Florida Wildlife Scrapbook

THE LARGEST FAMILY OF BIRDS IN THE WORLD is the Fringillidae, the finches. Some 200 species and subspecies are found all over the world except Australia. Around their short, stout bills are the grosbeaks, finches, buntings and sparrows. Their short, stout bills are especially adapted for cracking and eating seeds of all kinds. They also eat many kinds of harmful insects.

THE PINCHES OR FRINGILLIDAE FORM THE LARGEST FAMILY OF BIRDS IN THE WORLD. SOME 200 SPECIES AND SUBSPECIES ARE FOUND ALL OVER THE WORLD EXCEPT AUSTRALIA. AROUND THEIR SHORT, STOUT BILLS ARE THE GROSBEAKS, FINCHES, BUNTINGS AND SPARRROWS.

The cover is shown at lower right. An immature Brown Pelican exhibits grace and beauty during the nesting season, left. A immature Brown Pelican is shown at lower right. An immature Brown Pelican exhibits grace and beauty during the nesting season, left. A immature Brown Pelican is shown at lower right. An immature Brown Pelican exhibits grace and beauty during the nesting season, left. A immature Brown Pelican is shown at lower right. An immature Brown Pelican exhibits grace and beauty during the nesting season, left. A immature Brown Pelican is shown at lower right. An immature Brown Pelican exhibits grace and beauty during the nesting season, left.

Departments

Conservation Scene

Boating

Muzzle Flashes

Fishing

The Cover

Chroma looking on the ground, the Brown Pelican exhibits grace and beauty in flight. Most colorful during winter plumage, center right, the white neck is replaced with a streak of deep rust coloring during the summer nesting season, left. An immature Brown Pelican is shown at lower right. See page 14.

From a painting by Wallace Hughes
CONSERVATION SCENE

Underwater Camera Bugs Snoop For Science

That these rivers must be saved in Florida "... if we are to preserve enough scenic and recreational land to meet the demands of millions of residents and tourists." Three designations of scenic rivers would be established. Class I areas are stretches which are free of impoundments, inaccessible except by trail, and with primitive shores and unpolluted waters. Class II areas are stretches free of impoundments, with primitive watersheds and undeveloped shorelines, but accessible by roads. Class III areas are readily accessible by road or railroads, with some development along shorelines, and which may have undergone some impoundment or diversion in the past. Different uses would be permitted with different classifications. Commercial timber harvesting would not be allowed within one-half mile of Class II and Class III areas when compatible with the maintenance of scenic vistas. States would be encouraged to provide for scenic rivers in their own plans.

Backyard Cooking

The Department of the Interior's Bureau of Commercial Fisheries, with the arrival of the outdoor cooking season in most sections of the Nation, is again making available the popular recipe booklet Fish and Shellfish Over the Coals. The booklet, which features easy-to-follow recipes and full-color illustrations, is available for 40 cents from the Superintendent of Documents, Washington, D.C. 20402.

New Fisheries Program Planned

The Department of the Interior has announced proposed regulations to govern a new Federal program to conserve and develop the Nation's anadromous fishery resources. Anadromous fish, such as striped bass, salmon, and shad, live in the ocean and return to fresh water to spawn. The proposed rules are being published in the Federal Register.

Underwater Camera Bugs Snoop For Science

The Anadromous Fish Act, passed in October, 1965, provides funds for States and other non-Federal authorities to spend up to 50 percent of the cost of projects such as stream improvement and construction of fishways, spawning channels, hatcheries, and research.

Historical Markers

The Florida Historical Society and the Florida Park Board have joined in a new, cooperative program to erect plaques at historic sites in the state. William M. Goza of Clearwater, president of the Florida Historical Society, announced that under the new program the Society will determine the location and wording of markers to be placed at historic sites.

Backyard Cooking

The Park Board will pay half the cost of furnishing and erecting the plaques.

State Parks Director Bill Miller said, "The Florida Park Board is just beginning to set up shop, the districts were large and ill-defined, the personnel were few in number and the facilities and equipment primitive. Fires were fought with shovels, gummy sacks and a prayer. Certain public leaders, in and out of Government were beginning to call the timber industry a predatory animal with no conscience. Strangely enough, the combined burning efforts of thousands of migrant stump farmers who looked upon fire as a land clearing tool, were treated more gently. This leadership demanded a complete take-over of all forest holdings, regardless of ownership, by the Federal Government in so far as management and cutting practices were concerned. It was revolutionary in concept, and was far more severe in application. Naturally this was resisted by the timber industries and many small land owners. They could foresee free enterprise going down the drain. It should be pointed out that there were some timber corporations who deplored the waste of excessive cutting which developed a wildcat market, and the lack of fire protection which negated any long range planning. Management was impossible without a reasonable guarantee of fire protection. In fact combinations of companies in the West were setting up their Silver Anniversary

Tree Farms

By ERNEST SWIFT
National Wildfire Federation

PRESERVATION GENERATIONS of Americans hear or read little about timber families. In fact, Americans hear little about families, whether in all, except rumors from distant lands, and then price-supported grains are shipped to the needy. Fifty odd years ago when much of the lumber industry was still foot-loose and fancy-free to clear cut, to let land go tax deficient and to pull stakes for a new logging chance, there was a growing public concern that the nation would soon run out of timber. East of the Mississippi few original stands of extensive acreage and volume were left. The best species had been high graded, and what had formerly been considered inferior grades or uneconomical to cut was now being shipped to the mills.

Chronic and devastating fires through the Atlantic states, the Appalachians, the piney woods of the South and the Midwest had left entire regions destitute of any reproduction. Every forest area had its stump prairies. There was no fire protection of any consequence, management was an academic term, and tree planting was still in the experimental stages; high tax rates were an incentive for overcutting, and forestry education was a speculative gamble.

The more venturesome of the eastern and Midwestern loggers were migrating South or into the inner-mountain country of the West and the Pacific coast. In the early 1890's, especially around 1910, the forest fires in Montana and Idaho, so devastating and such volumes of virgin timber were destroyed it appeared that the entire complex of forest industry in those regions might be in jeopardy.

The Forest Service was just beginning to set up shop, the districts were large and ill-defined, the personnel were few in number and the facilities and equipment primitive. Fires were fought with shovels, gummy sacks and a prayer. Certain public leaders, in and out of Government were beginning to call the timber industry a predatory animal with no conscience. Strangely enough, the combined burning efforts of thousands of migrant stump farmers who looked upon fire as a land clearing tool, were treated more gently. This leadership demanded a complete take-over of all forest holdings, regardless of ownership, by the Federal Government in so far as management and cutting practices were concerned. It was revolutionary in concept, and was far more severe in application. Naturally this was resisted by the timber industries and many small land owners. They could foresee free enterprise going down the drain.

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Even the wildest creatures must have proper space and surroundings for fun

**ANIMALS AT PLAY**

By ROSS PHARES

Conservationists may be overlooking an important need of wild animals. Most recognize the need of supplying them food in emergencies, and for it.

Now, with the world fast crowding in on both man and beast, it seems time to say something of the least, I think this gives the narrowest of definitions for laughter. Some animals show obvious signs of mirth, and a bellowing to be praiseworthy. And he is human enough to enjoy a laugh at another's expense. The story is told of an African elephant who apparently, when bored, hid himself beside a bend in the road, and when an automobile appeared, rushed out toward it, ears spread ominously, bellowing bloody murder. Once satisfied the human travelers had the daylights scared out of them he retired to the brush, it is said, "with a twinkle in his sly little eyes."

Another story is told of an elephant along an African road that turned cars over. The elephant was not a people hater. It seems he had found a playing his size . . . and he simply wanted to bump it around just for the heck of it—not purposely to injure or kill anybody.

This seems a little on the crude side. But you can hardly expect an elephant, probably tense from lack of recreation, to react to an automobile on a human level of safety and refinement up to that of drag racing or mooning.

Whole herds of elephants have been seen sliding down cliffs on their big—and hopefully tough—rumps, as if having the time of their lives. All types of animals play—the big and the small, the airbornes, and those that live in the water. They all have their own types of games suited to their habits, the means at hand, and their own peculiar dexterities.

Crows are probably the most devilish teasers in the woods, particularly of small, land-bound animals such as rabbits, especially when the victim is trying to get some sleep against the efforts.

Whether or not animals actually laugh, in the human manner, certainly they go through the antics to produce it. The woodland world, even as Shakespeare's world for man, seems something of a stage filled with simple but eager comics and clowns and teasers and exuberant playboys.

The antics of bears at play are among the best known. Beyond mere exuberant frolicking at rolling and tumbling and tearing up the ground romping, they do such dare-devil acts as cliff-hanging, "tightrope" walking along rock rims and tree limbs. They take to sliding as bankers do to golf. Bears have been seen to leap off a cliff onto a snow-covered hill in a bellywhopper dive and go sliding crazily on ice. Bears have been seen to leap out of a tree onto a sleeping dog and knock the breath out of him.

Cubs are so energetic and mischievous at play, mamma bears, it is thought, have about as many discipline problems as human mammas. Young bears bite and get bit, bruise themselves falling or sliding on every thing, chase themselves lost, go where they have no business and think about it later. Nothing is funnier to a devilish cub than to leap out of a tree onto a sleeping dog and knock the breath out of him.

Penguins have about as little to play with as any creatures. But they have fun with what they find at hand. Their chief pastime, when there is no work or housekeeping to be done, is a game in which closeness is the main objective. Their intelligence in playing this game seems quite human—about on a college level, when we recall that college students have made some notable experiments and had some high fun at them by determining how many can pack themselves into a phone booth or sedan and still stay alive. The penguins find an ice floe and clinch onto it as long as it will hold another bird, and then ride it off with the current. The more birds and the smaller the floe, the greater the challenge . . . and the fun.

This writer does not understand the motives either of the college students or the birds, but inasmuch as the game continues for both, there surely must be some merit in it.

Even the awkward, dull-eyed elephant has his moments of mirth, and a bellowing to be praiseworthy. And he is human enough to enjoy a laugh at another's expense. The story is told of an African elephant who apparently, when bored, hid himself beside a bend in the road, and when an automobile appeared, rushed out toward it, ears spread ominously, bellowing bloody murder. Once satisfied the human travelers had the daylights scared out of them he retired to the brush, it is said, "with a twinkle in his sly little eyes."

Drawings By Wallace Hughes

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Penguins have about as little to play with as any creatures. But they have fun with what they find at hand. Their chief pastime, when there is no work

**FLORIDA WILDLIFE**

AUGUST, 1966

Young otters enjoy tug of war games with a stick.
of his night shift. As if pestering and annoying is not enough, these black cut-ups add insult to disturbance by laughing notoriously loud and long about what they have done.

What are the practical aspects of animal play? Most naturalists agree that animals play at hunting and fighting, that the play of youngsters will become, directly or indirectly, the work and business of survival—at the least, the play develops muscles and skills necessary for it. Communal games may promote, in some measure, a cooperative helpful, if not necessary, for protection as well as making a living.

Certainly one of the most important contributions of play is its influence, if not necessity, in propagating the species.

It is difficult to separate fun and sex. Well...we would try it after the Puritans made such a to-do about it! Which reminds us that many animals do not mate unless there is space and privacy to work up to it in the fashion of games or ceremonies—whatever you want to call it, it requires a place and a time. This is quickly realized when we observe that many animals will not breed in captivity.

In the animal world any arrangement as cramped and conspicuous as needing in the balcony is not likely to lead to families to keep the woods populated. Limited space doubtless is affecting animals even more significantly than it is people living in apartment compounds with only minimum room for eating, sleeping, breading, and getting on each others' nerves. It is not likely that the wild creatures can exert the self-control, to adjust in human fashion to the continuing limitation of living and playing space.

A visit to the woods at the romantic season will reveal pre-nuptial play, and suggest that proper setting, and enough of it, is necessary for life there to go on uninhibited. Birds almost everywhere will serve as interesting, obvious examples. Among some species, the male takes his lady to a ball, so to speak, and they dance themselves into a mood. The steps vary. Some species hop from limb to ground and up and down in a rhythm. Some couples march in circles. There are back and forth movements facing each other, the side-step, etc., etc.

If you have the patience and imagination you can see more grace and charm here than at a modern dance hall. But if you are accustomed only to civilization the birds may be a little too subtle and subdued for you to get the point. Their dances may not look as sexy as the twist or Watusi, but nonetheless that is what the birds are about.

We have learned very slowly about play and fun. For a long time parents and educators thought the human youngsters did not need either special equipment, space, or supervision for adequate recreation, growth, and health. A home-made ball, a few sticks, and some discarded bottles were considered sufficient. “Turn them loose, and they’ll enjoy themselves enough,” the saying went. Now, big money goes—deservedly so—for playgrounds, equipment, and supervision. But the wild animals, unlike vocal “underprivileged” minorities, are not going to march carrying placards displaying slurring remarks, such as “I want a wide meadow to play in, or I ain’t even done with your hand-outs,” but they may march off with dignity without being insulting, or making any disturbance at all, and never come back—as, indeed, they are doing.

Nothing elaborate is necessary for the wild creatures—for a start, just some open spaces among the brush and trees, some swimming and bathing pools in walking or flying distance from home, and privacy in the animal fashion.

Any way you look at it, in our Great Society, we simply cannot have any creature deprived of anything, including fun.
Babia Mar’s new look will be something like this in the fall. The world’s most luxurious motor is undergoing a complete over-haul that will add many more new conveniences for the boating public.

(Signed from preceding page)

facilities in that Florida east coast metropolis would make Venetians turn in their gondolas.

Get a letter from a south Florida fan who is really anxious to move into the boating world. This fellow is so "hut up" on boating he asks many questions and admits he knows absolutely nothing about the sport, but is anxious to learn, from basics on up. Now, this is a most commendable attitude.

One thing he was curious about is the term "porpoising" in a boat. He intimated he thought somebody who had seen porpoises at play likened it to his boat’s action to that of these frisky playboys of the bottom. Meanwhile the center of gravity remains absolutely straight, with motor tilt adjustment. Stubborn cases can be constructed that the transom was overloading, and this cause is now being attacked on a wide front. "Manufacturers affiliated with OBC have been placing weight and horse-power capacity plates aboard new boats for more than a decade," Lifton asserted. "Two years ago OBC enlisted the aid of marine dealers to get capacity tags on even more boats. The tags are now required by law in four states."

The Coast Guard report showed an almost exact parallel between sound enforcement programs and safety. New York and Michigan both have many more boats registered than California, yet they had 29 and 42 per cent fewer boating fatalities respectively than California. Both have extensive enforcement and education programs; California does not.

We can tip our hats to our Florida Boating Council, too. Florida is about fifth in the entire nation in number of registered pleasure craft, and we register boats only above ten horsepower, whereas other states above us register ten all. In Florida, since the boating Safety Council was established, accidents have dropped from 8-10% each year, and property damage, which had run to over a million dollars the year before the Council went in business, has now dropped to less than $500,000 per year.

This is a good example of sound law enforcement in Florida, and a good pat on the back is rated by the Florida Boating Council for doing a workmanlike job in a field where the best is haphazard as far as enforcement is concerned.

We are looking forward to the day when the Florida Boating Council is expanded to handle the ever increasing pleasure traffic on our Florida waterways. This isn’t something to think about next year or the year after . . . we need more law enforcement on the waters NOW!

Niki justifiably oozes superlatives when she talks about Marina Mar, and when you see it, you’ll be looking for a dictionary with bigger adjectives, too. Establishment of fine marinas like Marina Mar helps continue Florida’s surge to the top as being the boating capital of the world.

FLORIDA WILDLIFE

August, 1966

Speaking of marinas, as we were back up the page a-piece, there is a magnificent new spread in Sarasota. Niko Lifton, the little lovely who heads that city’s fine news bureau, sent me some information on fabulous Marina Mar, one of the prettiest and most convenient yacht harbors in the world. Marina Mar is not as big as Bahia Mar, but it is the last word in modern convenience for yachtsmen, and is considered at present the most complete marina on Florida’s west coast. This takes in a lot of ground, cause I have seen some pretty fancy lay-outs in St. Petersburg, Clearwater, Tampa, etc., but this one in Sarasota can fit right in.

SPEAKING OF MARINAS, AS WE WERE BACK UP THE PAGE A-PICE, THERE IS A MAGNIFICENT NEW SPREAD IN SARASOTA. NIKI LIFTON, THE LITTLE LOVELY WHO HEADS THAT CITY’S FINE NEWS BUREAU, SENT ME SOME INFORMATION ON FABULOUS MARINA MAR, ONE OF THE PRETTIEST AND MOST CONVENIENT YACHT HARBOURS IN THE WORLD. MARINA MAR IS NOT AS BIG AS BAHIA MAR, BUT IT IS THE LAST WORD IN MODERN CONVENIENCE FOR YACHTSMEN, AND IS CONSIDERED AT PRESENT THE MOST COMPLETE MARINA ON FLORIDA’S WEST COAST. THIS TAKES IN A LOT OF GROUND, CAUSE I HAVE SEEN SOME PRETTY FANCY LAY-OUTS IN ST. PETERSBURG, CLEARWATER, TAMPA, ETC., BUT THIS ONE IN SARASOTA CAN FIT RIGHT IN.

Marina Mar boasts docking space for 100 boats drawing eight feet and additional dockage for craft up to 150 feet in length. It is just off the Intracoastal Waterway at Sarasota’s Island Park, less than a block from downtown.

And get this, cats . . . each slip is equipped with water, telephone, electricity and individual piped aboard music. Now, really, how far uptown can you get?

Next month we plan to begin a series on test runs of new boats and motors that we tested at the OWAA convention at Port St. Lucie in June. We hope to give candid opinions on each boat tested and give the reader an insight on what feature of autos, doesn’t it? Lifton justifiably oozes superlatives when she talks about Marina Mar, and when you see it, you’ll be looking for a dictionary with bigger adjectives, too. Establishment of fine marinas like Marina Mar helps continue Florida’s surge to the top as being the boating capital of the world.

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The younger cat, Quinton and all, are talking to the boating world in droves and welcome aboard!
CONSIDER THE SPARROW

Male House Sparrow

A Big Lesson From A Small Bird

By HELEN KNAUS

At one time he was considered a pest because of his habit of hopping about the garden and feeding on insects, fruit and seed. With his short, thick bill he can reduce servings of sunflower, and similar seed, to a mass of empty husks. As my husband and I examined one nest we noticed a group of house sparrows who were hopping around the lawn searching for bits of grain left by the doves. Field glasses confirmed my suspicions. The stranger was a parakeet.

I eased the door open to go outside and immediately the small colony was off the ground in a soft flutter of wings, accompanied by the parakeet. I began to cheer loudly. Finally she flew into the basket, then out, then back in, as if trying to coax the small sparrows to follow her. Seeing her efforts fail, I stepped out and turned the basket on its side. Soon the motherly sparrow was back. In a short time she was herding her adopted children into a dense hedge.

The unpretentious sparrow may have a low popularity rating with some bird lovers, but he seems not to mind. He has good reason not to. He is a member of the weaver finch family of birds (Passeridae), closely related to our native finches, grosbeaks, buntings and sparrows (Pipridae), and held in high regard by most biologists. Included are such distinguished members as the cardinal, pyrrhuloxia, gold-finches, hunting and many others.

In the sparrow category alone there are twenty-four varieties. Among them are the swamp sparrow, chipping sparrow, fox sparrow, tree sparrow, English sparrow, and the Cape Sable sparrow, the only sea-side sparrow in Florida. But the English, or house sparrow, more correctly termed a weaver finch, is most familiar in all parts of the world.

This bird is of European origin and was first introduced into this country from Great Britain in 1850. At one time he was considered a pest because he destroyed large grain crops. But gradually he has changed his eating habits and now feeds largely on insects, fruit and seeds. His cage was equipped with bars and a tiny swing by my husband and here the fledgling spent happy hours learning to jump from bar to bar and to swing rapidly with obvious delight. His cage door was left open so that he could come out when he pleased. He was a cut-up from the first. He dive-bombed us from the chandelier, bummed rides on our shoulders, ran up and down our arms, landed on our heads where he yanked teasingly at strands of hair. After an absence he greeted our return with welcoming cheeps as he flew wildly around the house. He became a conversation piece, not only for us, but for everyone who saw him.

One day, as was my custom, I took Skipper to a sandy spot outside where he could have a dust bath which he loved. As he tumbled around happily a soft cheep sounded nearby. Then a female sparrow flew to a hibiscus bush back of us. She threw out breadcrumbs which he disposed of hastily. We missed our feathered pet, but we knew he had made his own way without difficulty. He was a smart one, we reasoned. Hadn't he taught us to respect his place among creatures of the wild?
Through executive orders by Theodore Roosevelt, Florida’s Pelican Island became the first established wildlife refuge in the nation.

**War of the Pelicans**

Half-way down the island-edged east coast of Florida, in shallow salty water rilled by schools of silvery fish, there is a mangrove islet that is a National Historic Landmark. It is also a little-known battleground for one of America’s strangest wars.

When this 3-acre island in the Indian River was no more than a wind-scoured spit of sand, it was chosen by the handsome brown pelican (Pelecanus occidentalis) as his place in the sun, and through sixty bloody and precarious years, against staggering odds, he has clung stubbornly to his squatters rights and, as stubbornly, has maintained his numbers.

I came to Pelican Island first on an afternoon of dazzling sunshine in late May when thousands of water birds of many kinds were nesting and resting on the island.

We launched a motor boat—luckily one with windshield and canvas top—into the mis-named Indian River at the Sebastian Highlands Yacht Club on U. S. 1, and headed south by east across the salty lagoon which is about two miles wide at Sebastian.

It was a day of shimmering brightness; the sky was cobalt shading into delphinium overhead.

White clouds-on-clouds towered on the horizons. But wind from the nearby Atlantic Ocean slapped the slate-blue water and our boat slammed into white-capped waves crossing the inland waterway channel.

About fifteen minutes after launching, we glimpsed Pelican Island amid a confusion of other islands. The tiny grey-green islet, seen across several miles of water, seethes with life. It shimmers now white, now black; it seems even to rise a few feet and then to settle back into the river. Tattered streamers of birds fly from its mangrove mastheads; the streamers waver against the cobalt sky and scatter into soaring flakes of light and darkness. They re-form, break, and re-form.

From the entire island rose a mushroom of sound, not harsh, not shrill, not singing, either, but a constant murmuring and talk of thousands of bird voices.

Pelican Island today is not only the home of the brown pelican although he is undisputed king of the roost; it is also home and a known breeding ground for thousands of other waterbirds—the egrets, snowy egret, common egret and cattle egret; the herons, too, the great blue heron, the little blue heron, the rare black-crowned night heron and the Louisiana heron, and the wood ibis, the double-crested cormorant, the sandpipers, and the frigate bird. Although these may not nest on the island, it is home and a loafing habitat for the white ibis, the fish crow, the black vulture, the turkey vulture, and the roseate spoonbill. And a variety of shorebirds and waterfowl, such as ducks and coots, claim the surrounding water areas.

The talking of the birds went on undisturbed as I edged through slippery sea lettuce toward the mangroves and an unforgettable sight. Egrets in bridial plumage, white tinted with a blush of orange-pink, fluttered among the interlaced mangrove branches. Blue herons poised on the highest twigs, seeming fragile and twig-like themselves. Pelicans, huge and solemn-looking, their beaks tucked in against their chests, sat on enormous grey nests. Baby birds, almost bare of plumage, lifted open mouths from scores of other nests, and young pelicans lumbered awkwardly about on the sand.

Above the mangroves, pelicans floated, skimmed, slipped sideways, or hung motionless heading into the wind. Many carried twigs in their beaks, and (Continued on next page)
for all their seeming heaviness and the size of their webbed feet, they landed light as down among the leaves.

Viewed close up, as we saw him, the brown pelican is a handsome glossy bird. A streak of deep rust color, feathery and beautiful outlines the back of his neck. His body plumage is soft grey touched with black and white, and white encircles his eye. His wing span is six feet. Those who have seen old weather-beaten pelicans floating near docks would not recognize the brown pelican on his home island.

Although the pelican looked solemn and heavy among the delicate waders, the long-stemmmed heron and ibis, on the wing over our heads, he was pure poetry, and although we saw no pelicans diving near their island, the pelican is a sharp-eyed fisher and diver without equal.

The brown pelican can spot the silvery flash of menhaden from thirty feet in the air. Straight down he plunges, streaking with half-spread wings to plop into the water with a tremendous splash. Then immediately, almost miraculously, he pops to the surface. Why? The answer lies in subcutaneous air sacs and in the fact that his bones are almost as light as air. Adult pelicans weigh no more than eight pounds.

Pelicans fly in waving lines or in V formation. Sometimes lines of pelicans soar lazily a hundred feet up in the air; sometimes they skim the crests of waves.

An anonymous rhymster has jingled a memorable but inaccurate description of the pelican. It runs like this:

"A wonderful bird is the pelican, His bill holds more than his belican. He stores in his beak enough food for a week, And I don't see how he harbican."

Actually, the pelican's pouch is a kind of seine; it is not used for the constant storage of food. The young, and sometimes, thieving gulls and other birds try to rob the pouch of its contents. Almost every pelican has a pouch, but some species have a pouch that is not as large as others. The pouch is used to store fish while the bird is diving for more. When the pelican surfaces, it will plop into the water with a tremendous splash, open its beak, and swallow the fish whole. It then contracts the muscles of its pouch, forcing the fish down its throat. The pouch is also used to store water, which is necessary for the pelican's survival. The pouch is a crucial part of the pelican's anatomy and plays a vital role in its ability to catch fish and stay afloat. So, the pelican's pouch is not just a decorative feature; it is an essential tool for survival.

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Although their choice puzzles naturalists, the pelicans never were hunted for plumes, or even for food. They were shot down by game wardens. But while William Dutcher pondered the plight of the pelicans, another man was acting. This man was Paul Kroegel, a pioneer remarkable for his far-seeing blue eyes, his over-sized mustache, his courage, and his love for birds.

From his home in the small settlement called "Sebastian," Kroegel could look across the Indian River to a triangle of sand near its eastern shores. He saw clouds of pelicans homing on this sand and, perhaps, he named it Pelican Island. He saw the white hulls of yachts threading a water path among the islands and heard the shots.

Appalled by the carnage left in the wake of some boats, Kroegel kept a sharp lookout for pleasure craft. At the first gleam of sail or hull, he raced for his small sailboat and set out for the island. Too often this was a losing race both for him and for the pelicans. But when he made the lee of the island ahead of the yacht, he anchored his boat between the on-coming craft and the island of the birds, and stood in his rocking boat, holding a rifle.

He was an impressive figure.

Kroegel's stature grew as the story ran up and down the river. It came to William Dutcher. And to George Nelson, wildlife photographer from the Museum of Comparative Zoology at Harvard. Nelson came to Sebastian to talk to Kroegel; he went to the island with him, and there recorded in a series of remarkable photographs Kroegel's performance.

This is a mystery. Along the eastern shore of the brackish lagoons near Pelican Island are half a dozen larger islands that appear better for birds to human eyes. Throughout all the area, including the marshy shore of the narrow barrier island that hemmed the Indian River away from the rolling Atlantic Ocean, there are shallows that dance with fish and mangroves that supply a crisiscrossing of branches for nests.

Although their choice puzzles naturalists, the brown pelicans made it for some pelican-understood reason that has stood the test of years. They lined up on their island when it was no more than a narrow bar of sand with no cover but wisps of wind-torn grass, and declared silently to the first head wind.

A Brown Pelican, above, left, with an American Egret. A Louisiana Heron, below, at home with nesting pelicans.

The mass killing of birds, in those formative years of a developing Audubon Society, was a shocking sight to the more sensitive members of the Society. They lined up on the island for observation six boats landed one after another. In most cases I was able to get across before they landed but sometimes if the wind was ahead or no wind they were ahead of me. On two occasions I got there in time to prevent the taking of young birds. I find that most of these people pay very little attention to the signs... I would suggest that for another season I sign about 20 feet long be painted with simply the words 'Do not land unless Warden is in the vicinity of the island.'

"There was only one case of shooting on the island this season that of Mr. Mellen of the steamer Vagabondia... I was at dinner at the time and could not get across quickly enough with a head wind."

"... There were no young birds killed and if any were carried off they were quite small by it as I was not aware of it. Most parties want to carry away a souvenir of the island and I have al-

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lowed them to take the discarded eggs, and after nesting was well underway have not allowed people to walk between the nests so as to make the birds take wing. This is a favorite pastime with amateur photographers so as to get a picture with flying birds.

"... I would be glad if the appropriation could be increased ... yours respectfully, Paul Kroegel."

Through the efforts of Kroegel, Dutcher, Nelson, and the Indian River County Commission, their plan came to Theodore Roosevelt, President of the United States of America.

By March 14, 1903, Roosevelt signed an executive order that made wildlife conservation history. It reads: "It is hereby ordered that Pelican Island in Indian River in section nine, township thirty-one range thirty-nine east, State of Florida, be, and it is hereby, reserved and set apart for the use of the Department of Agriculture as a preserve and breeding ground for native birds. Theodore Roosevelt."

Thus Pelican Island became the first federal wildlife refuge in the nation, with the first game warden!

This brief executive order was amplified by another dated Jan. 26, 1909. This second order enlarged the Pelican Island Reservation to include "all unreserved mangrove and other islands situated within sections nine and ten" and stated that it was "unlawful for any person to hunt, trap, or go wilfully or disturb or kill any bird of any kind whatever, or take the eggs of such birds within the limits of this reservation."

Colorful Warden Kroegel, with his drooping mustache, his rifle and badge became a legend on the river. He now had a motor boat, and on his homestead there was a flag-pole from which he flew the Stars and Stripes.

Yachtsmen threading a water path among the islands often sighted the flag and invariably saluted it with the boat's whistle. This was Warden Kroegel's signal to jump into his boat and set out for Pelican Island. The birds, thus protected, increased in numbers.

In 1919, however, the Congress of the United States, feeling the pinch of hard times, dismissed Warden Kroegel. But the pelican chung stubbornly to the island. As the years passed, its character changed. Mangrove seeds lodged in the sand, sprouted and grew. In time the spit of dazzling white sand was covered with the twisting trees that sometimes are called "the new land."" Evergreens, herons and ibis came to join the pelicans and to fish on the mud flats. The comarront, anhinga, and frigate birds began to nest on the tiny island. Then came the fish crow, the vultures, and the roseate spoonbill.

In time even a few white pelicans drifted across the river to join their handsome brown brothers. Ducks and coots began to use the surrounding water areas. And other birds came too, some to rob the three-aged pelican nests.

The passing years brought changes. Warden Kroegel died and was buried in the small cemetery in Sebastian.

Pelican Island was almost forgotten by many of the residents of Indian River County and nearby Brevard County. By 1960, they were more concerned with the "birds" soaring upward from Cape Canaveral (Cape Kennedy) fifty miles to the north. But if the average man living in the Indian River country had forgotten Pelican Island, real estate promoters had found it!

So, in 1962, began another battle in the 70-year war of the pelicans!

In 1962, a group of land speculators who held some tracts north of Pelican Island between the Atlantic Ocean and the Indian River applied to the Indian River County Commission to open the bulkhead line on their properties so that they might fill in more land, perhaps 3,000 additional feet of land.

At first, there was but a ripple of apprehension in the nearby communities of Sebastian, Wabasso and Vero Beach. Where would the fill come from? What about the mud flats around Pelican Island? These were the feeding grounds now for thousands upon thousands of birds.

What would happen to the pelicans if the feeding grounds were disturbed? The ripple of apprehension became a wave.

Citizens of Vero Beach, Wabasso, and Sebastian banded themselves into the Indian River Area Preservation League. Pioneers, citrus growers, school children, club women, editors, librarians and politicians joined forces to defend the helpless birds.

The League asked the State Board of Conservation, the Florida Game and Fresh Water Fish Commission, and the Federal Bureau of Sports Fisheries and Wildlife a cogent question: "What is necessary to support the bird life on the islands?"

The answers, from many official sources, boiled down to this: There must be a buffer zone, a safety margin, a sanctuary, of land and water adequate to support the bird life on the islands. "Pelican Island's value to the bird life of the area is completely dependent upon the surrounding bay bottoms and mangrove areas that provide essential feeding and loafing habitat and alternate resting sites. The entire Indian River area forms a complex ecological unit, each part of which is essential to the well being of the other." Boundary recommendations included a body of land and water comprising 4,760 acres.

Hearing these reports, the Indian River County Commission turned down the request from the real estate promoters to move the bulkhead line.

But the war was not won. It was only begun.

The promoters now turned to the State of Florida with a request to buy the tidal and submerged lands adjoining their property.

The Florida Audubon Society rushed an emergency bulletin into press: "Re: Saving Pelican Island, First National Wildlife Refuge." It began: "Incredible as it may seem, because of threatened encroachment upon its surrounding state lands, waters, famous Pelican Island is on its way to certain extinction."

And by now Pelican was famous. In 1965, it was designated a "Regional National Wildlife Landmark" by the United States Department of the Interior, National Park Service. Why? A bronze plaque explains in these words: "This site possesses exceptional value in commemorating and illustrating the history of the United States." A bronze marker was placed on Warden Kroegel's grave at the dedication ceremonies, and George Nelson's slides and pictures were shown in the Vero Beach library.

While the State of Florida pondered its decision "to sell or not to sell," conservationists focused their attention on the tiny mangrove island where thousands of birds were nesting undisturbed by the war of words. Theodore Roosevelt's proclamation was re-read and studied. Did the state have the right to sell this land? The answer seemed never to concern the promoters.

Meanwhile, real estate in the vicinity of Pelican Island was increasing in value. A quarter century of talk about a bridge to span the Sebastian Inlet through which water pours from ocean to river had become much more than talk. A magnificent bridge was being built which would carry the ocean-skirting highway A1A from Cape Canaveral southward to Vero Beach. The new highway would pass near Pelican Island. All of the area, including submerged lands, was becoming much more valuable as real estate.

Then the Board of Trustees of the Internal Improvement Fund of the State of Florida made its decision. It said: "No sale!" Pelican Island was saved.

The bridge spanning Sebastian Inlet opened to traffic on Feb. 27, 1965. Today the tourist, using binoculars, can see Pelican Island as I saw it on a May afternoon of dazzling sunshine, with silvery fish ruffling the shallow waters, and the mangroves wearing their flowering plumes of birds. He can go to the island from south of the bridge on A1A, or he can go to the Sebastian Highlands Yacht Club, on U. S. 1, and take a boat to near the island. While he may not go ashore, he yet can enter visually into this wonderful world of water birds.
LIKE SO MANY FLORIDA WILDLIFE readers, I’m a nut on history. Wherever I go I make it a practice to look up things historical. I’m not timid. I thrust my rather prominent nose into castles, slave quarters and seragios. I’ve raked up mounds and multitudes of mastodon bones. I’ve trudged irreverently over near-forgotten battle fields and poked my camera into fortresses and dungeons. Some of these objects of my interest were unbelievably difficult to locate, let alone photograph. It is a dream of mine to be able to photograph and write about all of them. But I don’t believe I ever was completely stumped until I came to Miami.

Miami. I had learned, has two historic relics: A battered lighthouse on the State-owned tip of an island in Biscayne Bay and the remnants of Old Fort Dallas, a garrisoned settlement that antedated the city of Miami by 60 years, at the mouth of the Miami River.

I had no trouble finding the Cape Florida light-house, a venerable pile, destined for early restoration. I turned my attention to the mainland and found the building before me had never been a part of the city of Miami. It was the Old Fort Dallas, and I turned my attention to the main-land and to Old Fort Dallas. Right away I ran into trouble.

The clerks at the hotels didn’t know and didn’t seem to care that they didn’t know. A taxi driver, veteran of 17 years, had never heard of Old Fort Dallas. Neither had a negro porter, a Cuban immigrant, a comely housewife with two fringe youngsters, nor an elderly gentleman who looked and talked like a retired professor and who insisted on binding my ear on the remains of the Maya Civilization in northern Yucatan.

I escaped and questioned a news vendor. He came up with the first practical suggestion. "Why’n’tcha call the Miami Public Library. (He pronounced it LIE-berry?) They got loads o’ books an’ things." I was tempted to ask him what sort of "things." Instead, I thanked him and went to a public phone.

The librarian of the Florida History Section to which my call was directed didn’t have to consult her "books ‘n’ things." "Old Fort Dallas? Of course its still in existence," she said cheerily.

"But, wh-where? Its not on the north bank of the Miami River at Biscayne Bay." I was consulting my notes.

"Where are you now?" She was suddenly exasperated.

"On the north bank of the Miami River at Biscayne Bay."

"Oh ... " My answer appeared to startle her.

"Oh, Dear. You’re a mile off. Old Fort Dallas is up the Miami River, at Lummers Park."

It was my turn to be exasperated. "What the devil is it doing up there?"

"They took it apart and put it back together again ... the Daughters of the American Revolution ... just there a long time ago. That’s why!" I detected a note of triumph.

Suddenly she remembered her manners, suspicious perhaps that her caller might be a snooping city commissioner. She added lamely, "Sir."

I slung the carrying strap of my Graflex over my shoulder, hailed a taxi and was soon standing before the object of my quest, the roving remnant of Old Fort Dallas. The building, 60 years the property of Miami’s beginning, only not, precisely, where it had had that beginning.

The building was long and low-lying, of native limestone, and the only thing that suggested anything was a Jobsen cow shed which, indeed, it had been at one stage of its checkered career.

I was disappointed. Certainly there could be nothing of interest here; a few transplanted stones, a bronze plaque, a flag fluttering from a pole. I was about to turn away without taking a single picture when my skin began to tingle with an old familiar sensation. It is a feeling that envelopes me in the presence of things hallowed, a sort of hypothesis, the result perhaps of an aura which emanates from weathered walls, an intangible something that combines with the picture when my skin begins to tingle with an old familiar sensation. It is a feeling that envelopes me in the presence of things hallowed, a sort of hypothesis, the result perhaps of an aura which emanates from weathered walls, an intangible something that combines with the picture. It was precisely where it had had that beginning. That’s the impression that its still in existence," she said cheerily. I was consulting my notes.

The Seminole Indians were getting restless and threatening the hostilies which nearly won them the fight to keep Florida the last preserve of the Red Man. William English was frightened and offered the United States Government the use of a portion of his estate and some of its buildings as a military post, for protection against a possible Indian uprising. When the uprising occurred and flared into the long, bloody Seminole Wars, English fled to Key West. He never returned to Fort Dallas.

The army, under the command of Major James Dallas for whom the post was named, occupied the English land at the mouth of the Miami River and paid a yearly rental of $200 to William English’s mother Harriet.

In 1858 the army moved out, paying Harriet English $12,000 for damage to plants and trees, incurred when the troops tried to raise vegetables.

Harriet English finally sold the estate to William Brickle who, with Julia Tuttle, is credited with pioneering the City of Miami.

In 1896 Fort Dallas became the City of Miami, and the Magic City, and tall buildings began to close in on the blackened stone walls that had sheltered slaves, soldiers, clubwomen and Julia Tuttle’s cow. But the old site’s days at the mouth of the Miami River were numbered. And so too were each of its stones as it was assembled piece-by-piece and lovingly put together again by the Daughters of the American Revolution for use as a meeting place in Lummers Park.

The site is an appropriate one for the ancient building, a quiet spot with a view of the river through the trees and a place to sit in the sun. I was recalled to the present by the clicking from the shuffleboard court nearby, a sound that had startled me by its similarity to the noise of the withdrawal of the haphazardly scattered stones.

I sighed, took my pictures and turned reluctantly to plunge anew into the burley-burley life of today.
Research studies of strange fish bone conditions, dating back to prehistoric times, may provide valuable archaeological clues.

**Peculiar Swollen Fish Bones**

As a vertebrate paleontologist for the state of Florida, I have had many interesting animal bones cross my desk for determination. Ranging as the most peculiar are a variety of fish bones that present a swollen or expanded appearance.

These bones were identified and described by many ichthyologists as "pathological fish spine bases" and were generally associated with the spade fish, Chaetodipterus faber. However, they have now been found in the common jack or crevalle, Caranx hippos; the yellowtail jack, Caranx bairdii; the haddock, Melanogrammus aeglefinus; the angelfish, Pterax pinnatus; and a lancefish, Lepidopus caudatus. These swellings or osteoderms have also been reported in one freshwater fish, the rainbow trout, Salmo gairdneri.

Fish possessing these clubbed elements are generally salt water forms occurring in the forms which inhabit the warmer seas. The ecological range of these fish is considerable. Chaetodipterus is found from the New England coast to Brazil.

The bones, in which swelling takes place, may be from the skull, the fin spines, or elsewhere in the skeleton. When sectioned the bone is sometimes very compact, having almost the appearance of ivory, or may be quite spongy in texture. Some experts have listed the cause of these abnormal appearing bones as being due to exostosis. However, exostosis is an irregular growth that takes place beyond the normal bone surface.

Swollen fish bones have been commonly recovered from Pleistocene and Pliocene fossil beds and are turned up in nearly every pre-Columbian Indian mound along the Florida coast.

The bones appear to be rather uniform within a species and are associated with adult specimens. Only a study of a large series of all ages of each species in which the bones occur can answer the question as to whether these bones can be used to identify the species to which they belong. If such a study establishes the taxonomic value of these hyperostotic fish bones then they can be of considerable value to the archaeologist.

If such a study establishes the taxonomic value of these hyperostotic fish bones then they can be of considerable value to the archaeologist. Some of these "swollen bone" fishes are known to completely ignore a hook or lure and must be obtained by trapping or netting. Others are restricted as to depth of water which they inhabit. Some are shallow water, coastal forms, others are found only in deep off-shore waters.

Once identified from these isolated osteomas or hyperostotic bones, the habits of the fish may give valuable clues to help the archaeologist interpret his site in a way that no other material can.

It is now generally agreed by osteologists that these bones are not cancerous or are they due to some other disease. However, what the function or purpose of these bones is has not been determined. A study of those fish possessing swollen bones is now underway by Dr. T. Edinger of the Museum of Comparative Zoology at Harvard University. When this monograph is completed we should know much more about these bones which have been mentioned in literature since the 1600's but whose study has largely remained neglected.

**AUGUST, 1966**

Samples of swollen fish bones taken from Florida archaeological sites.

**By STANLEY J. OLSEN**

Florida Board of Conservation

The common Jack Crevalle, drawing at left; and skeleton photo, above, with arrows showing hyperostotic bones.

The freshwater Rainbow Trout, above, and the salt water Spadefish, at right, are other species in which swellings, or osteoderms, have been located.
Hunting Conveniences

New stainless steel alloy for gun barrels now under research by steel companies and custom gunsmiths

By EDMUND MCLAURIN

THERE have been numerous requests from shotgun owners for work steps for removal of dents from shotgun barrels. Some of these have been from shooters owning Winchester Model 59 autoloaders, with barrel comprised of thin steel tubing around which 500 miles of glass fiber has been wound and bonded into a sleeve.

It isn't much of a job to remove fairly shallow dents from steel shotgun barrels, the difficulty arises in doing such a neat job that your home gunsmith cannot make barrel repair, the Mittermier tool is of bronze, to prevent bonding a thin-wall steel tube to an existing barrel, dent removal plugs, which later became the justly famous, only slightly adjusted Winchester Model 94, could then be had for $20.

The Marlin Model 1892 lever-action repeater, with 24-inch octagon barrel, in either .22 rimfire or .22 long rifle, catalog listed for $13.16. This was the Marlin rifle that eventually became the Model 39.

When Winchester announced the Model 59 auto-loader with Win-lite barrel, I was among the few gun editors who did not climb on the publicity bandwagon. While admiring the trade achievement of bonding a thin-wall steel tube to an exterior sleeve made of 500 miles of fiber glass thread, I wondered how developing barrel dents could be removed.

Significantly, the 1966 (100th Anniversary) edition of the Winchester catalog does not list the Model 59 autoloader nor indicate continued production. However, the latest Stoeger catalog lists the Model 59—probably because of an unsold lot of this particular model.

Model 59 owners tell me that Winchester's repair service is reluctant to tackle repairs to noticeably dented Win-lite barrels, and is advising purchase of a new barrel. (In this particular model autoloader, barrels can be interchanged freely without factory fitting.) Also, requests for installation of ventilated rib on a Model 59 reportedly have been declined by the Winchester factory.

Sturm Winchester Model 59 owners, as a last resort, can contact the firm of Ernie Simmons, Kansas City, Missouri, related to unissued shotguns, who can probably make barrel repairs, or desired ventilated rib installation, the hope is hopeless, whether the shotgun is a Winchester Model 59 Win-lite or any other make you might name. The Simmons firm has specialized in high grade shotgun barrel work for decades.

TIMBER change—and so do gun prices! Just wish you could have looked over my shoulder recently as I flipped the pages of the gun section of a Sears, Roebuck catalog. No. 117, circa 1968.

The Remington square-stem style, 6-shot auto-loading shotgun, made on the original John M Browning patent, could then be had for $30!

The Winchester Model 1890 .22 caliber slide-action repeating rifle—one of the best .22's ever made—cost $10.80!

The Marlin Model 1892 lever-action repeater, with 24-inch octagon barrel, in either .22 rimfire or .32 rimfire caliber, catalog listed for $13.16. This was the Marlin rifle that eventually became the Model 39.

On another page the Winchester Model 1894, which later became the justly famous, only slightly changed Model 94, could then be had in choice of four colors, and with octagon barrel, for either $12.25 or $13.53, depending on the caliber of your choice.

The long famous Winchester Model 1897 visible-loading, hammer style pump-action repeating shotgun was only $20. (The Model 97 was one of the most rugged and reliable shotguns ever produced; thousands are still in active service.)

Finally, the Colt single-action "Frontier" model revolver, caliber .44-40, with pearl handle and steer head carving on the right half, was $22.50!

How come there wasn't a .22 rifle gun buyer in my family then? . . .

Current gun prices are generally high, in some instances long popular models are being priced right out of average consumer reach—the little changed Winchester Model 94 lever-action big game rifle, for example, and certain of the Browning shotguns and rifles. The last time I ventured such observation, some retail dealers jumped on my neck, claiming I was suggesting that they sell at discount and loss. Not so! Fact of the matter, factories are charging dealer outlets high wholesale prices, with very little profit mark-up for the dealer to cover his tie-up money until the dealer's orders are sold. Some factories make small dealers wait and wait for ordered merchandise, while some nationally known big retail outlets advertise immediate shipment. This doesn't seem fair, in my opinion. In most cases, it is the small, local gun store that does the real selling—and usually with the smallest margin of profit.

As I see it, where prices of some gun models are obviously too high a uniform adjustment should be made at factory level, so that any lowered list price would not be at the expense of the small retail dealer, whose present margin of profit is already small.

STAINLESS STEEL of certified quality that can economically be made into high grade rifle barrels (discussed in the May 1966 issue of Florida Wildlife) is now the goal of research departments of several big steel companies, working in collaboration with nationally known custom gunsmiths and test shooters. Jones & Laughlin Steel Company is one of the latest to announce and market a new grade of stainless steel especially made for rifle barrels.

Known as the J & L No. 416-SM grade, the new stainless alloy offers better machinability, with desirable closer obtainable tolerances in barrel making, chamfering, and rifling, plus improved finished barrel appearance.

Dave Walker, holder of four world shooting records as a bench rest shooter, has been doing much of the research on the performance of finished product. His firm, the Walker Machine Tool Company, Louisville, Kentucky, is now turning out rifles for Olympic and national bench rest competition, with barrels made from the newly developed J & L No. 416-SM grade stainless steel.

Both Winchester and Remington already use stainless steel for barrels of some of their center fire Magnum models. However, they won't (at least, at this writing) fit and headspace a stainless steel barrel to one of their standard models or as a replacement barrel for an already owned rifle—even though you offer to pay extra for the installation. Technically, high quality stainless steel is still too expensive to produce with the uniform molecular (Continued on next page)
Serious dents in the fiber-glass wound steel tube completing a Win­chester Model 26 shotgun barrel are almost impossible to repair.

The sound produced is something in between a whistle and a horn sound, easily heard by man or dog. In fact, blowing this particular whistle close to another person’s ears is not recom­mended. . . .

Another valuable hunting accessory is a pair of soft, but tough gloves. They protect the hands in­numerable ways, and contribute to comfort on cold mornings. The best hunting gloves I’ve found are models in the Good Luck Glove Company’s (Car­bondale, Illinois) “Blue Ribbon” line—either the Model No. 683 red pigkins feather, “waffle” cloth lined gloves, or the Model 1550 wool, leather palm and finger-faced gloves available in choice of hunter red or forest green. Bootman’s catalog lists both Good Luck brand glove models, but under his own stock numbers.

It used to be that I was always dropping or leav­ing a glove somewhere. That annoyance was over­come by crimping a small eyelet in the cuff of each glove, and sewing a sweater curtain hook in­side my hunting coat to accept the gloves. Now, when I remove my hunting gloves they are slipped on the provided hanger; they are there when needed again.

The shower curtain hook should be sewn at a point in the hunting coat that permits the unworn gloves to hang just under armpit, where they nei­ther will be felt nor in the way . . . .

Now is the time to add the little accessories that can add so much to hunting season pleasure.

INCIDENTALLY, the Winchester-Western Division of Olin Mathieson Chemical Corporation has just announced availability of a 629-page tome titled “Exterior Ballistics of Small Arms Projectiles,” by D. Lowry, long-time Winchester-Western ballis­tician.

Using the included reference summaries, the shooter can determine in a matter of seconds the ballistic coefficients, muzzle velocities and trajec­tories of popular calibers. The book also gives a mathematical formula for computing trajectory characteristics of any small arms projectile.

There is only one “catch” to the offering, so far as the average shooter is concerned: The book carries a price tag of $50 per copy. (That’s right Fifty dollars!) It is technically-minded and often studied ballistic tables until I almost know them by heart, but I don’t think I’ll have the privilege of owning the named reference sheet.

The fly fishing perfectionist can change from one type of angling to another without too much trouble

By CHARLES WATERMAN

The fly fishing perfectionist can change from one type of angling to another without too much trouble

CHARLES WATERMAN

He had sent me a neatly tied streamer fly for approval and when I wrote to him that it was just the thing he’d need for snook he tied up twelve dozen, just in case he lost a couple.

I didn’t know whether to put him down as a fisherman or just a nice tackle nut but I figured the chances of his landing a good-sized fish (fishing being mediocre) weren’t too good as a mangrove snook, considerably rarer than a Kentucky bass and anybody who keeps polis­hing a Winston rod with a towel is not likely to latch on with both hands and dig in his heels when a snook makes a break-off run.

But since he was there and I had a boat in the water I thought it would be nice to go fishing with him so we got in and headed for Ferguson River five miles away. We were bouncing right along and I sit right next to the motor so any conversa­tion had to be carried on at a scream, what with the wind and all. By the time we got to the mouth of Ferguson River I was boarse from telling Roy what to do if he hooked a snook. I yelled so loudly that every mullet fisherman in Chokoloskee Bay knows what to do if he hooks a snook. Of course I never do those things myself, being one of the yelping and yanking school of fishermen when the chips are down and the thought that a snook tenderfoot from Kentucky would do anything other than run in circles and shout never occurred to me.

With Roy’s permission and his in­experience I stopped the motor in a narrow part of the river near where I’d found fish the day before and started drifting back downstream. He stood tensely on the little casting platform up front and flipped his streamers unnecessarily far back through little holes in the bushes. After 20 or 30 casts I concluded that it wasn’t luck and he really was a hotshot caster though he apologized for each throw. Then the river narrowed down and some­thing swirled away with one of the pretty little streamers while I gazed in agony at the vibrating Winston.

What Roy Berry had was a 5-pound jack crevalle, a rule test indeed for a fly fishing a mangrove creek for the first time. The jack went around and around the boat with Roy holding him out of bushes and logs and asking me what to do next. He never

(Continued from preceding page)
Serious fly fishermen where he lives, has simply fine angler. Kentucky, simply because I hadn't checked a sloppy reason. First, it is of rugged construction with a kinked the Winston too much and when we netted punkinseed sunfish to blue marlin with little trouble. This lure is manufactured by Pflueger's Factory, 4615 LeJeune Road, Coral Gables but they're not really in the mail order business. If a dealer or fishing club wants to buy some in moderate quantity it could be worked out, I think. Incidentally some of the big manufacturers are again building wooden plugs, finding them better than plastic for certain uses.

I wrote something about gulf fishing a while back and I have an interesting letter from Jack H. Meeks, Longview, Texas, describing a method of gulf fishing that should work well for casters and trollers. Mr. Meeks displays a piece of frayed-out nylon rope. The gar chomps down on the moving piece of rope (a knot or two will give it casting weight if needed) and can't disentangle his small, sharp teeth. Mr. Meeks mentions he figures I'd get a number of letters about gulf fishing methods but it didn't pan out that way. With all the talk about gars I'm surprised I haven't heard more fishing schemes.

A bluegill, that weighs a pound is a heck of a thing to scale a pound although several made 12. Neil Allinger, a neighbor of mine in Central Florida is an especially effective bluegill fisherman, using a popping bug and a trailing wet fly. He and Mrs. Allinger brought in 28 one day last spring and they had a total weight of 22 pounds. I'd call that a very outstanding catch.

Neil says he caught these fish as they were prepping to spawn, all in the same bedding area, and that they were male fish. He hasn't been able to come near that size since. I know I never did that well.

The point is that a perfectionist could move from the Winston too much and when we netted punkinseed sunfish to blue marlin with little trouble. This lure is manufactured by Pflueger's Factory, 4615 LeJeune Road, Coral Gables but they're not really in the mail order business. If a dealer or fishing club wants to buy some in moderate quantity it could be worked out, I think. Incidentally some of the big manufacturers are again building wooden plugs, finding them better than plastic for certain uses.

I wrote something about gulf fishing a while back and I have an interesting letter from Jack H. Meeks, Longview, Texas, describing a method of gulf fishing that should work well for casters and trollers. Mr. Meeks displays a piece of frayed-out nylon rope. The gar chomps down on the moving piece of rope (a knot or two will give it casting weight if needed) and can't disentangle his small, sharp teeth. Mr. Meeks mentions he figures I'd get a number of letters about gulf fishing methods but it didn't pan out that way. With all the talk about gars I'm surprised I haven't heard more fishing schemes.

A bluegill, that weighs a pound is a heck of a thing to scale a pound although several made 12. Neil Allinger, a neighbor of mine in Central Florida is an especially effective bluegill fisherman, using a popping bug and a trailing wet fly. He and Mrs. Allinger brought in 28 one day last spring and they had a total weight of 22 pounds. I'd call that a very outstanding catch.

Neil says he caught these fish as they were prepping to spawn, all in the same bedding area, and that they were male fish. He hasn't been able to come near that size since. I know I never did that well.

The point is that a perfectionist could move from the Winston too much and when we netted punkinseed sunfish to blue marlin with little trouble. This lure is manufactured by Pflueger's Factory, 4615 LeJeune Road, Coral Gables but they're not really in the mail order business. If a dealer or fishing club wants to buy some in moderate quantity it could be worked out, I think. Incidentally some of the big manufacturers are again building wooden plugs, finding them better than plastic for certain uses.
Florida's Fish Management Areas

Numbered on the map indicate counties in which Fish Management Areas are located. Copies of regulations applying to each Area can be obtained from the Fish and Wildlife Conservation Commission in Tallahassee and Regional Offices, but on pages 2 and 3, at the offices of the County Game and Fish Warden.

Fish Management Areas 1 through 18 are in the Camp Blanding Area.
Fish Management Areas 19 through 30 are known as the Chains of Lakes in Lake County.


C. George's office is known as the Fish and Wildlife Conservation Commission of Florida, which is responsible for the management of Florida's fish, wildlife, and natural resources.

Fishing

For 50 years or so, Florida fishermen have been using a method that goes by a whole list of strange names but is most often called "jigger bobbing." At intervals the method is rediscovered and introduced to a new generation as a revolutionary sure route to a fish dinner.

It works like this:
The fisherman gets a long, strong pole, preferably a calcium, and ties a few inches of heavy cord or nylon leader material to the business end. The "lure" goes on next and there's some disagreement about it, some experts swearing by a carefully cut out leather alligator, others employing huge "flies" of deer hair, some using a cut strip of fish with the fins left on and a few being secretive about the whole thing. The only point of agreement is that there should be a hook.

Along in spring when the weather gets warm and big black bass are showing up in the lily bonnet strands and around the cypress knees, the "jigger bobbers" go forth with easily paddled skiffs, working in pairs.

One man paddles the boat and the other sits in the bow and keeps the lure in constant motion on the surface through vigorous manipulation of the pole. He keeps up a continuous swishing and plipping because part of the game is to keep the water surface constantly broken so the fish can't see two men approaching with evil intent. Night is generally the best time.

When a bass strikes (and some of the blasts are nerve-shattering) the jigger bobber brings him in hand over hand, passing the pole back toward his companion.

Now the system may be called something else in other states but the Florida boys believe nobody else uses it for nasty-tempered salt water fish as well as black bass.

Of late some Florida jigger bobbers have moved into the South Florida mangrove swamps with their poles and lures and have done battle with snook, linesided fish with a delinquent look about the eyes and razor-sharp gill covers that will slice an ordinary line but, except for the use of monel wire instead of ordinary cord, the snook jigger bobbers employ the same methods they've been using on bass for these many years.

Now a snook is likely to weigh on up toward 30 pounds which definitely takes jigger bobbing out of the play pen set and there is always the possibility you might run into a 150-pound tarpon or even a goodness-knows-how-big shark.

But it's a good way to catch bass.
CONSERVATION SCENE
(Continued from page 4)

it to be most effective, we are extending the assistance of the Florida Historical Society.”

Goza said that local historical societies and county historical commissions will be asked to recommend suitable sites to the state Society. Named to the committee charged with approving the sites are Goza, a Clearwater attorney; Judge James R. Knott of Palm Beach, past president of the Society; and Dr. Samuel Proctor of Gainesville, editor of the Florida Historical Quarterly and a member of the University of Florida faculty.

The standard marker costs $152.50, Miller said. They are made of cast aluminum, covered with green enamel and raised gold letters. The markers will be erected by Park Board personnel.

Golden Eagle Directory

A complete list of Federal recreation areas where Operation Golden Eagle entrance permits are valid for admission has been published by Federal agencies and is now available for general distribution.

The Bureau of Outdoor Recreation produced a 16-page tabloid publication listing the areas in cooperation with the Forest Service, National Park Service, Bureau of Reclamation, Bureau of Land Management, Tennessee Valley Authority, and the U. S. Army Corps of Engineers.

The publication lists Federal recreation areas alphabetically by States. Shown with each agency’s designated list of areas are the period of fee collection, whether the annual $7 Golden Passport and one-day permits are valid for entry, and the cost of 20-day permits where applicable.

The $7 Golden Passport permit is valid for entry to most recreation areas on a year-round basis. It will admit a carload of people an unlimited number of times to thousands of Federal areas. The 1966 Golden Passport is valid through March 31, 1967. All funds from sale of the $7 permits are earmarked to provide additional State and Federal outdoor recreation opportunities.

Individuals wishing copies of the “Directory of Federal Recreation Areas Requiring Entrance and User Charges” may obtain them free from the Federal agencies which sell the $7 permits, from American Automobile Association offices, from many States, numerous conservation organizations or from Operation Golden Eagle, P. O. Box 7763, Washington, D. C. 20044.

Underwater Camera Bags

Camera enthusiasts are now joining the ranks of fish watchers and other underwater hobbyists in their invasion of Neptune’s realm. With inexpensive underwater cameras now readily available, any photo bug can go underwater and make good shots of fish, coral and other marine life.

Underwater photography is not only for sport. Photographs of fishes and other kinds of aquatic life are sorely needed for scientific study. There is so little known about life in the water that any observations are useful find, particularly if backed up by a photo.

The facts and photos are now available through the National Aquatic Society, an organization of amateur and professional naturalists and conservationists concerned with aquatic life. The Society publishes illustrated reports by fish watchers in its publication, founded in 1966, “The Aquatic Biologist and Underwater Naturalist.”

Editor Roland Woolson says, “The Aquatic Biologist is not a textbook, but a man wants to face out and then publish—how are fishes and aquatic animals living their private lives in their own neighborhoods? We are looking for candid shots of fishes and other marine animals going about their daily routines in a perfectly normal way, unless that they are on ‘candid camera.’”

Mr. Woolson pointed out that although many of the country’s top photographers are Society members, some of the best photos published are the work of amateurs. "Any photograph has value," he said, "if it shows a marine animal doing something-fiddling, spawning, defending its nest, or engaging in courtship behavior.”

"It doesn't necessarily take professional skill and an expensive camera," Mr. Woolson said, "but it does take the qualities that any good camera bug needs to make a good action shot: patience, an ability to observe, and the knack of being in the right place at the right time. And who knows—the snap with a camera may find a 'hook' for science!"

The Society is putting together special programs for its photographers and is preparing a special booklet with tips for underwater nature photographers. Interested shutter bugs are asked to contact the American Littoral Society, Sandy Hook Marine Laboratory, Highlands, N. J.

You and Your Lawmakers

To most sportmen, the great outdoors has very little to do with what goes on in the dark halls of the state legislature and this, says the Shooting Sports Association, is one reason why the future of outdoor recreation is slowly eroding away in every state in the Nation.

More often than not, this disinterest in legislative affairs is not because the sportsman is apathetic, but because he simply doesn't know how to take an active part in the lawmaking process. In some cases, how to write a convincing letter to his Congressman.

To give the sportsman a hand, the Association has recently published an attractive 24-page booklet which explains the ins and outs of the legislative process and describes the many ways a citizen can help his lawmakers. Titled "You and Your Lawmaker," single copies are available free by writing the Association, 1075 Post Road, Riverside, Conn. 06878.

Although the booklet is primarily concerned with firearms legislation, it is general enough to apply to any kind of legislative problem.

It then traces a bill through the various steps of the legislative process and details what a citizen can do at each step along the way to help mold its eventual outcome.

As the letter is probably the sportsman's most effective weapon, another chapter is devoted to a discussion of how to write the kind of letter that can really help a legislator in making a decision on a bill.

The booklet also contains chapters on local governments, why its important to join an organized sportsmen's group and how sportsmen can help their legislators gain a better understanding of the problems facing outdoor recreation. Another chapter gives some valuable hints on dealing with the press, including the procedure for obtaining time on radio and television.

For sportsmen's groups interested in ordering large quantities of the booklet, the bulk rate is ten cents per copy.

New Wildlife Sanctuary

Everyone knows that the Los Angeles Dodgers' first interest is baseball, otherwise they would not be such strong contenders for the highest place in the baseball standings.

But the Los Angeles Dodgers have another interest which is growing in importance. The Dodgers are helping to bring a new wildlife sanctuary to the area.

The sanctuary will be called the "Los Angeles Dodgers Wildlife Sanctuary" and will be located in the mountains near the stadium. The sanctuary will be open to the public and will feature a museum with exhibits about the history of the Los Angeles Dodgers and their role in wildlife conservation.

The sanctuary will also feature a variety of wildlife, including birds, mammals, reptiles, and amphibians. Visitors will be able to observe the animals in their natural habitats and learn about their biology, behavior, and conservation status.

The sanctuary will be open year-round and will be staffed by experienced naturalists who will be able to answer any questions visitors may have. There will be guided tours available for small groups and families.

The sanctuary will be a wonderful addition to the Los Angeles Dodgers' efforts to promote conservation and outdoor recreation. It will be a place where visitors can learn about the importance of wildlife conservation and the role that we all play in preserving the natural world for future generations.

FLORIDA WILDLIFE
AUGUST, 1966
For that BIG ONE

That didn't get away.

(Continued from preceding page)
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