!"

Louis Lemke, conservation officer for Cedar and Jones counties writes:

"Recently I assisted Paul Pierce in taking some test seine hauls from Sugar Creek in Cedar County. As we waded along we heard a splash in the water about 100 feet

(Continued on page 69)



Jim Sherman Photo.

The garter snakes, our best known species, are the joy of small boys and the terror of small girls.

Snakes . . .

(Continued from page 65)

but actually it is only distantly related. It is rather small in size, moderately stout in the body, and the head is no wider than the neck. The color is grayish brown, with a strong white or yellow stripe down the middle of the back, with a paler stripe on each side.

Marks that identify this snake from the garter snakes are the small head and two rows of large and uniform black spots upon the light-colored belly. The adult snake is about 12 inches long.

Even where it is common the striped swamp snake is not very often seen since it prefers to hide under rocks, logs, sod or boards. It seems to survive well in town and city areas, where it feeds largely on earthworms. It will rarely attempt to bite even when handled. In Iowa the striped swamp snake has been reported from counties in the central and southeastern parts of the state. Because of its secretive habits it may be present in many counties where it has not as yet been reported.

The most common and widely distributed snake in Iowa is the plains garter snake, *Thamnophis radix*. The colors of this snake are somewhat variable, but normally the three light lines on the body are prominent, the middle one a bright orange-yellow, the other two pale yellow. There are

distinct rows of squarish black spots between the stripes, except in some very dark individuals. Two rows of small irregular spots mark the bluish-green belly.

The plains garter snake prefers to live about marshes and the shores of ponds and streams. Many individuals are, however, found far away from water on upland plains or prairies. When alarmed they may take to the water as our water snakes do, diving to the bottom and hiding among the water plants. These snakes feed upon frogs, tadpoles, earthworms and fish. Young snakes feed largely on earthworms, as do adults away from water.

This snake is not large in size, as only the largest individuals measure as much as two and one-half to three feet in length. Female snakes are much larger than their mates. Litters or broods will average about 20 young, each six to seven inches long at birth. To make a rather foolish summary this amounts to ten feet of baby snakes!

Garter snakes do have one habit that discourages many would-be friends. When handled they discharge a milky substance with a strong unpleasant odor. This discharge comes from two glands located near the junction of body and tail and is entirely harmless.

Garter snakes often gather for hibernation. Snakes en route to

lowland areas for this purpose may appear in seemingly large numbers in lawns or yards. They are, however, apt to disappear for the winter within a few days. Hibernation is usually in a deep post-hole, an old well or a gopher hole that reaches down below the frost line.

"Common but not so common" describes the common garter snake, *Thamnophis sirtalis sirtalis*. This snake is "common" in the eastern states, much less so in Iowa. It is found only in some of the more eastern counties in this state.

This snake has the familiar three distinct stripes, but the middle one is yellow, never orange as in the plains garter snake. The side stripes are on the second and third row of scales rather than on the third and fourth as in the plains snake.

Temperament and disposition vary greatly among individuals. Some snakes of this species are very docile, others will bite at every opportunity. All of them will give off the unpleasant garter snake odor if disturbed.

The common garter snakes are the first snakes to appear in the spring, often coming out while snow still covers much of the ground. They are also the last to hibernate in the fall.

The red-sided garter snake, *Thamnophis sirtalis parietalis*, is closely related to the common garter snake. The name, however, describes its distinguishing feature, for the ground color on the sides is usually broken up with red-colored bars. The skin between the adjoining scales is also red.

This is the garter snake usually found in woodland pastures and along the edges of streams in all parts of Iowa. It feeds on earthworms, frogs and fish.

Long, slim and graceful is descriptive of the ribbon snake, *Thamnophis sauritus proximius*. This is a very slender garter snake, with the long tail making up one-third of the total length. Ribbon snakes are even more partial to the vicinity of water than are the other striped snakes. They are rarely seen far from streams or marshes. They are most common in the southern and southeastern portions of the state.

When pursued, ribbon snakes quickly enter the water, where they swim but do not dive as do some of the other garter snakes.

Garter snakes thrive in captivity and make interesting pets. The name garter snake really is a corruption of garden snake, as these snakes are the species most commonly found in gardens, yards, and around houses.

HOBNOBBING WITH THE SPORTSMEN

Trigger fingers are getting itchy as the duck season draws nigh. Just now there are hip boots in order, guns oiled and clean, duck calls tuned a dozen times, and khaki-wear all sparkling. But soon there will be snagged boots and soiled socks, wet coats and torn pants, dirty guns and broken calls; oh yes, there'll be a few ducks, too, but not the anticipated number. Ducks fly too fast and too high, men shoot too slow and too late. Long shots against hard

feathers spell victory for fowl. Man's aim against the power-dive of a teal is like a pop-gun on a pheasant hunt—you just don't hit.

But no matter what the price in hardship and materials, duck hunting is worth every cent. No matter how early you go out, you'll still get home late. No matter how urgent the matter at home, the alibi for hunting will suffice—at least for yourself. It may not faze a forlorn wife or an incensed frau; but it's enough to satisfy you.

There are several treatments to take when you come home late. Among the many that I have

(Continued on page 72)



Jim Sherman Photo.

There are always a few ducks, but never the anticipated number. No matter what the price in hardship and materials, duck hunting is worth every cent.



Wildlife in North Carolina Illustration.

Otters are the most playful of all adult mammals. Cover the lower half of the illustration to discover the source of rumors of huge water snakes.

Otter . . .

(Continued from page 65)

These, together with powerful leg muscles and the tail, equip the otter for his amazing ability as a swimmer.

The general color is a rich, glossy dark brown, with lighter hues along the head and neck. Sexes are colored alike, and there is no marked seasonal variation in color. The fur, like other water-loving fur bearers, is composed of two layers, a dense, thick undercoat with long, glossy guard hairs.

The ears are small, close-set, and almost invisible from a distance. The eyes are small, black and beady in appearance.

We have said that the otter is an amazing swimmer. Otters are perfectly capable of out-swimming a trout in its native habitat, although most observers contend that otters catch fish more by stealth than by speed. Since they can stay under water three or four minutes, they have ample time to stalk and seize their prey. W. P. Lett, in his book entitled *The Canadian Otter*, writes, ". . . It approaches its intended victim from behind with great caution. It stretches itself at full length, as when sliding, and with its short front paws, paddles itself slowly and stealthily along, with its body perfectly motionless, no movement being perceptible but the gentle action of its short forelegs. When within about 18 inches of its unsuspecting quarry, the pursuer arches up its back, like the bending of a bow and with the speed of an arrow, darts upon its victim, seldom failing to seize and secure it at the first plunge. Should it fail in the first attempt, providing the water is clear, the chase is



Wildlife in North Carolina Illustration.

Otter "slides for life" are found only along the Mississippi River in northeast Iowa.

continued, very generally with success . . ."

The diet of otters is composed almost entirely of fish. They are accused of competing with fishermen for fish, but their diet by no means consists entirely of game fish. They will take eels, suckers, branch roaches, or whatever species is most convenient to capture. In addition to fish, otters take shellfish, crayfish, and, rarely, frogs. Sometimes they may take young muskrats, small birds, waterfowl and poultry. Such items, however, are the exception rather than the rule.

Unlike their close relatives, the mink and weasel, otters rarely kill more than they can eat. Sometimes parts of large fish will be left to waste, but usually otters take smaller fish and eat them entirely.

Where male mink are promiscuous wanderers, seeking mates where they can be found, otters tend to pair off; some believe that the mating is for life. Otters prefer to make their homes in bank dens. These may be excavated by the animals themselves, with under water openings and large nest cavities warm and dry above the water line. If muskrat dens are available, otters will use them. Occasionally a pair of otters will set up housekeeping in the base of a hollow tree or a hollow cavity in a fallen tree. Invariably otters make their homes adjacent to water and spend their entire lives in or near water, except for occasional portages across dry land to the nearest pool or stream.

Mating occurs in January or February, and from one to three young are born about two months later. The young are well developed at birth although, like kittens, their first few days of breathing life are sightless.

The young of almost all mammals are considered "cute," but anyone who has seen a couple of young otters playing together will insist that they are by far the most lovable juvenile mammals. Family life is supervised by the mother otter, although the males may help out with feeding and join in with family fun.

Mother otters offer food to their youngsters in the form of wriggling fish long before they are capable of taking solid food, and a taste for fresh fish is acquired early in life.

The family may remain together

as a group until the young are nearly full grown.

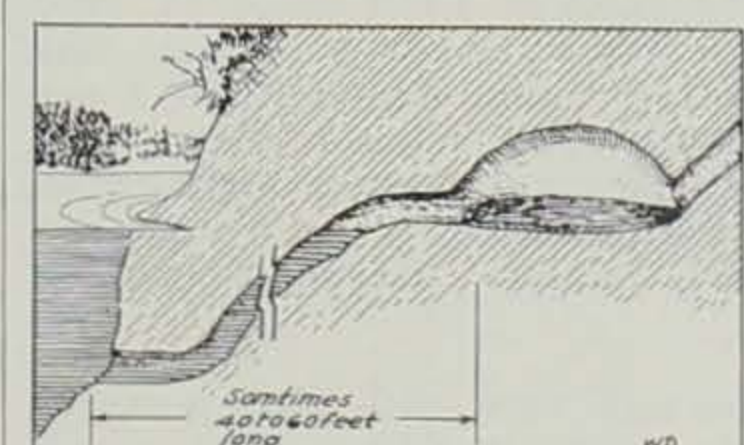
Although not gregarious in the sense that prairie dogs or elk are, otters do have social get-togethers, and seem to enjoy each other's company. Usually these gatherings are accompanied by one of the most delightful and amazing activities known to the mammal world. The young of almost all mammals spend considerable time playing, but otters are probably the only group wherein young and old alike engage in sport.

Otters select a steep slope overlooking a pool of deep water. They remove grass, moss, sticks, stone, or any other material which may interfere with making a smooth pathway from the brink of the slope to the water. Then they take turn about sliding down the slope on their bellies, with the front feet folded back and the hind legs extending backwards. After a few trips water from their wet hair makes the slide a greasy, slippery chute. The animals dash up the steep slope with considerable expenditure of energy for the sheer pleasure of sliding down again. Although groups of otters usually do not exceed four or five in number, eight or more may get together for the sport of sliding.

Otters like to swim and play about on the surface of the water. They have been observed playing "follow the leader" on the water. At this time they use an under-over action somewhat in the manner of porpoise. From time to time the leader of the troupe may stop, rear eight inches of his neck out of the water to look for possible danger. No wonder there have been reports of huge snakes cavorting in a lake or river! The undulating motion of a file of otters, the lead animal with his long neck out of the water, would certainly resemble some gigantic serpent.

In addition to their beauty, their intelligence, swimming ability and love of fun, otters have well-developed vocal talent to make them more interesting. When alarmed, they give forth sharp, high-pitched chirps or low, chattering growls and snarls. They grunt contentedly like pigs or give vent to hissing, sniffing snorts. Pets whimper and cry at the loss of the mate. The most astonishing voice is a piercing shriek that can be heard for miles, like the scream of an eagle.

Otters make the most affectionate and lovable pets. A pair at a wild animal farm in Florida (prob-



Wildlife in North Carolina Illustration.

The dens of otters may be from 40 to 60 feet long, with an underwater opening. The nest is well above the water line.

ably Florida otters) are the delight of tourists and customers who come by to see or purchase wild animals. The otters greet each arriving automobile, and if windows are left open, will make a thorough investigation of the contents and occupants of the car.

Seton reports that otters in captivity prefer fresh fish, just as wild ones do, but ate cooked fish, bread and milk, meat and potatoes.

The sanitary habits of otters in captivity are immaculate and fastidious. They select an odd corner of their cage or pen for a latrine, and use it unflinchingly.

The love for affection in pet otters is touching. They love to be fondled and petted. If there are two or more, those not being petted will beg for attention, with no display of jealousy among them as would be the case with puppies or dogs.

Old otters tend to become grouchy and even vicious, but in general otters are delightful pets and companions. No dog is a match for an otter in a fight in water, and few dogs can whip a full grown otter on the ground. They are gritty, fast, clever, vicious fighters, and household dogs and cats soon learn to respect them and join in their playful games.

As long as plenty of water and fish are available, together with a moderate amount of wilderness area, there is no danger of otters' becoming extinct. Strict legal protection and judicious harvesting of furs will assure North Carolina a continued population of these valuable and delightful animals. —*Wildlife in North Carolina.*

Tales . . .

(Continued from page 67)

upstream. I looked up in time to see what appeared to be a muskrat swimming across the creek.

"We walked on downstream and suddenly Paul, looking back and seeing the animal get out on the bank and then slide back into the water, said, 'Are you sure that's a muskrat?'"

"We both stood and watched the animal for some time. He kept swimming around and around in circles.

"'If that's a muskrat it must be nuts,' I said, wading over to get a closer look. I was sure that as I approached the animal would dive under the water and disappear, but instead it continued to swim in a circle. It looked almost exhausted. I reached under the water, picked it up by the tail and, to my surprise, came up with a young ground hog. I understood then why this 'chuck,' being a land animal, was having such a struggle in the water, but I am still wondering why he went into the creek in the first place, unless he just wanted to cool off on a warm day. Next time he'd better remember to take along his life preserver."

1950 IOWA HUNTING SEASON

PHEASANTS—Open season, long zone: November 11-December 5, 1950, both dates inclusive. Shooting hours 12 noon to 4:30 p.m. Bag limit three (3) cock birds. Possession limit three (3) cock birds. Open counties: Lyon, Osceola, Dickinson, Emmet, Kossuth, Winnebago, Worth, Mitchell, Howard, Winneshiek, Allamakee, Clayton, Fayette, Chickasaw, Floyd, Cerro Gordo, Hancock, Palo Alto, Clay, O'Brien, Sioux, Plymouth, Cherokee, Buena Vista, Pocahontas, Humboldt, Wright, Franklin, Butler, Bremer, Woodbury, Ida, Sac, Calhoun, Webster, Hamilton, Hardin, Grundy, Black Hawk, Buchanan, Delaware, Dubuque, Jackson, Clinton, Scott, Jones, Linn, Benton, Tama, Marshall, Story, Boone, Greene, Carroll, Crawford, Monona, Shelby, Audubon, Guthrie, Dallas, Jasper, Poweshiek, Iowa, Johnson, Cedar, Muscatine, Louisa, Washington, Keokuk and Mahaska.

Open season, short zone: November 11-20, 1950, both dates inclusive. Shooting hours 12 noon to 4:30 p.m. Bag limit three (3) cock birds. Possession limit three (3) cock birds. Open counties: Harrison, Pottawattamie, Cass, Adair, Madison, Adams, Union, Clarke, Lucas, Taylor, Ringgold, Decatur and Wayne.



Jim Sherman Photo.

The 1950 pheasant season promises an increased number of birds.

QUAIL—Open season, long zone: November 1-December 15, 1950, both dates inclusive. Shooting hours 8:30 a.m. to 4:30 p.m. daily. Bag limit 6, possession limit 6. Open counties: Tama, Benton, Linn, Jones, Jackson, Dallas, Polk, Jasper, Poweshiek, Iowa, Johnson, Cedar, Clinton, Scott, Madison, Warren, Marion, Mahaska, Keokuk, Washington, Muscatine, Louisa, Union, Clarke, Lucas, Monroe, Wapello, Jefferson, Henry, Des Moines, Taylor, Ringgold, Decatur, Wayne, Appanoose, Davis, Van Buren and Lee.

Open season, short zone: November 1-15, 1950, both dates inclusive. Shooting hours 8:30 a.m. to 4:30 p.m. daily. Bag limit 6, possession limit 6. Open counties: Winneshiek, Allamakee, Fayette, Clayton, Black Hawk, Buchanan, Delaware, Dubuque, Marshall, Guthrie, Adair, Adams and Page.



Jim Sherman Photo.

Figures released by the U. S. Fish and Wildlife Service indicate a slight decrease in duck population this fall.

SQUIRREL—Open season for gray and fox squirrels: September 15-November 15, 1950, both dates inclusive. Entire state open. Bag limit six (6) per day; possession limit after first day twelve (12).

RABBIT—Open season for cottontail and jack: September 15, 1950-January 31, 1951, both dates inclusive. Shooting hours 6:00 a.m. to 6:00 p.m. Entire state open. Bag limit six (6) per day. Possession limit after first day twelve (12).

DUCKS, GEESE, COOT OR MUDHEN—Open season October 20-November 23, 1950, both dates inclusive. Entire state open. Shooting allowed opening day from noon until one hour before sunset. Each day thereafter the season opens one-half hour before sunrise and closes one hour before sunset.

Ducks—Bag limit four (4) per day; possession limit after first day eight (8), with only one (1) wood duck in possession at any time.

Geese—Bag and possession limit four (4). Not more than two (2) of the limit may be Canada, Hutchins, cackling, or white-fronted geese. Two (2) of any of the above may be included in the limit. The entire bag may be made up of either blue or snow geese or any combination of them.

Coot or Mudhen—Bag and possession limit ten (10).

WILSON OR JACK SNIPE, GREBE, RAILS (EXCEPT COOT) AND GALLINULES, MOURNING DOVE, WOODCOCK, SWAN—No open season.



Jim Sherman Photo.

Squirrel shooters will find about the same number of "bushy-tails" this year as last.

DUCK SEASON OPENS OCTOBER 20

The duck season in Iowa opens at noon, October 20. Duck hunters are reminded to purchase a migratory bird hunting stamp, \$2 this year, from their post office, as well as an Iowa hunting license, before entering the blinds.

The regulation requiring guns to be plugged so that a total of not more than three shells can be contained in the magazine and barrel is still in effect. The following hunting seasons have been set by the U. S. Fish and Wildlife Service and concurred in by the Iowa Conservation Commission:

Kind of Bird and Locality	Open Season	Bag Limit	Possession Limit
Ducks—Entire state, except American Mergansers and Red-breasted Mergansers.	October 20 to November 23, both dates inclusive. Shooting allowed from one-half hour before sunrise and closes one hour before sunset, except that the hour of commencement of hunting on the first day of the season shall be 12 o'clock noon.	4—in the aggregate of all kinds except that not more than 1 wood duck shall be included in such limit.	First open day the possession limit shall be the daily bag limit; thereafter a two-day bag limit may be held in possession, except that no more than 1 wood duck may be possessed at any time.
American Mergansers and Red-breasted Mergansers, Entire state.	October 20 to November 23, both dates inclusive. Shooting allowed from one-half hour before sunrise and closes one hour before sunset, except that the hour of commencement of hunting on the first day of the season shall be 12 o'clock noon.	25 singly or in the aggregate.	None.
Blue Geese, Snow Geese, Canada Geese, Hutchins' Geese, White-fronted Geese, Cackling Geese, Entire state.	October 20 to November 23, both dates inclusive. Shooting allowed from one-half hour before sunrise and closes one hour before sunset, except that the hour of commencement of hunting on the first day of the season shall be 12 o'clock noon.	4—except that not more than 2 of the limit may be Canada, Hutchins', Cackling or Whitefronted Geese. Two of any of the above may be included in the limit. The entire bag may be made up of either Blue or Snow Geese or any combination of them.	One day's bag limit.
Ross' Geese, Entire state.	No open season.	None.	None.
Coot, Mudhen, Entire state.	October 20 to November 23, both dates inclusive. Shooting allowed from one-half hour before sunrise and closes one hour before sunset, except that the hour of commencement of hunting on the first day of the season shall be 12 o'clock noon.	10.	10.
Wilson's Snipe or Jacksnipe, Entire state.	No open season.	None.	None.
Grebe, Entire state.	No open season.	None.	None.
Rails (except Coot and Gallinules, Entire state.	No open season.	None.	None.
Mourning Dove, Entire state.	No open season.	None.	None.
Woodcock, Entire state.	No open season.	None.	None.
Swan, Entire state.	No open season.	None.	None.



Jim Sherman Photo.

1950

IOWA CONSERVATION COMMISSION

STATE OF IOWA—30 MINUTES BEFORE SUNRISE AND 1 HOUR BEFORE SUNSET SCHEDULE CENTRAL STANDARD TIME

(Note: This table has been compiled from official schedules furnished by the Weather Bureau Stations listed. A schedule from the Omaha, Nebraska, Station is used because there is no station in southwestern Iowa. The difference in time between stations should be taken into consideration in figuring the exact time at your particular location.)

	DAVENPORT		BURLINGTON		DUBUQUE		KEOKUK		CHARLES CITY		DES MOINES		OMAHA, NEBR.		SIOUX CITY	
	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset	30 Min. Before Sunrise	1 Hour Before Sunset
Oct. 20	Noon	4:15	Noon	4:16	Noon	4:14	Noon	4:19	Noon	4:20	Noon	4:26	Noon	4:36	Noon	4:36
21	5:52	4:14	5:52	4:15	5:52	4:12	5:53	4:18	6:02	4:19	6:04	4:25	6:12	4:35	6:15	4:35
22	5:53	4:13	5:53	4:14	5:53	4:11	5:54	4:17	6:03	4:18	6:05	4:23	6:14	4:33	6:16	4:34
23	5:54	4:11	5:54	4:12	5:54	4:09	5:55	4:16	6:04	4:16	6:05	4:22	6:14	4:32	6:18	4:32
24	5:55	4:10	5:55	4:11	5:56	4:08	5:56	4:14	6:06	4:15	6:07	4:20	6:16	4:30	6:19	4:31
25	5:56	4:09	5:56	4:09	5:57	4:06	5:58	4:13	6:07	4:13	6:07	4:19	6:16	4:29	6:21	4:29
26	5:57	4:07	5:57	4:08	5:59	4:05	5:59	4:12	6:08	4:12	6:08	4:18	6:17	4:28	6:22	4:28
27	5:59	4:05	5:59	4:07	6:00	4:03	6:00	4:10	6:10	4:10	6:11	4:16	6:20	4:26	6:23	4:26
28	6:00	4:04	6:00	4:05	6:01	4:02	6:01	4:09	6:11	4:09	6:11	4:15	6:20	4:25	6:24	4:25
29	6:01	4:02	6:01	4:04	6:02	4:01	6:02	4:08	6:12	4:08	6:13	4:13	6:22	4:23	6:25	4:24
30	6:02	4:01	6:02	4:03	6:03	3:59	6:03	4:06	6:13	4:06	6:14	4:12	6:23	4:22	6:27	4:22
31	6:03	4:00	6:03	4:01	6:05	3:58	6:04	4:05	6:14	4:05	6:14	4:11	6:23	4:21	6:28	4:21
Nov. 1	6:04	3:58	6:05	4:00	6:06	3:57	6:05	4:04	6:16	4:04	6:17	4:09	6:26	4:19	6:28	4:20
2	6:06	3:57	6:06	3:59	6:08	3:55	6:06	4:03	6:17	4:02	6:18	4:08	6:27	4:18	6:31	4:18
3	6:07	3:56	6:07	3:58	6:09	3:54	6:08	4:02	6:19	4:01	6:19	4:07	6:28	4:17	6:32	4:17
4	6:08	3:55	6:08	3:57	6:10	3:53	6:09	4:00	6:20	4:00	6:20	4:06	6:29	4:16	6:33	4:16
5	6:09	3:54	6:09	3:56	6:11	3:52	6:10	3:59	6:21	3:58	6:21	4:05	6:30	4:15	6:34	4:15
6	6:11	3:53	6:11	3:55	6:13	3:50	6:11	3:58	6:22	3:57	6:23	4:04	6:32	4:14	6:36	4:13
7	6:12	3:51	6:12	3:53	6:14	3:49	6:12	3:58	6:23	3:56	6:24	4:02	6:33	4:12	6:37	4:12
8	6:13	3:50	6:13	3:52	6:15	3:48	6:13	3:56	6:25	3:55	6:25	4:01	6:34	4:11	6:38	4:11
9	6:14	3:49	6:14	3:51	6:16	3:47	6:15	3:54	6:26	3:54	6:26	4:00	6:35	4:10	6:39	4:10
10	6:15	3:48	6:15	3:50	6:17	3:46	6:16	3:54	6:27	3:53	6:27	3:59	6:36	4:09	6:40	4:09
11	6:16	3:47	6:16	3:50	6:19	3:45	6:17	3:53	6:29	3:52	6:28	3:58	6:37	4:08	6:42	4:08
12	6:18	3:46	6:17	3:49	6:20	3:44	6:18	3:53	6:30	3:51	6:30	3:57	6:39	4:07	6:43	4:07
13	6:19	3:45	6:19	3:48	6:21	3:43	6:19	3:52	6:31	3:50	6:31	3:56	6:40	4:06	6:44	4:06
14	6:20	3:44	6:20	3:47	6:22	3:42	6:20	3:51	6:32	3:49	6:32	3:56	6:41	4:06	6:45	4:06
15	6:21	3:43	6:21	3:46	6:24	3:41	6:21	3:50	6:34	3:48	6:33	3:55	6:42	4:05	6:47	4:04
16	6:22	3:42	6:22	3:45	6:25	3:40	6:23	3:49	6:35	3:47	6:34	3:54	6:43	4:04	6:48	4:03
17	6:24	3:42	6:23	3:44	6:27	3:39	6:24	3:48	6:36	3:46	6:36	3:53	6:45	4:03	6:50	4:02
18	6:25	3:41	6:24	3:44	6:28	3:38	6:25	3:48	6:37	3:45	6:37	3:52	6:46	4:02	6:51	4:01
19	6:26	3:40	6:26	3:43	6:29	3:37	6:26	3:47	6:39	3:44	6:38	3:52	6:47	4:02	6:53	4:00
20	6:27	3:40	6:27	3:42	6:30	3:37	6:27	3:46	6:40	3:44	6:39	3:51	6:48	4:01	6:53	4:00
21	6:28	3:39	6:28	3:42	6:32	3:36	6:28	3:46	6:41	3:43	6:40	3:50	6:49	4:00	6:55	3:59
22	6:29	3:38	6:29	3:41	6:33	3:35	6:29	3:45	6:42	3:42	6:41	3:50	6:50	4:00	6:56	3:58
23	6:31	3:38	6:30	3:41	6:34	3:35	6:30	3:45	6:44	3:41	6:43	3:49	6:52	3:59	6:56	3:58

Conservation . . .

(Continued from page 65)

public which harvests the results.

One of the most serious deterrents to the progress of conservation is that there is too wide a gap between these administrators, scientists, and the public. Until that gap is bridged through common understanding by the public, efforts for extended conservation programs are dragged along by ignorance and lethargy.

Conservation from the state or national viewpoint can be said to be composed of a number of segments. Principally, these are an informed population, effective laws, constructive policies and a practical administration.

Of these points, the main stem is the public that knows exactly what is going on and what is needed. Without this, the hope for laws to build the foundation and create the framework for constructive conservation programs is dimmed.

Along with this, the development of a sound administrative program of progressive objectives is frustrated.

It remains with the conservation writers and press and educators to combat this lack of knowledge. Their success may well chart the kind of nation we'll have in the future.

In each problem, whether it be a social or economical one, there is a surface that reflects to a natural resource, conservation, or the lack of it. The vitality of a conservation plan depends on the alertness of its advocates to realize these factors.

For example, a valley overwhelmed with flood waters will seek to protect itself with levees and other flood protection works. It will neglect the source of the flood. A town finding itself with a shortage of water may drill another well and overload the water table, forgetting what exhausted the well that is still present.

The fisherman, unsuccessful in a polluted stream, may urge the stocking of hatchery products. He will overlook the problem of stopping the pollution which is so urgent to water conservation and public health, as well as to natural fish production.

National legislation has recognized the need for conservation. Of the over 9,800 bills introduced in the first session of the 81st Congress, more than 1,200 touch on some phase of natural resources. The National Association of Conservation Education and Publicity did much to insure this national recognition by its effective support of constructive legislation and its strong efforts against negative legislation.

The President, in his State of the Union message, acknowledged conservation as the third of the 10 important goals for the future. A study of the Hoover Commission recommended a cabinet Department of Natural Resources.

This is a most encouraging awakening to conservation need. But there is still no clear-cut policy for the problem. There must be a complete integration of resource considerations in the national programs affecting resources.

In his history, man has grown by crusades. It has been a vehicle to his routine. He lives because of tomorrow, and the basis of conservation is that there will be a tomorrow. Conservation, in its true philanthropy, can mean all things to all peoples.

Each publication in each community can show the relationship of the community with its resources and its stake in conservation.

If the story of conservation can be put across, the restoration of wasted land, reforestation, and a constructive water policy, will postpone the day when demands to exploit secondary areas are made.

The fight for conservation has not been nor will be an easy one.—*Pennsylvania Game News.*



Jim Sherman Photo.

If you're weary of indoor chores, grab your tackle box and rod and head for the lakes.

PERCH, FALL FISHERMAN'S TONIC

The fish are biting again on our lakes.

If you're weary of your indoor chores or back-breaking labors, if you're tired of pitting your wits against the next fellow's in this work-a-day world, if you think everyone around you is crabby and there is too much bickering and littleness in this world, grab your tackle box and rod and head for the lakes.

Take along plenty of clothes, some extra sweaters and jackets, for the temperature can get nippy and penetrating out on a big lake even with the sun shining and not much wind blowing. Leave the chatty folks at home and take along a silent friend or two who can just sit there and enjoy the fishing as you do.

The perch are biting with those delicate little nibbles that are a challenge to get the finny completely onto your hook, so you can pull him out of the water and into your boat. Their yellow bellies and yellow fins are a beautiful sight to see, and a stringer or net bag of them in the water alongside your boat can give you a thrill that only a fisherman knows.

Of the hundreds of men and women who go fishing here, only a small per cent feast on their fish out-of-doors before they go home. If the day is a good one, include a sharp knife and a pair of pliers in your tackle box, and slip a big skillet into the car along with maybe a few potatoes to fry, a thermo of hot coffee, and some tomatoes or fruit. One of you can build a good shore fire while the other is cleaning the fish. It seemingly takes no time at all, although your appetite will be at a point where those fish will taste like a feast for a king when you finally settle down to a big plateful.

Nothing is better to tone up your system, prevent ulcers, and make the world appear a much better place in which to live. The next fellow who wants to argue with you about some trivial thing, tell him how those fish bit, tell him of the warmth and color of the campfire as you sat relaxed and full of fish, reluctant to break the spell and go home, as the darkness of the evening stole over the lake and the sounds of the out-of-doors penetrated and put the whole world right.—*Spencer Times.*

Hobnobbing . . .

(Continued from page 68)

heard about (experienced some, too) is the one called "The Silent Cure." I recall that a friend and I were hunting on a Saturday, and having promised the fiery sex that we would be home by noon, fell by the wayside and it was nearly four bells when we did finally drag into the kitchen. The hot soup that she had saved for my pal turned into cold shoulder, and the cheery greeting faded into an icy stare. Two days later when I rubbed shoulders with this same friend, and when I quietly asked him how things were stacking up, he simply answered, "I'm taking the silent cure." Apparently she hadn't spoken to him since we landed in his backyard on the Saturday before. But there is a great virtue in the so-called "silent cure." It does prove to the world that the talking sex can be silenced, even if it takes a man with a shotgun, delinquent in return.—*Bellevue Leader.*

During the past beaver trapping season, Lewis Fisher of Pacific Junction trapped a granddaddy beaver. He reports the weight at 95 pounds. The pelt stretched 80 inches.

The European or Hungarian partridge was introduced into the United States about 1900.

The woodcock is a nocturnal feeder and also migrates mainly at night.



Jim Sherman Photo.

Until the gap is bridged through education, efforts for extended conservation programs are dragged along by lethargy.