YOU CAN HELP
PROTECT OUR VALUABLE NON-GAME BIRDS

PILEATED WOODPECKER
Large, crow-size woodpecker with solid black back, white underwings and red crest on head. Uncommon and local in extensive forests.

SNOWY EGRET
Long-legged wading bird. 3 feet tall. Legs black, feet yellow. Commonly seen in fresh and salt water marshes.

STATE AND FEDERAL LAWS PROHIBIT THE TAKING OR MOLESTING OF NON-GAME BIRDS WHICH ARE A BENEFICIAL AND ENJOYABLE PART OF OUR NATURAL ENVIRONMENT.

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The Cover
A good retriever, such as the Labrador shown with a mallard on this month's cover, can greatly reduce the loss of waterfowl downed but not recovered by the hunter. Also, the joy of watching a good dog work adds greatly to a day afield.

Photograph by Gene Smith

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ROSE TALLAHASSEE
FISH IDENTIFICATION
RECORD FISH PROGRAM—PART 2

CHAIN-LIKE MARKINGS

BRANCHIOSTEGAL RAYS

14-16

BRANCHIOSTEGAL RAYS

UNDERSIDE OF PICKEREL HEAD SHOWING BRANCHIOSTEGAL RAYS

IRREGULAR VERTICAL MARKINGS

11-12 DORSAL FIN RAYS

SIZE TO 30 INCHES OR MORE

SIZE—RARELY OVER 12 INCHES LONG

METHOD OF IDENTIFICATION OF SPOTTED AND FLORIDA GARS

A. SPLIT SKIN OF Isthmus (or Throat)
B. FOLD BACK. SPOTTED GAR HAS SCALES PRESENT. FLORIDA GAR DOES NOT USE OF MAGNIFYING GLASS IS HELPFUL WHEN MAKING EXAMINATION.

SEE NEXT PAGE

FLORIDA WILDLIFE

SEPTEMBER 1976

(continued on next page)
Channel Catfish
*Ictalurus punctatus*

- **Spotted Body, Spots Often Absent in Very Large Individuals**
- **Tail Deeply Forked, Pointed Lobes**
- **24-29 Anal Fin Rays**
- **No Spots on Body**
- **Tail Moderately Forked, Rounded Lobes**
- **19-23 Anal Fin Rays**

White Catfish
*Ictalurus catas*

- **Broad Head, See Below**
- **Drawings by Wallace Hughes**

**Florida Wildlife**

(continued from preceding page)

American Shad
*Alosa sapidissima*

- **Usually One Dark Spot and Several Indistinct Ones—More Evident When Scales Are Removed**
- **Lower Jaw Fits into Deep Notch in Upper Jaw When Mouth Is Closed**
- **Found in the Larger Rivers of Florida's Gulf Coast from the Suwannee Westward**

Alabama Shad
*Alosa alabamae*

- **Lower Jaw and Snout About Even in Length**
- **Serrated Bony Spine**
- **Long Dorsal Fin**
- **Yellowish or "Brassy" Color**
- **2 Barbels Each Side of Jaw**
- **Very Long Dorsal Fin**
- **Serrated Spine**

Carp
*Cyprinus carpio*

- **Large Individuals May Lose Body Markings and Be Almost Black**
- **Male Black Spot With Lighter Rim; Female No Rim or No Spot**
- **Short Barbels**
- **Large Mouth With Teeth**
- **Bowfin or "Mudfish"—*Amia calva***

Drawings by Wallace Hughes

SEPTEMBER 1976
Buffalo, which once roamed Florida, art now making a comeback at Paynes Prairie State Preserve, located south of Gainesville. A herd of 10 buffalo were released on a remote section of the 35,000 acre preserve several months ago. "They are doing very well, and are as contented in the prairie grass," reports Stevenson, chief naturalist for the Florida Department of Parks, who stresses that the prairie is completely out of sight of highways and the public, and cannot be viewed at present because the preserve is not open to the public.

Stevenson says reintroduction of the buffalo into Florida follows park policy of bringing back native species that have been removed or exterminated.

"We have determined through historical research that buffalo definitely occurred in what is now Florida," Stevenson says, citing, among others, Diego Pena's Expedition to Apalachicola in 1716. "This report recounts how a Spanish expedition traveled from St. Augustine to West Florida, and killed buffalo along the way. They killed buffaloes at Lake Newnan, at the edge of Paynes Prairie. They also killed three buffalo at Ichetucknee Springs, now a state park, and several more were taken at Lake Jackson, near Tallahassee," Stevenson notes.

Paynes Prairie was selected as the most suitable location for the reintroduction of the bison into Florida because of its lush, natural prairie. Several federal agencies handling bison in the West were consulted, and the U.S. Fish and Wildlife Service donated three bulls and seven cows from Wind Mountains National Wildlife Refuge, in Oklahoma. Young animals were selected because it was felt they could adapt more easily to the Florida climate.

Stevenson says the bison will not be domesticated or confined. They will be allowed to roam free, in a natural, wild state. "Although it will take many years to build a sizable herd," he concludes, "we think the public is going to derive a great deal of pleasure from seeing buffalo on the prairie."

"There never were as many fishing books as there are today, some of them thoughtful jobs that have taken someone a long time to put together, and others simply typewritten to specifications by writers who emphasize quantity and often make a book of a lot of money.

In the past year I've read more highly valuable fishing books and more nearly useless ones than ever before. Being on the edge of the business, I have a pretty good idea of what certain authors are going to come up with, and some of them have little to say but can say it so entertainingly that you don't realize you've been had. If it was purely entertainment you wanted, you still made a good buy, but hard information can be lost in the fun.

There are some other writers capable of turning out 80,000 words with neither entertainment nor information included. They write for money, and write very rapidly, and will often admit that if they invested a little more time and effort their stuff would be a lot better, but that a lot of mediocre stuff pays better than a little good work.

There are plenty of general books on fishing, quite a number being devoted to introductory stuff for beginning anglers, and most of them are good as far as they go. Then there are all the special books, generally by well-known writers, often fishing contributors or editors of large magazines, and they are generally reliable, whether you find exactly what you want or not.

But some of the real treasures are written by little-known authors who are highly specialized and often pretty local. Such a writer often has a tough time getting his book published, because one of the first things a publisher asks is, "How wide an appeal has this?"

If a manuscript is concerned only with saltwater trout fishing along 20 miles of the gulf coast, the publisher is going to turn it away. It probably won't make money. I've talked to about a dozen fishermen with a purely local view of a specific kind of fishing, all of them masters in their field, and wanting to write books, but, so far, none of them has gotten his work published. Not only is the publisher likely to ask if a subject will attract national interest, he may even wonder about the overseas sales.

Thus we lose some wonderful stuff but no one is to blame. That's the way the ink splashes.

Some of the best known of freshwater trout books have been written about very small areas, but it happens that such trout fishermen are the greatest readers in the fishing world, and have a sort of literary cult of their own.

Until the recent years of the bass boat and the patched jumpsuits, black bass fishing wasn't very well recorded. Now there's a virtual flood of black bass books by black bass experts who never wrote books before, as well as by general fishing writers who have jumped on the wagon. Most of them are pretty comprehensive, although they're often repetitive. I doubt if any of them will become classics, for the obvious reason that bass authors never seem to get very esthetic; they leave out the wonders of nature and tend toward deliberate hilly expression. As I've mentioned before, a rainbow trout is likely to be recorded as a "shard of gleaming color" but a bass comes out as a "hawg."

Shopping for fishing books tends to be a mail order affair. Some of the very best bookstores may have a few you can study on the shelves before digging for a wallet, but I'd guess most of the fishing books that are sold are either through book clubs or as straight mail orders. Only in the larger cities are sporting goods stores likely to offer anything like a comprehensive selection of outdoor stuff. I do know that many mail orderies are unhappy with what they get, often because they don't study the advertising very carefully or who check the book review columns that appear in many sporting publications.

Book titles are decided on wondrous ways by groups of people at long tables, and some of them are misleading. Of late, if I'm seeking pure information, I have become very skeptical of fancy titles. Take two recent names. One is Sportfishing For Sharks: a good job on exactly what it advertises. The other is Fly-Fishing Heresies: an equally good book but one that is probably sold mostly to people who read the advertising very carefully or who know of the author and guess what he's going to do.

Lately there is a rash of anthologies, books made up of works by several authors, each of whom does a chapter, generally on his speciality. I have written for more than a dozen of these recently, and view them with mixed emotions. The danger is that there may be a dozen or more subjects, only one of which you're really interested in.
you can just flip to the next

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A CONCLUSION CONCERNING hyacinth control

that you may not have thought about:

The best control methods are almost continual.

In other words, when the plants are killed while

quite small, there is less problem from bottom

sludge, and the sum-total of plants to be destroyed

is smaller. When the plants get a long start and

appear in enormous rafts, they not only clog water

ways and keep the sun off great expanses of water,

but provide an unwelcome abundance of residue

when killed and allowed to sink.

But continually patrolling with a spray unit or

mechanical harvester is an expensive proposition.

We still don't have the answer, just more ideas.

Striped Bass, always an unknown quantity

to some extent, because they live in both fresh and

spouts trout fishermen I know seldom, if ever,

bring in a fish. In both East and West we now have

"trophy water," where only a fish of taxidermy size

is taken home. When we fished the Letort (Penn­

sylvania) in May, we found the keeper limit was 20

inches. That's quite a trout, but the Letort is quite

a place: a world-famous center for "technical" trout

fishing, where it's quite possible you'll go all day

without catching a fish, despite frequent sightings

of really big brown trout. Killing a Letort fish seems

murderous.

SPouting off in the April column about the Nile

perch, a proposed import that has been tried a bit

in warm American waters, I stated I hadn't heard

of the fish being caught on artificial lures. Well, I

have now.

I never fished for the big African, but it seems

some readers have, and I've heard from two or three.

One of them, L. E. Newman, of Venice, says his party

caught 20 pounders on plugs, and that many of more

than 100 pounds have fallen to artificial in Africa.

NORTH CAROLINA TROUT STREAMS ARE AMONG THE MOST SCENIC IN THE NATION. ABove IS SOUTH MILLS RIVER NEAR BREVARD.

(continued from preceding page)

Book shopping may be poor places for learning anything

informative. Most of the chapters are builddowns

what the writers have done previously. That

sounds bad to begin with, but a summary may be

what you're after. Anyway, if one guy turns you off,

resembles a tune-up of

show how they differ.

Another drawdown project is to involve Lake

Kissimmee located farther down the Kissimmee

River toward Lake Okeechobee. That one is to be

began around the end of this year and it will involve

putting a temporary plug in the river (now more of a can

as a result of dredging) in order to hold water in up

stream areas.

THERE'S A LITTLE PATCH OF fresh-water trout

fishing in northern Georgia, but I usually recom

mand North Carolina to someone wanting a bit of

it within a day's drive of Florida. Late spring and

early summer are the best time. After that you tend

to run into low and warm water, and the fishing

suffers badly.

Late in the spring of 1976, we did some fishing

in the Brevard, N.C. area. That's just south of the

Blue Ridge Parkway, and presents about the finest

of eastern mountain scenery. The fish were small but

plentiful, and we caught them mainly on dry flies.

There's a variety of trout fishing near Brevard,

and a variety of regulations to go with it. In some of

the "wild" trout sections, fishing is with flies only,

and sometimes the size limits just about wipe out

any chance of a "mess of trout." If you want to be

reasonable sure of eating fish, you'd better go to

the streams regularly stocked, where anything from

a spinner to a kernel of canned corn is likely to

catch something that may not be very smart but

certainly is a trout.

For that matter, I think the day of taking wild

tout for the table is pretty well gone. Most of the

salt water and have a carefree habit of going from one

to the other without announcements, seem to be

doing a little better in some Florida areas.

The upper U.S. East Coast has fallen upon hard

times in the striped business. That's especially bad

news because history shows that there have been

long periods when the striped were completely absent

from long stretches of coastlines.

There have always been striped bass in the St.

Johns River, and the Game & Fresh Water Fish Com-

mission has been planting fingerlings there with

regularity although unable to check accurately on

the effect. Last spring there were a great many

small strippers (around a foot long) being caught in

the upper St. Johns, and although those aren't keeper

fish they're an optimistic indication. Fish of that

size have made it on their own for a year.

The sunshine bass (cross between the striped

and white bass) is doing well. Although it is unlikely

to attain the size of the largest strippers, it appears

that 8-pounders won't be unusual. Observers are

pleased to note the fish are being caught on both

live bait and artificials. Forrest Ware, research

cordinator, is especially happy over the new fish's

preference for gizzard shad as a food fish.

The sunshine bass is not a cover seeker like the

largemouth, but it is often found in deep holes and

seems to prefer moving water.

A REEL REPAIRMAN once told me that such-and-
such a supplier, who was never far from the market.

Oh, it was a lousy reel, he said, but there were so

many sold and so many breakdowns that everybody

had parts. When it broke, you could get it fixed.

and every tackle dealer knew what parts were most

likely to go first.

The parts business is complex for several reasons.

For one, some manufacturers and importers demand

a minimum order of parts from a dealer. So if your

Whuzit reel needs a screw for the endplug, that

dealer will have to buy $10 worth of things to

get it for you. If he hasn't been selling your particular

brand of reel, he's faced with a dilemma: making you

mad by charging too much, or making you mad by

refusing to work on your tackle.

The truth is that it's often possible for the in-

dividual to get much better service by going directly

to the factory for it. Walls from individual

fishermen are likely to receive more prompt attention, evidently
giving through different channels that are more

cognizant of public relations. (Some dealers will

tell you frankly that you can't get better service than

they can.) This doesn't apply where the dealer

handles a large quantity of an item, but it does

apply in a case where the gadget you take to him is

something he doesn't sell.
the use of lead shot for waterfowl is probably on the way out

The Case For Steel Shot

For endless weeks, ‘tis a summer, the Florida countryside has simmered in the heat. Then one day there slips up on us a first subtle break in summer’s grip. A bit of a drop in the humidity and an easing of the temperature, perhaps. Or maybe it’s the sight of a little knot of blue-winged teal springing from a tidal pool in a railroad marsh that gives a hint of more moderate days to come. Many a Florida outdoorsman will sniff the breeze, fretter now somehow, and declare there’s a definite feeling of fall in the air.

Whatever triggers it, this change of season in the offing will start any number of Florida waterfowlers thinking in terms of the forthcoming hunting season. One question that is foremost in their minds is, “What can we expect in the way of duck numbers this season?”

The fate of North America’s duck population is closely tied to the amount of surface water available on the major nesting grounds in the prairie-parkland region lying east of the Rocky Mountains in Montana, the Dakotas, and Minnesota northward into southern Manitoba. During years when there is plenty of surface water in the duck factory area, there is a good crop of “new” birds to join the flocks on the autumn migration. Conversely, during dry seasons there are fewer recruits to take to the air on their first southward passage. During the past two decades, the fall population of ducks in North America has varied from a low of 77 million in 1961 to a high of 120 million in 1957. These figures do not include sea ducks and merganers.

The harvest of ducks in the U.S. averaged 12 million a year between 1965 and 1972. In addition, an estimated 3 million birds were downed but not retrieved. The Canadian harvest took 4 million a year during the period, and Mexican hunting a half million. This means that roughly 19 ½ million ducks are cropped from the continental population each season.

But nesting success and the harvest by hunters is not the complete picture. It becomes apparent, when seasonal population figures and hunting mortality are considered, that there is a significant additional drain on the waterfowl population from other sources. Nonhunting mortality removes from 20 to 25 million ducks a year from the calculations of the specialists. Disease, unusually severe weather, predation, and oil and pesticide pollution are among the mortality factors that have been identified in various instances of notable waterfowl losses.

Occasionally there occurs a type of mortality that “does in” a substantial number of birds in a relatively small area within a short period of time. Those periodic outbreaks of botulism that rack up the birds in windrows on the western duck marshes, for example. But for the most part, losses from causes other than hunting go all but undetected, or at least pretty much unheralded, marked as they most often are by a scattering of dead or afflicted birds spread out over a large area and occurring over a prolonged period. The result is that seldom does an individual observer see any notable number of dead birds.

This is the case with lead poisoning, which has long been recognized as a factor in waterfowl mortality. As early as 1919, it was noted that lead poisoning was causing loss of a considerable number of birds annually. In a study reported that year, it was stated that mallards, black ducks, pintails, canvasback, and whistling swans were commonly poisoned by ingested lead shot.

Waterfowl feeding on the bottom of wetlands or in fields all too frequently encounter and take in lead shot pellets. Possibly they are swallowed accidentally, mistaken for food. or perhaps taken in as grit. At any rate, in the gizzard the shot are subjected to grinding and corrosion. This action reduces the lead to a soluble form which is picked up by the blood stream and transported about the system to be absorbed by various organs.

At first flush it seems a bit far out to many of us dipped-in-the-mud hunters to believe that there is enough shot lying about the country’s marshlands (continued on next page)
Many of resting and lodging waterfowl, as the availability of pellets in the habitat of each species, as well as the feeding habits of each species, as well as the number of pellets in the area, is flooded by high tides several times each year.

With this much shot exposed to feeding waterfowl, there is little wonder that a significant percentage do manage to ingest some quantity of lead. Biologist Frank Bellrose examined more than 35,000 duck gizzards during a 1950s study. Some 6.7 per cent of the gizzards he examined contained lead shot. The percentage varied among species, with buffleheads, green-winged teal, mergansers, wood ducks, shovelers, and gadwalls showing 2 per cent carrying ingested shot, whereas canvasbacks, lesser scaup, redheads, and ring-necked ducks ranged from 1 to 14 per cent. The difference, it was deduced, related to the feeding habits of each species, as well as the availability of pellets in the habitat of each species.

At specific locations, almost 100 per cent of the ducks present may have at least one lead pellet in the gizzard. This is sufficient to cause death under some conditions.

The amount of lead absorbed through the digestive system and deposited in the wingbones of waterfowl is a measure of the amount of shot ingested by the bird. In studies conducted in 1972 and 1973, it was found that lead levels were highest in the Atlantic Flyway and lowest in the Central Flyway. It is estimated that the annual nationwide loss of waterfowl due to lead poisoning is 2 to 3 per cent of the fall population.

The impact statement prepared by the U.S. Fish and Wildlife Service says, of the effect of shot on birds, that the toxic action lead exerts in the system is the disrupting of the action of the enzymes, the biochemical 'trigger' that affects various bodily functions. For example, by interfering with the production of hemoglobin, lead-poisoned waterfowl develop increasingly severe anemia, with a number of associated symptoms and affects. The liver may cease to function properly, and certain muscle fibers shrivel and erode away or become nonfunctional.

The result is that birds thus affected are certainly less able to deal with the rigors of life in the wild, being more vulnerable to predation and disease, less able to cope with severe weather, and, being less alert, are certainly subject to disproportionate hunting mortality.

Waterfowl with a well-advanced case of lead poisoning are thin, superfluous and appear to be the best answer to lead poisoning problem at this particular time.

Photo by Loyd Williams

(continued from preceding page)
To identify the plant, Smith went to the herbarium to talk with Anderson. Fortunately, the curator remembered a similar incident in another state, and recognized the culprit. Smith says, “Dr. Anderson showed me a patch of wart-cress on the campus, and prepared a pressed specimen which I was able to show to dairymen. It seems that the cress grows mainly around the edges of the grazing land, near fences, and during dry periods, when lush, green grass is scarce, the cows eat the hardy wart-cress.

The director of the State’s Division of Dairy Industry, Jay Boosinger, expressed his gratitude in a letter to Dr. Anderson. It reads, in part, “We are acquainting our various inspectors with this particular weed, and they are alerting dairymen to be on the lookout... Without your valuable assistance, we would not have been able to bring the off-flavor situation under control as quickly as we did.”

Of what other importance to Florida is FSU’s herbarium besides being of practical help as in the case of the dairy farmers? Perhaps of first importance is the fact that it houses an extremely valuable collection of plants of Florida, the Southeast, and tropical America. Since its organization in 1940, and its spurt of growth since 1954 under the leadership of Dr. Robert K. Godfrey, now curator emeritus, the collection has grown to 146,000 specimens.

Botanists from many states, and some in Europe and Asia, have visited the herbarium over the years. Recent visitors were Drs. Peter Taylor, from the herbarium in the Royal Botanical Garden of Kew, United Kingdom, and Beryl Simpson, from the Smithsonian Institution, in Washington, D.C.

The herbarium houses 2,500 species from the Florida panhandle alone—equal to the total number found in many states. “It is the richest area in the United States,” says Loren Anderson. “There are some plants found here that are not found anywhere else in the world.” One is Harpagonella paniculata, a new genus of lily, named for the famous botanist of the late 1800s, Roland Harper. The plant was found in Franklin County by Sidney McDaniel, a graduate student at FSU.

Two other rare and interesting plants, among the many found in the panhandle, are Torreya taxifolia and Rhododendron chapmanii. Both are endangered species.

The herbarium collection is especially useful for ecologists, conservationists, agriculturists, biologists and naturalists, and is an invaluable tool for those who teach a wide variety of botanical subjects. It also serves as a reference for practicing field botanists, and is indispensable in preparing environmental impact studies in the state. In addition, the collection can be used to indicate the spread of noxious weeds, and to identify newly-introduced species that might become serious threats to agriculture.

Presently Dr. Anderson and his staff are working on a manual of plants in the panhandle, and on a guide to the vascular plants of Florida (vascular plants are all flowering plants, pines, and ferns). Dr. Godfrey, meanwhile, is preparing a manual of all plants in the wetlands of the southern United States.
Have said, "Why not hunt with us this year? You don't have to be with us."

I asked myself that day when my husband, Kim, aged 14, 12 and 9, packed their gear and planned their strategy. Just watching them hunt might be fun.

I agreed to join them and we drove to their hunting camp on a Friday, the eve of bowhunting season. The camp was located three miles beyond what seemed the last outpost of civilization, a service station in Holopaw. We drove down 3 miles of Dixie Highway. An abrupt turn, a wait while a gate was closed behind us, and we were surrounded by pasturelands. We followed a trail which bridged a small pond, where I spied an ancient refrigerator. And finally, way in the distance was an honest to goodness outhouse which couldn't resist. "For this you pay $1500 a year."

I was a Bambi lover, opposite page, but I knew I could no longer condemn killing deer, unless I became a vegetarian and also condemned killing cows. Camp scenes, below, show bus body that was our camp home, Kevin with his first turkey, and Kirk rolling out at 4 a.m. (continued on next page)

IS HUNTING A SPECTATOR SPORT? That's what I asked myself that day when my husband, Kim, said, "Why not hunt with us this year? You don't have to carry a gun, or shoot any game. Just come to be with us."

Goodness knows, I was no hunter. I would take a trigger without once pulling a gun, or shoot any game. Just come to be with us.

But I remembered the atmosphere in our home the day before as each weekend approached and excitement mounted while Kim and our three sons, aged 14, 12 and 9, packed their gear and planned their strategy. Just watching them hunt might be fun.

I agreed to join them and we drove to their hunting camp on a Friday, the eve of bowhunting season. The camp was located three miles beyond what seemed to be the last outpost of civilization, a service station in Holopaw. We drove down 3 miles of clay road, alternately washboarded and potholed, then we bumped along several hundred yards of Desert Ranch's old Dixie Highway. An abrupt turn, a wait while a gate was closed behind us, and we were surrounded by pasturelands. We followed a trail which bridged a small pond, where I spied an alligator. Finally we rounded the last bend. We were truly in the deep woods.

"Let's go."

"There it is, Mom," cried Chris. He was filled with excitement.

We halted beside an old deserted bus devoid of any wheels. Its seats replaced by fold-down canvas bunks, its every window cracked. "But they're all air tight," Kevin assured me, proud of the camp's bedroom. Its only indoor space. The beams of our headlights crawled across the vast pasture for the next thirty minutes. Then we drenched ourselves with mosquito repellent and trudged blindly across a newly plowed field, where my unbooted ankles behaved like jelly. The boys dispersed into the darkness and Kim led me to a spot beside a bush. There we sat down on the cold ground. "Shhh," Kim whispered. We sat there in the dark and waited for dawn as clouds of mosquitoes noisily swarmed about us.

I was a Bambi lover, opposite page, but I knew I could no longer condemn killing deer, unless I became a vegetarian and also condemned killing cows. Camp scenes, below, show bus body that was our camp home, Kevin with his first turkey, and Kirk rolling out at 4 a.m. (continued on next page)

I peered from behind the bush. I expected to see a deer crossing to wait while Kirk walked through one of the islands of trees to flush out any hiding deer. I perched behind the bush. I expected to see a deer at any moment. One hour later Kirk appeared and shrugged helplessly.

"Oh, come on now," I said. "Where are the deer?"

"I was distressed. "Don't worry," Kim said as he started the jeep. "We'll find them. Just be patient. This is only our first morning out."

It was now afternoon. We had hunted for 8 full hours and I had yet to see my first wild animal.

The only electrical convenience in the camp, other than six bare light bulbs which Kim had strung. was a mixture of bug light and smoke. I heard the sizzling of bacon frying and the hushed mumbling of the children as they fed wood into the fireplace and loaded gear into the jeep.

I scrambled into my clothes, stumbled through the darkness to the outhouse, and then huddled near the fire for warmth. I ignored the smoke, and stuffed myself with biscuits, bacon, eggs, swamp cabbage and potatoes, delicious eaten in the outdoor air.

"Load up," Kim said and we all piled into the jeep. The beams of our headlights crawled across the vast pasture for the next thirty minutes. Then we drenched ourselves with mosquito repellent and trudged blindly across a newly plowed field, where my unbooted ankles behaved like jelly. The boys dispersed into the darkness and Kim led me to a spot beside a bush. There we sat down on the cold ground. "Shhh," Kim whispered. We sat there in the dark and waited for dawn as clouds of mosquitoes noisily swarmed about us.

I was a Bambi lover, opposite page, but I knew I could no longer condemn killing deer, unless I became a vegetarian and also condemned killing cows. Camp scenes, below, show bus body that was our camp home, Kevin with his first turkey, and Kirk rolling out at 4 a.m. (continued on next page)
curiosity tempted me to watch. Slowly, almost bloodlessly, that deer was transformed into venison, just as I thought, amazed, as a cow becomes beef. I was a Bambi hunter, but I knew I could no longer condemn killing deer unless I also condemned killing cows and became a vegetarian. I couldn"t do that. But I, myself, wanted no part of creating this transition from beautiful animal to edible meat, so for the remainder of bow hunting season, I stayed home.

As rifle season approached, Kim urged me to accompany them once more. "You could hunt with your camera," he said. At first I refused, remembering that dying buck. Yet I realized hunting with a camera would be different. Anticipation of my own shots, not kills but snapshots of wild animals at close range, would keep me alert during the long, uneventful days. I"d begun back in September. But I admitted to myself that last year Kim and the boys had hunted hard all season long to bag their limit of only two deer each. Now I understood why. Deer were hard to find. I was soon overwhelemed by a sense of being the only human on earth. I nodded again.

Toward the end of the first day Kim spotted a group of boar hogs, unsuitable for shooting. "Hey! You can get a picture of this," Kim cried. As the boys leaped from the jeep, ran through the tiny head, and flushed out the hogs, Kim raced the jeep cross-country, oblivious of the small weed-covered drainage ditches we bounced over. I was afraid, but I was even more determined to capture on film these wild creatures which now besiege us. "When we head them off, they"ll freeze," Kim yelled. "Get ready to jump!" He slammed on the brakes, and I leaped out, focused my camera on the pigs, and snapped away, as proud of my shots as any gun-toting hunter ever was of his own.

Meat in the pot is certainly not all there is to hunting— not even the most important to a true sportsman. It is the shock after the country that adds the highlights to the thrill of the chase. The barred owl, left, is one of the background music makers of the big woods. The sight of an alert deer checking back trail below, is example of inside peek at the private lives of wild creatures to be enjoyed by the observant hunter.

When we reached camp I was glowing with pride. Then, I opened my camera and found it empty. Oh, no! I had been "taking pictures" with no film. That wild, dangerous ride to capture the hogs had been useless. I cried out in despair, but shining through my disappointment was the memory of the day's excitement. I had tasted success, and I knew I'd not soon forget my film again.

The delicious dinner more than compensated for our temporary fatigue and sore muscles. Kim had cooked country-fried morsels of venison backstrap and gravy, and from a black iron skillet he'd produced sourdough biscuits. Now I leaped back, relaxed and let the tension run out of my body, and listened while the boys exchanged stories around the fire.

Today a turkey had actually answered Kevin's call and walked up into view. Young Chris had the thrill of sitting perfectly still as a hummingbird fluttered its wings against his cheek. And Kim, waiting for a deer, had been determined not to move in spite of a snake beside his boot. In my sleepy state I mused that these were experiences they wouldn't soon forget.

During the next two weeks, Kirk downed 2 deer. Kevin, 1. The luck surpassed my own, for the distances in the wilds had proved deceptive. Pictures taken with my 35mm fixed-lens camera showed only pinpoints of color where animals should have been. My best shots might as well have been misses. I gave up and swore that after that I'd stay home.

However, after only one weekend at home, I rejoined the hunters, lured by tales of what I'd missed. Chris had stalked a snapping, stomping buck right out in the open field. Kevin spied a fawn who then hid by placing only his head behind a nearby tree trunk. They all stared with laughter when Kim told of the owl who clucked Kim at dawn. He took Kim's white face for a rabbit and swooped down to carry him away. Kim flipped his own arms and shoulders, and the owl flew off.

Now I was eager to be a participant in their life in the wilds as I climbed into the tree stand on the edge of a field and sat all alone, facing a dirt road and the fenced section of pasture beyond. But the hungry urge and caution could not be avoided. And today's wait was almost undeniably prolonged by fog.

Just when I thought I could not sit there without moving for even one more minute, the deer soundlessly materialized from the fog as if by magic. There in front of me, just beyond the fence stood a buck and two does. In utter silence one doe crawled under the fence then disappeared around the head. The other doe followed 10 yards behind. She started looks in every direction. She halted and glanced back as if she were communicating with the buck which stood, still and motionless, behind the fence. Suddenly I heard the hooves of the first doe returning. The second jerked her head up, then turned and fled. The buck jumped the fence and the three deer roared away. Their hooves pounded on the dirt road with the force of thunder. Then they were swallowed up by the fog and silence again as if we'd reversed the months and released our breath. What a beautiful sight! I jumped off the stand and hurried to find Kim.

"Was that worth waiting for?" Kim asked later. I grinned. "Those deer were gorgeous. I wouldn't have missed seeing them for anything in the world."

It had been worth waiting which for me I'd begin back in September. But I admitted to myself that a repeat performance wouldn't be worth even a one-weekend wait. Not because the rare sightings were so rare, but because remarkable sightings were too rare to be the rewards of a spectator.

A spectator needs action to watch. She can't observe a hunter's anticipation; she can't watch his controlled excitement; she can't view game through his scope or anticipate his moves. Hunting was no spectator sport.

Nevertheless, the camaraderie accompanying the sport is so beautiful, the escape it provides, is what hunting truly means to me. Perhaps if I, too, learned the animals' habits, if, too, I developed an entrapment plan... who knows? Next year I may don my camouflage gear, arm myself with my new camera and telephoto lens, and become a hunter of wild animals again.
roamed the marshy wilderness centuries ago. In its original state, the region comprised one of the largest freshwater marshes on the North American continent, ranging from 30 to 40 miles in width and miles into what is now Everglades National Park. extending from Lake Okeechobee south some Glades in both public and private ownership still the western portions of Dade, Broward, and Palm expansion along Florida's heavily-populated Gold Coasts. called "Conservation Areas," of the South Florida Water Management District. Undeveloped Glades in both public and private ownership still remain outside of these areas, but most have been developed for agricultural purposes or have given way to residential development as a result of western expansion along Florida's heavily-populated Gold Coast. The 210 square miles of Conservation Area 2 and the 914 square miles of Conservation Area 3 were combined for designation as the Everglades Wildlife Management Area in 1962, and are operated by the Game and Fresh Water Fish Commission under the terms of a cooperative and license agreement with the Water Management District. Conservation Area 1 is leased to the U.S. Fish and Wildlife Service as the Loxahatchee National Wildlife Refuge.

Everglades Wildlife Management Area

O nce remote and mysterious, the sprawling, grassy waters known as the Everglades have beckoned to civilized man ever since savage Indians more than 1100 square miles of glades country is available to outdoorsmen

To the casual onlooker, it appears as if you could walk across the Everglades without much trouble. On closer observation, however, the intrepid trekker soon realizes that he will need other means of transport to travel across this "river of grass." An average of one to two feet of water is hidden beneath the miles of swaying, cracking, sharp-edged saw-grass which dominate the humid, subtropical setting. This endless needlepoint kaleidoscope is broken only by an occasional tree island community, or hammock, with its species of wax myrtle, willow, cabbage palmetto, and wild coffee growing inter-spersed among varieties of swamp ferns and vines.

Researchers believe that each tree island at one time or another was a camping spot for the Calusa and Seminole Indian tribes. Where the Indian trails outdoorsmen now hunt and fish, moving into the sawgrass marshland by small boat, airboat, swamp buggy, or halftrack. Over 5,000 south Florida sportsmen utilize the Everglades Wildlife Management Area each year for recreational activities which include hunting, fishing, frogging, camping, hiking, boating, bird watching, sightseeing, and simply "getting away from it all." For those who journey by boat, there are some 40 species of fish to be found in the Everglades. Grassy flats and deepwater canals provide the angling public with the opportunity to catch largemouth bass, redear sunfish, speckled perch, bluegill, catfish, pickerel, bowfin, gar, and an occasional snook or tarpon. The latter two represent saltwater species that have become established in the Conservation Areas.

Much of the angling is done in one of the four major waterways of the Everglades: (1) Hillsboro Canal, which provides Conservation Area 1 and 2 and flows to the Intracoastal Waterway between Boca Raton and Pompano Beach; (2) North New River Canal, separating Conservation Areas 2 and 3, with its tidewater outlet at Fort Lauderdale-Hollywood; (3) Miami Canal, which cuts diagonally through Conservation Area 3 to the east coast at Miami; and (4) Tamiami Canal, a top bank fishing area, bordering Conservation Area 3 at its southwestern point just north of Everglades National Park. All together, there are some 300 miles of fishing and boating around the Glades.

For those who take to the marsh by airboat or swamp buggy, the deer bred in the Everglades offers a valuable natural resource and community asset. It furnishes the only big game hunting in south Florida within an hour's drive of the metropolis along the lower east coast. While public demand for deer hunting has increased considerably over the past decade, yearly sustained harvests remain steady, indicating a stable and healthy Everglades deer herd. This has not only been good news for the sportman, but also for other conservation groups in south Florida who do not hunt but are interested in deer for their aesthetic value.

Joining the white-tailed deer on the list of Everglades wildlife are the wild hog (the other principal game animal), the raccoon, opossum, marsh rabbit, and otter. Occasionally an outdoorsman sees a black bear or a panther, both protected species.

Attracted to the wet prairies and sloughs and providing another important hunting resource are waterfowl like the blue-winged teal, mallard, wood duck, hooded merganser, and fulvous tree duck. Numbered among the resident wildlife are large segments of colonial and wading birds like the great egret and the snowy egret. Coots, gallinules, grackles and red-winged blackbirds are often sighted along......
One of the most important but least understood natural resources of the Everglades WMA is the bullfrog, which is of tremendous economic importance to commercial froggers and a source of recreation for sportmen. Many people in south Florida supplement their livelihood with revenue obtained from the sale of frog legs. Not only does this frog supply the market with a highly prized delicacy; it ranks highly as a game animal to many airboat enthusiasts and probably ranks close to first as a link in the wildlife food chain and the total ecology of the Everglades.

As man's greater awareness of his environment developed, so did his concern for those lesser creatures whose existence depended upon his actions. Establishing endangered species lists was a progressive step forward, and the Everglades Wildlife Management Area continues to provide habitat for many of these threatened species. The Florida panther, the everglade kite, the southern bald eagle, and the wood stork utilize the Conservation Areas either on a temporary or permanent basis. The region also plays host to a variety of rare and endangered plant life.

Access and entry into the Everglades is made from several major sites. Boat ramps are provided along the Tamiami Trail (U.S. Highway 41) west of Miami and at the Everglades Holiday Park and Sawgrass Recreation Areas along U.S. Highway 27. Both of these facilities include a concession building, where sportmen may purchase hunting and fishing equipment and licenses as well as food and beverages. Boat rentals, guided tours, airboat rides, and other services, including camping space, are also available. Additional launching facilities can be found along Alligator Alley (S.R. 84), which bisects Conservation Area 3 north and south.

Sportsmen traveling by buggy or halftrack use the limerock levee network which crisscrosses the terrain to touch the interior marsh. Numerous signs have been erected throughout the area to indicate boundaries and to guide hunters and fishermen. During general hunting season, check stations are established at main entrances.

During the past decade, a 47 per cent increase in population along Florida's southeast coast has placed additional demands on the natural resources of south Florida. One of the most substantial of these demands has been for increased outdoor recreation opportunities. Fortunately, the Everglades Wildlife Management Area can meet a large part of this need.

To provide for sound, systematic planning, development, and management of the Everglades Water Conservation Areas, the 1973 Florida Legislature enacted a law creating the Everglades Recreational Planning Board, to prepare and coordinate the implementation of a recreational development plan for the Everglades WMA. The Planning Board, through the Game and Fresh Water Fish Commission, has improved existing boat launching sites and completed construction on two new day-use facilities along U.S. 27 in North Broward County. It has improved the water treatment systems at two recreation areas and increased the number of public camping spaces at both. Continued emphasis will be to meet all the resource-based outdoor recreation demands the Conservation Areas can support without detriment to the basic resources.

Because good habitat is the key to stable wildlife populations, the Commission's Wildlife Management Division is involved in several habitat management programs which will benefit wildlife and help maintain the Everglades as an ecosystem. The Commission is cooperating with the Florida Division of Forestry in a program of prescribed burning to minimize the danger of wildfires during droughts. Fire has been used as a management tool on the Everglades Wildlife Management Area for several years.

While control burning is effective on the native flora, it has little or no effect on the exotic trees and plants which have invaded the Glades. At the present time, the most serious threat is from melaleuca trees. Staff biologists are conducting studies into the experimental control of this exotic import, which is literally choking out the natural vegetation and making some parts of the marsh totally devoid of wildlife.

Working with organized sportmen's clubs and other concerned conservation organizations, the Commission has constructed nearly 100 manmade "wildlife islands" complete with elderberry, fusc, saltbushes, and adjacent freshwater ponds. These islands will lessen the fluctuation in animal populations in the area by providing high ground refuge during times of flooding and life-saving water and browse during times of drought. The result will be to obtain a maximum annual sustainable production of deer and other desirable wildlife species.

The Everglades has long been a part of Florida's outdoor heritage. The Everglades Wildlife Management Area serves to remind us of that heritage while maintaining a wide variety of recreational opportunities for the modern sportsman. Few locations can lay claim to this unique achievement.
Talk about bass," the old man said as he leaned forward, placing his elbows on his knees. He glanced around the circle of bass fishermen who had just come in from a disappointing day on Lake Kissimmee. Satisfied that he had the attention of the group, he continued, "Well boys, I recall when the canal to Lake Jackson was clear. You could run up there in a skipjack and fill the boat in an hour."

As he waited for the words to sink in, he shifted the lump in his jaw to the other side, and turned his head. The long brown stream of spittle narrowly missed an old black and tan hound, which got up and moved out of range before lying back down.

"There must be some way to get in there," one of the fishermen said.

"Sure," the old man answered, "you can get in by jeep, that is, if you don't get caught. The folks who own that land around it are mighty particular about who drives through the pasture."

He again moved the lump of Red Man to the other cheek, and continued, "No sir, the only way you're going to fish that lake is to grow wings."

The old man's last statement was to roll around in the back of my head for the next few years before surfacing. During that period, Lake Jackson, east of Lake Kissimmee, was acquired as part of the Three Lakes Wildlife Management Area, and has now been opened to fishing.

"The old man was right. The only way to fish that lake is to grow wings."

A properly equipped light plane may be the key to some hot fishing action.

Barnstorming For Bass

One afternoon, as I was flying over the eastern end of Polk county, I noticed a lake that was connected to Lake Hatchineha by Reedy Creek. The creek was jammed with hyacinths, which prevented anyone from fishing in the lake. A fly rod may be just the ticket in a lake with a shallow grass line; it might become excess baggage in one with overhanging trees.

Lures should include those which are effective in areas of heavy fishing pressure. Plastic worms, crank baits, and spinney baits work equally well in lakes where fishing is rare. I also like to construct a few "life-like" creations and offer them up to "inexperienced bass." One such concoction which has proven very successful is a 4-inch twister tail grub in purple or green with eight rubber legs inserted through the body with a darning needle. It can be fished on the bottom with a slip sinker or cast with a fly rod or ultralight equipment.

We made a low pass over the lake and marveled at one of the most beautiful bass lakes we had ever seen. I detected a slight drool from John as he nodded and grinned back at me. The peaceful setting was momentarily interrupted by the engine's roar as we (continued on next page)
touched down on the grass surface. We taxied to the north end and anchored in 5 feet of water.

Fishing in a lake that is uninhabited by other fishermen has its own rewards, regardless of success. The solitude and anticipation that combine to make fishing the sport of 60 million people, seem magnified in a remote setting.

We flipped a coin to see who would go in which direction, and parted with our usual bet: low man buys lunch. I had gone about 30 yards and was pondering starting with the fly rod when a fat 4-pounder inhaled the Queen Bee I had tied on. The lake’s serenity, which had returned after our landing, was once again shattered by the wisdom of starting with the fly rod.

An hour later, I headed back to the plane for a steaming cup. I saw a swirl next to the grass and broke out my baitcasting rod. As I attached a purple homemade critter has been very successful.

Compacted equipment is essential for flying fishermen. The four piece rod was made by the author for backpacking. Note dragonfly lure, lower left. This is something that measure a successful trip—not the weight of the stringer.

When space is available, a compact, endless belt of moving game figure targets can be improvised using directions and illustrations to be found in the October 1967 issue of The American Rifleman. (If you do not keep a file of Rifleman magazines, the National Rifle Association, 1600 Rhode Island Ave, N.W., Washington, D.C. 20036, can furnish you a photocopy of the article at a nominal charge.)

The front sight was a high, narrow-but-sturdy, blued steel blade, spot welded to the barrel housing. It was nonadjustable. The rear sight was an equally sturdy steel stamping, made in wide and deep V pattern, adjustable for elevation by moving a notchched slide under the sight’s tensioned leaf. It was somewhat further from the aiming eye than a similar open rear sight on a .22 caliber cartridge firearm.

Behind conventional paper targets that fit in the same breath lamented he couldn’t afford to shoot the expensive rifle and shotgun ammunition needed to practice regularly. “Get a good Daisy air rifle,” I countered. “That’s how I learned.”

An explosion occurred almost by the shore, which had returned about the lake for a while before loading the plane to head for home. As we cleared the tree line after takeoff, we both cast a longing glance back over our shoulders at the little lake, vowing in word to return someday.

I’m sure the airplane will never replace the bass fishing that ensued.

Needed gears and pulleys, a bicycle chain, and even a small motor can be acquired from your community junkyard without much financial investment. In emphasizing the value of shooting practice with an air rifle, I do so from experience dating back to age 7, when I acquired my first air rifle, a Daisy Model 25. Significantly, I still use a Daisy Model 25, which is a force-fed, 50-shot-capacity, pump-action repeater.

The model was comprised of two assembled halves, the long, heavy metal cocking lever channel on the forward half slipping tightly into the receiver and stock half, with joined halves further locked together with a threaded through-bolt. The result was rigid, virtually one-piece assembly. The mechanism itself was simple and serviceable. The Daisy engineers did their drawing-board work well in designing the Model 25.

Dubbing a recent coffee session with friends, one remarked that he aspired to become a good shot, but in the same breath lamented he couldn’t afford to shoot the expensive rifle and shotgun ammunition needed to practice regularly.

It was well intended advice. Practicing with an accurate, spring-powered air rifle is an easy, inexpensive way to quickly develop marksmanship skill, or improve it. Better still, in these days of growing shortage of public shooting ranges, air rifle practice can be quietly carried out in one’s own back yard or, with a hanger-rig backstop, even inside garage or home.

Besides conventional paper targets that fit in Specifically designed holders, there are various commercial sound-type air rifle targets that indicate hits by audible tinkle or bell ring.

Where space is available, a compact, endless belt of moving game figure targets can be improvised using directions and illustrations to be found in the October 1967 issue of The American Rifleman. (If you do not keep a file of Rifleman magazines, the National Rifle Association, 1600 Rhode Island Ave, N.W., Washington, D.C. 20036, can furnish you a photocopy of the article at a nominal charge.)

A doctor’s order was deviated from a leather-washer piston, backed by a powerful spring that was automatically cocked as the under-barrel cocking slide was pulled back, using the grooved wood cocking handle. The slide was ready to fire when the handle was returned to fully extended under-barrel position.

As a small kid, I used to have to place gunstock butt against joint of right leg and body and pull back on the cocking handle with both hands outstretched, to activate the cocking mechanism. Later I could accomplish the cocking operation with hands alone, without supplementary body bract. Also in time, cocking for the next shot was performed almost subconsciously.

The air rifle shot holding unit was of long tube, muzzle-insertion type, with threaded base that secured and locked the loading tube assembly deep inside a shoguntube barrel housing. To load the magazine, a spring was pulled up by provided finger spur until the spur reached a notch in the housing, where it stayed until manually... (continued on next page)
A cardboard box filled with shredded paper or plastic foam used by shotshell reloaders. Air rifle shot are smaller in diameter, measuring .175" against .180" for BB's. Although commonly, and incorrectly, referred to as BBs, air rifle shot are not the same as BB shot used by shotshell reloaders. Air rifle shot are smaller, harder to grip, and have to be handled with care. Unfortunately, substitution of a plastic stock for the wood stock originally used on the Model 25 has resulted in a decrease in accuracy. Because individually introduced errors in shooting an air rifle are not covered up by firing recoil, as with a powder weapon, it was proven to be the perfect range training exercise for both U.S. military and school ROTC units. Accomplished marksmen can thereby be developed in a reasonably short time. Although I own and still use a Daisy Model 25 air rifle, my current interest centers on alternate use of a lever-action Special Model 25 with hooded front sight and adjustable rear peep. This is the air rifle model used in the formal paper target competition sponsored yearly by Daisy Company and the National Rifle Association. It sells for less than $35.00.
THE COOT

By LOIS ANDERSON

ANYONE WHO HAS LIVED in Florida for at least one winter is probably familiar with the coot or "mud hen." Wherever there is fresh water, the "crazy" coot will be found. Coots are probably the most abundant waterfowl in Florida. They are easily recognized by the way they paddle through the water bobbing their heads back and forth like a chicken when it walks. Another distinguishing feature is its white beak. No other water bird has anything like it.

Though often mistaken for a duck, the coot is an inland water-dwelling bird of the genus Fulica, belonging to the rail family. Railidiae, of which there are about 10 species. Our North American variety is related to the European coot. They are approximately 16 to 18 inches long, with dark gray plumage that is almost black on the head and neck. Unlike most water birds, they do not have webbed toes. Instead, their toes are fringed by a lobed membrane which helps them to swim and walk over plant-choked marshes and ooze.

The coot is a wild bird with many wild ways. Yet, the strange migratory bird is not bothered by populated areas. Practically all the lakes in Florida have some coots, and at certain lakes they swarm all winter. On Lake Okeechobee alone, the wintering coot population has been estimated at 20,000 or more. The coots usually arrive in September and leave by late April. Though many do stay through all winter. On Lake Okeechobee alone, the wintering coot population has been estimated at 20,000 or more.

Coots feed and live among ducks, rails, and gallinules, uttering many sounds—whistles, clucks, squawks, and shrieks, all in a variety of ranges. When nesting in Florida, the coot carries out normal procedures by placing its nest in a clump of grass or aquatic vegetation in freshwater marshes or at the edges of ponds or streams. Their eggs number from 8 to 14 and are buffy white covered with fine flecks, and heavily speckled, unified with black.

Like many birds, coots have monocular vision; that is, each eye is used independently of the other. When a single eye is focused on an object, it is quite difficult to judge distance and size. Coots compensate for their monocular vision by jerking their heads as they move, thus giving themselves a series of rapidly changing views of their surroundings.

Coots paddle along the surface each time they have to fly, for the same reason that seaplanes taxi along the water before takeoff to gain momentum. The seemingly short-winged coot appears to rise with difficulty from the water, but is capable of sustained and rapid flight, as some hunters have learned.

This rather peculiar water bird is often classed with the duck family for good reason. Though scored by some, the coot can be hunted in the winter season, when it is most gregarious. Countless numbers of coots are killed during the migratory bird season in our state. The hunter's daily bag limit is 15 coots. And, contrary to some, the flesh can be as palatable as many other waterfowl, especially if they have fed on favorable vegetation, which they frequently do. According to Alexander Sprunt, in Florida Bird Life, eating experiments were made with seasoned hunters, who were unable to tell cooked coot from duck.

The error most hunters make in preparing coot is to parboil it. The fatty layer under the skin retains the flavor of any seafood diet. Parboiling saturates the edible part of the bird. The trick is to field dress a coot, and, like quail, the breast is about all there is.

Florida has annually adopted the Federal guidelines of a daily bag limit of 15 coots during certain open hunting dates in November, December, and January, with no assigned point values. This liberal bag limit, as compared to other waterfowl limits, may account for the new interest in shooting our "crazy" coots.

CONSERVATION SCENE

New DU Program

A $8 MILLION DOLLAR PROGRAM to provide habitat for North America's waterfowl has been announced by Ducks Unlimited, the international waterfowl conservation organization. The plan was announced at the organization's 39th annual board of trustees meeting held in Mexico City. The plan calls for Ducks Unlimited, Inc., to raise the money over the next 5 years, for the development of wetlands in Canada, where over 70 per cent of the waterfowl on the North American continent originate. DU, Inc., will forward $7 million dollars to DU (Canada) during the current calendar year and accelerate this rate of funding over the remaining four years of the program.

Since its inception in 1937, DU has raised over 48 million dollars for the preservation of wetlands. As a result over 2,200,000 acres have been set aside, providing approximately 11,000 miles of shoreline for nesting. Nearly 1,400 wetland projects have been constructed. These provides project living room for some 300 species of wildlife, including several endangered species.

Eagle Protection

The bald eagle, symbol of the nation, representative of courage, strength, and independence, has been proposed for listing as endangered in 43 States and as threatened in five others. Keith M. Schreiner, associate director of the Interior Department's U.S. Fish and Wildlife Service, announced: "It is ironic and particularly disturbing to find that at the time of the Bicentennial the living eagle (continued on next page)."
Promote NHF

Sportsmen need not belong to an organized rod and gun club or conservation group in order to help promote National Hunting and Fishing Day, which is September 25th. There are many things the individual hunter or fisherman can do on his own to help spread the word about NHF Day. There are 55 million hunters and fishermen in America, according to NHF Day headquarters, in Riverside, Conn. All are honored by National Hunting and Fishing Day and all should do their part in helping to make the day a success.

Steel Shot Available

A new nontoxic steel shot load, in both 2-3/4- and 3-inch 12-gauge plastic shells, will be available for waterfowl hunting seasons this fall, it was announced by the Winchester-Western Division of Olin Corporation.

The new Super-X Steel Shot load 1-1/4 ounces in 2-3/4-inch and 1-1/2 ounces in 3-inch shells will be offered in shot sizes 1, 2 and 4 in Winchester and Western brands.

The new Winchester and Western Super-X Steel Shot load will have a suggested retail price of $8.85 per box for the 2-3/4-inch shells; the 3-inch shells will list at $11.50 per box.

Extensive research, testing and development have gone into producing the new Super-X Steel Shot load. Several unique features distinguish it from other steel shot loads and enable it to deliver consistently excellent patterns at normal waterfowl hunting ranges.

Since steel is lighter than lead, more pellets are required to attain a shot charge of equal weight. Winchester-Western technicians surmounted the problem of putting more steel shot pellets into the new shells by utilizing a rolled crimp and specially designed high density polyethylene top wad called the Flyaway wad.

Without sacrificing the sturdy gas-sealing base wad, the rolled crimp enables the new 2-3/4-inch shell to be loaded with 11 per cent more steel pellets than can be used in the same length shell employing the more common fold crimp design and the standard height base wad. In the Super-X 3-inch shell, nine per cent more steel pellets can be used.

The earlier disadvantage of an over shot wad staying in the shot cloud and creating "blown" patterns has been negated by the new Flyway wad. The uniquely imbalanced wad quickly drops aside, leaving the shot charge unimpeded on its way to the target.

In addition, the new Super-X Steel Shot load has a special one-piece cup wad and shot collar designed to protect shotgun barrels. A high-strength plastic hull gives dependably smooth, positive feeding and ejection in all shotgun actions. A reliable non-corrosive primer provides instant ignition for the clean, progressive-burning Ball Powder propellant.

The use of steel shot is required by law this fall in designated "hot spots" on the Atlantic flyway and in certain wildlife refuge areas throughout the nation.

The use of steel shot may cause barrel damage in some guns and should be used only in arms in good condition and designed for modern ammunition of the proper gauge. If doubt exists, check with the gun manufacturer or a competent gunsmith.

(Editor's Note: See The Case For Steel Shot, page 10, this issue, for a related article.)
**AMERICAN COOT**  
Adult  
Immature  
Adult

**COMMON GALLINULE**  
Adult  
Immature  
Adult

**PURPLE GALLINULE**  
Adult  
Immature  
Adult

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**CHANGE OF ADDRESS**

Paste recent magazine label onto space indicated, show change on form and mail.

**NEW SUBSCRIPTION**

Fill out form at right and mail with payment.

**RENEWAL**

Paste your last magazine address label onto space indicated and mail with payment.

**GIFT SUBSCRIPTION**

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