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DON'T RELEASE EXOTIC PETS

FOREIGN ANIMALS WILL COMPETE WITH NATIVE WILDLIFE FOR FOOD AND SPACE
- SOME MAY BECOME AGRICULTURAL PESTS OR PUBLIC NUISANCES
- DANGEROUS ANIMALS MAY PRESENT A THREAT TO HUMAN SAFETY

STATE LAW AND REGULATIONS OF THE FLORIDA GAME AND FRESH WATER FISH COMMISSION SPECIFICALLY PROHIBIT THE RELEASE OF ANY ANIMAL NOT NATIVE TO STATE OF FLORIDA

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THE COVER
Summer buck. A whitetail with antlers not yet fully formed is spotlighted by early morning sun. Photographed at St. Marks National Wildlife Refuge by James C. Greene. See page 32.
Very small, white, head-headed jigs such as those used for speckled perch, are fished in tandem and top the list of white bass artificial. Sometimes putting a cork float above the jig and popping it as you retrieve is effective. A 1/8-oz rooster tail with one of the small speck jigs trailing also produces.

One of the best spots to begin looking for whites is just off the sand bar formed at the power line crossing south of U.S. 90. If the whites are running, you will notice vehicles clustered, in the evening, along the edge of the road near the power line crossing. At the water's edge, practically elbow to elbow, will be the white or "sand" bass anglers, some standing, some sitting on buckets. One of the main topics of discussion is the white bass—why they're biting or why they're not.

A biologist might come by looking for "ripe" brood white bass one of the bank fishermen has beached. Treading a fish he's caught for a good egg, or mill-pro-
ducer someone else has landed is one source of supply the fisheries people tap for hatchery use.

If you enjoy the feel of a heavily-bowed rod and the humming of a taut mono line, go for the power-packed sunshine bass. Its hybrid vigor and robust physique are responsible for its gamey qualities. As of this writing the state record stands at 11 pounds 1 ounce. The hybrid has only been in the river system four years and the state record is being edged gradually upward.

Since it, like the striped, has an affinity for feeding on shad, these make an excellent natural bait. Always take a dip net along as shad may be found along the catwalk at the base of the dam on the east side of the river. Shad are fished in the heavy tailrace current. Egg sinkers are stacked above a barrel swivel as necessary to keep the bait near the bottom. While maribou jigs are productive artificial.

Hybrids are also caught near the turbine intake on

**TRY FOR THREE**

To many Floridians, the name Chattahoochee brings to mind the state hospital located in that west Florida community. To the knowing rod and reeler, however, it means something much different.

Perched on high ground above the Apalachicola, Chattahoochee is the gateway to the Woodruff Dam area of the big river. For a trio of gamefish species—two naturals and a "handmade" one—this is where the action is. At the proper time and with suitable water conditions, you may make connections with striped bass, white bass, or at least as likely, with the sunshine bass. The latter is a hybrid—a hatchery-created cross between striper and white bass.

The white bass run picks up in March, and the optimum water temperature for triggering the run is from 55-65°F. Whites are taken on live bait and crawdads and grass shrimp are favorites. Small crawdads are usually best fished on the bottom using a No. 12 hook.

The walkway on the east side of the river just below Woodruff Dam is a favorite spot for the linelovers. Bob Rouassou, fish management specialist, displays a trio of Apalachicola River sunshine bass. Current state record for this hybrid stands at 11 lbs. 1 oz.

Through the floodgates at Woodruff Dam flows Florida’s most powerful river with its diverse and unique fish fauna. The dam has both negative and positive aspects from the fisherman’s viewpoint. It is the end of the road for fish such as striped bass and sturgeon which migrate upstream to spawn. The construction of the dam decreased the spawning habitat available for stripers by some 38 percent.

At the same time, by forming a block, it concentrates those fish species with an upstream movement pattern creating excellent fishing. You can fish the dam for stripers and sunshine bass without a boat—just stand on the catwalk next to the tailrace below the generating station and go for it.

Part of my job as a fishery biologist is to aid in collecting white bass brood fish for the Commission’s sunshine bass program. As a result I’ve accumulated some know-how on fishing for stripers, whites and sunshine. Perhaps a few words on the subject will help you get started in the right direction with these fish.

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**By Steve Babcock**

STEVE BABCOCK is a biologist with the Game & Fresh Water Fish Commission. An avid outdoorsman, he spends a great amount of time with fishing gear in-hand.

Photo by Stan Kirkland

JULY-AUGUST 1979
the lake side of the dam from a rock rip-rap. The proper rig for casting is a magnus or saltwater Rapala in black or blue trailed from a three-way swivel. From the other arm of the swivel a small white lead-headed jig is tied with a length of monofilament. The jig is the lure the fish usually hits. Don't neglect downstream areas for hybrids when you can fish creek mouths with small white jigs.

You can usually tell when a fisherman has a hybrid on. His drag will screech in short bursts as the fish tugs the rod. The line will move rapidly back and forth in the water and you'll see an occasional boil as the fish swims just under the surface. The fisherman most likely will be grinning from ear to ear and hopping around trying to keep up with his quarry.

The king sportfish of the Apalachicola River is the striped bass. An anadromous fish, meaning it ascends freshwater rivers from salt water to spawn, the striper shows up below the dam in the spring and spring months are April and May when water temperature is between 55° and 75° F, and again in the fall, during October and November. Since the Commission began keeping records three years ago, 33 1/2 pounds is the largest striped weighed in. Stories heard from local residents indicate fish over 50 pounds have been landed. The damming of the river has probably played a major role in the downward trend of the Gulf Coast race of striped bass.

To fish for stripers, live bait such as shad is excellent, rigged the same way as fishing for hybrids. Eels are plentiful in the fall and are the striped fisherman's most potent weapon. A visit to a fish camp near the dam when the eels are running will bear witness to their value as striper bait. Several rockfish anglers seeking bait at once can cause pandemonium to erupt as they sort through a silithering mass of eels, each attempting to capture the "select" or largest ones. It is axiomatic in fishing that big bait yields big fish and thoughts of a big striper can drive a man through some tense eel sorting.

If you tend to thumb your nose at live bait, there are several good artificials. A lead head jig is an excellent choice with red head and white body. Fish it deep and slow. The weight of the jig depends on water depth and current velocity. Second choice would have to be a deep diving Magnum Rapala possibly preceded by a keel weight. When fishing for stripers, choose tackle suitable for a large and powerful fish. "The one that got away" stories are a dime a dozen among striper fishermen.

I've told it like it is on fishing the linesides. The rest is up to you. Be sure to check your mono for nicks, and use strong knots. A 30-pound striper or an 11-pound hybrid will show no mercy.

A variety of artificials has produced results on the Apalachicola stripers, whites, and sunshines. This selection from the author's tacklebox includes plugs, spinners, and jigs that have turned the trick on the big river fish.

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**BEFORE YOU BOW HUNT**

An increasing number of Florida sportsmen are taking up bowhunting for the whitetail deer. A few are hard core bowmen, preferring to hunt only under the restrictions imposed by that ancient arm. A far greater number are two-season hunters, those who double their time in the open by hunting in both the bow and gun seasons.

Learning to shoot the bow is much easier than many people think; it sort of comes naturally, like a boy with a slingshot. Before hunting with the bow and arrow, however, there are a couple of important preparations that are often overlooked by the beginner.

No serious archer will go afield at season's opening without having honed his shooting skill well ahead of time. Shooting field courses is fun and good for getting the muscles in shape, but it should not be construed as final, before-the-hunt practice. The bowhunter needs to shoot broadheads; he needs to shoot at unknown distances; and he must shoot at game-like targets.

**No serious archer will go afield at opening of hunting season without adequate preparation.**

For hunting practice it is important to shoot at something other than a round target and one which is solidly connected with the ground, as field butts are. The visual connection between the two and the abnormal above-ground height can throw one off in the field and cause him to neglect the one most important point in hunting—picking a tiny spot to hit, rather than aiming at the entire animal.

Silhouette targets are the answer for the serious bowhunter. These are made by sketching the rough outline of a deer on heavy corrugated carton material, then cutting it out and either hanging it on a wire between two stakes or tacking it to the stakes with roofing nails, the stakes representing the legs of the animal. These targets should be set up so they appear to be at a
deer's normal height. Arrow retrieval is eased by having a bank or hillside behind the silhouette. These targets should have no visible aiming spots. The idea is to train yourself to automatically pick a spot without having a bullseye to help. You should use this type of target for practicing at least two weeks before the hunting season begins.

Another excellent form of bowhunting practice is an adaptation of the ancient English game of Rovers. It can be done alone, but a companion or two spices up the game considerably.

It is very simple, requiring only a suitable stretch of woodlands or tract of unused land. Slightly hilly or rolling terrain is excellent. The targets are picked at random and consist of old stumps, clumps of grass, pinecones, thistles, bare spots on a bank, or anything else suitable. If more than one archer is participating, the one who hits or comes closest to the target has the privilege of choosing a mark for the next shot. The game is both enjoyable and excellent for developing your judgment of distance.

If you plan to hunt from a tree stand, practice shooting down at silhouette targets from a flat-roofed garage, step ladder, or other elevated position. In practicing from such a height, bend the entire body over at the waist rather than just lowering the bow arm; otherwise the target will be overshot.

If you plan to hunt with a bow sight, some adjustment may be necessary, not because of the higher or lower trajectory but because of the higher or lower head position which may change the distance between eye and nock end of the arrow. Needless to say, such adjustments should be worked out well ahead of time rather than waiting until the actual hunt to do so.

Game has a way of making an appearance when least expected and the successful bowman is often one who is capable of shooting from the most awkward positions. Your practice should include shots from kneeling and sitting positions and with your body twisted either right or left from the waist. Shooting at fast-moving ground game is not generally recommended because of the difficulty in exact arrow placement. However, there are times when such a shot may be attempted as the game bolts by at close range. Here, the archer, like the gunner, must swing with his target and use a lead. Practice for such a shot can be obtained by using old tire casings with corrugated cardboard material inserted in the centers. Rolled down a slope or across uneven ground, these make for challenging and enjoyable practice.

Incidentally, no matter how sharp you think you are, never stop practicing when hunting season begins.
takes daily practice to keep the muscles, the eyes, and the confidence in shape. Always shoot a few arrows to limber up before beginning a day's hunt, and again during a lunch break and just before leaving your blind or stand. The more limbered up and coordinated you are, the better your chance when opportunity finally comes.

There is a certain amount of luck connected with the bowhunting endeavor, but the bowman who walks into an area on opening day for the first time that year, and heads home with a trophy after a few hours of hunting, is definitely the exception rather than the rule. The experienced hunter knows luck is fickle and prefers solid knowledge as his hunting companion. Such knowledge includes the lay of the land and the habits and movements of the quarry to be hunted. Even in an area well known to the individual, the habits of the deer may change with the seasons, depending on climatic conditions and food abundance.

Scouting intended hunting areas before the season opens can determine where the game is most concentrated. Successful bowhunters generally make several visits to their favorite hunting area prior to the season. If you intend to hunt an area unfamiliar to you, it often pays to check with local wildlife officers, rural mailmen, farmers and the like for leads on where game can be found.

The whitetail's daily cycle includes movement from a bedding area through a travel zone to a feeding area, to a watering area, and back to a bedding area. Food preference and abundance are the nucleus of all deer movement patterns. By locating the feeding areas, you can then place your blinds or stands with much better chance for success.

While scouting, search for bedding spots in cover. Check small streams for actively used crossings. Reconnoiter dirt roads through the area for well-used crossings. Observe tracks in such spots, note the time of day, and then examine the area again in morning, afternoon and evening.

Unless you already know, ask your state Game and Fish Commission about the most used deer foods in your area and familiarize yourself with them. You can then more readily find the feeding areas and check for fresh browsing. Droppings are also indicators of deer activity and are often easier to spot than tracks. The fresh ones will be dark, shiny, and can be mashed flat without crumbling.

Sketch a map of the area and plot deer sightings, good signs, feed areas, prevailing wind direction and stand or blind locations.

The odds are certainly against the bowhunter, but these easy and enjoyable preparations will give you a much better chance for filling that license.

placed in a natural setting, a silhouette target, such as the deer cut-out in the photo below, lends an air of realism to target practice.

Fishing

Bugs For Bugs

"There may be more effective ways to do in a fish, but if they're any more fun, I couldn't stand it."

I suppose everyone who has splashed away much of his life at one form of angling or another has a favorite kind that carries most of the memories and nostalgia. With me it is bug fishing. I'm neither touting it as the most skilled method nor as the most successful. In fact, I have done it when other ways would have caught more fish and some of my trout and salmon catching friends have explained delicately that it doesn't require much finesse. My saltwater friends who go for records tell me how streamers tend to be more effective in most cases.

Popping bugs (as well as "sliders" and hair bugs) haven't really come so very far in the past half century. They cast a little better because of advanced designs, but a box of 40-year-old bugs I have here on the desk would do very well today if the bass happened to be staning upward.

When I started throwing bugs on one of dozens of Cow Creeks in the Midwest in the early thirties the business of bug fishing was already an old method. In fact, I'm sure a larger percentage of bass fishermen used fly rods in those days. It was the only way to throw very small and very light lures.

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Spinning hadn't appeared and the plugging reels required considerable weight to get going.

As a kid I'd have some junk fly rods but my first really practical one was a 3-piece split bamboo that took what we'd call an 8 line today and it cast very well. About 25 years ago I had it refurbished but haven't used it much since and, like me, it is something of an antique now. When I had it reworked I took it to the Winston Rod Company shop in San Francisco and the refurbishing cost quite a bit more than the rod cost new.

I carried the bass bugs to a lot of places. There was the time when fishing was slow on the new Lake of the Ozarks in Missouri and one evening they came swarming up for bugs when nothing else worked and I was the hero of a little fishing camp there. I remember that one of the bass was a husky smallmouth that went deeper than any bass I'd ever

"Antique" popping bugs. The big one at the top was known as the Stunted Skunk.
that big bass hit just as the sun dipped and the barred
owls tuned up back in the cypress.

And my first fly rod snook in a black-watered little
creek of Everglades National Park came up as a
frightening bulge and chugged one of those old
Dragon Flies. By the time I got to Maine the bugs
were a little easier to cast, the rods were lightweight
glass or snappy bamboo and I was leaning toward
hair “powderpuffs.”

So I don’t use the old bugs anymore although I
keep several of the fragments. Although I
am a little short on the Latin names that
freshwater trout fishermen use so freely these
days, and am told repeatedly that I could catch
caster fish better some other way, I guess I’d rather fish
with a bug than with anything else.

You can see what’s going on, or imagine it. You
can imagine the big bass (or whatever you’ve
thrown the bug over) seeing it plop down and pos­
ing it. Bugs are best when the sun is almost down or
just a changing glow and a good bass bug
bang. You’ve let it sit for a little, you twitch it and it sputts
up a little flick of water and maybe the bass will
look at it. Then, after a little

Jack crevalle, left, are vicious strikers of popping bugs, and some call them the hardest fighting fish of all, pound for pound. Dudly Dudley spinnertail, right, is designed to work “on the way down” with ultralight spinner.

It’s fun to fish them while you’re wading or floating
along in one of those inner tube that the later
fishermen call “belly boats.” At first we called them
just “tubes” and later we named them “floater
bubbles.” They lack the kind of glamour that comes
with streamlined bassboats and three-figure horse­
power.

Bugs go well with canoes though, the paddler
and the caster engaged in a sort of double pleasure,
sliding along quietly next to a lake shore or down a
river that doesn’t move too fast. Bug fishermen
don’t talk very loudly.

Most bass-buggers areream fishermen, too. They
just use smaller bugs or rubber spiders and some of
them won’t fish at all if they have to go deep, even
though that may take more skill than doing it on
top. Some of the most skilled fishermen I’ve known
have fished beneath the surface, seeming to have
some sort of X-ray mind that told them what was
going on down there.

But I’m a little like Jack Gowdy who was fishing
with me on an old coal mining strip pit back in
southeastern Kansas 40 years ago. It was a pretty
place, even then, the ugly little ridges covered with
small trees and grass and the shoreline ragged with
emergent water growth. Fishing was poor that
evening. Jack took off his bug and substituted a tiny spin­
ner and fly. He flipped it ahead of our little canvas
duck boat and stripped it along the shore. A burly
green sunfish grabbed it. Then he hooked a small
bass down there on a later cast.

But Jack reeled in and stripped off the spinner.

“If I’ve gotta use wet bait I’d just as soon go back
to town,” he said.

**Jack Crevalle**

I got into trouble a while back when Lefty Rea­
gan, a Key West guide noted for the big offshore
fish landed by his fly fishing clients, did some
chumming and hooked me to more jack crevalle
than I really wanted to handle.

This started when Ray Donnersberger and I
decided we wanted some of that chumming business
and Ray, living in the Keys and knowing about such
things, contacted Lefty. The chumming and teasing
drin, primarily intended for amberjack and cobia,
goes like this:

Lefty anchors his big open boat over a reef (this
one was 17 feet down) and lowers a chum bag over
the side. He sweetened its appeal by tossing out a
few handfuls of pilchards. If something big gets attentive Lefty has a big
chugging plug to tease it with. Well, the chum
didn’t attract anything but a bunch of mangrove
snappers that were too smart to bother any lures we
threw at them. So we began throwing jigs around
and finally a big bubble, surface-peapping jack cre­
valles showed up. Lefty kept them in range with his
hookless chugger thrown on a spinning rig and Ray cast a big saltwater popper at them with his fly rod.

That turned into quite a brawl because the jack he
hooked weighed around 8 pounds.

Every now and then the jacks returned and each
time Ray would hook one. Then it was my turn and
after getting jumpy and taking the bug away from
one charging contingent I flapped it to

**Dudly Dudley**

Some months back I got almost poetic about the
value of special action as a lure is sinking, which is
the basis of much of the attraction of jigs and cer­
tain wobbling spoons. Many spinnerbaits have extra
appeal on the way down.

Bing McClellan calls my attention to a spinnerbait
produced by his Burke concern which places
emphasis on sexy sinking. Instead of a spoon-shaped
spinner ahead of the single hook, this one, named
“Dedly Dudly,” has a sort of modified propeller
type of extreme light alloy. Toss it into the water and
the spinner works hard all the way down.

Many fishermen actually “jig” spinnerbaits, espe­
cially for bass, allowing the lure to get clear to the
bottom, then flipping it up for a few inches and
allowing it to fall back. This “Dedly Dudly” thing
did all right for us when fish in patchy eelgrass,
reeled fast over the top and casted flashtail in the
pockets, then hurried up again.

**BREAM-BASS RELATIONSHIPS**

With bass fishermen increasingly interested in
size limits and the words, “slot limits,” appearing
more and more there’s increasing appraisal of the
strange populations of certain bodies of water.

“Slot limits” refer to size limits engineered to protect certain age classes of bass that have been
having a bad time. For example, if 10-inch bass are
having rough sledding because of fishing pressure it
might work to prohibit the keeping of fish between
9 inches and 14 inches and allow harvest of any­
ting else.

The pardish-bass relationship isn’t as simple as
the proposal to “give em plenty of bluegills and they’ll multiply and get big.” Suppose too many of
the middle-sized bass are caught and the bluegills
get the upper hand. The bass get too thick and
become stunted, great for the few lunkers that have
survived, but they are too large to provide food for
little bass and are highly destrutive of bass eggs
and tiny basslets.

Result: Poor fishing, a few monsters and nothing
much coming along.

**Electric Trolling Motors**

Down in the Florida Keys I have seen quite a few
electric trolling motors used at the stern of flats
fishing boats. Good reason why they’re back there.
Up front they would be in the way of a fisherman to
some extent and such boats have rather high bows,
maybe not ideally suited to the electric. And when they’re at the stern the guide can operate them.
An electric at the stern is terribly handicapped as
to performance. I’ve tried it and found myself in
trouble in a little wind or current. Couldn’t turn the
bow around. For that matter, I’ve often talked to
an electric motor to the gunwale of a small boat a little
back from the bow, simply because there was no
other convenient place to put it. Just a couple of
feet back makes a big difference if the breeze moves.
Put it in front if at all possible.
The License Fee Increase

WHERE YOUR $$$ GO

Florida sportsmen also can pick up a resident combination hunting and fishing permit for $17.50. Hunters and fishermen who buy licenses from a Commission subagent, such as a bait and tackle shop, pay an additional quarter.

The increase in hunting license fees averages out to about 33 cents a month for a Florida resident hunter, the executive director said, "or less annually than a box of shotgun shells."

"Florida fishmen are currently paying almost as much for 100 earthworms as they will for the new fishing license. If they use that $6.50 license only 10 times a year, each trip will cost only 65 cents—the least expensive item on a fishing trip."

"Citizens will be able to see their tax dollars at work in the coming years as more wildlife officers are placed on patrol, more fish are put into our lakes and rivers, scientific fish and wildlife programs expanded and outdoor recreational opportunities created on the state's wildlife management area lands," Brantly said.

Because of the license fee increases, the Commission's Division of Law Enforcement will be able to hire 36 new wildlife officers, investigators and inspectors in 1979-80 and 11 more officers in 1980-81. The increased number of wildlife inspectors has not kept pace. With the passage of the new fee bill, more inspectors will now be added to the Commission.

To meet its burgeoning workload, the Division has been forced to use wildlife officers for inspection duties and, in some areas, this has caused a total enforcement efficiency loss. New laws pertaining to personal wildlife pets (F.S. 372.922), falconry and endangered species have placed more and more responsibilities on this already overburdened program.

Wildlife inspectors have a tremendous responsibility in helping to protect the environment by monitoring exotic animals and birds imported into Florida. Last year, 4,000 restricted fishes and 250 illegally imported or possessed wildlife specimens were seized.

License fee revenue also will be used to replace

lightly needed law enforcement vehicles. The Division has been forced to retain its patrol vehicles for as long as five years. These vehicles, used in rough terrain, often are driven for more than 100,000 miles. Because of the long service, high mileage and off-road use, maintenance costs are extremely high. These conditions result in lost enforcement efficiency when officers are required to spend an inordinate amount of time getting their vehicles repaired.

In addition, with the state's unique terrain, specialized expensive equipment including airboats, half-tracks, full-tracks and swamp buggies, are essential to provide effective wildlife law enforcement patrols for such areas as the Green Swamp, Everglades and Big Cypress National Preserve.

The Division of Fisheries will receive $562,183 in 1979-80 and $549,923 in 1980-81 to help meet the challenge of enhancing Florida's freshwater fish resources. Recreational fishing is growing faster than the state's population. To meet some of the tremendous utilization of the state's fisheries resources, programs must be expanded to supply more of Florida's new homemade fish, the sunshine bass.

Without more sunshine bass production, only a limited number of lakes and rivers can be stocked. Just

Sunshine bass fry in net, left, highlight prospects for developing further the promising new hybrid fishery. Increased funds will boost hatchery production.

The number of wildlife officers in the field, below, will be increased substantially over the next couple of years as a result of additional funds from license fees.
three river systems now contain sunshine bass, and work on other new species such as flathead catfish can't be accomplished without additional manpower. To adequately maintain and operate a fish hatchery, one person per five acres of production ponds is required. The Commission's ratio now is one person per nine acres. With additional hatchery personnel, sunshine fingerling production can grow by one million. Presently, the 28 acres of production ponds are raising 2.3 million fingerlings. With the additional personnel, production can rise to 3.3 million. This means with additional ponds the Commission will be able to produce more than five million sunshine bass by 1982 for stocking an additional 75,000 to 100,000 acres of public lakes and streams.

During the past two decades, more than 30 undesirable exotic species of fishes have established substantial populations in Florida's public waters. These fish vary from the walking catfish to the little known, but probably more damaging, South American tigerfish. Most recently, a South American piranha was discovered in a Palm Beach County pond and chemically eradicated by Fisheries personnel.

The ever-increasing problem of exotic fish contamination and its associated impacts on the state's native aquatic resources requires much greater attention than existing fisheries programs could provide without money from the license increases. It is essential the Commission now begin a broad field investigation to research established species and to develop knowledge and methods of restraining future exotic population growth or contamination. The addition, through the fee increases, of a two-man research team at the Boca Raton Exotic Fish Laboratory provides a field investigative group to aid in accomplishing this mission.

To meet increasing commercial fishing responsibilities, investigation teams are to be established to research, monitor and provide recommendations for regulating the industry. As Florida inland waters produce growing numbers of commercially harvestable fish, industry regulation must be developed to insure a wise use of these resources. Personnel assigned to these inspections teams will monitor commercial fish populations to ensure an optimum sustained yield.

Florida's freshwater commercial fishing industry has been broadened to include not only native fisheries but the tropical fish industry and aquaculture as well. The tropical fish industry has become a multi-million dollar business. The 60 million tropical fish, produced by fish farms in Florida, now represent 80% of the total U.S. production. Tropical fish make up the largest class of air freight in Florida.

Aquaculture of food and shellfishes is an industry which is growing in importance on the international level. Special attention is being directed to Florida because its climate is so well-suited to aquaculture. These investigative teams will help determine the aquaculture feasibility of native and exotic fish species where industry has made assistance requests.

The Commission's sportfish introduction projects will involve increased research methods for artificial spawning, culture requirements, stocking and field evaluation of new species.

The Division of Wildlife will receive $597,966 in badly needed monies to upgrade and protect Florida's wildlife management system. The Commission currently administers more than 4,500,000 acres in its wildlife management program.

The additional funds will be used to more adequately staff the wildlife management area system, to intensify research on selected species, construct bridges, roads, and public access facilities, and provide herbaceous plantings for deer, turkey, and quail, stocking of hogs, water level manipulation, and general habitat improvement.

Several wildlife species are hunted or trapped for their pelts, and a number of Floridians sell these pelts as a part of their living. Otters, bobcats, raccoons and mink are among the harvested animals, but only limited basic research data is available on which to base property management. Additional manpower and funds will be devoted to this aspect of natural resource management.

Florida's endangered species will be aided, too. Only 20 of the 87 species contained on the state's endangered and threatened species lists are specifically provided for through Florida's current Endangered Species Program. The 10 of the 36 federally-listed Florida species are specifically provided for. Very little is known about the survival requirements of many of these species and others are in urgent need of special management and/or protective measures. Additional funding will allow the Division of Wildlife to carry out the appropriate reserves.

Increased funding will permit an expanded Commission Wildlife Reserve program. This citizens' volunteer group, under Commission direction, will now be expanded to cover the entire state whereas in the past only three of the five administrative regions had this program.

The Commission also will be able to undertake new work in the environmentally sensitive Okeechobee wetlands and the unique Apalachicola River system. These areas are of particular environmental concern to the Commission and must be preserved.

And finally, license fees from Florida's sportsmen will mean the Commission can upgrade its administrative staff operations to serve the state's citizens more efficiently. "Each dollar of revenue produced from license fee increases will go to making the Commission a more effective organization to serve not only the sportsmen of the state but all citizens who treasure our environment," Brantly said.

Additional funds will provide means for upgrading and better protecting the wildlife management areas. Endangered species, including panther, left, will benefit from stepped-up management activities. An expanded wildlife reserve program will be possible with increased income. Northwest Region reservists are sworn in, photo below.

Photo by W. L. Adams
THE CHAIRMAN COMMENTS
By BERNIE PARRISH
Chairman, Game and Fresh Water Fish Commission

As I prepare to step down from my term as Chairman of the Game and Fresh Water Fish Commission, I would like to take this opportunity to review some of the accomplishments of this agency over the past 12 months.

First of all, you have probably heard that hunting and fishing license fees have gone up. Although this is a time when the money pinch is hitting everyone hard, no one was feeling the crunch more than the Commission.

This is the first time hunting licenses have increased in 37 years. And fishing licenses have risen only one dollar in that same time period. Without the passage of the fee increase, the Commission was faced with the very real prospect of having to cut back programs. Now we have some breathing room and the prospect of an additional $3 million in desperately needed operating revenue.

The revenue will go towards increased law enforcement protection, increased fish hatchery production and increased management of our wildlife areas. Additionally we look to more personnel to carry out some important research for both game and non-game species. Although no immediate large scale purchase of lands for wildlife management areas is planned, the increase gives us the option to purchase or lease more public lands for hunting opportunities. As the number of hunters continues to grow, we must meet the ever-increasing demands for publicly-owned wildlife management areas.

Another bill we saw passed this year has a direct bearing on public lands for outdoor recreation. With the enactment of the Environmentally Endangered Lands Bill, some $3 million has been earmarked next year for purchase of lands which are sensitive to development. This bill allows the Commission and other agencies to become involved in preservation of rare ecosystems as well as provide for outdoor recreation.

The procedure for acquisition of these lands, financed through the severance tax on minerals, has been strengthened under the new law. It is a good law and one which I feel will benefit all conservation-minded Floridians.

When I took over as chairman, I made a few promises to myself and the people of Florida. I am happy to report that, thanks to the diligent efforts of the Commissioners, Commission staff and the sportsmen of the state, I have seen most of them come true.

I made a commitment to see the Wildlife Reserve expand to encompass all of the state. This is becoming a reality as the Commission received the funding and personnel to implement the program in all five regions. It would be great for all Floridians to have the opportunity to participate in the Commission’s natural resource policy by joining the Reserve. Since its creation 10 years ago, the Reserve has offered the citizens of the state an unique opportunity to work in a wide variety of wildlife and fish management tasks. The value of these conservationists to the Commission is incredible. Many times a task might not have been done if it hadn’t been for these volunteers.

I also wanted more emphasis on our outstanding Hunter Education program. Recognized as one of the best in the nation, the Hunter Education program is not designed to turn out sharpshooters, but to work to create the respect and responsibility that using a firearm commands.

Through the efforts of our Hunter Education staff, the program is being implemented in several county school systems this fall. Additionally, it is being taught this summer at camping programs across the state. We hope to see more than 8,000 people certified as Florida Safe Hunters this year.

Although I will be turning over the gavel to another Commissioner this summer, this does not mean my involvement will end. As a member of the Commission I will continue a strong push to get more Floridians, from all walks of life, involved in our work. It is the only way to ensure we are doing the best job possible for the people and the resources of the state.

This past year as chairman has been one of the most rewarding and enriching experiences of my life. The people I have had the opportunity to meet and work with have made my term an enjoyable one. I hope the next chairman has the same type of experience.

Critically examining the condition of confined animal life and controlling exotics are important jobs of the WILDLIFE INSPECTOR

The Florida Game and Fresh Water Fish Commission is charged by law with the regulation of all wildlife and freshwater fish in Florida, whether native to the state or not. On this basis, the control of the importation and possession of exotic wildlife and fish comes under the jurisdiction of the agency.

As early as 1969 it became evident that the law enforcement division was rapidly losing ground in its efforts to meet the expanding responsibilities of the Commission in the regulation of wildlife exhibits, the importation and exportation of exotic and native wildlife and in control of the propagation and sale of wildlife and freshwater fish in the state.

In order to meet these specialized needs, a wildlife inspection section was established. The move represented a radical departure from the norm of most wildlife enforcement operations. Wildlife inspectors are required to possess a four-year degree in a natural science such as zoology, mammalogy or herpetology. In addition, they must attend numerous specialized training sessions on exotic fish, plant and bird species.

By Kyle Hill
Monk parakeet, right, above, is established in the wild, and poses a potential agricultural threat. Below, more than 20 million tropical fishes are brought into Florida each year.

Identification as well as on falconry, zookeeping and other wildlife-related topics in order to develop expertise in these areas.

Wildlife inspectors are the first line of defense against potentially damaging introductions of exotics. Last year, more than 4,000 restricted fishes and 250 specimens of other wildlife were seized by Commission inspectors.

As an indication of the seriousness of the situation, at the current time, there are at least 82 animal species alien to our shores that have been recorded "in the wild" within the state. A breakdown shows 14 mammals, 20 reptiles, three amphibians, 22 birds and 23 fish. We also host countless exotic invertebrates such as the fire ant and the giant African land snail. Nor are members of the plant kingdom ignored: witness the multimillion dollar headache represented by such thriving imports as hydrilla, alligator weed and water hyacinth.

WILDLIFE INSPECTOR

The threat posed by these exotics can be grouped into four categories.

First, those that pose a threat to human safety. Most people can readily understand the danger a population of piranhas or freshwater stingrays would represent to the recreationists of Florida. However, the problem is even more complex and subtle than the threat of a crippling stab of a ray's barb or the slashing teeth of the piranha. There is the threat of introduction of foreign diseases that can be transmitted to livestock or to man. Many of the most dangerous diseases require a chain of intermediate hosts. If by chance one of these alien hosts should become established here, the results could be disastrous. Newcastle's disease and pitticoecosis are examples of afflictions that exotics have brought to this country.

The second consideration is that, because of their high reproductive potential, exotics pose a threat of crowding out native forms. An animal that is capable of very fast reproduction may outcompete indigenous species for food and space. The tilapia and walking catfish are examples of foreign wildlife that are on the way to crowding out native bass and sunfish in some waters. Fourteen tilapia can produce 14,000 young in just two and a half months. The species provide parental care of the young to a degree unusual in fish, holding the eggs and fry in
the mouth. This serves the admirable purpose, from the standpoint of the species, of ensuring a high survival rate of the eggs and young.

Third, many exotics prove very aggressive and prey on, or offer keen competition to, our native species for food and living space.

In this category are the fish-eating (piscivorous) fishes. The tigerfish, piranha, snake-heads, electric eels and electric catfish are examples of fish that will eat virtually anything that does not eat them first.

The piranha's reputation—part fact, part fiction—holds that at least one species is able to skeletonize a victim in minutes. A possibly more realistic threat, however, is that to our native bass and bream. The piranha certainly would be a strong competitor for food and would be a formidable predator on our native species should it become established here.

The electric eel and the electric catfish use their powers of producing an electrical charge to stun or kill their prey. Their electrical current is also used as an echo locator—a type of sonar system—to find their prey. Both species have small, weak eyes. An electric eel can deliver a 600-volt shock, an electric catfish a jolt up to 450 volts: both fish are unpleasant sorts of invaders to be free in our waters.

Fourth, they present a threat to agricultural activities. This category is amply filled by a substantial list of foreign animals, birds and invertebrates. The South American fire ant, the

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The South American fire ant, the

WILDLIFE INSPECTOR

monk parakeet and the giant African land snail are among those on this list.

Why is Florida in particular having all this trouble with exotics? Aren't any other states having exotic animal problems?

A primary factor in the successful establishment of so many exotics in the wild here is the subtropical climate. Florida's weather is similar to that of many Asian and South American countries. Escapees, plant or animal, have a good chance of surviving and becoming established in the state. Florida, however, is not the only state having problems with exotics. Hawaii, as an outstanding example, has lost more than 60 percent of its native land birds following the ill-starred introduction of the mongoose, European hare, house cats and rats. The exotic animals list in Hawaii goes further: it includes more than 500 species of insects, more than 50 species of birds and numerous reptiles, amphibiens and moths.

A secondary factor that adds to Florida's difficulties with foreign animals is the volume of exotics that passes through the state. Florida has become a major point of entry for foreign animals. In 1976, approximately 35 million animals and fish were imported into Florida. These were distributed to nearly every state through the pet trade. The demand by Americans for foreign animals is staggering. Suppliers cannot meet the demand, although a steady flow of exotics arrives daily in Florida.

Tropical fish are undoubtedly the most populous of the exotics that have found a home in Florida. Couple the approximately 20 million fish that are import-
ed each year with the production of the 600 fish farms in the state and it is easy to understand how nearly 80 percent of the nation's aquarium fish originate from, or at least pass through, Florida. Tropical fish represent a $35 million a year business. Of course, some specimens inevitably escape. Florida's lakes and canals provide the perfect sub-tropical environment for these transplants to flourish.

Unfortunately, careless handling by importers, farmers and home aquarium owners has resulted in the establishment in our waters of over two dozen species of exotic fish.

Since one of the duties of the Florida Game and Fresh Water Fish Commission is to protect the ecology of the state, we are concerned with this dramatic form of "biological pollution." Despite the rules and regulations which make it illegal to release or allow the escape of any exotic animal into the wilds of Florida, there are some individuals who simply will not heed the law. This is the reason the Commission developed the wildlife inspection unit and drew up the restricted fish species list. It's all part of our battle against the invasion of the exotics.

Capt. KYLE HILL heads the Division of Law Enforcement's wildlife inspection section from his office in Tallahassee.

 Inspector checks panther, above, part of traveling wildlife exhibit. The heavily parasitized deer in photo, right, was part of a northeast Florida exhibit that was closed down because of failure of the owner to adhere to health and safety standards.

WILDLIFE INSPECTOR

A Natural History Landmark -

CORKSCREW SWAMP

By Reed Hellman

We were traveling west on Alligator Alley (State Road 84). Around us the Big Cypress area was silver grey. Huge bromeliads gave bodies to the stick-figure cypress trees, Palmetto scrub and occasional pines provided color, their greens and the blue sky reflected in roadside canals.

Perched on an isolated cypress branch, far enough from us to make our cameras useless, was a bald eagle. We pulled off the highway and stared as he slowly launched from his branch and wheeled north over the 'glades. The white-feathered head and the wingspread were distinctive. This was a big bird, as regal and impressive as we had imagined, beating its way over the winter-bald Everglades.

We were still talking about that eagle when we rolled into Corkscrew Swamp Sanctuary on the northern edge of Florida's Big Cypress. Here the National Audubon Society maintains a refuge of some 11,600 acres of cypress swamp, pine flatwoods, soggy prairie, and sawgrass. Until 1954, only occasional hunters or loggers cared to penetrate this end of south Florida. A coalition of 14 organizations joined to form Cypress Rookery Association and asked the Audubon Society to manage the wilderness area. More than a mile of boardwalk was eventually constructed, enabling tourists, birdwatchers, and wildlife enthusiasts to penetrate the large strand of still-virgin cypress.

A fine balance has been established in the Corkscrew. The wilderness and its biota have been preserved and protected, but also made accessible. It is not necessary to outfit a full expedition to see an alligator sunning in his nat-
ural home. You can see the lanky limpkin stalking snails on the pond lettuce without wading a mile through hip-deep swamp. Except for the boardwalk, the sanctuary remains untouched. The feeling that we were privileged visitors struck us the moment we left the entrance station and entered the pine flatwoods.

Crossing through the pineland and over a fringe of wet prairie, we entered the hush of the cypress tangle. I find it necessary to stop to attune my senses to the rhythms of an area before I can really see what is there. Each sound and flicker of motion has to be individually investigated. The wind has to be gauged and tasted. Had I stopped to perform a complete "focus," I might still be standing on that boardwalk seeing, hearing, feeling. There was life everywhere. Even dead branches held clusters of ferns, lichens, and epiphytes. The water was never still. Mosquito fish made little pops as they struck the surface, shaking the duckweed. Frogs leaped across the water, always one jump ahead of our direct gaze. Beneath the dark surface, larger fish stirred ripples as they hunted smaller prey.

It was the variety of the plant life that held our attention. Duckweed floated on the tea-colored water. Resurrection ferns in various shades of green and brown spread along tree branches and up the trunks. Bromeliads and wild orchids clinging to custard apple trees sent up blue-red flower spikes. Every available surface had something growing on it. Several varieties of ferns, pop osh trees, hollies, willows, and sweet bay pushed up from the marshy shallows. The wet prairies were waving waist-high carpets of sawgrass. Despite the winter season, green was the dominant color.

Some of the varied flora and fauna of the Corkscrew are shown in this panel of photographs. Clockwise from top left: white ibis, Guzmania air plant, view of Lettuce Lake, green heron, red-shouldered hawk, resurrection fern and butterfly orchid.

**CORKSCREW SWAMP**

REED HELLMAN, a freelancer from Baltimore, Maryland, fell under the spell of the Corkscrew area on a recent visit.
CORKSCREW SWAMP

him problems. Still composed and dignified, the heron puffed out half of a fish dangling and flipping from his beak.

Over on the edge of the pond, a flock of white ibises kept up a noisy chorus for the general public. Snowy wings flapped as the feathered crew hopped from low branches of the bordering trees down to the pond and back again. These birds were as unconcerned about our presence as the heron had been. They were so close to the platform that we could easily photograph them; a telephoto lens was not necessary. Their quizzically red legs looked ridiculously long and fragile as they strolled the fringe of the pond.

In the center of the pond, an Audubon staff naturalist had set up a large spotting telescope focused on a cabbage palm island in the middle distance. Basking in the afternoon sunshine on the island was a fair-sized female alligator. The telescope let us right into her particular corner of the swamp. She rested easily, occasionally yawning and readjusting her spiky jaws. As we watched, another larger female alligator came up from the shady back of the island and proceeded to flap down on top of the first. We waited, anticipating a fight for possession of the prime southern exposure. Even the noisy ibises quieted down and took seats.

At arm’s length he stopped and posed, eyeing the action both below the pond lettuce and on the boardwalk. His blue-grey plumage showed flashes of pure aquamarine as he uncrossed his long neck and struck a four-inch gape hiding beneath the surface. The fish’s front half disappeared down his throat, but the back half seemed to give us a glimpse of aquamarine.

The pond cypress gave way to bald cypress with their characteristic “knees” rising out of the swamp. Here the water was deeper and the tangle thicker, but the air was alive with sounds of wildlife. Overhead, a red-shouldered hawk circled just above the treetops, looking for lunch. Sparrows and small wrens, cardinals and tufted titmice flitted from branch to branch.

After a short walk, we broke out of the cypress gloom and started across an irregularly-shaped pond. The surface was covered with what appeared to be lettuce leaves. Near the center of the pond, the boardwalk forked, the right path leading to an observation platform.

Reaching that platform we met a little blue heron who obviously held the deed to this pond, and was just letting the Audubon Society borrow the area. He had the air of a country squire checking on his guests, making sure that we were enjoying our visit to his estate. He had the presence as the heron had been. They were so close to the platform that we could easily photograph them; a telephoto lens was not necessary. Their quizzically red legs looked ridiculously long and fragile as they strolled the fringe of the pond.

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Seventy Five Years of Pelicans

By Mike Smith

A hint of winter rain hung in the air as Lawrence Wineland, biological technician in charge of Pelican Island, cut the motor and let the boat drift into the murky shallows. Just ahead of us Pelican Island lay long and low in the salty Indian River, its once tall trees now worn to haggard stumps, the remaining mangroves crouching under an overburden of adult birds and nests.

The river, I saw, had gnawed at the island’s edges so that a lone mangrove, wind-twisted and isolated by water, stood at each end. Compared to the pelicans whose expression is almost benevolent, the huge black birds with their red pouches and the evil-looking hook at the end of their beaks, appeared malevolent. Actually, they are known to rob gulls and terns in flight. But as they took to the air, their beauty was startling. They sailed like swift kites, black and red against the blue.

There had been as many as 200 frigate birds on Pelican Island last year, Wineland said. “The wood storks come in summer and almost take over the feeding grounds. And the island has ducks, coots, gulls, herons, egrets, vultures, crows and many water and wading birds. There seems to be food enough for all.” He grinned. “People ask why I don’t feed the birds. We’re not about to do that. They’d be lined up, looking for a handout.”

While the island refuge is off-limits to the casual visitor, thousands of school children and civic and club groups visit it each year. “The fourth graders are given a chance to study not only the birds but also the turtles and the small fish.”

Wineland has watched over the island and its environs for 13 years. But the history of Pelican Island goes back to 1881 when a young man named Paul Kroege and his father arrived in the tiny river settlement of Sebastian. They were German immigrants, seeking to homestead a section of land. The elder Kroege chose land that included an enormous Indian mound—Barker’s Bluff, it was called, for a man who was scalped by the Indians. As a youth, Paul often climbed the mound and stared out a mile across penetrable thickets. In 1970, when I saw it again, some of the taller trees were dying and the grass was thinning. Now it was obvious that bird-wear had killed all the tall trees, and worn the mangroves down to shrubs.

The winter light changed from sun-brill to rain-gray as we circled the island in the small boat. Wineland explained that 4,700 acres of surrounding water and bottom lands are leased from the state to protect the pelican’s fishing grounds.

“This is the richest fishing area in the river,” he said. “And the river is clean enough here to produce good oysters and clams.” He added, “The excrement from the birds enriches the water and helps grow the grasses that many fish need.”

We saw a white pelican floating near the island, then a group of about 25. “Winter visitors,” Wineland said. “They’re pointed to a tall dead tree. “Frigate birds!” A dozen frigate birds, their scarlet neck pouches distended like bubble gum bubbles about to burst, hunched in the tree. Compared to the pelicans whose egg expression is almost benevolent, the huge black birds with their red pouches and the evil-looking hook at the end of their beaks, appeared malevolent. Actually, they

An adult brown pelican, left, is "unusual" or "interesting" in appearance, but is certainly no avian beauty. Ugly ducking start in life is nestlings’ lot, as shown by young birds on nest, below.
the river to the sandy spit of a wind-scoured island where pelicans were trying to nest. He felt that the big birds were his friends, as the storks had been in Germany. He was intrigued by their spectacular dives—the brown pelican folds its wings back and plummets into the water from 30 feet or more in the air. Then, immediately, it bolts to the surface. He saw that the big birds use their bill pouches as seines, and that they feed their young by regurgitation.

In time, as Kroegel watched, mangroves took root on the island so that the pelicans had small trees in which to build nests. The colony grew from a hundred to a thousand and more.

But now tourists were coming to Florida. It saddened Kroegel that those in boats sometimes raided the pelicans' nests, taking the eggs as souvenirs. As the 19th century waned, boat traffic on the river speeded up. Sailing and steam yachts, bound for Palm Beach, passed within a hundred yards of the island. All too often well-dressed travelers with expensive guns took pot shots at the birds. Many times after yachts were gone, Kroegel found wounded birds and starving babies.

This careless carnage so enraged Kroegel that when he saw a yacht coming, he would leap into his sailboat and make for the island. There, anchored between the channel and the island, he stood in his boat, a ten gauge shotgun across his arm.

Kroegel was not a tall man, but he was stocky and his appearance was striking. He had the fierce blue eyes of his Saxon ancestors, a huge walrus mustache, and a body made strong by years of boat building, sailing and hard work.

"No one ever took a shot at him or at the birds when he was there," his daughter, Frieda Thompson, told me recently. "Of course, he wasn't always there. So he began to talk to all the river men, to spread the word of conservation. He wanted the President of the United States to know about the pelicans."

Kroegel was not alone, even in his earliest efforts. William Dutcher, president of the American Ornithologists Union, had learned of the plight of the pelicans. George Nelson, a wildlife photographer from Harvard University, also came to Sebastian to sail with Kroegel to the island. Others came, too.

"Sometimes our yard was full of tents," Mrs. Thompson said. She and her husband, J.T. Thompson, still live on the old homestead.

Kroegel became a semi-official warden, with a starting salary of $1 a month, from the A.O.U. (Later this was raised to $15.)

Tourists were not Kroegel's only problem nor his most difficult. There were plume-hunters in those days killing Florida birds by the tens of thousands for their beautiful feathers, and plume-hunters were expert boatsmen, wise in the ways of birds. They were difficult to catch and deadly to deal with.

"The wings of young pelicans still in their white phase were used to trim women's hats," Mrs. Thompson said. "Many young pelicans were killed for this purpose."

But Kroegel kept at his self-imposed task. And finally, when the birds were almost gone, word did reach the President of the United States, Theodore Roosevelt.

On March 14, 1903, Roosevelt signed the order that made tiny Pelican Island the first federal wildlife refuge and Kroegel became the first federal game warden. Now it was unlawful to "hunt, trap, capture, willfully disturb or kill" any bird within the limits of the Pelican Island reservation.

Kroegel was provided a motor boat and it was easier for him to protect his island. He also had a government-furnished flag which he flew from the Indian mound. Inevitably, yacht captains coming down the river would blow their whistles to salute Old Glory. At this signal, Kroegel would jump into his boat and head for the island.

After the murder of Guy Bradley, another game war-

den, in waters off Flamingo in 1905 by plume-hunting poachers, the so-called "War of the Feathers" ended. No more pelican wings on hats.

Thus protected, the pelicans on Pelican Island increased in numbers. In 1926, when Kroegel gave up his job, thousands were nesting on the island. And there were thousands of herons, egrets, wood storks, an­

hingas, cormorants and other birds.

During the heyday of the Space Age, the little island was almost forgotten. There were other "birds" to watch. But in 1962 a group of real estate developers sought permission to fill in river bottom that provided feeding areas for the pelicans. This aroused a conservation-minded citizenry to ac­tion. Permission was denied. People had begun to realize that the Indian River is a complex ecological unit. If the pelicans, manatees, mullet and other fish, birds, and animals are to be saved, the river must be saved. And the water must be clean enough to provide oysters and clams for people. It was determined by the De­partment of the Interior that Pelican Island must have a buffer zone of at least 4,700 acres to provide "a feeding and breeding habitat." This was essential.

In 1963, the tiny island was designated a "National Historic Landmark" and a bronze marker was placed on Kroegel's grave in Sebastian. The pelicans were saved. Or so it seemed.

But something else was happening. By 1950, Louisiana began losing its pelicans, a sad predicament since Louisiana bills itself as "The Pelican State." And by 1966, brown pelicans had ceased to nest successfully in Texas and California. The reason, scientists determined, was DDT. The infiltration of DDT into fishing waters and fish, and thus into pelicans, was causing the eggs to be so thin that they cracked under the weight of the incubating adults. Thus, no pelican chicks.

Within a few more years, the brown pelican was on the endangered list. Florida's pelicans—about 20,000—were absorbing enough DDT to send the experts scurrying for answers. But there was only one: stop its use.

Was it too late for Pelican Island? Windward, the present warden whose job fits him as comfortably as an old shoe, says the pelicans on this island are not dying of DDT or any other plague. They are wearing out the vegetation, but it will grow back. All is well.

But there is a small cloud on this bright horizon. Leases run out, and real estate is still on the upswing. But the birds have held their island against predators, perils and problems for 75 years. I, for one, will bet on them.

MARY ELLEN "MIDGE" SMITH is a freelance write-photographer who calls Melbourne home.
Come over right away! The stripers are HITTING LIKE CRAZY!

Rocky Morgan’s excitement was obvious on the telephone. An excited guide always arouses my curiosity.

“Can you come over right away?” he asked, skipping the usual salutations.

“Hold it, Rocky,” I replied. “What’s happening?”

Obviously he was in a lather about fishing. Rocky guides from Silver Glen Springs, only a quarter of a mile from Lake George, part of the St. Johns River. He’s primarily a tight tackle largemouth bass guide. I suspected bass were causing his state. But it was too early for the largemouths to be schooling, and late summer isn’t the top bass time in Florida anyway.

Still his fishing news had to be good, or he wouldn’t be making the long distance call.

“They’re hitting like crazy,” he continued, the words flowing in an un punctuated torrent. “We’re catching them off the boat ramp dock just below the Springs.”

“Easy, levy,” I replied. “What’s hitting?”

“Oh, yeah,” he answered. “It’s the stripers. You asked me to call if the stripers ever got active.”

That I had. His news sent my fishing blood soaring. Stripers—basically a saltwater fish in more northerly coastal areas—are sometimes caught in the St. Johns River.

Rocky and his dad, Justin, manager of Silver Glen Springs, had told me the stripers were often seen in the Springs. I hadn’t disbelieved them but neither had I seen the stripers, let alone caught one of them. Having fished the famous Santee-Cooper lakes in South Carolina for the landlocked striped bass, I knew their fighting qualities and their high dinner table rating. I was aware there was a St. Johns stripers population that apparently came from the Atlantic. It’s not unusual for the rockfish (as the species is commonly called in these parts) to wander up coastal streams for a good many miles. The presence of stripers in a number of Florida waters has been confirmed but they are not

The striped bass is better known as rockfish by many Florida fishermen. By whatever name, the species is notable for putting up a good argument against being baited.

By Max Hunn

Max Hunn is half of an outdoor writing-photography team, his wife, Kilt, being the other half of the crew. They work out of Daytona Beach, Fla.

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**NORMAL ANTLER DEVELOPMENT CYCLE**

<table>
<thead>
<tr>
<th>Area</th>
<th>Development</th>
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<td></td>
<td>Begins</td>
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<td></td>
<td>Mid Feb.</td>
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<tr>
<td>South Florida—Fresh Water</td>
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<td>Man and Pam Rocks</td>
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<td>Central Florida—East Coast</td>
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<td>Flatheads</td>
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<td>Salt Flathead-Oak</td>
<td>March</td>
<td>Sept.</td>
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<td>North Central Florida—</td>
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<td>Northwest Florida—</td>
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**Regional Wave Guide**

No legal bingo will be available in January.

**Dates**

<table>
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<th>Area</th>
<th>Begins</th>
<th>Completed</th>
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**Photo by Wallace Hughes**
what you could call avidly sought after, with a possible exception or two which will be mentioned later. “Can’t make it now, Rocky,” I answered. “How about next Monday. Will they hit then?”

“Sure,” he replied. “We can limit out in a couple of hours.”

Maybe, I thought. While the Florida bag limit is six striper per day per man, claiming you could get two limits in a couple of hours was pushing it a bit. “Be over next Monday noon,” I replied. “You better have those stripers ready for hours.”

“Don’t worry,” he responded. “They’ll be hitting. I can promise that.”

Rocky’s a young, enthusiastic guide, or he’d never have made that promise. The longer you fish, the less you’re inclined to promise anything. Veteran guides get lockjaw when asked to guarantee success. Either Rocky was overly-enthusiastic or the fishing was really bad.

Monday, Kit and I head for Silver Glen. It was overcast leaving Inverness, starting to rain in Ocala, and pouring as we reached the Ocala National Forest. The radio said the barometer was falling, and the wind was out of the east. Things didn’t look good for any type of fishing, let alone for the elusive stripers.

When we reached Silver Glen Springs, the rain was sheeting. Dashing into the Morgan’s house, we considered the situation. “See you brought your usual rainy luck,” grinned Justin. “It was beautiful yesterday.”

“Aww, it’s not so bad,” interrupted Rocky. “The fish’ll bite, even in this rain. But it’ll be better if it quits.”

Outside the rain continued relentlessly. I asked questions about the sudden appearance of the stripers, assuming it was a freak event. Now I’m not certain it was. Probably they were there all the time but now anglers were learning how to fish for them.

“The Yankee campers taught us,” explained Justin. “Silver Glen features a beautiful, wooded campground on the banks of the spring run. It’s becoming a popular spot for campers. Not knowing how to fish for Florida bass,” continued Justin, “they began trolling, as they do in the North. They caught a few largemouth bass, but more important they located the stripers, and found they would hit.”

“When I saw them catch stripers,” added Rocky, “I copied their methods. I began trolling in Lake George, around the deep holes near the south end.”

“The rocks like small lures. I’ve had good luck with a 1/16 ounce yellow No Alibi lure, and with small silver and black Rebel plugs,” he explained.

“Any size?” I asked, recalling the Santee-Cooper record was over 50 pounds. “Biggest I’ve caught to date is 18 pounds,” replied Rocky. “But there’re bigger ones. I’ve seen them in the spring boil.”

Rocky’s not only a guide, but also a SCUBA diver. He’s spent time observing the fish in the spring boil and has knowledge few anglers possess.

Outside the rain continued. While Justin and I talked, Rocky disappeared. Half an hour later, he returned, soaking wet but triumphantly displaying a stripper, about 15 inches long, and weighing about a pound and a half.

“See,” he exclaimed, displaying his catch. “Those striper will hit, rain or not.”

Finally the rain stopped. Rocky, Kit and I went to the boat ramp dock to see if the striper would cooperate. I still had my doubts. However, I kept quiet.

Rocky began casting a quick-sinking metal lure—Cordell’s Gay Blade. On his second cast, he connected. His rod bent sharply as the fish took line against his reel filled with 6-lb mono. The scraper headed for a convenient weed bed, but Rocky checked him.

After another pair of desperate runs, the guide had the upper hand. Gradually working the fish back to the dock, he reached and lifted a one pound stripper ashore. Yes, there were stripers in Silver Glen run.

Shortly I managed to land one with a deep sinking jig—widely used in South Carolina for rockfish. Again it was a good fight, but my 8-lb line was adequate.

Continuing to cast, Rocky kept complaining the action was too slow. “They should be hitting like mad,” he kept saying.

I didn’t know. However, in the rain which had started again and with an east wind, it was doubtful any fish would bite. Conditions were lousy.

“Want to try shiners?” Rocky finally asked. “We can stir them into feeding by freelining shiners. I’ve done it. Then they’ll start hitting lures again.”

Shiners were fine. I’d used them for stripers on Santee-Cooper after the herring season. The rockfish will hit a shiner just as eagerly as a herring if the latter isn’t available. However, in South Carolina the fishing is from a drifting boat. Fishing shiners from a dock was a different situation. Would it work?

Rocky raced to the Silver Glen store-tackle shop returning shortly with a bucket of shiners. They were the normal, commercial ones, ranging from three to five inches in size. They weren’t as big as those used on the Santee-Cooper, but they would do nicely.

I rigged my first shiner on a No. 1/0 hook. A larger barb wasn’t needed for the smaller stripers. Instead of freelining, I added a No. 5 split shot to send the shiner deep. Rocky elected to freeline.

Dropping the shiner near a deep weed bed, the sinker took the struggling bait to the bottom. Nothing happened. Were the “rocky” going to be finicky?

After moving the bait a little, there was a pickup. The fish moved off. As soon as the slack was out of my line, I set the hook, and the fireworks began.

Feeling the barb, the fish made a power surge toward cover. However, the rod’s spring halted that.

Then began a series of darting, side-to-side pulls.

Fortunately, I had 10-pound test line on this other spinning reel. It was strong enough. Gradually I worked the struggling stripper to where I could reach down and land it. It was a twin of the others.

Meanwhile, Rocky failed on his first freeline cast, but the second one proved the striper would come to the top to nail a passing meal. Not only did Rocky hook his fish, but he also attracted another half dozen out of the grass.

Apparently the others thought the hooked fish had latched on to a meal. They darted about trying to take the shiner away. Against the light background of the sand bar, the stripers were easily visible.

After another three were caught with shiners, Rocky announced: “They ought to be in a feeding mood now. Let’s go back to artificials.”

He was correct. Apparently the shiners triggered the striper’s feeding desires. Rocky started back to his second cast, he connected. His rod bent sharply as the fish took line against his reel filled with 6-lb mono. The scraper headed for a convenient weed bed, but Rocky checked him.

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Dropping the shiner near a deep weed bed, the sinker took the struggling bait to the bottom. Nothing happened. Were the “rocks” going to be finicky?

After moving the bait a little, there was a pickup. The fish moved off. As soon as the slack was out of my line, I set the hook, and the fireworks began.

Rocky Morgan nets a Silver Glen stripper for Kit Humm. Located in the Ocala National Forest, Silver Glen Springs empties into Lake George.
don't hesitate to change lure colors according to light conditions.

Another thing apparent about the striper—it takes a fast retrieve to egg them into hitting an artificial. They'd show an interest in a slowly retrieved lure but wouldn't strike. However, zip the same lure past them and watch out! They didn't always connect, but they tried hard. Hence, rule number two is retrieve fast, as Rockey recommends.

This encounter with the Silver Glen striper whetted my curiosity about Florida rockfish. Talking to Forrest Ware, fish biologist with the Florida Game and Fish Commission, resulted in more information.

The rocks are not only caught in the St. Johns River near Silver Glen Springs, but also in the mouth of Juniper Creek, in the "Croaker Hole" near Welaka, and in the undamaged portion of the Oklawaha River below the Rodman Dam.

Florida carried on a striped stock program in the early 1970s, but finally abandoned it because of lack of angler interest.

Although the fisheries experts knew the stripers were surviving and thriving, although probably not reproducing, a few rocks showed up in various creel census.

As a result of the lack of interest, Florida shifted its stocking emphasis to the sunshine bass, a cross between a white and striped bass.

However, the lakes that were stocked still have stripers, if anyone bothers to fish for them. Ware knows there's a good striped population in Lake Talquin, but the stripers probably will die of old age because of the lack of fishing pressure. The same is true of the other stocked lakes.

Certain rivers in the Florida Panhandle had and still have annual striped spawning runs. Rockfish are caught in the Ochlockonee River below the Lake Talquin Dam. They're also in the Apalachicola River, and are often caught below the Jim Woodruff Dam which forms Lake Seminole at the head of the Apalachicola.

On the wall of Wingate's Lunker Lodge on Lake Seminole are huge, mounted rockfish—in the 25- to 30-pound class—that were caught in the lake after the dam was closed.

Whether they were trapped by the dam closure, or whether they migrated upstream from the Gulf and through the locks is unknown, but these are huge fish. Infrequently, there are reports of stripers still being caught.

Before the Chattahoochee and Flint rivers, which join on the Florida-Georgia state line to form the Apalachicola, were dammed, there was a rockfish spawning run up the two rivers. The dams have stopped this, but apparently there is some spawning below the Woodruff Dam or in the Apalachicola.

Stripers are infrequently caught in the lower Apalachicola River, and also in the Intra-Coastal Waterway near Lake Wimico. There's also a spring run of stripers up Black Creek, one of the tributaries of the Choctawhatchee River farther west in the Panhandle.

Florida has a bag limit of six stripers a day. Minimum length is 15 inches. The rocks are rated as freshwater fish—seldom being caught in salt water here—and you need a freshwater fishing license to try for them.

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Some day no doubt the striped bass may get long due recognition as a great sportfish here in Florida. Until then they remain one of the state's all but overlooked finsters. But I'm not going to wait for them to achieve fame. I'm going fishing for stripers whenever I can. They're fun to catch and good to eat—a tough combination to beat.}

**What's A Trophy?**

Every deer hunter wants to bag a trophy. Most hunters want to know why there aren't more trophy deer. Well, trophy implies rarity. It's also a relative term. If there was an abundant number of large deer with huge racks, a trophy would be the next size up.

Compared to northern woodland and Dakota deer, the largest of the whitetail subspecies, not many Florida deer are trophies. It is more realistic for a Florida buck to be compared with other deer in the state.

It takes as much skill to bag a 10-point buck in Florida as a 10-pointer in Wisconsin, but the odds are that the northern buck will be larger and so will his antlers.

For the Florida hunter, a lot of things are out of his control. Bergmann's Rule, a general biological principle, says that the farther north or south of the equator a species is found, the larger it will be. In hot latitudes, the smaller body will have a larger relative surface which allows for more efficient heat loss. In northern climates, the larger the body, the smaller the relative surface area, and the species can hold warmth better.

Florida's Key deer, a whitetail subspecies, is the smallest deer in the nation. Generally, the largest deer are found in our northern states and southern Canada.

The shape and size of a white-tailed deer's antlers depend on food, age, heredity and sex. After that, everything gets confusing.

If you're wondering what sex has to do with it, does sometimes have antlers. A New York study showed that for about every 2,600 deer with antlers, one was a doe. One Pennsylvania study revealed a ratio of 1:4.924. Doe antlers seldom harden and grow large.

Although a buck reaches sexual maturity at 1½ years, his best antler production will come during the time he is from 4½ to 6½ years, or, in some cases, a year or so later. As a buck reaches advanced age, his loss of vigor is usually reflected by the decreasing size of his antlers.

A buck 1½ years old can have spikes, forks or even be a 12-pointer under unusually good nutri-
Tional conditions if he has the right genes. Under poor nutritional conditions, a 4½-year-old buck can have spikes, especially if he comes from an inferior strain in regard to antler production.

Antlers are a product of nutrition and heredity. The percentage of each is where things get sticky. Biologists don't pretend to have all the answers. They're not nearly as positive as hunters about these things.

Recent studies in Texas show that you can feed a genetically inferior spike a super nutritional diet and he won't grow anything but more spikes. On the other hand, a young spike from good stock, put on high nutrition, will develop better antlers the next year.

The first demand on food a buck eats is for growth and maintenance. The extra nutrients taken in go for antler development. A balanced diet is lacking in calcium and phosphorus, there will be poor antler development.

Some research indicates that diet controls the size of antlers while heredity influences their shape and number of points. More research is needed before too many definite statements can be made on this.

Besides the Key deer, Florida has three other subspecies—the Virginia, Florida whitetail and Florida coastal whitetail. Of course, the ranges overlap and the subspecies interbreed. In addition, over the years sportmen have imported other subspecies and released them. This complicates the genetic aspects of body and antler size.

In sandy soils, where much of the fertility has been leached away, bucks may not get enough nutrition to grow large bodies and big antlers. Where there are too many deer for the carrying capacity of the habitat, bucks may live a hardscrabble life and not reach their genetic potential.

Antlers have a social and sexual significance within a herd. While there are exceptions, the buck with the largest antlers is usually the dominant one. The mere sight of a 10-pointer is often enough for a forked horn buck to accept his lower position. Battles for dominance are frequently decided before the rutting peak. The dominant buck is usually able to breed in peace. However, with the high percentage of does to bucks in Florida, there is no doubt that many inferior bucks get to mate.

The statewide deer herd is expanding and has been for many years. A considerable percentage of sportmen hunt only for large bucks with good racks. In most areas, there is a sizable hunting pressure on the best animals. Some bucks on fertile farm land are taken as soon as they are 6-pointers, although they may be only 1% or 2½ years old, a long way from their size and antler potential.

In other words, many bucks do not live long enough to reach maximum body size and antler growth which is 4½ years plus. Since an individual buck has a small home range, say an average of 640 or so acres, once he's spotted he's hunted pretty hard.

There's an increasing belief that hunters should kill more spikes, especially if there's any indication the spike might be 2½ years or older. He will not grow a larger rack if he is genetically inferior and the food he eats could better be used by bucks with more potential.

For a hunter to bag an outstanding trophy, a combination of things must have clicked. The buck must have come from superior stock and have had superior nutrition. In addition the animal must have survived long enough to attain good body or antler size or both.

The hunter has a right to be proud of outfoxing a good buck. The right set of circumstances happened, and that's fairly uncommon. Trophies are rare or they wouldn't be trophies.

**TREE STAND USE**

The hunter bangs and twists two antlers together, as the technique ever since when they find fresh scrapes, Benny says he frequently finds them in Florida. He'd read about the Texas hunters but he had no ambition to clatter so he took his pocketknife and rattled it against the arrows in his quiver.

The buck turned and walked straight towards him. Benny missed his first shot and the buck ran off a ways and stopped. Benny rattled again and the buck came back. This time Benny nailed him.

He spotted a forked buck about 100 yards away. He'd read about the Texas hunters but he had no ambition to clatter so he took his pocketknife and rattled it against the arrows in his quiver.

The buck turned and walked straight towards him. Benny missed his first shot and the buck ran off a ways and stopped. Benny rattled again and the buck came back. This time Benny nailed him.

The next morning, with a pair of antlers, he rattled near another scrape and pulled a buck within eight steps. Benny and Wendell have been using the technique ever since when they find fresh scrapes. Although September sounds early for scraping, Benny says he found them in August when scouting ahead of the bowhunting season.

They do their rattling on the ground, rather than from tree stands. They paint the antlers bright red just in case other hunters are attracted to the battle sounds. For anyone wanting to try rattling, there are instructional records on the market.
WILDLIFE MANAGEMENT CLASS

By Lt. Rudy Howell

Wildlife management is another class subject included in the Hunter Education Program. Besides giving students an insight into modern management practices, the instructors describe "how it was" before the existence of game laws. Special emphasis is given important wildlife species such as white-tailed deer, buffalo, elk, antelope, wild turkey and waterfowl.

As early as 1887 the buffalo was all but gone in the United States and deer were practically extinct in Pennsylvania. By 1900, of the millions of whitetailed deer once found in this country, barely 500,000 remained. During this period, game habitat was plowed, fenced, preempted by towns and roads, and forests cut as if there were no tomorrow.

It was during this period of tragic misuse of wildlife that Theodore Roosevelt, a sport hunter, was elected President of the United States. While in office, he pioneered a new concept of managing wildlife resources. Through his leadership, wildlife refuges and national parks were established across the country. Market hunting ground to a virtual stop by enactment and enforcement of state and federal game and fish laws. For wildlife, it marked the beginning of a trend toward salvation.

During the class, students learn some of the ways the modern day wildlife manager uses the hunter as a management tool—to keep wildlife populations in a healthy condition and at a level needed dollars for preservation and protection of wildlife.

In fact, the bulk of the cost of wildlife management projects and operation of wildlife refuges is paid by money out of the sportsmen's pocket, through their purchase of licenses, permits and wildlife management area stamps. These are not taxes, but fees requested by the hunters and fishermen who are vitally interested in the future and management of wildlife.

Since the enactment of the Pittman-Robertson Bill of 1937 (sponsored by sportsmen), more than $4 billion has been collected and distributed back to the states for wildlife restoration, benefiting game along with nongame species. Some of these funds are used to teach novice hunters in hunter safety/education programs throughout the United States.

As part of the wildlife management section of the course, students have the opportunity to view some of the opponents of hunting in action. The film, "A Question of Hunting," is viewed and, through its presentation of pro and con aspects of this sport, opens the way for a discussion of the role of hunting in our country's future.

Wildlife manager and captured deer. Animals are live-trapped and moved from overpopulated range to areas where deer numbers are down.

Pho to by Lawrence Rioscino

JULY-AUGUST 1979
but on winding up the line I found that my arrow had become entangled with one lost by someone else. I
paraphrased others had preceded us in pursuit of "Old Ironsides."

Just then I heard Chris’ rebel yell as he wound in 10 or 12 pounds of struggling gar. The homemade reel had
operated perfectly and Chris had struck the gar just
or 12 pounds of struggling gar. The homemade reel had
which was slung out of the fish’s body by his frantic
of life perhaps we should administer the

I answered that due to the gar’s tenacity in clinging to
my arrow, instead of

"Good—why, man, gar is—rotted," roared Chris.

Chris displayed his captive, but

My first point of attack was the head. Seeing my

"You don’t DARE bring that nasty gar into my house!”

"Great!" he pronounced. Then, "Try up some more, Mom!”

Our whole clan is anxiously awaiting an upcoming
collection of gar to our dinner table, I wasn’t overly alarmed.

I couldn’t help thinking of the time when I was skinny

Since we were so amazed by the tastiness of our gar
we disposed of the insides. When I returned, Joe’s face was "Hulk"

I couldn’t help thinking of the time when I was skinny

apprentices of the gar feast, we spread the word far and near, “Don’t throw that gar away—give him to us.” In the course of swap­
ning this information, we have run across many indi­

bored face and nonchalantly wound my gar in as if

"Let’s taste such stuff like my devilish crab," she exclaimed.

"Peeled," but I can’t vouch for the flavor of the fish simply

"No," shouted Phil, "It tastes like MORE! Start cooking, Mom!”

I stepped away unenthusiastic about the gar patties. He
ate one only and remarked that it was good, but didn’t
go back for seconds. Joe, however, lets his mind in­
fluence his taste buds and he confided later that he
couldn’t help thinking of the time when I was skinny

I sneaked in with my ears, threatening to.can­

Sneaking of food poisoning and wasted time and

I didn’t look up from my work. Betty prepared a conglomera­tion of gar, chopped

Muttering of food poisoning and wasted time and

I also avoided picking at the gar’s tenacity in clinging to
life perhaps we should administer the coup de grace
with a club, but before this could be done, an old gentleman inquired if we wanted the fish. We had no
use for the gar and were glad someone wanted him.

I didn’t look up from my work. Betty prepared a conglomera­tion of gar, chopped

hearing Chris’ rebel yell as he wound in 10 or 12 pounds of struggling gar.

"Just then I heard Chris’ rebel yell as he wound in 10 or 12 pounds of struggling gar."

PRIVY RIVER
STEEL TUBE, SLIGHT FIT INTO PRACTICE POINT.
STOP OUT

The details of the business end of a Reel Carter home-brewed fishing arrow.
The day before Thanksgiving in 1930, my Aunt Libbie brought me a present; a small air rifle, costing a dollar, that would throw a pellet perhaps 150 feet. She also brought delightful, exciting news. Tomorrow we were all going hunting to the squirrel-hammock near Brooksville!

I managed a little sleep somehow and before light my aunt arrived in her Model A Ford. My family of six plus lunch and guns crammed ourselves into the small sedan and off we went. We took the crooked, pockmarked road north and by sunrise parked in the hammock near Skinner Pond.

Grandpa loaned Victor, my 15 year old brother, a small twenty-gauge double gun, and that completely unfledged young greenhorn speedily earned a blast from Uncle George by using the loaded gun for a walking stick. Uncle George was a badly shell-shocked veteran of the World War—it was an exasperating job to get him to the right place at the right time—but he was a fast, accurate shot, and once in shooting position with his old Browning could give winged game of any kind a hard time.

To get back to the hunt, the grownups and Victor went off for squirrels, leaving me to my own devices in the nearby abandoned farmyard. I remember that a large purple-brown mantis got me in his sights, and his spray sent me off painfully blinded and bawling. Another boy happened by—a little older and with a beautiful expensive air gun. He shot the mantis, washed the poison from my eyes, and gave me a pat on the back. Then he showed me how to shoot gumballs from the trees, and even gave me some BB shot before he left. I would have run him for president about then; we never saw each other again.

About then Victor reappeared, banging away at every bird he saw. He dropped to one knee in fine light-Infantry style (he was reading Napoleon's campaigns at the time) and downed a tiny turtle dove just as Grandpa and Uncle George showed up. Again, a reaming. The Depression was in full fling; we couldn't eat the bird, and shells cost money.

We were taken in tow and commenced driving the nearby cornfield. First a game-eating feral house cat broke cover and was promptly shot. Next, Uncle George popped the rabbit that the cat had been stalking.

Later we moved to a large prairie in the sandhills south of Brooksville. Walking to it we stumbled upon and flushed a large covey of quail. On the rise Uncle George and Grandpa stood fast, banging away and dropping several birds. Victor and I rushed ahead to retrieve them, and then I shared in receiving the blistering bawling out that followed. More birds that had stuck tight got up and several more were dropped, and then the men went after the singles leaving me behind to search for a cripple.

The sun set, and guns flashed in the dusk until all ammunition was gone—what a way to end the day! It was memorable, and I learned many hunting precepts, mostly at the expense of brother Victor, such as, never be found close to the grown-ups if you think they are going to run out of shells.

I had great expectations for the following year, but several days before Thanksgiving Grandpa and Uncle George traitorously vanished in the direction of Ocala's Big Scrub to hunt deer. Thanksgiving day my brother and I went to a football game on what might be considered a command invitation. What did I care which way an oversized unhusked pecan moved down the field when the woods beckoned? I muttered and growled, sulking for days and impressing upon my kinfolks for all time exactly the direction in which my sentiments lay. Somehow I had also developed a permanent loathing for football. But I had caught the hunting fever, and have never been cured.
BOB BINKS DESIGNS FIRST FLORIDA WATERFOWL STAMP

With most wildlife artists, there is usually a story of how they got started. Generally, at some tender age, they took crayon in hand and the first recognizable thing they drew was an animal. Daytona Beach's Bob Binks has such a tale. Seems his grandmother insists that, while still a wee mite of a lad, he took a piece of chalk in his hand and, with the tail, drew a duck. The 37-year-old artist is still drawing ducks, but has progressed since that fateful day, and no longer begins his waterfowl at the nether end. Just how much progress he has made will be obvious this fall when thousands of Floridians begin carrying a recent example of his work around with them.

For Binks' painting of a pair of green-winged teal in flight was selected to adorn the first Florida waterfowl stamp. The $3.25 stamp will be required of hunters planning to take waterfowl in the state beginning with this fall season.

The stamp, approved by the 1979 Florida Legislature, will raise funds to benefit Florida's waterfowl populations. Florida hunters will not only have Binks' teal, but the same species graces the 1979-80 federal waterfowl stamp, also required when duck hunting. Although Binks admits he has been dabbling in waterfowl and wildlife art all his life, his training and work as a technical illustrator helped pay the bills to support it. This profession was the reason he moved from his native Missouri to Daytona Beach in 1965 when he accepted a job with General Electric.

Last February, he made the break and now works out of a studio in his home in the woods near the resort city, concentrating on his art. Although waterfowl remains his specialty, he does other wildlife "... but only because other people have talked me into it."

He obviously mastered that subject as well for it was a painting of a whitetailed deer which won him the honor as 1977 Wildlife Artist of the Year by the North Carolina Wildlife Federation. Binks has been a regular exhibitor at the Raleigh, N.C., art show sponsored by the federation, and is an invited exhibitor at the show sponsored by Shikar-Safari as well as the "grand-daddy of them all" the Easton, Maryland Waterfowl Festival.

An avid duck hunter, Binks received his early education in the finer ways of the feathered fowl from an uncle who not only taught him how to hunt ducks, but also insisted "if I was going to paint them, that I do it right." When he is not hunting or painting, he is training Labrador retrievers.

The green-winged teal was chosen as the subject of this first stamp because of its coloration and recognizability. Painted in opaque watercolors, the pair was based on a mounted drake and a live hen which hung around the pond outside Binks' studio. Starting next year, a contest will be conducted annually to determine the waterfowl painting to grace the stamp. It will be patterned after the one by the U.S. Fish and Wildlife Service for the federal stamp and those conducted by other states which require a state waterfowl stamp. -Trisha Spillman

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BOB BINKS AND AFRICAN LION CUB

HOPE FOR THE DUSKY SEASIDE SPARROW

There is a glimmer of hope for the dusky seaside sparrow, which until recently had been considered functionally extinct. This small bird lives only in the marshes around Titusville on Florida's east coast. Exhaustive searches in 1977 and 1978 failed to find a female (26 males were located in 1977, 24 males in 1978). But on June 7 of this year, biologists of the U.S. Fish and Wildlife Service and the Game and Fresh Water Fish Commission located a female and officers Gary Shipman, Wally Jackson, Larry Vinson, Bennie Greene, Joe Johnson and Joe James. Wildlife officers and other Game Commission employees also assisted the Polk County Sheriff's office in the Auburndale tornado disaster area. Game Commission employees put in a total of 147 work hours in the storm-struck area.

The habitat occupied by this rare sparrow has been greatly altered by uncontrolled fires and marsh drainage operations, which have expanded in the area since the space boom of the 1960s. If the dusky seaside sparrow should disappear, it will be the first listed endangered bird species to become extinct since Congress passed the Endangered Species Act of 1973. Up to now, the battle has been a losing one. In January 1979, the state of Florida, in cooperation with the Florida Audubon Society, began an emergency campaign to rescue the tiny bird.

This emergency program includes provisions to capture a
few of the remaining males for safekeeping, until their habitat can be improved, and to freeze and store their sperm in the event that females are captured and artificial insemination is necessary.

The emergency program is being carried out almost wholly with donated funds. Citizens wishing to contribute may contact the Game and Fresh Water Fish Commission, Bryant Building, Tallahassee 32301, phone 904/488-3831.

FIELD NOTES

In the Central Florida Region an informant relayed information that a panther was being held in captivity. After a lengthy investigation the information was found to be false. Ultimately warrants were issued against the informant for giving false information to a law enforcement officer. The result was a $500 fine and a 30-day jail sentence. The state attorney prosecuted the case vigorously, partly because of the nature of the crime, but mostly because of the extensive work and expense resulting from the investigators' efforts in the case.

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The Commission's wildlife inspection unit has learned to expect the unexpected. With constant dabbling in animal seizures it was inevitable that one day the unit would inherit a zoo. It finally happened. During May, Commission representatives took temporary custody of 55 animals confined under inhumane conditions at a wildlife attraction in St. Augustine. The collection, consisting of lions, tigers, leopards, monkeys and other assorted animals, was placed in the temporary custody of the Commission pending the outcome of a hearing to determine the financial competency of the owner who had allegedly abandoned them without food for 10 days. At the time of the seizure, many of the big cats were so weak they were unable to stand. In a subsequent order, the defense was successful in having the animals remanded into the custody of the owner. Wildlife officers and inspectors have formulated a diet and are supervising daily feedings of the animals. A financial competency hearing was still pending at press time.

A total of 868 cases were made by the Division of Law Enforcement during May, which is a decrease of approximately 20 cases from the same period last year. Although the number of fishing license cases went up, boating safety violations dropped sharply.

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The supply of Robert Butler bear hunt prints, offered as premiums for new subscriptions to FLORIDA WILDLIFE, has been exhausted. We continue to receive requests for the prints. As we mentioned in the announcement of the premium offer, we only had 500 signed, numbered prints, and they are gone.

OPPs!

Daniel J. Mackey, not James Mackey, wrote "The Manatee" in the May-June 1979 issue of FLORIDA WILDLIFE. Sorry, 'bout that, Dan!
A familiar sight along roadside waterways, seashores, bays, marshes, freshwater ponds, lakes and cypress swamps is the stately great blue heron. The 4½-foot tall bird is a patient, careful stalker, moving silently through the shallows in search of its food. Its menu includes a variety of aquatic animal life, mainly fish, frogs and snakes. When disturbed, its lays open its huge, 80-inch wingspread, utters a series of hoarse squawks and flies with measured beat to another watery place.