How Much Do They Weigh?

MOURNING DOVE
4 OUNCES

GAME BIRDS
GALLINACEOUS BIRDS
DOVES
PHEASANTS

BOBWHITE QUAIL
5 TO 9 OUNCES
AVERAGE 6%

CLAPPER RAIL
12 OUNCES

FLORIDA WILDLIFE MAGAZINE • FLORIDA GAME AND FRESH WATER FISH COMMISSION

Vol. 27, No. 5

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How Much Do They Weigh?

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Gadwalls are familiar to Florida waterfowlers but are never in great supply. Look for them in fresh water lakes and streams. They’re midseason migrants southward, and late spring migrants toward the nesting grounds. See page 30.

From A Painting By Wallace Hughes

FLORIDA WILDLIFE is an official publication of the Game & Fresh Water Fish Commission of State of Florida *

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The most common categories of organisms inhabiting these rivers are caddis fly, midge, and sand fly larvae; dragonfly and mayfly nymphs; and isopods, snails, and clams.

Caddis fly larvae and mayfly nymphs, which prefer swift water and rock substrates, are common in the lower Santa Fe. Quiet water species such as clams, snails, dragonfly nymphs, and isopods are most common in the Suwannee. Abundant in both rivers, redbreasts prey primarily on bottom-living organisms, but being opportunists, they will also take midwater and surface organisms. Small fishes and terrestrial insects which fall into the water may also be taken.

Food items from 978 Suwannee River redbreast stomachs and 774 Santa Fe River redbreast stomachs were analyzed during the course of the research project. Numerically, the most abundant food items found in the stomachs of the Suwannee River redbreasts were midge larvae, isopods, caddis fly larvae, small crustaceans, sand fly larvae, and beetles, in that order. Ants, young blue crabs, snails, clams, and small fishes were also identified from the stomachs of these fish. The Santa Fe River redbreasts had consumed large numbers of caddis fly and midge larvae, and, to a lesser extent, mayfly nymphs and emergent insects.

Redbreasts are the most sought-after fish in the Suwannee River drainage. A year-long creel census was initiated on the central Suwannee in September 1970. Of the species taken by anglers during that survey, 38% were redbreast sunfish.

By VINARD HITT

The redbreast sunfish, or redbelly, left, is most sought after in Suwannee-Santa Fe River lakes, according to the creel census studies. Old standby, the cane pole, seen at right, is most widely used tackle. The best bet for redbelly is wading waters. One census showed that over half the fish caught in the lower Santa Fe River in the spring and summer seasons are redbreasts.
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FLORIDA WILDLIFE

The line guides on any fishing rod are taken for granted by most of us. Their effect on casting and line wear gets little attention. A lot of other things get blamed for sneaky things performed by guides.

Placement of guides on the rod have much to do with its action, although most of us leave that to the manufacturer and assume it to be correct. In the better rods it is correct, or nearly so. When you drop down to really cheap equipment you'll often find that the guides are too scarce, a simple matter of economy. Cheap rods may have guides that wear the line excessively, but most of us can't judge them by simple inspection. A set of guides that works well in light use may ruin a line quickly when you play heavy fish. Casting ease depends greatly on guide efficiency, whether plugging, spinning, or fly fishing.

When I first started fishing, the true agate guide was considered best of all in addition to being pretty. It was imitated by glass which often worked fine, but took unkindly to being stepped on or banged against a gunwale. Agate isn't as durable as some other materials, and it is rather heavy, a minor thing on some rods, but enough to ruin ultralight gear.

Many of the good old bamboo fly rods used agate on the rearmost, or stripping, guide but used ordinary wire "snake" guides the rest of the way. Agate might occasionally be used for the tip guide. An acquaintance of mine figured if a little agate was good, a lot of agate was better, so he equipped his bass buggling rod with agate from stem to stern—and since he wanted to be careful of the action, he put on lots of guides. Since the rod was a heavy, 9-foot bamboo job to begin with, he ended up with something that felt pretty strange and bent, as if it already had a fish when he was just carrying it to the creek. Although it was a real arm breaker, he stuck with it and swore it was just what he needed.

Agate was pretty well replaced by various alloys, and "carbide" guides have long been popular on many high quality rods for a variety of purposes. Generally, a reasonably expensive rod does have good guides, but some years back I paid more than I could afford for a rod allegedly intended for salt water and found the guides red bent, as if it already had a fish when he was just carrying it to the creek. While it was a real arm breaker, he stuck with it and swore it was just what he needed.

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adds to fragility, but don't judge all guides in general. Sometimes the base flexes with the rod even though the ring itself is rigid. This flexing business is greatly reduced in plugging rods because the guides are much smaller. The core of line loops that come off the spinning rod isn't present with the plugging outfit (turning spool), although there can still be line slap. With a fly rod and a long cast, the handling, or shooting, line enters the first guide at an angle, presenting problems similar to those of spinning, but less acute.

Fishermen playing very heavy fish with fly rods are sometimes very particular about the first guide since the line may pull on it with great pressure as the rod bends greatly. Fly lines can lose their coating through friction there, and it is the section that works against this guide which generally gives out first. It is often subjected to hard jerking even though large fish are not involved.

There's no question that the Fuji Hard Speed Rings used as guides by Lew Childre & Sanders, Inc., Foley, Alabama 36535, are something special. These guides, imported from Japan, are of aluminum oxide and appear on the plugging, spinning, and the casting rods marketed as Lew's Speed Sticks and have a wide variety of actions. They are so light that the rigid rings can be mounted on fly rods instead of wire snake guides. That's not traditional, but it works.

In a typical amateur's test of quality I tried a file on the guides and nothing happened. They're hard all right. Then I laid one on the floor and walked on it. Nothing broke. Finally, I laid one on a piece of steel and battered it into submission with a ball-peen hammer. I finally showed who was boss, but the toughness was incredible to me.

The Speed Sticks are of excellent quality fiber glass. I have used a fairly stiff plugging version in both fresh and salt water. It's black and glossy and sharp corners. But just to keep Lew Childre from getting smug, I have to report that my wife put on the bathtub bottoms to give traction. I usually stood up to fish, your legs and feet must make constant adjustment as the deck moves, no matter how slightly. The more the propulsion is seldom mentioned in any boating literature, but when you're conscious of it you may be surprised to learn that some of the most seaworthy craft can be tiring when lying dead or nearly dead. There's a lot of difference, even in modern planing hulls. The extreme, of course, is in round-bottomed boats, seldom used much anymore.

Engine vibration. When many salt water trout fishermen used small "hathed" inboards, there were certain makes and sizes they swear would catch more trout while trolling. Most of them thought the vibrations were right.

Exhaust. For most fishing where wire leaders aren't used, needlenose pliers will do considerably more for you when it comes to unhooking fish. You can go quite a piece back and are handy for cutting and handling wire leaders, the long stainless steel needlenose, cutters, which pull through and at length, but have some advantages and the ordinary needlenose pliers at the right. All three kinds of pliers are used to retrieve hooks and costly bugs.

One of the best features of any large skiff is its stability for anyone moving around on board, but you don't hear much about how stability prevents fatigue. If you stand up to fish, your legs and feet must make constant adjustment as the deck moves, no matter how slightly. The more the above-water exhaust frightens fish less. This has been proved in trolling for several species. Most outboards exhaust below the surface.

Wake patterns. A lot of people think that red is attractive to fish, that white is too visible and might scare them away, and that the part above water should be painted neutral colors. Somebody says that the upper part is likely to be against the bright sky, however, and the lighter the better.

Fishing plugs. Good examples are the great procession of "Ford fenders" and similar shifty things dragged along to excite trout for something smaller. Many species take offshore trolling baits or teasers immediately in the propeller turbulence.

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I ntrigu ing T rees

By M A X H U N N

Florida is a land of big, old, odd, and

oddities. Some satisfy your curiosity. Florida has an unusual and excellent examples of nature's unusual peculiarities.

1,000-year-old oldest cypress in the U.S., the only transplanted 1,000-year-old cypress, a magnificent Florida mahogany, and such oddities as the land-building tree and the sausage tree.

The state's most famous cypress, named The Senator, is located between Sanford and Orlando. Its age is estimated to be 2,500 to 3,500 years. It is a giant with a circumference of 34½ feet and a trunk diameter of 10 feet, 8 inches, measured 4½ feet above ground level. (A cypress in Tennessee is said to be slightly larger.) Although The Senator stands 128 feet tall, its present height is not in proportion to its other impressive dimensions. Undoubtedly, the big tree was much taller centuries ago, perhaps towering 200 or more feet prior to some natural topping.

Foresters estimate the tree contains 12,000 to 15,000 board feet of lumber, but, of course, its uniqueness makes it priceless today. It is a common bald cypress, and was named in honor of State Senator M. O. Overstreet, who donated the tree and the surrounding land to Seminole County as a park in 1929. President Calvin Coolidge dedicated it that same year.

If you wander into Highlands Hammock State Park, near Sebring, you can see the huge live oak estimated to be 1,000 years old by the Florida Division of Recreation and Parks. Age has left its mark, but the tree has been expertly repaired. You can see the giant by following a path leading from the park's main highway. It's a very short walk.

Highlands Hammock also has the U.S. champion sabal palm. This slender tree towers 90 feet, has a girth of 45 inches, and a spread of 12 feet. It is a genuine oddity, for such trees seldom attain giant stature.

Jacksonville boasts of the famous Treaty Oak, where Indians and whites once met to discuss their treaties. Estimated to be 500 years old, it has a circumference of 17½ feet and a limb spread of 120.

In a little county park near Port Orange you'll find the Confederacy Oak, so named because Confederate supply troops camped under its spreading branches while awaiting sugar supplies during the Civil War. The great oak, probably 500 years old, is located near the ruins of an old Spanish mission.

The state's largest live oak, standing 90 feet, has a trunk diameter of 6 feet, 1 inch, with a limb spread of 120. In 1928, Senator M. O. Overstreet, who donated the tree, moved it to the Seminole County Park, near Sanford, because of its mark and the surrounding land to Seminole County as a park in 1929. President Calvin Coolidge dedicated it that same year.

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Tom Gaskins proved a mature cypress could be successfully transplanted when he moved one to be the centerpiece of his Cypress Knee Museum. He moved a cypress tree weighing six tons, two miles successfully. The tree repaid Gaskins for his expensive gamble by "giving birth" to a new knee 18 months later. (The cost of the transplant: $1,200.)

For years, the little town of Mulberry, east of Tampa, had its famous depot tree. Standing beside the railroad tracks was the mulberry tree that served as the first freight depot, and which gave the town its name.

During the 1880s, no railroad station existed, nor any town, although a few settlers were moving into the region. Regular shipments were simply tagged "Put off at the Big Mulberry Tree." And that's where the goods were unloaded.

During the turbulent 1880s, several persons were hanged from the sturdy limbs of the old mulberry tree. It was back during the period.

(Continued on next page)
The grand old oak, believed to be several hundred years old, has suffered from the ravages of windstorms and old age, and probably has received more professional attention than any other tree in the state.

 Tradition says the English who settled in northwestern Florida in the 18th century introduced the custom of crowning a queen the first week in May. On a Bradenton back street is a huge rubber tree that is a town landmark. Planted in 1913, it is now 75 feet tall, and its 100-foot branches cover 8,000 square feet. That’s some shade tree!

Although classified with the banyan, the common rubber, and fig trees, the tree in Bradenton is a distinct species (Ficus floridanus).

There are numerous large banyan trees growing throughout the state. One of the most famous is located on the grounds of Thomas Edison’s winter home in Fort Myers. The tree was given to Edison in 1925 by Harvey Firestone, Sr., who brought it from India.

One of the state’s most unusual trees is the sausage tree, another import. The fruit of this African tree does resemble the breakfast standby, but it’s not for the table. A native of the Lake Victoria region of Africa, the sausage was brought to south Florida by Dr. David Fairchild, famed plant explorer, around 1900. Known botanically as Riepella pinata, the tree grows a new crop of “sausages” annually. These attain a maximum length of 27 inches and weigh 15 to 20 pounds—hefty enough to give a king size headache to anyone accidentally hit by a falling sausage.

The site of the nation’s largest mahogany tree is appropriately enough, Mahogany Hammock, in the Everglades National Park. This tree, another victim of natural topping, measures 11 feet, 5 inches in circumference at a point 41⁄4 feet above the ground. Park visitors reach the big tree, which stands 81 feet tall, via a boardwalk.

In the Florida panhandle, near Bristol, is Torreya State Park, named for the rare torreya tree (Torreya taxifolia), said to be the same wood Noah used in building the ark. As a result, this tie-in and other circumstantial evidence, some of the local residents claim—with a twinkle in their eye—that the park is part of the original Garden of Eden. (See “Florida’s Garden of Eden,” Florida Wildlife, October 1979, page 22.) But don’t expect to see any Adams and Eves running around if you visit there.

The torreya is also known by the names stinking cedar, savin, and gopherwood. It is very hard and durable wood.

In Tampa there’s the historic De Soto Oak, named for the Spanish explorer, who wandered through Florida and the southeastern U.S. only to die on the banks of the Mississippi River in the 16th century.

East of Ocala, at Silver Springs, are the sweetheart palms. They’re a pair of Washingtonia palms that were blown over by the wind. Although uprooted, they lived and grew into their present fantastic, intertwined pattern.

And no list of intriguing Florida trees would be complete without mention of the various palms—coconut, date, royal and fishtail—which enhance the state’s tropical scenery. Then there are such trees as the traveler palm, a source of drinking water in an emergency, and the now-protected cabbage palm, the edible bud of which makes a tasty cooked vegetable and a delicious raw salad.

Pine trees are notable for their importance to the state’s economy. They yield a commercial crop yearly—in naval stores, timber, and pulpwood for the manufacturing of paper and other products.

For oddly named trees, try the hophornbeam, the Florida fishfuddle tree, the loblolly pine, the longleaf loblolly, the shadow serviceberry, and the strongback. Then who could forget the pigeon plum, or pigeon seagrape, the butterbough (also known as the inkwood, or ironwood, a member of the soapberry family of trees), and the woolybucket, or gum elastic tree.

Those are almost as strange sounding as the gumbo-limbo tree, the melaleuca (also called the cajuput, or puk), and the flamboyant tree, another name for the royal poinciana.
My guess is that the duck most familiar to the average Florida waterfowler is the jaunty ringneck, a middle-sized sport model that travels in small, fast, loose flocks, pitches straight in to the decoys without circling, sits lightly on the water, and takes off well back on the body to facilitate such a manner of feeding.

Ring-necked ducks are found primarily on fresh water lakes and reservoirs, where they raft safely with other divers in open water at night. They also feed in small ponds and in streams, sloughs, and roadside canals. Ringnecks are easily observed and photographed from automobiles in many parts of Florida.

Some local flocks of wintering ringnecks feed in salt marshes, where the foods they consume tend to impart a strong, "fishy" taste and odor to their flesh, reducing their value as table birds. As a rule, however, the ringneck is popular with hunters and makes a fine main course.

At the 25-point value assigned for the 1973-74 season, four ringnecks will make a legal daily bag limit in Florida.

It is able to dive to depths of 40 feet to obtain food—largely vegetable matter. It swims underwater with its wings folded, propelling itself rapidly and expertly with its webbed feet on legs placed well back on the body to facilitate such a manner of feeding.

Ring-necked ducks of both sexes have white rings on their bills (at the base and near the end); the scaup doesn’t have it. The ringnecks have gray wing patches; the scaups have white ones. The brownish female ringneck has a dirty white face and a distinct white eye ring that her counterpart, the lady bluebill, must live without. And the male ringneck’s head has the suggestion of a crest, but the scaup drake’s head is smoothly rounded in profile.

Ringnecks are members of the diving duck fraternity, which includes, besides the scaup, the redhead and canvasback, the goldeneye and bufflehead, the ruddy duck, and three species of mergansers. These typically patter across the water in order to get airborne. The ringneck is the handiest of them all at this. He requires only a few blurring wingbeats and a few feet to be up and away on wings that literally whistle.

Accounts of the ringneck’s life history state that it is able to dive to depths of 40 feet to obtain food—largely vegetable matter. It swims underwater with its wings folded, propelling itself rapidly and expertly with its webbed feet on legs placed well back on the body to facilitate such a manner of feeding.

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Ring-necked ducks are found primarily on fresh water lakes and reservoirs, where they raft safely with other divers in open water at night. They also feed in small ponds and in streams, sloughs, and roadside canals. Ringnecks are easily observed and photographed from automobiles in many parts of Florida.

Some local flocks of wintering ringnecks feed in salt marshes, where the foods they consume tend to impart a strong, "fishy" taste and odor to their flesh, reducing their value as table birds. As a rule, however, the ringneck is popular with hunters and makes a fine main course.

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The Bass Boat Cometh

built for specialty use,
the new craft may prove adaptable
to many types of inshore fishing

By CHARLES WATERMAN

The modern bass boat developed pretty fast once it got started, but I can't say who built the first one. It has waders borrowed from many other boats, but it has acquired a distinctive look on the way to efficiency, and almost anyone hanging around fishing. This is only the beginning.

Fresh water calls it a coast, where snook fishing is closely akin to bass fishing. This is harmless. I think the bass boat is going to have new uses if it got started, but I can't say who built the first one. It has waders borrowed from many other boats, but it has acquired a distinctive look on the way to efficiency, and almost anyone hanging around fishing. This is only the beginning.

However, the bass boat has no bearing on the basic good qualities of the bass. Although a large part of the Florida population is there for a purpose. Wind is bad medicine for electric motor use, and a few extra inches there really hurts. I have been using an electric with a high-sided old aluminum 18-foot and find it pretty unmanageable in the wind.

Low freeboard is much handier for fishing in calm water, and the broad gauntlets can shelter equipment. Stick steering has been very popular on the smaller bass boats, operated from the bow, and enables the operator to manage his boat from the position in which he intends to fish.

In theory, the man in the bow can best see where he's going and the boat operator should be the one in charge of the expedition. Since electric motors work best in the bow, the man on the stick is ready to lower the electric when needed and can control it, whether by foot or hand, without moving from his seat. In practice, the stick steering has disadvantages at high speed in rough water. You can brace yourself on a steering wheel but not on a wobbly, long-handled stick. I may get shrieks of rage from stick lovers, but I note that most of the competitive bass fishermen use steering wheels, usually near the stern. They seem to like a console off center to the right (starboard) rather than a center mount—so popular with salt water men. Nearly all of them sit rather than stand while steering. The standing operator can absorb wave pounding with his legs. Most of us like to stand when things are lumpy. That's possible in bass boats, but isn't done much. The steering wheel is generally a low, and bass fishermen aren't expected to spend much time in the rough stuff.

Indoor-outdoor carpeting is popular with bass boat users. It's quiet, adds to the boat's plush appearance, and isn't too hard to clean. But a smooth deck washes down easier, and I doubt that salt water users will go for the carpet.

Now to the seating. The "professional" bass boats generally have sailboat chairs, either body-formed hard fiber glass or padded jobs that look as if they'd escaped a modern office building. Some of them have arm rests. The arms get in my way but maybe not yours. The seats are generally easily removable, and you can have sockets located wherever you want them.

The best way is to have a pair of seats built so one can be put in the bow and the other in the stern while fishing and relocated low and nearer amidships while under way.

Some lazy types have the sad habit of riding at 40 miles an hour perched high on the very bow of a bass boat. I cover my eyes until such pilgrims have rounded the bend. Any collision at that speed would give a spectacular side effect.

(Continued on next page)
Having been tossed off my feet or seat by such events on numerous occasions, I ain’t going to sit on no high bow seat at any speed of more than 5 knots. I don’t want to drown, I don’t want my brains knocked out, and I don’t want any high-powered outboard prop playing tick-tack-toe up my spine.

Some wild bass boat operation comes from imitation of the tournament anglers who often race each other to the fishing grounds. The rules there generally include life jackets and other regulations for safety. It’s possible some of the imitators of the tournament boys leave out the safety things. Like other craft, bass boats are sometimes overpowered. I’m not blaming the manufacturers.

Bass boats aren’t salty looking in the style of seagoing craft, and offshore sailors might even say (some have) they don’t look like boats at all and have some of the characteristics of automobiles. But these things are tough, awfully tough, and when you take one over a ski jump at top speed, landing without damage to electric motor, depth finder, hundred-plus horsepower outboard, or boat structure, you’ve been riding in something that was made on purpose. Mel Sargent of Ranger Boats did all of that down at Cypress Gardens a while back, and if he got bruises they didn’t show. I don’t recommend ski jumping with anybody’s floating tackle box, but it’s a good stunt to know about.

Most of the bigger boats have one or two live wells and considerable storage space, some even having a bilge hole for the anchor line, which retracts on a spring-loaded gadget and goes in like a spooked grass snake. Electric bilge pumps are pretty standard appliances, and many of the bigger motors have automatic tilts, the idea being that it can be turned to face in any direction, and one

is usually enough. There’s often a thermometer for surface temperatures and readable on the console. Now there’s talk of gadgets that check oxygen content of fishing waters and (coming, maybe) a water cleanson indicator.

The bass boat style is for flat-on trailers. Although I have plaintively suggested that such rigs shouldn’t be backed into salt water, the manufacturers tell me that if the thing is galvanized, and if a proper greasing system has been installed, no harm will be done. Okay, okay.

I have never seen one of the bigger late model bass boats with oars, although they look very easy to row and are much narrower than boats we have been rowing for a long time.

Poling is something different. Few bass boats have been poled, but there’s going to be a place for that on flats such as those of the Florida Keys. Most of them seem ready-made for the pole. There’s generally raised decking both fore and aft for the poler to stand on, and the wide gunwale would make a good place for storing a fiberglass shover. The bass boat builders could well check these possibilities and maybe even work out minor modifications to keep salt water people happy. So far, it seems to me that bass boats are somewhat less expensive than their opposite numbers for salt water.

Although they go for built-in gasoline tanks, I’ve seen no standard models that carry enough for much black bass fishing. A big bracket for something up to 10 horses should be all right, and I think a standby 10-horse motor would get almost any bass boat home in reasonable time. It could be used with outdrive bass boats as well as the outboards. Shouldn’t be any problem except that it adds weight to a stern that’s sometimes pretty low in the water to begin with.

These thoughts about extracurricular uses for bass rigs may not interest the builders, but I think they should. Now that the bass boats and jump suits have arrived in Florida, I see no reason why they couldn’t put them to special Florida uses. As yet, not many of them are built here, but more and more are showing up. They got their start, of course, in the South and Midwest. (When you say that, you have to explain how most fishermen think of the South as ending somewhere around Tallahassee and most of Florida being something else.)

I see no reason why the bass boat can’t be a family affair, except that there are seldom more than three seats. There might be a little modification for that with individual users. There could be canvas tops and special seats, but we’d be working toward another kind of boat then, I think. Crowding comes quickly when there are too many conveniences.

To a blue water sailor a bass boat is a funny looking thing, but then, he didn’t like any of the tri-hulls or the cathedral hulls to begin with. He certainly didn’t beam over the John boat. I think all of us may as well get used to the bass boat. Beauty is in the eye of the beholder, and a public that can get used to Indianapolis race cars that look like lawn mowers, and motor homes that look like packing crates, can certainly love the bass boat, even if it does resemble a custom bathtub just a little. Long live it. I’ll take it.
Help Wanted

records show that firearms and
hunter safety training
reduces accidents, gives more
shooting fun, and
assures better conservation

By CHARLES Dickey

John Jr., a young football player in the Dade County school system, was proud of his first rifle. He gets good marks in class and loves the outdoors. On the second trip with his new gun, he ended up in a hospital with a bullet in his stomach. When a dog knocked the gun down, it went off and a young companion was shot in the foot. Fortunately, he recovered.

That's one of the major problems with the state-wide program, according to Capt. Jim Carter, Hunter and Firearms Safety Coordinator. He supervises the training through the Commission's five regional offices under the administration of the Commission's Information-Education Division.

Some parents are willing to shell out the money to buy their youngsters a gun for Christmas, but they don't insist on their taking a course in safe gun handling. Furthermore, they don't protect their households by taking the 10-hour voluntary course themselves. Yet, year after year, national statistics show there are more gun accidents in the home than in the field.

Once a gun is brought into the home, no matter by whom, gun safety becomes a concern of all members of the household. Whether parents have a gun in the home or not, there is no way they can keep their kids from running across one or more places—at a neighbor's house, perhaps. Depending on whose statistics you prefer, there are from 125 million to 200 million guns in America. Sooner or later, every kid comes across one or is tempted to try to use one. If he or she has been taught proper respect for a firearm, and correct gun handling, there's not likely to be a problem. If the child's safety education has been neglected, he, or she may get into trouble—fatal trouble.

It's always easy to say any problem can be solved by more education. Carter believes more stimulation and action is needed by parents and, in many cases, by the school systems. The firearms safety program in Florida is well underway. There is a larger budget than ever before; the program has been endorsed by the U.S. Bureau of Sport Fisheries and Wildlife; 10,000 more copies of the student handbook used in the course were recently published; and the instructors have access to a variety of instructional materials. In addition, there are reasonable funds for leasing firing ranges.

For a parent to find out where the nearest safety course is going to be conducted, all he needs to do is contact his regional Commission office as listed in the front of Florida Wildlife. If no course is scheduled, the regional I&E officer will be glad to begin preparations for starting one, according to Capt. Carter.

Although many states have conducted safety courses mainly for youngsters, Florida is not set up this way. Carter, when designing the program, was fully aware that statistics show that adults have their share of gun accidents, both in the home and afield. As any veteran hunter will admit, he never goes through a hunting season without running across many hunters over 30 years of age who desperately need refresher courses.

Over one-third of those taking the safety course are adults, according to Capt. Carter. Some of them want to start hunting for the first time; others are wise enough to realize it's easy to acquire faulty habits and they are anxious for a refresher course.

(Continued on next page)
For the satisfactory completion of a safety course from Alachua, has been hunting since he was 9 years old, but he recently took the course.

Seventeen states have mandatory requirements for the satisfactory completion of a safety course before a hunter can buy his first hunting license. In recent years, some states have been cracking down on adults and nonresident hunters. For example, nonresident hunters of all ages going to Colorado, New York, or Quebec must show that they have passed a certified course before they will be issued a hunting license. The Florida hunter who goes to Colorado without these credentials may find himself sitting in a motel rather than on a horse out hunting for deer or elk.

These requirements in other states have contributed to the number of adults taking the Florida course. Once passed and certified in Florida, it's readily accepted in other states, Capt. Carter says. Although Capt. Carter is high in his praise of "old reliables" who spend countless hours teaching gun safety, shooting, and outdoor skills, he never has enough working instructors. In fact, in a few areas eager teen-agers have been unable to take the safety course because certified instructors were not available. One reservoir of volunteer instructors has been retired people who moved to Florida. Anxious to keep their hands in the shoot-

ing sports and to help others, the retirees have consistently been excellent instructors.

Perhaps the most pleasant surprise which has happened, despite the problem of getting instructors and encouraging parents to send youngsters, is that once a course starts, it seldom stops after the minimum of 10 hours. Capt. Carter says that only two classes in Florida have ended activity after the final tests. Instructors and students alike are having such a good time that all of them find time for extra field trips and practice on the range.

Judy Neisler, who is with Ocala's Vanguard High School's athletic department, has given nearly all of her students 32 hours of instruction, more than three times the required amount. The youngsters keep coming back for more. Along with her husband, Cecil, a police officer, she has helped train 150 students. Much of the extra time has been spent at the Marion County Trap and Rifle Club and on field trips where students handle practical gun problems they'll encounter when they're hunting on their own.

As hundreds of students have discovered, Florida's firearms safety course really is fun. It isn't all work and memorizing safety rules. There are usually five sessions of two hours each, with a great deal of student participation, not just listening to lectures. The first hour, in addition to indoctrination, includes a review of the state's laws on firearms ownership, hunting regulations, and the reasons for laws governing wildlife. The next three hours are spent studying firearms and how to handle them under a variety of conditions.

One of the most popular hours is one spent on wildlife identification. There is also instruction in practical first aid and survival. Of course, a lot of the youngsters "endure" this early part waiting for the chance to get on the range and shoot. They get to shoot, all right, but they do it under supervision and only after they've gone through the earlier instruction. The tenth hour is spent on wildlife management and what the hunter is doing for conservation.

The icing on the cake is a field trip where students get a chance to practice what they've learned about carrying a gun afield. No live ammunition is allowed, but the instructors make sure the students have obstacles to cross, such as fences, ditches, and logs, plus taking guns out of vehicles safely and storing them when they leave. Depending on the instructor, there is considerable nature study such as identifying plants and birds.

There's an optional hour on archery and bow hunting, including a study of equipment and its safe handling. Most students, caught up in the enjoyment of outdoor recreation, take this optional hour and ask for more.

There's a trend towards entire families taking the course together, Carter says. Although the courses are generally informal, with a great deal of fun, there's always an underlying theme of seriousness. If there's a gun in the home, then gun safety becomes serious business for everyone in the home.

"We make it as painless as possible," Carter smiles. "While the field trips involve work and study, they're partly the same as any family might be taking on a weekend. In addition to getting the chance to meet others with mutual interests in the outdoors, the students get free expert training in nature and outdoor skills. It's probably the cheapest type of entertainment available for the whole family."

Sometimes the mothers take it more seriously than the fathers. Although it doesn't happen often, one family of four started, but the father and one son dropped out. The mother and another son (Continued on next page)
completed the course with high marks. The mother said simply, "I want to know." According to the five regional managers, who are responsible for the program in their regions, there is an increase in the number of housewives who enroll in the program. Carter says, "Maybe the word is getting around that most gun accidents happen in the home. Whatever the reason for the increase in the number of wives and mothers taking our courses, we're glad to see them. That means somebody in the home will know about gun safety, and you can bet most of the mamas will be passing the word."

Some of the junior colleges are playing a leading role by being the first in their communities to conduct firearms safety courses.

Dr. Wilson F. Wetzler, vice president of Manatee Junior College, at Bradenton, arranged for three rooms to be used for instruction at night. The Board of County Commissioners of Manatee County cooperated by making the new public shooting range available.

Few gun accidents result from mechanical problems: they are most often from human error and carelessness. Safe hunters, below, keep equipment in good order, point guns in safe direction, and know where companions are. They also know guns love and obey them. The result? They're smart sportsmen, not outdoor slackers who give hunting a bad name by their conduct.

Mrs. Hugh J. (Helen) Canney, an accountant with Eastern Airlines, has been a sparkplug in classes both for training instructors, at Miami Springs Community College. Mrs. Canney, having taken the safety course herself, and put her youngsters through it, has gained quite a reputation for collaring adults for instructors. Helped by Peter Syros, of Miami Springs, and Dade County Wildlife Officer Dick Lawrence, she has had no trouble getting the full cooperation of Miami Springs Community College.

Carter gets his volunteer instructors from all walks of life. Marcus Myers, a retired army major, teamed with Bob Fowler, who works for the City of Bradenton, to teach and graduate 26 much needed instructors.

Rev. Robert Walker, a Baptist minister in Weirsdale, recently completed a course for hunters going to Colorado. Without certification they could not have gotten hunting licenses there.

Generally, hunting accidents are decreasing in Florida in proportion to the number of hunters, and the statistics for last year are encouraging. According to Capt. Carter's summary of gun mishaps for 1972, quick draw must be on the way out, since, for the first time in many years, no accidents were reported under that category. But there were four casualties as the result of horseplay, 14 under the heading, "gun fell from rest," seven under "didn't know the gun was loaded," and another seven under "examing the gun."

Most of the accidents involved handguns, and in 36 of the 126 firearms casually cases reported to Capt. Carter, the victims were "less than 10 yards from the muzzle." At this close range, rifles, shotguns, and hand guns all can be lethal.

The dedicated professional and volunteer instructors served the state are vitally concerned with reducing gun accidents, no matter where they occur or how. These men and women know that few gun accidents occur from mechanical failure. It's nearly always the result of human error. Somebody made a mistake. Someone used poor or immature judgment. Somebody didn't think. And someone was wounded or killed—maybe a best friend; maybe a loved one.

These same instructors know that most of these accidents would not have happened had the person with the gun taken the 18-hour hunter and firearms safety course.

Education is most of the answer. Right now, Florida needs more volunteer instructors and more people to sign up for the courses. As Capt. Carter says, "We can have the finest program in the world, but only the parents can send the kids." It would be even better if the parents brought the kids, and took the course with them. It's real family fun.

For those shooters able to handle a .58 caliber rifle, the Navy Arms replica is worthy of examination and comparison with the more compact .45 caliber "Yorkshire."

One of the best projectile selections for a muzzle-loading rifle is a hollow-base Minie bullet that, besides desired shape and better rifling seal, provides greater sectional density than a round ball, and easier, faster loading.

Most users of black powder muzzle-loading rifles prefer to make their own bullets, for both economy and pleasure. For them, Lee Custom Engineering Company, Box 903, Hartford, Wisconsin 53087, makes an electric lead melting pot that draws 500 watts and melts about 10 pounds of lead in about 20 minutes. Smaller and slower performing models are also available, along with molds for forming consistently perfect bullets of the Minie type.

Genuine pioneer period muzzle-loading rifles and shotguns in usable condition are both hard to find and expensive. Fortunately, growing interest in hunting with primitive-type weapons has brought about the manufacture of replicas of the more widely used types of muzzle-loading rifles and shotguns. Most of the facsimiles meet shooter needs admirably.

Currently, two of the most popular muzzle-loading rifles are replicas of the famed "Yorkshire" and "Navy Model 1861 Springfield" rifle models. Both are imported and both are percussion-type, or cap-locks. The first is marketed by Richland Arms Company, Blissfield, Michigan 49228, and the Navy 3-barrel-band musket reproduction comes from Navy Arms Company, Ridgefield, New Jersey 07657. The "Yorkshire" comes in 45 caliber, and the "Navy 1861 Springfield" in .58 caliber.

Why such large calibers?

First, in a weapon firing a single projectile at the low muzzle velocities developed by black powder, a heavy, round-nosed chunk of lead is needed for impact shock and killing effectiveness. Second, the modern replicas merely duplicate the calibers for which originals were chambered.

The "Yorkshire," besides being 45 caliber, is 51/4 inches long overall. Its 5-inch diameter rifled barrel is 36 inches long, fitted with brass blade front sight and open-U notch rear sight. Features include adjustable double-set triggers for improved trigger activation, the artistic trigger guard shape gives a handle, and "Yorkshire" rifles, and stock-included patch box and butt-plate. Fore-end wood runs the full length of the barrel. The stock is made of select maple. Total gun weight is 71/4 pounds.

The "Yorkshire" replica is easy to carry and quickly shouldered, and the 45 caliber is marginally adequate for use on deer, while delivering relatively light firing recoil.

The replica of the "Navy 1861 Springfield" rifle is longer and heavier than the "Yorkshire." It measures 541/2 inches overall and weighs 81/4 pounds. Barrel length is 40 inches.

Sights are blade front and a fully adjustable open rear sight. Trigger is single type. The stock is American walnut and newly finished, as is the entire rifle.

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It has been common occurrence for a Jeep or other off-road vehicle loaded with hunters to turn into one of these dirt roads from an improved boundary road and follow the Forest Service especially of seeing game. When nothing is seen—as can be expected when there is noisy backwoods travel—the occupants of the vehicle often have electricity to park, have something to eat or drink, then target practice on empty tin cans and bottles. Such activity has spoiled hunting for everyone, time and again. Then there is the case of six Florida resident deer hunters who spent their only available vacation time hunting during opening day of the season.

On opening day, well before daylight, they had quietly walked into, and settled themselves safe and undisturbed. Some are plainly visible and easily followed. Others are so ill and overgrown as to go almost unnoticed. Shortly after daylight, and just when hopes of a spectacular kill were fading, a bullet left the barrel of a rifle belt-loaded with .30-30 caliber Winchester Model 94 cartridges far into the brush, and told him to get out of my sight— pronto! Later, I encountered the youth and his father on Forest Road 88. The man said his son had just returned from Korea, after long being under combat strain. The morning deer hunt was his first hunting experience— and he had never shot the 30-30 caliber Winchester Model 94 he carried.

Basic problem to personal safety as a hunter is that you can never—as when driving a car—know with comforting assurance that the other fellow will always act correctly during critical moments of decision or stress.

The solution, of course, is firearms education, preferably through the progressive type of hunter safety education course sponsored by the Florida Game and Fresh Water Fish Commission and cooperating volunteer educators. It is the untrained hunter who is most likely to inflict injury on himself— or others—by simply failing to make sure of target identity before shooting, a rule that, if followed, cannot be beaten. Meanwhile, if you are dangerously sloppy in your hunting safety habits, miss more game than you hit, and are not too conscientious about observing the gun laws— you don’t care in Czechoslovakia. There, a citizen-hunter must first apply to the government-controlled Hunting Association, and then take a school course of study, including 66 hours of schooling at evening classes devoted to hunter knowledge of correct use of a gun, basic biology, dog handling, preservation of wildlife, and related hunting phases.

But on successful completion of the 66-hour course of study, the hopeful hunter does not get to actually hunt— he must be allowed to carry a gun alone. During this on-the-scene training period the rime is taught how to safely handle different types of guns by Association instructors, and how to use them effectively on different species of game. Thereafter, the hunter must pass a comprehensive examination based on what has been taught. THEN—and only then—is he issued a permit to purchase his own gun and the required type of license.

One can’t help but wonder how many Florida hunters could qualify for hunting privileges under the Czech system . . .
CONSERVATION SCENE

Wildlife Aid

The AGRICULTURAL ACT of 1973, recently signed by the President, contains provisions which would significantly benefit wildlife. It expands the Department of Agriculture's role in wildlife conservation and could provide 60 million new acres for game and nongame species alike through a multyear set-aside program and through new authority to purchase perpetual easements to protect wetlands and flood plain areas.

Under the set-aside program the Secretary of Agriculture is now authorized to issue contracts retiring excess farm acreage for up to 5 years. Also, the Act provides Federal funds to share costs of planting suitable wildlife cover. The 5 year provision, the 5 year provision, and the cost-sharing plan, should provide the needed time for permanent cover to grow. The 5 year provision, plus the cost-sharing plan, should provide the needed time and incentive to establish additional wildlife habitat on unused land that would otherwise remain barren.

Unfortunately, due to the current food shortage the Department of Agriculture has announced that there will not be a set-aside program for 1974. With the ever-present threat of American agricultural surpluses, however, the 60 million acres of set-aside land will progressively come out of production and, through the 5 years and cost-sharing provisions, become new wildlife habitat. Thirty million of these acres are in the North Central states, a prime waterfowl area.

The Act also reinstates the Water Bank Act, funds for which were impounded last year by the Administration. The Water Bank Act provides for the purchase of perpetual easements of wetland areas, thus giving farmers monetary incentive not to drain marsh areas.

The Secretary of Agriculture has also been given new authority to purchase easements of flood plains, shore land, and other aquatic areas. The exact amount of funding has not yet been decided by Congress, but it will be between $10 and $20 million. For the first time, farmers will be presented with a viable alternative to channelization—the most serious threat to our waterfowl populations.

In implementing these conservation measures the Department of Agriculture will be aided by advisory boards at both state and national levels. State boards will include the heads of state wildlife agencies, forestry departments and, and water quality administrators. The national advisory board will be named in consultation with the Interior Department.

Public Shorelines

Free and unrestricted access to the nation's public shoreline will be guaranteed if the Congress adopts the National Open Beaches Act introduced September 18th by Representatives Bob Eckhardt (D-Tex.) and Bill Gunter (D-Fla.).

The legislation, endorsed by Governor Reubin O'D. Askew and the Florida Department of Natural Resources, was made necessary by the growing practice of private and industrial landowners fencing off access roads and lands adjacent to public beaches.

"No property rights will be asserted," a footnote Gunter stressed. "It merely protects the right of all Americans to gain ingress and egress to their beaches. While statutes refer generally to public ownership of beaches, they are usually cloudy on the subject of access.

Eckhardt pointed out that "only about 5 percent of the recreational shoreline of the United States is now available for public use. Both private control and industry are removing massive amounts of beach from the public use by fencing or enclosing the land in front of the public beaches."

As a result, a letter to Gunter after reviewing a draft of the proposal, said, "I feel the bill represents one of the most significant legislative benefiting the public interest. The State of Florida strongly supports protecting public access to the beach voluntarily."

Miss Caudill has worked extensively in many other wild areas of North and South America and the Caribbean as well as in Europe and Asia.

Everglades Country

The true Everglades, a river of saw grass that once swept an area 40 miles long and 40 miles wide, no longer exists. The free, seasonal flow of water—vital to the special plant and animal life—has been replaced by controlled allowances through canals and levees that have placed the Everglades under stress and its future in danger. In 1968, plans to construct a huge jetport in Big Cypress Swamp were halted, marking a turning point in the history of Florida and perhaps the United States, for it indicated man's growing concern with his environment.

In Everglades Country: A Question of Life or Death, author Patricia Lauber and photographer Patricia Caudill show how the Everglades has come to symbolize our nation's loss of environmental coexistence. Lucid and detailed descriptions of the geography of the park and of the plants and animals that live there are complemented by striking photographs. The reader comes away with a clear understanding and appreciation of the diversity of life forms that make up the park, and the problems that create the problems of, Everglades National Park.

Patricia Lauber has written more than 40 books for young people. She has been editor of Junior Scholaric, editor-in-chief of the Magazine, editor for science and mathematics for The New Book of Knowledge.

Photographer Patricia Caudill is well-known for her work with the camera for such periodicals as National Wildlife, National Geographic, and Natural History. In addition to other assignments, the Florida photographer has worked extensively in many other wild areas of North and South America and the Caribbean as well as in Europe and Asia.

Everglades Country, for ages 12 and up, conservation of the area's wildlife and interrelationships which exist among the varied plant and animal life of the watery glades and shows why and how the future of this vast area remains in such delicate balance, placing the human population in the environment in a perspective from which it can be rationally and quietly examined.


MONTICOT METAL SHOT

"During the past several months, there's been a lot written about the transition from toxic lead to nontoxic steel shot for waterfowl hunting. Conflict­ ing articles and statements have been published concerning bal­ listics, kill efficiency, choke movement, and 'knockdown power' of lead shot loads versus nontoxic steel shot loads. Not being arms manufacturers over waterfowl hunting experts, we've stayed out of this arena of dis­ cussion. However, reports Thomas M. Bar­ rett, president of The Superior Steel Ball Company, Hartford, Conn. "What we have stated in conversations with arms manufactur­ ers, Department of the Interior officials, and interested conservationists, are a few simple facts:"

"Superior is now in a position to supply enough steel shot to permit the closing of the Atlantic Flyway Steel Shot for water­ fowl hunting in the 1974-75 season."

"We have been working with U.S. and Canadian ammunition manufacturers on nontoxic steel shot since June 1970, and have supplied all the shot used in the various in-house tests, field tests, and tests conducted under the auspices of the Department of Wildlife and Natural History in the Florida, Georgia and South Carolina area."

"In a timetable standpoint, within 60 days of the issuance of any forthcoming directive banning the use of lead shot in a flyway, Superior's current facili­ ties can be producing at a monthly rate of 350,000 pounds, i.e., at an annual rate of 4 million pounds. Upon receipt of suitable contracts, the company has developed a program which, within 24 weeks, can move monthly production up to 800,000 pounds or, approxi­ mately 10 million pounds annu­ ally."

"From a product specification standpoint, superior to the average steel shot, we have found that the company has a very high clear picture of the production and economic considerations govern­ ing the manufacture of steel shot."

"In preparation for volume production, Superior has begun tooling up one of its plants in Washington, Ind., to serve as the main source of supply. This plant's midcontinent location gives it easy access to the arms manufacturers' loading facilities. The existence of personnel who have manufactured nontoxic steel shot on a pilot basis assures an easy transition to volume pro­ duction."

"From a technical standpoint, within 60 days of the issuance of any forthcoming directive ban­ ning the use of lead shot in a flyway, Superior's current facili­ ties can be producing at a monthly rate of 350,000 pounds, i.e., at an annual rate of 4 million pounds. Upon receipt of suitable contracts, the company has developed a program which, within 24 weeks, can move monthly production up to 800,000 pounds or, approxi­ mately 10 million pounds annu­ ally."
The Gadwall

by Gene Smith

There are gadwalls in Florida every winter, but not very many in any one place. These inconspicuous, medium-sized, gray-brown puddle ducks have the distinction of being the most widely distributed of all ducks, yet they aren’t plentiful anywhere. Gadwalls are found throughout most of the temperate zones of the world, except in Australia and South America.

A few gadgies turn up in all parts of peninsular Florida, but they most commonly winter in the northern and central sections. They frequent fresh water lakes, ponds, sloughs and streams, and sometimes brackish pools and marshes.

Gadwalls breed most heavily in the prairies and parklands of central Canada, but some nesting occurs in the other provinces and in the U.S.

These ducks winter from the Carolinas to Texas and eastern Mexico on the Gulf, along the Pacific coast of Mexico, and southward to Jamaica in the Caribbean.

After various mating rituals, gadwalls nest on land—sometimes a good distance from water. The ground nest is well hidden under the grass. A clutch of 7 to 13 creamy white eggs is laid, and incubation requires approximately 28 days. If Mrs. Gaddy is discovered and unduly disturbed during this period, she may abandon her nest and move away to establish another.

The down-covered ducklings are led overland to the nearest water shortly after the last one is hatched. Some inevitably fall prey to natural enemies: birds, snakes, bobcats, foxes, and other predators. A capricious storm often destroys many young.

Gadwalls feed on vegetation—grasses, sedges, pondweeds, and algae—and a few small animals, such as insects, larvae, and water beetles. Their desirability as table birds apparently depends largely upon what they’ve been eating. Some gadwalls are tasty—comparable to mallards and wood ducks—while others are described as hardly fit to eat.

Oddly, the gaddy frequently dives for its food even though it is a member of the dabbler group, which normally tip up to feed. The glossy black undertail area of the drake gadwall is a good field mark to look for when ducks are tipping up to feed.

In the 1973-74 waterfowl hunting regulations for Florida, the gadwall is assigned a point value of 25 for purposes of arriving at the daily bag limit of ducks. It was a 25-point bird in the 1972-73 season.

By directing the points for each duck shot—in the order they are taken—the daily limit is reached as the total points reach or exceed 100.

Waterfowl season comes in two phases this year, another change. The dates are November 22 through December 9, and December 20 through January 20. Be sure to check all the regulations and review the current point setup before heading for the marsh or lake. Call or visit your local wildlife officer, one of the Commission offices, or your county tax collector’s office for complete information.

FLORIDA WILDLIFE’S
FISHING CITATION

is available without charge, to any and all subscribers to Florida Wildlife Magazine, and their immediate families, who catch any of the fresh-water game fish of the prescribed species and size requirements. Citation, showing recorded date of the catch, will be mailed to the application within 90 days from date of catch and signed.

Only fishing citation applications received within 90 days from date of catch will be honored.

To receive a fishing citation, simply fill out the application blank below. Mail the completed form to the Florida Wildlife Fishing Citation office.

APPLICATION FOR FLORIDA WILDLIFE FISHING CITATION

Type of Tackle ___________ Weight _______ Length _______

Species ___________ City ___________ State ___________ Zip No. _______

Bait or lure used ___________ Date Caught ___________

Where Caught ___________ County _______

Registered, Weighed By ______ At _______

Signature of Applicant _______

The Editor, Florida Wildlife, Tallahassee, Fla.

Please send me the Florida Wildlife Fishing Citation with the inscribed data listed below:

Name (please print) _______

Address _______

City _______ State _______ Zip No. _______

Species _______ Weight _______ Length _______

Type of Tackle _______

Bait or Lure Used _______

Where Caught _______

County _______

Date Caught _______

With who _______

Registered, Weighed By _______

Signature of Applicant _______

Cut out and save this application blank.