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Florida Fish and Wildlife  
Conservation Commission

# Florida WILDLIFE

JANUARY, 1955

The Florida Magazine for all Sportsmen

BOBWHITE QUAIL

HUNTING & FISHING  
PROGRAM

FLORIDA'S FISHINGEST  
FISHING BRIDGE

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# COMING SOON! *Another* JUNIOR WILDLIFE CONTEST

WITH ALL KINDS OF PRIZES FOR THE OUTDOOR BOY AND GIRL

☆☆☆☆ *Florida*  
**WILDLIFE** *Junior Wildlife*

# PHOTO CONTEST

TO BE ANNOUNCED IN THE MARCH ISSUE OF FLORIDA WILDLIFE



*Also . . .* IN THE MARCH ISSUE—

*Winners* OF THE JUNIOR  
CONSERVATION ESSAY CONTEST

*Will Be Announced!*

☆☆  
Winners in each division will receive their prizes  
as soon as all essays have been read and judged.

VOL. 8, NO. 8

*Florida*  
**WILDLIFE**

JANUARY, 1955

★  
Published monthly by the  
FLORIDA GAME AND FRESH WATER FISH COMMISSION  
Tallahassee, Florida

★  
Dedicated to the  
Conservation, Restoration, Protection of Our Game and Fish

★  
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ROSE TALLAHASSEE

JANUARY, 1955

## This Month's Cover

Dick Macomber takes a marsh hen from Sambo, his Black Labrador retriever, during a hunt on Franklin County's Gulf Coastal marshes.

Each season more outdoorsmen are becoming aware of the important part the retrieving dog plays in making bird hunting trips more enjoyable. Besides putting more birds in the bag, a good dog helps to reduce the crippling loss, a factor with which game specialists and hunters have long been concerned.

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# CJ Junior CONSERVATIONIST

By DENVER STE. CLAIRE

### WHAT CAN I DO IN 1955

What can I do in Conservation  
To aid my community, state, and nation?  
... I can use courtesy, thought, and care.  
In field or forest anywhere.  
... Take what I need, but never waste.  
Curb my desire for frantic haste.  
... In handling forest, range or field,  
Plan skillfully for future yield.  
... Observe the laws for fish and game,  
And help my neighbors do the same.  
... So live that in a future year  
None will regret that I passed here.

WOODBRIDGE METCALF  
President

California Conservation Council

\*\*\*

### HAPPY NEW YEAR!

To all of you, especially those who are making plans this coming year to contribute something worthwhile in the field of conservation.

It's a New Year before us gang, let's do something about Conservation. Remember Conservation Can't



Pictured above are the officers of the newly formed Archbishop Curley High School Conservation Club. The officers are (left to right): Charles Diamond, member of Board of Directors; Walter Sklar, Vice President; Michael O'Neil, Secretary; Guy Brickman, President; Theodore Genest, Treasurer; and Mr. James Kutz, faculty advisor.

wait and that Conservation benefits everyone.

\*\*\*

### MERIT POINT SYSTEM

In the December issue a list of 26 projects for self-improvement and individual and group activities were presented. From time to time additional projects will be presented to the Clubs and their members. Ask your leaders and advisors for help if you need any. Remember this is the new Merit Point System. Through its use will be determined eligibility for Summer Camp, Selection of the Junior Conservationist of the Year, Award Badges and Ranks.

\*\*\*

In the next issue more information will be given as to the number of

points required for certain League benefits and awards.

Can't think of a better way to start a New Year than by telling you about a new club joining our happy family. On November 17, a new club was organized by the Orlando Optimist Club.

Mr. John Hand is Chairman of the committee in charge of the new Orlando Optimist Junior Conservation Club. Mr. Bob Cox, President of the Optimist Club, and his associates are to be congratulated.

The newly organized club elected these officers for the coming year:  
RICHARD TAYLOR, *President*  
WAYNE KASPER, *Vice President*  
BILL NELSON, *Secretary-Treasurer*

Age limit for the club was decided to be ages 12-18. Meetings are to be held every Wednesday night at the Sea Scout Club House on West Church Street at Lorna Doone Park, Orlando.

\*\*\*

### AROUND THE STATE WITH NEWS FROM SOME OF YOUR CLUBS

**Eustis Junior Wildlife Club** has elected a new slate of officers:

RONNIE BAKER, *President*  
BILLY TAYLOR, *Vice President*  
CHARLES ADAIR, *Secretary-Treasurer*

16 members are listed for the club.

**Bartow Junior Conservation Club** reports by way of its secretary, Sonny Kirkland, that the club now has 51 members.

At their meeting of November 9, Mr. B. L. Timmons, their advisor, read a letter from the Royal Order of the Moose officially accepting sponsorship of the youthful club.

Sonny reports too, that \$72.00 is the amount in their treasury. League dues paid are 42.

**Everglades Junior Conservation Squadron** at Hialeah has a new secretary—a young lady—and she reports the club roster as having 14 members. Good luck — Jenni-gail Becraft. Members in the club now are:

RONNIE EDMOND    WALT MONAHAN  
JOAN JAY            DEANNE DAVIS  
TOM MAWHINNEY    MIKE DAVIS  
RICHARD DANIELS   TOMMY CAMPBELL  
JOHN PATRICK       VICKY CAMPBELL  
DOT THURMAN       JENNI-GAIL  
FRANKIE MIDKIFF    BECRAFT  
DONNA MAY SAPP

The club now has \$52.72 in its treasury.

**Leon County Junior Rod and Gun Club** of Tallahassee reports that

John Dean is President of the club, John Calhoun is secretary. The club lists 15 members. Their treasury totals \$12.50. The Board of Directors consists of J. Dean, F. Dean, J. Calhoun, C. Baldwin, and R. Jackson.

**Allapattah Optimist Junior Conservation Club** of Miami reports through their secretary Lynn Ward that they have voted to close their membership at 30. Others wanting to join will be placed on what they call a "Goon Squad." At the last report they had 28 members.

The club entered floats in the annual Optimist Club Week parade and went one better this year. The club decided to have a queen reign on one of their floats. With the help of the Opti-Mrs. and the Optimists, candidates were qualified and a judging was held on October 12. The girls were in formal attire and were between the ages of 14 and 16. Senior Optimists judged the contest and Nancy Bailey was selected queen for the float.

Past President, Phil Alexander, was presented a cap for the Best Camper Award-1954.

**Lake Weir Junior Wildlife Club** of Weirsdale and Oklawaha reports through its new secretary, Teal Cole, that it has elected the following officers:

HARRY BAXLEY, *President*  
JOHNNY REITZ, *Vice President*  
TEAL COLE, *Secretary-Treasurer*

**Leesburg Junior Wildlife Club** reports that 46 members were present for the meeting held November 1. Discussion for their meeting was Hunting Rules and Regulations for 1954-55. Mr. Ed Richey, Wildlife Officer, explained the rules.

**Hardee County Junior Conservation Club** at Wauchula reports through its secretary, Bob Anderson, that they were making plans for the Cucumber festival that was held in November. The club planned to exhibit a small collection of animals and sell subscriptions for the FLORIDA WILDLIFE MAGAZINE.

Jimmy Cottin is in the lead in the subscription drive with 7 subscriptions to his credit.

The treasury has swelled to a sum of \$47.35. The club membership now totals 17.

**Perry Junior Conservation Club** held its first party on October 27. This was a weiner roast and tacky party and almost the entire membership was present. The party was held at the home of Wildlife Officer, Mack Cook, who is the club advisor.

The following boys and girls were present:

JAMES CAMPBELL	ARNOLD CARLAN
WAYNE COLLINS	JERRELL DAVIS
TED EZELL	DANNY FRANKLIN
WINSTON FRENCH	ARVIL GRUBBS
MACK LANDRY	LAWTON LEE
BERT PUTNAL	SAM REGISTER
JOHN ROBINSON	SAMMIE SEALEY
JOHN SHAW	JACKIE SUNDAY
DAVID THOMLEY	SKIPPER VEREEN
DON L. WHITFIELD	WILLIE WILKERSON
BETTY BERGER	SON
BEVERLY	EVA BUCKHALTER
CHEWNING	NADINE ELLISON
JOAN FUSSELL	CHARLOTTE GREEN
JANICE GUNTER	JUDITH
HILDA HUNER	HOLLOWELL
PATRICIA	BETTY JACKSON
KIRKLAND	LOTIE MATTOX
LUCIA PADGETT	NORMA JEAN
MARIE SHERRER	SADLER
EMMA LOU	BARBARA SZUCH
WALKER	

**Okeechobee Junior Wildlife Club** has reorganized and has elected the following officers:

DAVID DAVIS, *President*  
JOE OSCEOLA, *Vice President*  
ALLEN CHANDLER, *Secretary*  
MARTIN VICKERS, *Treasurer*

Board of Directors are Roy Douglas, John Allen, and Richard Hoff-

man. Mr. Frank Nowak, Information and Education Officer of the Everglades Division is helping the boys with their program. Good luck to all of you.

I would like to hear from all of the clubs concerning the following matters:

We are in the process of making up a 1955 Club Directory. Will all of you please send in complete addresses for mailing?

We are sending out a great deal of material and many forms. Are you getting this material? If not, please let us know.

Please, please use the Secretary's Club report form. These forms have been sent to you. We shall be glad to send you more if you need them.

The CLAW bulletin needs information. If you have a party, picnic, field trip or any other activity which would be of interest to other clubs, send it in for the bulletin.

Send all requests and information to:

Denver Ste. Claire  
Executive Secretary  
Junior Conservation Club League  
P. O. Box 77  
Williston, Florida

Shown below is the Secretary's Club Report from which all club secretaries are requested to use. If you need more forms, forward your request to Denver Ste. Claire, Executive Secretary of the Junior Conservation Club League.

### SECRETARY'S CLUB REPORT

DATE.....

NAME OF CLUB:.....

ADDRESS:..... CITY:.....

NO. MEMBERS:..... NO. ATTENDING MEETING:..... (Leave Blank)

NAME DIRECTORS PRESENT:..... A.M. P.M.

MEETING HELD AT:..... TIME CONVENED.....

REPORT OF MEETING:  
ACTIVITIES AND PROJECTS: (Completed and Planned)

REMARKS:..... GUEST SPEAKERS:..... FILMS:.....

GUESTS:.....

SPONSORS:..... ADVISORS:..... Present Present

AMOUNT IN TREASURY: \$..... TOTAL PD. UP MEMBERSHIP:.....

LEAGUE DUES PD. .... P.M. A.M.

TIME MEETING ADJOURNED:..... SECRETARY..... (Signature)

CLUB:.....

# WHO said Christmas comes ? but once a year ?

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ISSUES



Says "Merry Christmas" over and over again throughout the year!

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Gift---DON'T WAIT---DO IT NOW!

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Please send gift subscriptions to the sportsmen listed below:

My Name Is \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_

Name \_\_\_\_\_  
Address \_\_\_\_\_  
City \_\_\_\_\_ State \_\_\_\_\_



E. B. (Shorty) JONES

The history of Florida, and of the nation, is inseparably entwined with the story of its wildlife resources. That is but natural for without abundant game to sustain the early day traveller, the exploration and settlement of North America would not have been accomplished in the relatively short period it required. So spectacular were some of the former game populations that it is difficult for people of the present day to accept, without a great deal of credulity, the accounts of herds of bison that required hours or even days to pass a given point, or of flocks of passenger pigeons that darkened the skies for hours on end as they moved from one feeding ground to another.

Within a generation or two removed from our own, hunting game for public sale constituted a legitimate and profitable business. Accounts that even now are far from ancient tell of the seemingly inexhaustible abundance of wildlife. Men yet living have participated in an orgy of wildlife slaughter that is difficult for us to conceive. For years the ruthless waste of game continued. There were signs of the fast approaching depletion of many forms even during the early stages of concentrated exploitation but the voices of those that could see and understand these signs of the black days to come were drowned by the cries of those who held that "no ordinary destruction can lessen them or can they be missed from the myriads that are yearly produced."

Then one morning the people of the nation awoke to the fact that the vast, "inexhaustible" herds were no more. Some species, notably the bison or buffalo of the plains and the passenger pigeon of our eastern woodlands, to cite the classic examples, were all but gone. The bison was saved by the actions of a few far sighted individuals who preserved remnant herds that served as the seed stock which kept the species from vanishing. The once fabulously abundant passenger pigeon had been pushed beyond the brink, beyond the possible point of recovery. The species lingered on for a few years around the start of the present century then passed completely from the scene.

A sudden awareness of the disaster that



threatened to rob the nation of its rich heritage of wildlife had its first important stirring sometime around the close of the last century. William T. Hornaday and other visionary conservationists of the period, brought before the American public the plight of our native wildlife. Their impassioned writings and lectures touched the public conscience. A reaction against the heedless waste set in and upon the scene was ushered an era of preservation. Conservation became synonymous with saving.

During this period, public sentiment backed by legislation was instrumental in accomplishing many of the far reaching objectives of the pioneer conservationists. Species that had been nearing the point of extinction were given respite; limited perhaps but none the less sufficient to enable their natural productivity to assure, in many instances, spectacular recovery.

It was not too many years before, from widespread points came murmurings that something was amiss in the "Conservation means saving for savings sake" concept. An oft used example concerns that of the Kaibab deer herd in Arizona. Concerted efforts were made to remove the predatory enemies of the deer, especially the panther. At the same time no hunting was allowed in the Kaibab Forest. The deer herd increased so rapidly that the range was badly damaged and deer starved to death by the thousands thus defeating the purpose of the "Conservation" plan which made no allowances for harvest of the surplus.

Along about 1908, Theodore Roosevelt introduced his idea of "Conservation through wise use." To Roosevelt and the other progressive conservation thinkers of his time wildlife, forests, range lands, soil, and water were renewable organic resources which could last indefinitely—forever, if they were harvested in a wise manner at no greater rate than they were produced.

Over the years, this concept of "Conservation through wise use" has proven itself and it is upon this basic philosophy that modern day game and fish management programs are based.

(Continued on Page 47)



HAL H. HARRISON FROM NATIONAL AUDUBON SOCIETY

The bobwhite ranks first in the listing of the upland game birds of the country. The plumage markings of the male, right, above, are more distinct than those of the female, left.

## BOBWHITE QUAIL

Among the birds of North America, few are held in such high esteem by so many people, hunters and non-hunters alike, as is the bobwhite quail. The cheery call of the bobwhite is a familiar sound from the Atlantic to the Pacific. A favorite with the hunter because of its fast flight, its proclivity to hold well before a dog and the excellent table qualities of its flesh, the bobwhite is considered by authorities to rate first in the ranking of American upland game birds on the basis of the numbers taken each season and the numbers of hunters engaged in his pursuit.

The bobwhite is essentially a bird of the eastern United States, its native range extending from the Dakotas southward to Texas in the west. To the north, the species ranges to central Minnesota, Wisconsin, New York, and southward along the eastern seaboard through Florida and west along the Gulf states.

In the west, the bobwhite has been introduced with some degree of success, several isolated localities now boasting populations of the bird. Outside of the United States, the species occurs as a member of the native bird life southward through Central America.

Two races of the bobwhite are recognized in Florida; the eastern bobwhite, *Colinus virginianus virginianus* and the Florida bobwhite, *Colinus virginianus florida-nus*. The life histories and habits of the two forms are for all practical purposes the same except where environmental factors require adaptations. The Florida bobwhite is a somewhat smaller and darker bird than the eastern race.

Among adult bobwhite quail populations there are normally more males than females, a situation that has been attributed to various causes among which are included the theory that the male is harder than the female and the possibility that the female is subjected to more danger than the male. Whatever the cause, extensive examination of the subject has shown that the sex ratio of bobwhites throughout its range is somewhere in the neighborhood of 53 males to 47 females.

The bobwhite is monogamous, a rather unusual situation among our game birds. With the arrival of the warmer days of spring, the winter covey begin to break up as the birds pair off. The beginning of the mating season depending as it does upon the rela-

tive lateness or earliness of warm spring weather, varies somewhat from year to year as well as from one locality to another. In the southern part of Florida the breeding season may begin during February, becoming progressively later toward the north. The earliest "bobwhite" calls in the spring are a good indication that the mating season has arrived. Later on in the year, the calling is usually that of the unmated males.

Upon breaking off from the winter covey, each pair of bobwhites selects a territory where they will remain until such time that the young chicks are hatched. During the early part of the nesting season, males from adjoining territories may fight with each other, but it is unusual for the participants to suffer any extensive injury. The male remains with the female throughout the nesting season and assists her in caring for the young. Although the family joins others in the winter covey, the same birds may pair off with the arrival of the next mating season. Pairs of bobwhites have been known to remain together through several consecutive mating seasons.

Depending upon the prevailing weather conditions, actual nesting activities may not begin for as much as a month after the birds have paired off, although generally the period is much less.

The bobwhite nest is a shallow depression on the ground, lined with fine grasses and other material from the vicinity. Quite often a screen of grasses may extend over the nest partially concealing it but still thin enough to give the incubating bird the opportunity to view its surroundings. Although the female usually does most of the work in constructing the nest and

incubating the eggs, the male does take a part in both duties. The nest itself may be located in a variety of sites, although the birds display a definite partiality to broom sedge fields and weedy fence rows. Extensive studies have shown that about three-quarters of the nests are located 50 feet or less from roads, trails, fire lanes, or similar openings. Nestings in dense woodlands are not common.

Usually one egg is deposited each day until a complete clutch has collected. The average number of eggs in a clutch is 14 but up to 37 eggs have been found in a single nest, undoubtedly the result of two or more hens laying in one nest, an occurrence that has been recorded in the past. The eggs are light brown to white in color and are smaller than those of the bantam chicken.

Each pair of birds normally brings off only one brood of young per season. Should the nest be destroyed before incubation is completed, the pair may make a second and even a third attempt to bring off a brood.

Even though there is a matter of quite a number of days between the time the first egg and the last egg of a given clutch is laid, apparently the incubation begins at approximately the same time for the eggs are hatched within a 24 hour period. The incubation period of bobwhite eggs is from 23-24 days. In the wild, the viability of eggs is high, that is from 85 to 95 per cent.

Should some misfortune befall the hen during the nesting season, the male assumes full responsibility

(Continued on Next Page)

Comparison between the wings of adult and juvenile bobwhites is shown below. The juvenile has buff tips on the upper wing coverts (the short stiff feathers which overlap the large "flight" feathers). Upper wing coverts of adult birds do not have the buff tip.





Jack Deering from National Audubon Society  
This hen bobwhite quail has a full brood with 16 eggs being incubated at the time the photo was taken.

for completing the incubation of eggs and rearing of the young.

The bobwhite chicks are able to walk about within a short time of hatching and soon they leave the nest under the guidance of the parents. For the introduction of modern farm machinery, the increase in human population, and the acceptance of the practice of "clean" farming, the bobwhite population went into a decline. The conversion of lands formerly devoted to other purposes into pasture lands with its dearth of usable cover has been one factor in the recent decline in bobwhite quail populations.

The diet of the bobwhite quail is preponderantly vegetable at all seasons of the year. During the winter months vegetable material total nearly 100% of the food taken. During the summer and fall months animal material, mainly insects, comprise an important portion of the food. There are a great number of plants that rank high as quail food in the southeastern states. Among them are several legumes, especially the lespedezas, beggarweeds, and partridge pea, the panic grasses, Johnson grass, certain sedges, the mast of oaks, sweet gum, and pines, blueberries, huckleberries, and a great variety of seeds including those of smartweeds, ragweeds, knotgrass, and wild geranium.

In the past, there has been some disagreement on the question of the water requirements of the bobwhite. It has been conclusively shown that the bobwhite does not depend upon open bodies of water for their moisture requirements, dew, fleshy fruits, and succulent vegetation of various types satisfying their requirements in this respect. When water in the free state is available, the birds may regularly drink at such places.

Grit is considered an essential to the bobwhite. Although gravel is the most acceptable material, the hard chitinous parts of insects or various hard coated seeds may serve as the food grinding agent in the gizzard.

Game management experts have come to the conclusion that a bobwhite population average of one bird per acre is the maximum fall carrying capacity of the best bobwhite range. Heavier populations on

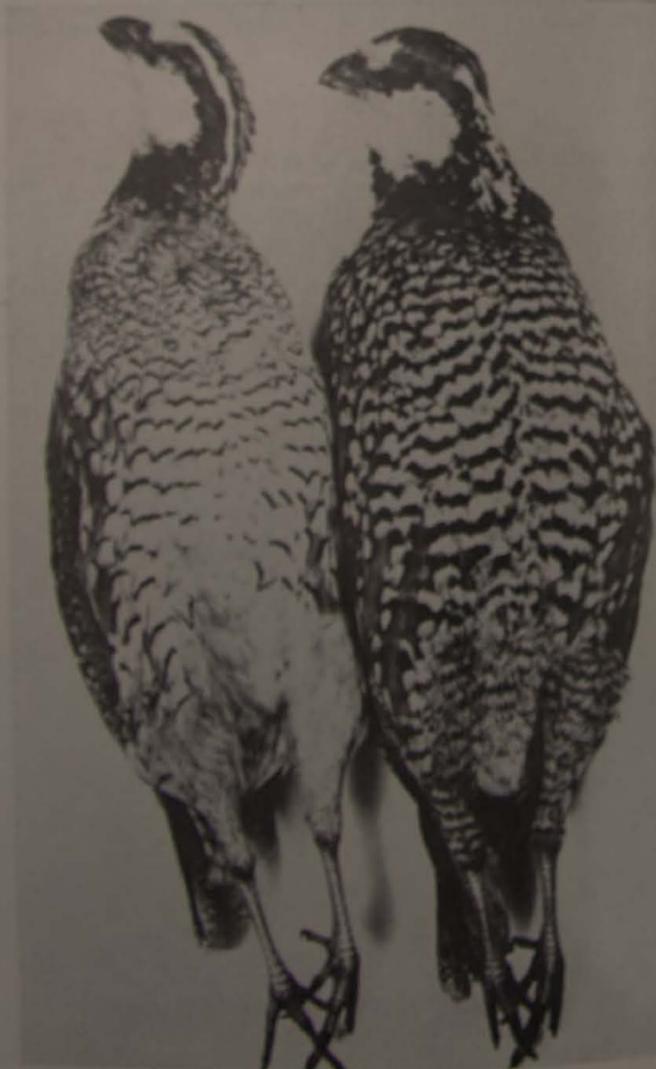
any extensive acreage are unlikely and lighter concentrations are the rule.

As is true with most birds which nest on the ground, the nesting mortality of the bobwhite is high, even under the best of conditions. Desertion of the nest is a rather common cause of nesting mortality and may be brought about by a number of conditions such as human interference, heavy rains, extremely dry weather, floods and natural enemies.

The weather exerts a considerable influence upon the bobwhite population, although its indirect influence is perhaps more important than such direct factors as loss through nest flooding. When rainfall is heavy, vegetative cover and food producing plants are encouraged which in turn enables the survival of a greater number of quail. During seasons of drought, the shortage of food and cover plants may have a serious detrimental effect as reflected in the lower rate of survival.

Because the species is one which readily responds to management practices and can thrive on farmlands in close proximity to man, if attention is given to its basic needs, this number one favorite among American game birds bids fair to provide pleasurable sport for years to come.  
END.

The Eastern Bobwhite, shown at left in the photo below, and the darker plumaged Florida Bobwhite (right) occur within the state. The eastern form is a bird of the northern counties, the Florida subspecies of the southern portions.



FLORIDA WILDLIFE



# SHOOT CROW--- EAT CROW

By LOU MUSSLER

Crows are not a comfortable bird to live with—that's for sure. They're thieves, they are pests, they are raucous and they're ugly.

But they are good hunting, and they are very good eating—two things lots of people did not know about crows. I do know, and please take my word for it. It was hunting crows that first brought me Outdoors. It was hunting crows that brought me into contact with Old Hank, a character I'll always remember. And, although I've had to eat crow many times in my ululant life, I've only enjoyed it as cooked by Old Hank.

Let me tell you about crows, the hunting of them and Old Hank all at once.

First consider the crow as a game bird. Prejudice is all that prevents us from including him with the rest of America's great hunting fowl. This is not to say the crow is not hunted as a game bird by some; sadly though, he is thought unworthy of being included as a gamester by the majority.

The crow is smart, he is shrewd, and the chances are he will outwit you ten to one. Moreover, if you miss him once, don't bother to pull a bead on him again; at least, don't bother trying to shoot the crow you missed. He won't be around.

As a kid on Long Island more years ago than I care to remember, I'd take off through my Grandpa's cornfields with my rusty, trusty .22 rifle, looking for crows. My rifle was an old single shot Marlin, I think, and a hand-me-down at that. But I could plink a target fairly accurate at 100 yards, and thought myself a hot-shot rifleman.

In looking for crows, sometimes I'd find them. Most of the time they were looking and laughing at me. The lookout, a cagey bird among cagey birds, would tell the rest I was coming. The trick, of course, is to knock down the lookout. But first you must get into a position unobserved by the lookout. At first my crow shooting efforts resulted in dismal disappointment. Soon, however, I began to think like a crow, and to make the approach for a good shot without tipping my hand. Then I'd knock over the bird manning the outpost, and before he was missed by the rest of the flock, sneak off to another good shooting location. Every time I did that I'd come back with five or six more in my pouch.

Grandpop and I had a fair arrangement. If I went out crow hunting I would be out of his way. I would also be reducing the number of birds raiding his corn-

stacks. All this suited him. Then if I shot any birds, he would pay me a nickel a bill, and that would suit me fine too. In those days, a nickel was worth at least five cents, and half a dozen dead birds would make me a temporarily rich man. "J. P." Mussler, the rich crow hunter!

After Grandpop made his bill count, my day's bag I would take to my friend, Hank. And what a friend he was. Perhaps, you'd call him eccentric, but he wasn't any such thing to me. He was an optimist with an optimum of individuality. Practically a hermit, Hank didn't have to take a bath, wash behind his ears, get things done in time and put up with the other annoyances kids have to face. A disabled Spanish-American War veteran, Hank wasn't very fast on his feet. But he was Indian-like in the woods.

Hank lived off the field and from the streams. And he was an ardent conservationist back in the days when (am I dating myself?) conservation was not much in vogue. From him I learned lots—the real meaning of wildlife protection and conservation. I might also mention I learned from him, the hard way, not to shoot at Western Union open wire insulators. He caught me doing it once, and I haven't done it since.

Hank could cook game like an Explorers Club chef. It would even put Grandma's cooking to shame, and my size testifies that her cooking wasn't bad.

Most of his success with the skillet, I attribute to the mysterious herbs he used. He kept them in old mason jars in his cabin and would choose them almost secretly as he was cooking.

"Not eatable unless you use some of this," he would say, and, "then a bit of this," adding some more of the mysterious stuff.

What those herbs were, I never did find out. My bag of crows were always a welcome addition to Hank's larder. He would cook them in pots suspended over an old-fashioned stone fireplace. Pioneer stuff, believe it or not, on 20th century Long Island. On one side of the fireplace there was a built-in oven where Hank roasted his game and baked his bread.

I would help him clean and dress my crows. We'd soak them in hot water, remove the feathers and dress them. Then we'd drop them into a pot containing water, seasoning, some of Hank's mysterious herbs, and let them parboil. When done to his satisfaction, Hank would remove the birds, place them on a pan, glaze them with butter and put them in the oven—

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# Florida's Hunting and Fishing Picture

## Wild Turkey and Deer

By CLEVELAND VAN DRESSER



This is the first of a series of articles covering Florida's comprehensive wildlife management program which has been designed to assure the continuance of good hunting and fishing throughout the Sunshine State. It is hoped that through these articles the sportsman will receive a clearer picture in regards to the progress of the various projects encompassed by the state-wide program being conducted by the Game & Fresh Water Fish Commission.



If you want to find out anything about wild turkey and deer in Florida, get in touch with Edward B. Chamberlain, Jr. I learned that this summer during my investigative tour of the state. There is no substitute for first-hand information, and with the invaluable aid of Chamberlain, whose respect-compelling title is Federal Aid Wildlife Coordinator for the Florida Game and Fresh Water Fish Commission, I got just that.

We grouped wild turkey and deer together because the same type of problems beset both, and programs designed for habitat restoration apply to both. On the whole, I can truthfully report that turkey and deer populations are on the upswing in Florida, and unless something catastrophic happens, sportsmen can look forward to improved hunting in future years for these two magnificent game species.

As with all forms of wildlife, not only in Florida, but throughout the entire nation, suitable habitat, or rather, lack of it, is far and away the foremost limiting factor. That is being overcome to some extent in the Sunshine State, for which the sportsmen can be mighty thankful. Even though turkey and deer requirements are very similar—what is bad for one is bad for the other, and vice versa—for purposes of clarification, let us consider them separately.

The wild turkey is a native of Florida and his original range was the entire state. This magnificent bird first came to exalted notice during the 1760's when William Bartram, "Botanist To His Majesty King George of England", wrote about the great numbers of these huge birds he observed during an exploratory tour. The Spaniards also remarked about the abundance of wild turkeys during their domination of the land to which they gave the name of "Florida."

Later, the wild turkey played an important role in the Seminole Indian Wars. During many of those campaigns, the soldiers lived off the land, and wild turkeys were a staple part of their diet.

This king of upland game birds continued in abundance in Florida clear up to the early 1920's. Around that time loggers moved into the state and started "clear cutting" huge tracts of timber. Homesteaders began filtering down from the north to settle in wild areas. Much like the soldiers who preceded them, homesteaders lived off the land, and the wild turkey was an important food item. The combined activities of loggers and homesteaders cut heavy inroads into the habitat of the wild turkey and the birds retreated farther and farther into diminishing unsettled areas.

The famous real estate "boom", which also started (and collapsed) during the 1920's further curtailed the terrain of the wild turkey. The low ebb for the gobblers was reached about 20 years ago when their

original range of 35 million acres had been reduced to a mere 15 million acres. Then the pendulum began swinging the other way.

Huge cattle interests took over a lot of the cutover timber land and fenced and posted it. Their work done, loggers moved out, and homesteaders, no longer welcome on land that was now in private hands, likewise deserted the more remote sections of Florida and headed for urban centers. This shift in population and activities left considerable terrain open for re-establishment of wild turkey.

Even at their lowest ebb, there were some wild turkey in practically every county in Florida, so the picture was far from gloomy. However, the birds are not as adaptable as quail, and do not take up residence in a new area anywhere near as quickly as do the bobwhites. Once gobblers have been ousted from their range, it takes a lot of time, under ordinary circumstances, for them to set up housekeeping again on the old stand. They will come back in time, but this is the age of speed and the Florida Game Commission wanted to get turkey back on their old ranges as quickly as possible, especially in view of the fact that many areas were once again capable of supporting the birds. So the Commission decided to give Nature a boost.

At first the Commission tried artificial rearing of wild turkeys. The plan was to produce the birds in incubators, raise them to semi-maturity and release them in areas that had already been studied and pronounced capable of supporting them.

It was a good theory, but the birds wouldn't cooperate. Confined living and hand feeding so dulled their wild instinct that once they were released, wild turkeys hung around farms and hobnobbed with barnyard fowl. Such degrading association led to cross-breeding with the result that the pure wild turkey blood strain was in real danger of corruption. In addition, what few released turkeys that did take to the woods fell easy prey to their natural enemies, such as bobcats, foxes, semi-wild house cats, skunks and wild hogs, among others. Hand-reared turkeys simply could not cope with life in the wild. In short, the project was a dismal failure and was abandoned when that fact became apparent.

Although the upward trend in wild turkey populations started in the late 1930's, progress for the next ten years was extremely slow. It wasn't until 1948 that things started to get lively in the turkey department. The Commission reasoned that if really wild birds could be established in restored range, the gobblers would carry the ball from then on. Reasoning further, the Commission decided the only way to get wild birds on a new or restored range was to trap

them elsewhere and release them where needed. The reasoning proved sound as subsequent events were to prove.

In early 1949 it was decided to trap birds on the Fisheating Creek Wildlife Management Area in Glades County and on the Polk-Osceola breeding grounds and release them in about 12 counties in the central part of the state. These areas could really use some wild turkeys. Bear in mind that this was no haphazard idea—the birds were not to be released just anywhere there was some open land. The proposed areas had been carefully studied by Commission biologists and pronounced fully capable of supporting wild turkey once the birds were convinced they could get along in their new range.

To trace each individual re-stocking activity would take far too much space, so I'll give you the results of one typical case:

Five years ago there were virtually no wild turkeys in the Peace River drainage area in Hardee and DeSoto counties in the south-central part of the state. The area had been heavily hunted for a number of years and had also been clear cut. These two factors contributed mainly to the no-wild turkey situation in the region.

Following out the new plan, the Commission trapped 162 wild turkeys and released them in the Peace River drainage section. The region was closed to hunting for five years. The latest wild turkey census reports upwards of 2,800 birds on an area that boasted of practically none five years ago. It is conservative to say that wild turkey have been re-established in the Peace River drainage section of Hardee and DeSoto counties.

For those interested in habitat requirements for wild turkeys, the birds need plenty of cabbage palm berries, cypress balls and pine mast (seed) for food, and like to nest and feed in a mixture of open short grass and timber. Heavy cover, such as palmetto clumps, thick brush and bases of windblown trees are regarded by wild turkeys as ideal spots to incubate their young. Mating starts in February or early March and each hen lays from 10 to 14 eggs starting generally in late March. Although a hen may lay a second clutch of eggs if her first is destroyed, she is far more loath to do it than is the quail. Due to natural mortality, about three or four young birds reach maturity.

In all cases of restocking turkey range, the Commission firmly urges a closed season from three to five years, thus giving the birds a chance to get established.

That the wild turkey restoration program is a success is amply proved by the recognized fact that Florida now has more pure wild turkeys than any state east of the Mississippi. Texas lays claim to the most number of these magnificent game birds, but then Texas has

a habit of claiming the mostest and biggest of almost anything.

As remarked at the beginning of this article, deer are subject to much the same problems as are wild turkeys, and much the same methods of restoration are being employed. Clear cut timber operations and homesteaders made serious inroads on the deer supply, particularly in the northwestern part of the state. Deer, like turkey, are slow to come back to a range once they have been driven from it. And again, like the turkey restoration program, the Game Commission sought to give Nature some help in bringing back these valuable game species to areas which once again had become capable of supporting them.

Habitat requirements for deer are similar to those necessary for wild turkey, so it is not at all unusual to find these animals in the same areas as the birds. However, I learned one surprising thing (to me) on my field trips. A given area will support more deer than it will turkey. In other words, it takes less range to produce and support a deer than it does a wild turkey.

Artificial raising of deer was out of the question, as the animals become so tame after prolonged association with man that they never will make the grade in the wild. So, as was the case with turkey, live trapping of deer was in order.

Most of the trapped deer released throughout Florida come from Texas and Wisconsin. It does no good to trap a deer and move him only a few miles. He'll invariably return to his original range, even though it is practically denuded of food. This has been proved many times. Not long ago the U. S. Forest Service had a surplus of deer in one section of the Kaibab National Forest in Arizona. There were so many of the animals in that particular section that the food supply wouldn't go around and many deer were slowly dying of starvation. A determined attempt was made to drive part of the herd to another section of the forest where food was plentiful. It was no go. The deer repeatedly eluded the drivers and made it back to the old home stand. They apparently preferred slow death by starvation in familiar surroundings to new homes with plenty to eat.

Profiting by this knowledge, when the Florida Game Commission decides to stock an area with deer, they make sure they get animals from a considerable distance away.

The Commission has had a deal with the U. S. Fish and Wildlife Service. The federal game refuge at Aransas, Texas, is overcrowded with deer and the Fish and Wildlife Service and the Texas Game Commission are glad to cooperate with the Florida Game Commission by live trapping the animals for restocking. The deer generally run on a 50-50 basis—that is,

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At any season of the year and at any hour of the day or night there are anglers trying their luck on the Pine Island Bridge.

in grabbing the rod, I threw on the star-drag, swung back and sunk the hook. The screaming of the reel stopped but the heavy rod kept bending like a willow branch and the star-drag ground ominously as my quarry pulled the nylon line through it as he headed away from the bridge. Nearby fishermen rushed over to watch the struggle with this tough denizen of the deep. There were excited exclamations that the rod was going to break, but a Calcutta rod "can take it" and it didn't break. Ten minutes went by and then the strong drives of my antagonist slowed up and I was able to gradually reel him in closer and closer to the bridge. He still fought vigorously and that old rod bent and bent some more but now I had him within 20 feet of the bridge. Suddenly, my fighting fish headed directly toward me and the sharp, barnacle-covered piles of the bridge. Caught off guard, temporarily, by this unexpected maneuver, I reeled in at top-speed, yet I could not reel fast enough to catch up with my quarry. By the time I had raised the rod

"He's taking all my line through the drag, which is tightened as tight as I can tighten it, and only a few yards are left on my reel." Then, the end of the line was reached, and "crack", the line went limp. Butler gasped with the exertion and sighed with disappointment, realizing that his second fish had "gone with the wind". "Gee", said he, "what kind of fish are in these waters?" A native fisherman answered, "Probably both were 20 to 30 pound snook, as there are plenty of them here."

Our wives, using light tackle, had landed several speckled sea trout, a snapper or two, and a large sheeps-head. We left about noon-time, and all voted that those waters held some mighty big fish and we'd be back.

We've fished this bridge many times since, and have seldom failed to make a good score. Even if one is not fishing, one gets a thrill by just standing on Pine Island Bridge, and hearing the excited yells, as one fisherman after another struggles with a big speckled



At the top of the list as an all-season producer of fish is the Pine Island Bridge, according to the author.

# FLORIDA'S FISHINGEST FISHING BRIDGE

By  
FREDERICK  
H.  
TIMSON

After several years of fishing from bridges along the East and West Coasts of Florida, and the Florida Keys, I'm convinced that Pine Island Bridge tops 'em all for really delivering the goods at any and all seasons of the year. That is, in comparison with the length of the bridge, which is approximately only three hundred yards long.

This bridge is located about fifteen miles northwest of Fort Myers, via U. S. Highway 41 and Route 78. It extends from the mainland across deep water Matlacha Pass to Porpoise Island which is a part of the Pine Island group. Matlacha (pronounced Mat-la-shay) is an inland waterway from the Gulf of Mexico. There is a fishing balcony, and at any time, winter, summer, day or night, you'll see both men and women wetting their lines over the rails of this bridge. Recently, I actually counted 220 fishermen on this bridge, while a few hundred yards north of the bridge in about a quarter of a mile-square space of water, I counted 42 boats, each with two or three persons fishing from them. They all appeared to be reeling in fish. This spectacle of so many fishermen lining the bridge, shoulder to shoulder, the fleet of boats on the dark blue water, and the emerald islands, all under a bright blue sky, caused a continual jam of cars, as tourists watched the bending rods and listened to the exciting shouts and laughter of the fishermen as they landed speckled sea trout and now and then a snook, red fish, or mackerel.

The first time I fished at Pine Island Bridge, I got a genuine surprise as did the others in our party. My wife and I had driven up from Fort Myers Beach with Mr. and Mrs. Harold Butler of Guilford, Connecticut. We arrived at the bridge about 10:30 A. M. on a clear and sunny day. Both Butler and I had 72 pound test lines and 8-0 Soby hooks. We decided to fish on bottom for big ones. I baited up with a big chunk of mullet and cast out about 150 feet in the deep channel at the entrance to the draw-bridge. Setting the clicker, I rested my eight-foot Calcutta rod against the rail and walked over to help the women bait their hooks. In less than three minutes, the reel screamed and the line started racing out at high speed. Losing no time

high enough to take up the slack line, the fish had circled one of the shell-covered bridge posts. Someone along the rail shouted: "It's one of those big, tackle-busting snook and it'll cut your line on the barnacles. But I didn't worry about that; I had a five-foot steel leader back of that hook. Tightening up on the line, I managed to pull the snook around and away from the pile, and then another fisherman, using my 25-foot long snag rope, with leaded sinker and big triple hooks, snagged the snook and brought him up, hand over hand, and on to the bridge deck. As he floundered around I couldn't help but admire him for the tough fight he had given me. He weighed 12½ pounds. The "surprise", however, came from landing a snook in broad daylight, when the sun was high. We all know that it is the exception when a snook is caught other than early evening, at dawn, or at night. However, I have found that for some unknown reason, snook are landed off this bridge at most any time, be it mid-day or at night. By the time I had landed my snook, Butler came into his share of excitement. He cast out two lines, and placed both rods against the bridge rail, about fifteen feet apart. Suddenly, and at about the same instant, both reels screamed and the rod tips bent. Butler was startled by the sudden action, and realizing that he had only one pair of hands, seemed bewildered for a moment. Then, grabbing one of the rods, and with an expression of grim determination on his face, he swung back, and set the hook. But he didn't stop the fish. It kept going - bending the rod into a horse-shoe shape, and pulling yards of line through the star drag. In the meantime, my wife grabbed up Butler's other rod. There was little she could do however, except hang on to the rod. That fish was bound for an unknown destination, and was taking all the line with him. I ran to her assistance, but before I reached her, the line parted with the crack like the sound of a rifle shot. During this time, Butler was trying to handle his tough customer. With teeth set, and with a look of grim determination on his face, he stood with one foot in front of the other, with knees bent, bracing himself, as he held the bending rod. "I can't hold him", he shouted, "It must be a whale."

ocean trout, or perhaps a golden pompano, a tackle-busting snook, or some other kind of fish, while now and then a Silver King Tarpon gives some fisherman the thrill of a lifetime as it fights to stay in the water, and the fellow at the other end of the line is just as determined that Mr. Tarpon is coming up on that bridge.

Although a large percentage of the anglers who patronize this bridge are from Fort Myers and vicinity, I have met folks fishing here who came from Orlando, St. Petersburg, Tampa, Sarasota, Bradenton, and even from as far away as Miami and other East Coast cities, which testifies to how famous this bridge has become from its fishing. One night while the shimmering waters were lighted by a full moon, I tied into a five or six foot Silver King Tarpon which tried to take rod, reel, and line, away from me. I played him for about 15 minutes, during which time he made five jumps several feet into the air. In the bright moonlight, no more beautiful picture could have been desired than seeing that mass of gleaming silver soaring repeatedly into the air, with the resultant great splash of white foam when it landed back in the dark water. Suddenly, reversing direction, my tarpon headed directly toward the bridge and me. Reeling at top speed, I couldn't catch up with him as he came like a race-horse toward me, and under the bridge he went. A minute later, he had cut my taut line on the barnacles of the bridge piling, and was gone. It was fun, though, while it lasted, not only for myself, but for about fifty other people who had watched the battle.

Banks Pearce, a year-around resident living near Pine Island Bridge, is a consistent snook fisherman, and tells of many exciting adventures he has had fighting these tackle-busting snook. The story he told this writer about the 19½ lb. snook, which, like an atom-powered torpedo, tangled his line with the lines of four other fishermen, and which gave five fishermen an exciting night which they will never forget, was good enough for a fantastic story magazine.

There's the story Hartzell Flagg of Park Falls, Wisconsin, tells of his battle with a 29½ pound snook he landed. He wondered if he was going to land the fish

or if he was going into the drink himself that night.

Harry Phippen and Ed Collins, both from Michigan, had an exciting time one night. They, and four other men, were fishing this night on the same side of the bridge, all using 72 pound test lines. They were about twenty feet apart and from time to time a snook was landed. Then, evidently, a school of snook came under the bridge, and almost simultaneously each man had a strike, and there sure was something doing around that part of the bridge for the next hour or so. You can, perhaps, imagine the picture of six men in the moonlight, each one playing a big snook... the sound of reels shrieking as lines rolled out and here and there the ominous sound of lines pulled through star-drags, the movements and shouts of the men as they worked up and down the bridge railing each battling his own fish. Minutes went by, a line broke sounding like a rifle shot and then again and again the same staccato sound, followed by the uncomplimentary remarks made by the fisherman about the fish that got away. As lines broke, each man immediately rerigged and got into the game again. When the score was totaled up, it was found that Harry Phippen had landed two snook, weighing nine and twelve pounds, respectively. Ed Collins had landed a ten pounder, and one man out of the other four had one weighing eleven pounds. Between the six men fishing, there had been five lines broken and in six cases, the fish were so heavy they had either straightened out the hook or ripped the hook from the jaws and gotten away.

Hank Phippen, who is a veteran fisherman, having battled fish over the Great Lakes section for many years, states that he has never tangled with a fish that has the power and "never say die" fighting qualities as he has found in the snook.

Another feature which everyone appreciates, particularly fishermen, is that near Pine Island Bridge are several restaurants, five trailer parks, tackle shops where live bait fish and shrimp may be obtained. There are boat houses where boats may be rented, with or without motors, and nearby is the fast-growing community of Island Harbors where modern motels

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George Weiser, St. Petersburg watchmaker and gun hobbyist, is shown putting the final assembly screwdriver to a combined relief carving and plastic inlay job he has executed on a Winchester model 94 carbine. Son William, master of a smooth, lightning-fast cap pistol draw, plans a whittling job of his own.

# WEISER'S WONDROUS WHITTLING

"That's the finest gunstock decorating job I've ever seen!" The speaker was a retired man and his complimentary commentary was his first remark after minutely examining a relief carving gunstock decoration job performed by George Weiser, a St. Petersburg watchmaker by trade and a gun hobbyist at heart. The statement might be considered as having been made by one expert to another, for the speaker himself was, for more than thirty years, a stockmaker and woodworking artist for a group of famous firearms manufacturers maintaining a custom job department.

Weiser's active interest in gunstock ornamentation developed from his inveterate habit of whittling on a piece of wood when not too busy, and from the fact that a friend accidentally dropped Weiser's best hunting rifle one day and put a bad, wandering scratch in the stock. To cover up the damage, Weiser whittled out a simple design from the surrounding wood. It was so good that other shooters wanted their gunstocks similarly carved. Weiser suddenly found himself with many new friends—and famous to an extent surpassing his hard-earned reputation as a reliable repairman of between eight and nine thousand watches and chronographs.

For the guidance of FLORIDA WILDLIFE readers who may wish to tackle their own stock decorating jobs, Weiser has generously volunteered much helpful information that otherwise might only be acquired the hard way and over a long period of time. Most helpfully, he has broken down and outlined both his inlay and hand carving procedures into easy to follow step-by-step operations.

The St. Petersburg gun hobbyist begins his work by first removing a firearm's butt plate, its sling swivels (if fastened to the stock or wood portion of the forearm) and all other attachments that are located within the areas to be worked. Actions are removed entirely from their stock beds; oiled, and set aside.

Weiser next carefully scrapes the stock and fore end piece with a putty knife which has been altered with a file to give a flat, blunt-edged face. When held at a slight angle to the work, this homemade tool gives two opposite cutting edges of optional choice and doubles the tool's useful life between sharpenings. The scraping operation, carried out until all old varnish, minor scratches and scars are removed, prepares the wood



A J. C. Higgins (Sears, Roebuck & Co.) model 30 autoloading .22 caliber rifle, with plenty of wood in its stock and fore-end, is a good firearm on which to carry out inlay decoration schemes like the one Weiser has executed on this one. The stock and fore-end pieces are easily removed from the rifle, a firearm considered by many to be tops among autoloading .22's.



A Johnson sporter, caliber .30-06, with attached muzzle brake, and a Winchester model 62 slide-action .22 caliber, tubular-magazine repeating rifle, team up to make a nice display of Weiser's wondrous whittling.

A bead chain dot inlay pattern, combined with half diamonds, makes the illustrated Remington model 31 pump-action, 16 ga. shotgun, with Super-Poly Choke device, a thing of beauty. The companion gun is a single shot .410, marketed by one of the mail order houses under their own brand name. Both shotguns, ornamented by Weiser, are typical examples of how carefully planned and executed plastic inlays can add to the attractiveness of firearms.



By EDMUND McLAURIN

surfaces for the later stages of work, Weiser points out, and makes succeeding operations easier.

Small dents, so frequently found in stocks that have seen considerable field service, Weiser takes out by the hot steam method. Water-saturated wads of Kleenex or toilet tissue are placed over each dent and these wet pads are touched with a hot soldering iron for applications of about ten seconds. Several such wettings and steamings may be required before the wood fibres expand to normal level. The hot steam method is fine where no wood has been removed and the stock dents are merely indentations of compressed wood, much as occurs when a hammer misses a nail-head and dents a cabinet's surface.

Where hard usage and mishaps have resulted in gouges from which wood has been removed, these imperfections are deliberately enlarged; undercut, and packed tightly with a plastic wood mixture made from matching powdered sawdust and plastic cement. After hardening, repaired spots are lightly sanded and hand rubbed until practically invisible as patches. The stock is now ready to be decorated with plastic inlays cut from sheets of opaque Plexiglas, or to be embellished with ornamental relief carvings.

Though various colors are to be had in the opaque Plexiglas material from which Weiser rough saws and file finishes his inlays, he claims that his most effective color schemes come from white diamond inlays with single black dots, and the reverse combination of black inlays with white dots. He suggests that black diamonds be used on light colored stocks, and white ones on dark or reddish stocks. Further variation is to be had by using straight-drawn diamonds on some jobs and graceful, curved designs for others.

When inlays for opposite sides are to be identical, Weiser glues the two roughed out designs together temporarily; places them in a small vise, and hand files the two inlays as a single piece for twin size and shape.

Shaped inlays are bevelled on their edges so that they enter the stock wedge-shaped, a wise step in case the routed out hole ends up a trifle oversize. By beveling the edges of the plastics before each prepared inlay is carefully fitted, the surface can later be sanded down considerably and the edges of the inlays will still remain sharp and clean. If the edges were cut straight, it would be almost impossible to get a smooth cut and perfect fit all the way around; any small cut in the wrong direction would result in an ugly gap when the inlay's surface is sanded down enough to expose the flaw.

Once he has decided on his principal pattern, Weiser positions his largest inlays, small side down, and draws around them with a sharp pencil. He makes his outline cuts first, keeping the cut edges bevelled inward, same as the underside edge cuts on the inlays to be set. His cutting of waste wood is from the pattern's outline to center, and, though Weiser depends on the accuracy of his eyes for evenness of depth, he suggests

that beginners coat the bevelled edges and the bottom side of each diamond sparingly with Prussian Blue, a color paste obtainable at any hardware store. When the diamond is coated and press-fitted to the hole, high spots needing additional paring will be revealed. This fitting operation is repeated until the diamond lies evenly in the recess cut for it, and about 1/16" high.

Achieving a perfect fit by repeated, unhurried testing, and satisfied with the final result, Weiser removes all traces of any used Prussian Blue with turpentine. His next step is to coat the hole with DuPont cement and press the plastic inlay firmly in place, tapping it gently with a small hammer to help seat it solidly. Because DuPont cement is a mild solvent for plastic, he is careful not to get any of the adhesive on the outside surface of the inlays.

Cemented designs are wiped carefully, clamped with a C-clamp, or woodworker's clamp, and set aside for at least 24 hours.

Weiser recommends that the gun owner imbued with the desire for a beautified gun stock use an inlay dot pattern for his first attempt. He also advocates that both beginners and advanced workers use small size diamond inlays, claiming that the small and medium plastics have less tendency to crack, either while being worked on or when subjected to marked temperature changes after installation. In his own inlay work, he plans his designs most carefully and never over-decorates by using too many major diamond inlays, something the beginner may be tempted to do.

For his dot inlays, the whittling watchmaker buys plastic rods in 1/8, 1/4, 3/8, and 1/2 inch diameters, in plain colors, and slices his dots therefrom much as one slices bread. With these assorted diameters and color combinations he creates diamonds, scrolls and other decorative schemes that can be formed from grouped dots.

Dot inlays are rough cut from the smaller diameter plastic rods by first making encircling cuts with a sharp razor blade, then slicing them from the rods with a sharp knife. Large dots are sawed. However, before being cut from the parent stick, each dot is given a bottom taper by undercutting at the point scribed for severance. This gives each dot a tapered end and a large end, like a round wedge. Weiser cuts his dot inlays so that, after their inlaying, the unfinished dots will extend about 1/16 to 1/8 above the surface of the wood being decorated.

To prepare the firearm's stock for the dot inlays, Weiser marks out his spacings with a pencil and a flexible rule to get exact locations for each planned inlay and to assure accurate spacing of all dots executed in bead chain fashion. He then goes back over the penciled marks and indents them with a light tap from a perfectly centered, pointed punch.

For his large dot inlays, Weiser cuts out their receiving holes with small, curved chisels, but uses a very sharp, slightly undersized, wood-cutting, steel drill, chucked in a hand-style pin vise, to make the

(Continued on Next Page)

really small holes. The difficulty of using a drill to make the dot inlay holes for large dots is that a drill will almost always crawl a wee bit and make a hole larger than the drill. Weiser circumvents this problem by always using a drill size slightly smaller than his tapered dots. He uses sharp drills only.

When a number of holes have been prepared, a drop of DuPont cement is placed in each and spread uniformly by twisting a match stick several revolutions. Dots are then inserted, tapered end down, and tapped home with light blows from a plastic hammer. Because they are wedge-driven, the smaller sizes need not be C-clamped and consequently a considerable number may be set in a single work session. All dots are left from 1/16" to 1/4" high, as previously stated, for later sanding.

Whether doing inlay work or relief carving, Weiser takes plenty of time for the necessary job steps. He never attempts to route out and set even one full size diamond inlay at a single session at the workbench, but divides the work steps of each major inlay operation over several nights for attainment of the highest degree of perfection in the finished job. Hurry is fatal to a good job, he says.

After all inlays are cemented in their places, Weiser cuts them down to stock level height with a Handee-Tool powering a small sanding band, applied with very light, repeated touches. He then goes over the sanded surfaces with a very fine file until inlays and surrounding wood feel smooth to a fingertip. Sandpaper of 180 grit fineness, wet or dry grade, but used dry, is the next applied abrasive. All sanding is with the stock's grain.

Careful scraping with an altered putty knife, and follow up hard rubbing with fine grade steel wool, will give the inlaid stock a rough satin finish.

Fine abrasive rubbing compound is generously applied to the stock at this stage of the work and vigorously handrubbed to give a smooth, glossy sheen to the dressed inlays. After wiping with alcohol, the stock is given an application of PDQ, or Tru-Oil, stock finish, and set aside for from 24 to 48 hours.

The steel wool operation is then repeated, but with great care to avoid any possible scratching of the inlays. More PDQ, or Tru-Oil, is applied and the stock again set aside for a 24 to 48 hour period. Repeated steel wool polishing and additional applications of PDQ, or Tru-Oil, are made until desired stock luster is obtained. Weiser finds that use of PDQ gives a faster finish than Tru-Oil, or linseed oil, yet the results are as good or better, and equally lasting.

Weiser points out that plastic spacers sandwiched between the gun's butt plate and the stock, or between a recoil pad and the stock, also add much to the appearance of a firearm. He uses sheets of Plexiglas 1/16 and 1/8" thick, on which the butt plate's outline is drawn and sawed to rough shape. At times, he also uses certain of the better grades of plastic wall tile for very fine line spacers.

To fit the 1/8" thickness spacers to the stock, the St. Petersburg man clamps the roughly-shaped, slightly oversize spacers in a vise and drills a couple of clearance holes for two small flathead screws, making sure that the drilled holes do not fall in line with the screw holes of the butt plate's or recoil pad's screws. He then countersinks the outside spacer until the screws are just below the surface. Next, he drills holes in the stock smaller than the threads on the screws, using the drilled spacer for a jig. He never attempts to put



Two rifles that even a king would like to own! Weiser's skill, as expressed in relief carvings, has made the pictured Winchester model 94 and Savage model 99 deer rifles aristocrats of their line.

in any stock screws without first drilling a small hole, to avoid any possibility of splitting the wood.

The surface of each spacer is roughed with sandpaper, coated with DuPont cement and screwed in place. The recoil pad, or the butt plate if no recoil pad is used, is placed on top of the attached spacers and the screw holes marked and drilled into the wood. The outside spacer and recoil pad, or butt plate, are coated with cement and screwed tight.

Weiser says that cementing the spacers and recoil pad, or supporting butt plate, will prevent any fine particles of saw-dust from getting between the spacers and opening them up when sandpapering the spacers and butt plate to a finished fit.

He attaches his pistol grip spacers in much the same manner, by screwing the first two in place and glueing the last one on, thus giving a nice smooth cap with no ugly screws. Occasionally he inlays a small magnetic compass in the pistol grip, using one of the Fra-Mor ready-made kits.

But Weiser's wondrous whittling is best represented by his beautifully executed hand carving. His jobs have been judged as reflecting finesse and quality seldom seen in the field of firearms ornamentation.

For this type of work, he develops his designs from leather-working manuals and jigsaw scrolls, and uses portions thereof. Selected designs are traced on flexible cardboard and these are cut out with scissors or sharp knife. Such designs may be used singly or in combinations, and last indefinitely.

Weiser prepares his wood for relief carving just as he does for his plastic inlays. He then sticks his selected scroll pattern to the gunstock with fine pins, or with map tacks, and traces the outline of his chosen pattern on the wood with a soft lead pencil. Thereafter he is careful not to touch and smear his pencilled outlines.

His first cutting of wood is a fine-line, light cut around the pattern. The cutting is repeated, but deeper this time, with a bevelling cut toward the pattern itself.

(Continued on Page 50)

This close-up photo of Weiser's work on the same Winchester model 94 and Savage 99 rifles, pictured in full in another illustration on these pages, shows the fine detail and precise patterns which Weiser achieves from his unhurried sessions at his work bench.



# Spanish Moss

By ROSS ALLEN and  
WILFRED T. NEILL

Ross Allen's  
Reptile Institute  
Silver Springs, Florida

The native Floridian regards Spanish moss as commonplace, but the out-of-state visitor is profoundly impressed by his first view of this plant, hanging in long, gray streamers from the trees. No account of outdoor Florida would be complete without some discussion of Spanish moss, which imparts a characteristic aspect to southern scenery.

Spanish moss is found from extreme southern Virginia and the lowlands of the Carolinas southward through Florida and westward along the Gulf States into Texas. Thus it is not "Spanish" at all, but a native plant. Some say that it received its name from its resemblance to the long, gray beards of the early Spanish soldiers in the New World. More likely, the Spaniards used it as packing when they shipped various things back to their home country, and so introduced it to the civilized world.

It is not a moss but a true flowering plant, belonging in the same family with the pineapple and the air-plants (see Florida Wildlife, August, 1954). Like the air-plants, it is not a parasite; it derives only support, not nourishment, from the tree on which it grows. It thrives by combining atmospheric moisture with carbon dioxide of the air, to produce starch or cellulose—a remarkable chemical process carried on by nearly all plants.

Many people believe that Spanish moss kills the tree on which it grows. This is not true. Sometimes it is seen upon a dead tree, but in such a case it was not responsible for the death. Examination of the living moss will reveal that it does not penetrate the sapwood, but is merely anchored to the bark. Thus, if the surroundings are sufficiently moist, Spanish moss will grow even on a telephone wire.

Spanish moss bears little, yellowish flowers, half concealed by the greenish-gray, stringy leaves. At night these flowers give off a fragrant, though faint, odor. After the blossom is pollinated, the petals fall away and each growing seed develops a downy tuft.



When the tiny seed is ripe, it drops off, and the tuft acts as a parachute which drifts in the air. Thus the seeds are wafted about, and many of them find lodging in the bark of trees, where they sprout and form new clusters of the moss. Frequently, bunches of Spanish moss are torn away by the wind. Those that fall to the ground soon die, but those that are blown into another tree continue to grow in their new surroundings.

Many wild creatures find Spanish moss useful. Some birds weave the strands into their nests, or line the nests with the soft down from Spanish moss seeds. Tree-frogs often live under damp clusters of the plant; and at night the fence lizards (described in Florida Wildlife, January, 1952) ascend the live-oaks and hide beneath mossy streamers. Gray squirrels and screech owls find concealment in bunches of the moss.

Cotton planters do not like Spanish moss, for in winter it provides a retreat for boll weevils, and cotton fields lying adjacent to moss-draped timber are more apt to become infested with this insect. However, the commercial value of the moss far outweighs other considerations; quite an industry has grown up around the gathering and marketing of Spanish moss.

The commercial moss gatherer generally uses a long pole with a sharp, hooked blade at the end. With this he cuts the streamers loose. Often he takes along a few children, who can climb into the branches and cut down still more of the plant. The market value of the "green" moss fluctuates; a few years ago it brought \$30.00 per ton. Where the moss is really abundant, a picker may accumulate a ton in about four days. Most of the gathering is done in the fall, for

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## KNOW YOUR WILDLIFE



NEW YORK ZOOLOGICAL SOCIETY

The widely distributed otter is Florida's number one fur bearer from the standpoint of value per individual pelt. More difficult than most other animals to lure into a trap, the otter is also hard to hold.

## THE OLD SKIN GAME

The jump trap is compact and is much easier to conceal than the long spring type. Where traps must be carried long distances, the lighter weight as compared with other types of traps is appreciated.



Many people consider fur animal trapping solely in connection with a bearded character, swathed in fur garments, mushing his dog team across the frozen wastelands and enduring great hardships as he reaps a bountiful harvest in rich furs under the dancing light of the aurora borealis. This romantic conception of the fur trapper is not without foundation for even in this age of the jet and the atom there are men who brave the rigors of the northern wilderness following the trapline in a manner much the same as their progenitors since the earliest days of the continent's fur trade.

Actually however, the source of most of the annual crop of North American raw furs upon which is based one of the important industries of the nation, is the farmlands, the wood lots, and the marshes of the United States. According to the experts, at least 75 percent of the annual fur take is marketed by farmers, school boys, and workers in other fields who run part time traplines for sport and for the additional income derived from the sale of pelts.

Trapping is logically considered one of the oldest pursuits of mankind. Basically it has changed but little since earliest history, except for the introduction of the steel trap sometime after mid-18th century. For some this ancient pursuit provides the means of

adding much needed income. To others the steel trap is a valued tool in the protection of crops and livestock against depredations of wild animals both large and small. To yet others, the trapline offers a pleasurable hobby or pastime, having the added attraction of producing a product which finds a ready market.

For whatever reason he may engage in the pursuit of fur and predatory animals, the newcomer cannot help but catch some of the excitement that sends scores of men and boys into the field each season armed with an assortment of trapping equipment and boundless enthusiasm for this age old activity.

Although the figures are far from complete, trapping does add considerably to the income of many rural Florida families, especially those in the lower income bracket. The mainstay of the Florida trapper, the "long-haired" furs such as coon, fox, skunk, and opossum, have been out of style for the past several years with the result that the prices paid for raw furs have been low. The otter and the mink (the latter of limited distribution in the state) have held up in value and at present represent the most valuable furs taken on Florida traplines.

In spite of low fur prices, the money that is earned by persons otherwise unemployed during the winter months when the trapping season is open and furs are "prime" undoubtedly does have definite local significance.

The sport factor in trapping can not be overlooked and there are many people in the state who seek the trapline as a means of pleasurable outdoor recreation.

Many Florida school boys earn pocket money running a few traps before or after school. An additional source of trapline income is derived from the sale of the meat of animals such as the coon and opossum which finds a ready market in many localities.

Down through the ages, countless devices have been developed to enable man to capture animals which, because of their nocturnal habits, shyness, and other reasons, could not otherwise be readily taken. Deadfalls and snares in their infinite variety are typical of the devices employed since earliest times. Sometime during the mid-18th century, the steel trap, essentially the same as those now employed, was developed. It was largely upon the use of this newly developed trap that the vast fur trade which sparked the exploration of most of the continent was based.

Since that early day, although refinements have been made in design and material, there has been little change in the steel trap. Though its use men have been able to cope with the larger predators that once made livestock raising an uncertain undertaking in some localities. Trappers have been enabled to harvest the annual fur crop. The poultrymen and agriculturalists have been able to protect their property from the inroads of rodents and predators.

Although all steel traps operate on the same general principle, there are three main varieties. The most widely known is the long spring trap which may have either a single spring or double springs, one at each end of the trap. The coil spring trap is a fairly recent development and is preferred by many trappers because it is easy to conceal, being more compact than the long spring. The jump trap is also easier to conceal than the long spring, is lighter to carry, and in theory, at least, leaps from the ground when sprung to take a higher, more secure grip on the animal's leg.

The type of trap used is a matter of personal preference. The long spring trap is usually the one most readily obtainable and for that reason is used more than the others. The number 2 coil spring shown in the illustration has found great favor among trappers for animals such as the fox and coon.

A great many different trapping methods or "sets" have been developed over the years. The kind of set used hinges upon the animal being sought and upon the weather, soil, and other natural conditions which exist within the particular section.

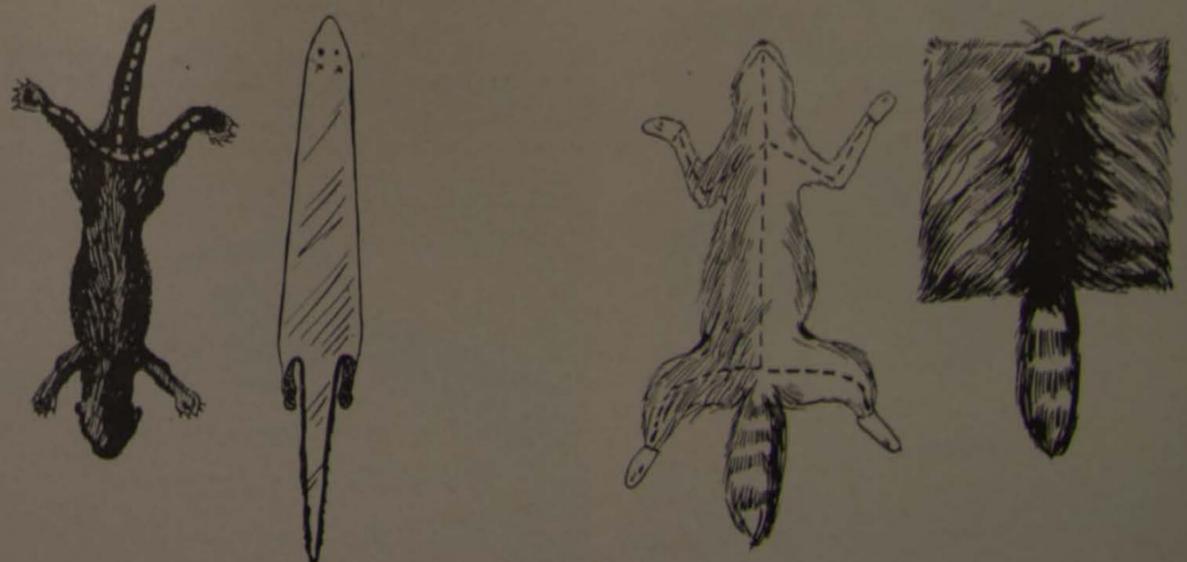
Boiled down to the barest essentials however, there are actually only two general types. One is the "blind" set which is based upon the natural comings and goings of the game being sought and involves placing the trap in a trail or passageway in such a manner that the animal will step into the trap in the course of its normal activities. It is "blind" because the animal is not drawn to the trap by artificial means. The other general type is the bait or scent set which depends upon luring the animal into the trap by presenting a bait or scent which appeals to the animal's hunger, curiosity, or passions.

Commercially prepared scents are available from trappers' supply houses and from individual trappers. The usual price is about \$1.00 per ounce, an amount sufficient for a season of part time trapping. Since the habits of the different animals vary, special scents are made for each species. For those animals which depend a great deal upon the sense of smell in the ordinary course of their lives, for example the fox, several different scents may be available from a single supplier.

Although results depend upon the use of good traps, baits, scents, and other items of gear, the most important factor in the successful operation of a trapline is common sense, the ability to observe and profit by what is seen of the habits and movements of the various fur bearers. This article and any other written

(Continued on Next Page)

Pelts of most of the common fur bearers are removed "cased." After the flesh and fat have been removed, the pelt is slipped over a boat-shaped stretching board to dry. No salt or other material should be put on the pelt to aid drying. Of our common southeastern fur bearers, skunk, civit (spotted skunk), weasel, mink, opossum, otter, and fox are "cased." The white dotted line in the illustration shows the cuts required to case skin an animal. The pelt is pulled over the animal's body much as if peeling off a sweater, with a sharp skinning knife being used only where required to free the pelt from the body. The coon is the only southeast fur bearer that is skinned "open," with the possible exception of the bobcat which is sometimes skinned in that manner. Open skinned coon pelts are stretched as nearly square as possible by driving nails around the edges of the pelt and into a wall or special wooden panel. The dotted line indicates the cuts made in skinning an animal "open."



material concerning trapping can but introduce to the tyro the methods of attaining an end. It is up to the individual to apply general rules to whatever specific conditions he meets.

Animals do not travel at random over the countryside. They follow certain rather well defined routes, the location of which depends upon weather, food conditions, cover, and perhaps other factors. Traps should not be set at random without thought as to what animals are travelling the territory and where they are moving. Some examples of good locations for trap sets are along brushy fence rows, beside old roads, under bridges, at the forks of a stream, at the mouth of small creeks, along the banks of small streams, in recently used burrows or dens, in culverts and drain pipes under roads, and in trail where animals are entering or leaving the water or crossing under fences. The opportunities for set sites are numerous in most localities. Look for tracks and other signs of the game you are seeking and place your traps accordingly.

The illustration shows a few of the great variety of sets that are commonly used to take furbearers. Although for the sake of clarity, the traps shown in the illustration have been drawn so that they appear to be placed on top of the ground, such is not the case. Although a great many animals are taken each year in uncovered traps, it is always a good idea to carefully conceal the trap. The most valuable furbearers such as the mink and otter are wary of walking into uncovered traps and it is seldom if ever that such animals will be taken in a carelessly made set. A "bed" is made of sufficient size to accommodate the trap by removing the earth or debris from the spot where the trap is to be placed. The trap when set should rest slightly below the level of the surrounding ground. Dirt or leaves which blend in with the surroundings should be used to cover the trap.

To keep dirt from sifting under the "pan" or treadle of the trap and preventing it from springing, a small soft wad of cotton or moss may be placed under the pan before the dirt covering is applied. Some trappers use a piece of waxed paper cut to fit between the open jaws of the trap. Placed over the treadle, the paper keeps the dirt covering from blocking the pan. Care must be taken to keep small sticks and stones

out of the covering material; otherwise many animals will be lost as the result of debris lodging between the jaws of the trap which prevents them from closing tightly.

Traps that are set under water need not be covered as animals seldom appear to be wary of a trap that is so placed.

The trapping of furbearing animals is such a broad subject that an article of this kind can but offer an introduction to this interesting outdoor activity. For those who would like to learn more of the details of trapping, four books which have been recently examined and seem to offer practical information of value to the beginner are listed below. The list is by no means a complete one and there are many other valuable guides for trappers.

"Trapping North American Furbearers," S. Stanley Hawbaker, Ft. Loudon, Pa.

"Trapping," by H. McCracken & H. Van Cleave, A. S. Barnes & Co., New York, N.Y.

"Professional Trapping," Walter L. Arnold, Guilford, Maine.

"Mink Trapping" & others by Herbert Lenon, Gulliver, Michigan.

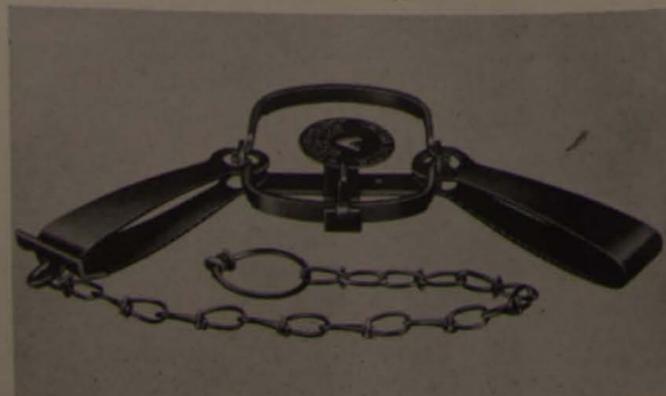
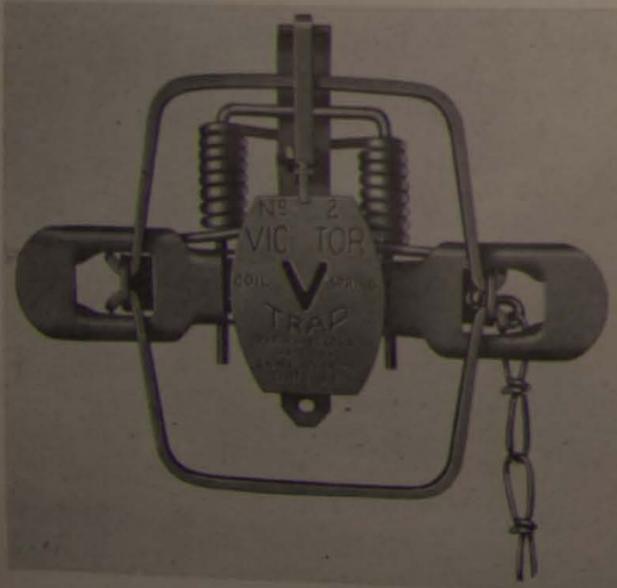
Two monthly publications that contain much of interest and value in the way of articles dealing with trapping, pelt preparation, and related material are: The American Woodsman, Ft. Loudon, Pa. and Fur-Fish-Game, 174 E. Long St., Columbus 15, Ohio. END.

#### Florida's Trapping Laws

Season, December 1 to March 1. Possession, sale, and purchase of pelts limited to open season and thirty days immediately following. Restriction as to time of possession, etc., do not apply to dealers in manufactured furs. Method of taking—Furbearers may be taken with dogs, guns, traps. Each trap must bear owner's name and address. All traps must be visited at least once each day. Traps in open must be staked on four sides with stakes 1 inch in diameter, extending 24 inches above ground, placed not closer than 15 inches nor farther than 36 inches from trap, and inclined so stakes will come together over top of trap. May not be set on enclosed land without written consent of owner. Transportation — Packages containing hides,

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Left: The number 2 coil spring, featuring an adjustable tension pan or treadle, is a fox trappers' favorite. It is also finding favor for taking other animals, especially mink, coon, and bobcat. Below: The number 2 long spring is the old time favorite and is the trap long favored by southern trappers for most fur bearers.



Shown above are variations of the two basic types of trap sets. In the upper left is shown a cubby or bait pen made by leaning sticks or chunks of wood against a tree or stump. Bait is placed in the back of the pen and a trap concealed in the entrance in such a manner that an animal will step into it when attempting to get at the bait.

At the upper right is a hollow log which serves the same purpose as the artificially constructed pen. Bait is placed well back in the log and the trap concealed in front.

The center set is yet another adaptation of the bait pen. A pair of logs is roofed over with branches and other debris to form the pen. At the lower left is shown a blind set in a trail which enters the water. This "haul out" type of location is popular with otter trappers. The trap pan should be slightly to one side of the trail's center to avoid having the trap thrown by the animal's body or tail.

The lower right sketch shows a small stream or ditch narrowed down with a fence of stakes. Traps set in water need not be covered in most cases. Stake your traps securely or staple to a length of solid log which will serve as a drag. Traps are often wired to convenient bushes or trees.



## "IN THIS CORNER"

By CLEVELAND VAN DRESSER

ONE of the surest ways of getting into an argument about angling is to state categorically that a certain species of fish is a greater fighter than a certain other species. No matter what kind of finny contender you root for, it's an absolute certainty there will be someone in the other corner pulling for the opposition. If you're foolish enough to champion salt water fish versus fresh water gamesters, a dry fly purist is liable to beat your ears off—verbally, I mean.

It works the other way, too. Light tackle enthusiasts along the Florida Coast who tell hair raising tales of salty encounters, are prone to utter derisive snorts when somebody comes up with a stirring account of battling a Chinook salmon in Oregon, or being almost dragged out of a boat by an alligator gar in Arkansas. It seems there isn't a species of fish living that hasn't got a second in his corner willing to take on all comers, providing, of course, the fish of his choice does the battling. The seconds in the ring of life can always talk a good fight.

Outdoor magazines of late have been publishing stories about the pugilistic attributes of hitherto scorned piscatorial species which have escaped recognition for centuries. It seems that Joe Blow suddenly discovers that the lowly three-finned mud digger, which lives placidly three feet under the bottom of a stagnant pond, is capable of unrestrained fury when lured from its murky retreat by a piece of ancient whale blubber impaled on the bent prong of a tin fork.

That's not as crazy as it sounds. Why once I heard tell of a guy who claimed that a . . . Well, never mind. I'm going to get into enough trouble as it is before this yarn is finished; no use in straining the patience of the reader too far.

When I first mentioned to Bill Hansen, editor of this esteemed publication, that I would like to do a story based on my experiences catching certain "Yankee" game fish as compared to similar experiences in Florida, he was skeptical, to pen an understatement. He re-

garded me as slightly unhinged, and inquired, reasonably, why I wanted to stick my neck out.

"Make a good story," I said.

He conceded this might be so, but expressed puzzlement over why I would want to write a yarn that was sure to get me into disfavor with one or more groups of the angling fraternity.

"This magazine goes up North, you know," he added, significantly.

I replied that I had long wanted to write such a story and that I would assume all responsibility.

Under the circumstances, Hansen said, it would be all right. There were ominous overtones in his reluctant acquiescence — vague references to starting the War of the States all over again.

Hansen reminds me of a dog I once had. He (the dog) would do almost anything I asked him to, provided I did it first. If I came through the experience alive, he figured it was safe for him to try it, too. In other words, I ran the risks. He was a very smart dog.

To carry out the simile, the agreement between Hansen and myself is that I take the blame for anything that may befall as a result of this piece—upon my head shall fall any recriminations from Izaak Waltons I may unwittingly outrage. Hansen is just going along for the ride. He apparently wants to see how many letters to the editor he gets.

But to quit stalling around, this yarn concerns four species of game fish with which I have had personal encounters. Two of them live strictly north of the Mason-Dixon Line—lake trout and muskellunge, and two are southern gentlemen, suh—barracuda and dolphin.

A few years ago I was a guest aboard a National Park Service boat based on Isle Royale, Lake Superior. Before embarking on the craft I purchased a brand new lake trout fishing outfit. It consisted of a beautiful jointed heavy bamboo rod with a long butt, and a copper line wound on a reel about eight inches in diameter.

For the benefit of Floridians who have never fished for lake trout, this somewhat unusual rig is for the purpose of deep trolling. The big ones go pretty far down in Lake Superior and a line has to descend as much as 100 feet or better to get at them.

I caught a number of lake trout during my cruise of the lake, and the experience was eminently satisfying. The fish is no sissy. There was no star drag on the reel, which meant, of course, that I was in direct contact with the hooked fish at all times. Lacking the benefit of the drag, an 18 to 20 pound lake trout can give you a rough workout, as I learned several times.

That winter I went to Key West for a go at reef fishing. I took along my lake trout outfit, but substituted a standard make star drag reel equipped with 300 yards of 50-pound test line for the small windlass I had used on lake trout.

As nearly as possible, the rig duplicated what I had used on Lake Superior. I had to change the reel and line as I was surface trolling. However, the outfits were as nearly identical as possible under the circumstances. This was to be a scientific experiment. I wanted to find out which species of fish—the trout of the Great Lakes—or the reef fish off the Florida Coast—of the same weight, fought the hardest.

The outfit did all right on mackerel and grouper, by none of these fish—the largest about 10 pounds—gave me the fight put up by the larger lake trout I had caught. It began to look as if round one was going to Lake Superior.

Suddenly a big barracuda hit my trolling lure — walloped it, a better word. A lively battle ensued for about ten seconds. Then the rod came apart at the joint. In the excitement I grabbed the reel with both hands, and in so doing, must have jammed the brake full on. At any rate, the line parted and the barracuda went on about his business.

My guide, an oldtimer at deep sea fishing, saw the 'cuda plainly. He estimated the weight as not over 20 pounds. We spent the rest of the day trolling with conventional outfits, and I landed several barracuda, one of them weighing 18 pounds.

Taking everything into consideration, my opinion is that an 18-pound barracuda will outfight an 18-pound lake trout on the same equipment. I had caught several 18-pound lake trout without putting undue strain on my outfit, but the first barracuda of comparable size, wrecked it.

During the past year, I made another "scientific test," this time pitting a muskellunge against a dolphin by means of using similar tackle on both fish. The scene of the first round occurred in the Thousand Islands area of the St. Lawrence River. My host was Capt. Dan Garnsey, who besides being a muskie catcher of note, also charters boats out of Pompano Beach, Florida. At the Thousand Islands I learned, somewhat to my surprise, that catching of muskies closely resembles trolling off the Florida coast. The same kind of tackle is used — star drag reel, and line of the same tensile strength—about 30 pound test—that is employed by the more sporting gentry when in pursuit of sailfish.

As a matter of fact, 9-thread line (which approximates 30-pound test) is considered fairly light tackle for sailfish, but I figured if a spikebill could be caught

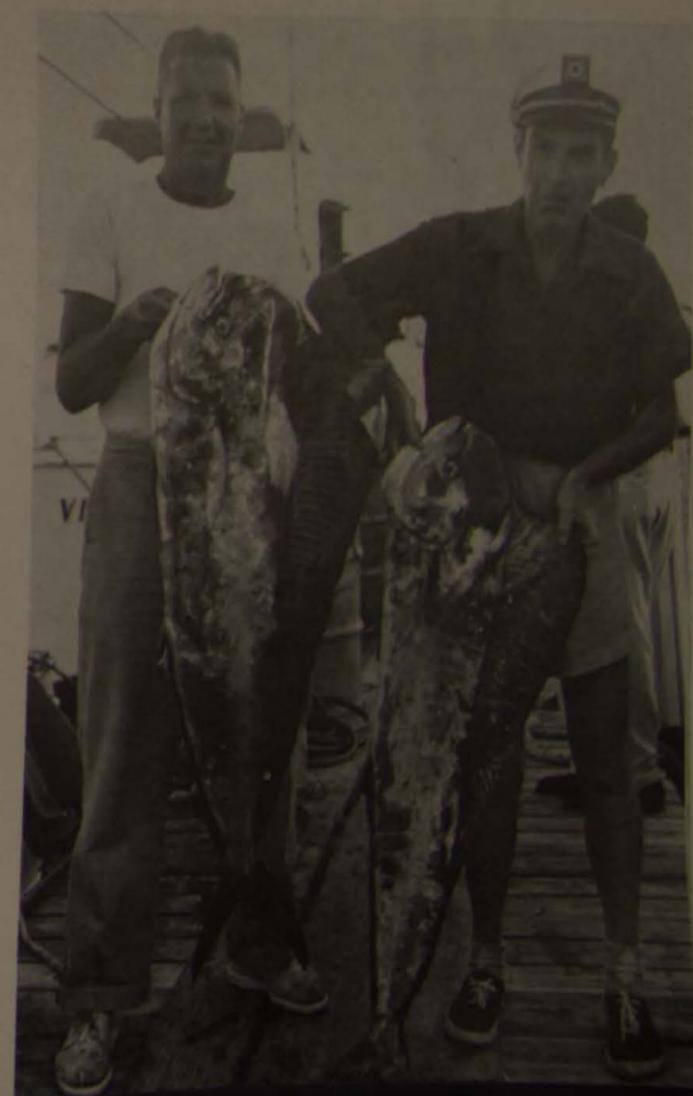
on such tackle, it should be adequate for muskies. These outsized cousins of Great Northern Pike are considered the top fresh water prize by many Northern anglers. Even that comparatively innocuous state-are sportsmen who will sternly champion bass, numerous species of trout, and/or several varieties of salmon as worthy of the crown. Be that as it may, it's pretty generally conceded that the muskellunge is a tough customer. Up Canada way he's known as the "Tiger of the St. Lawrence," and he hasn't got that reputation for nothing.

It took nearly half a day's trolling to get a big muskie strike in the St. Lawrence. The fish, which weighed in at 15 pounds — put up rugged resistance, making several runs and savage leaps. The encounter lasted 12 minutes.

The next winter I was aboard a charter boat out of Palm Beach and was using a duplication of the rig that had caught the 15-pound muskie. In order to make things as even as possible, the rod had too short a butt to use the seat socket, so I stood up and held the end against my stomach. The drag was off while trolling, a reversal of the procedure I was used to in deep sea fishing. Also the brake operated in exactly the opposite manner from any star drag reel I had ever used. In other words, the "on" position on the light rig I was using was the "off" position on every deep sea reel I'd ever worked before. I go into detail about these matters as a sort of advance alibi for what happened.

After about a half hour, a fish struck vigorously. As

(Continued on Page 45)



After "scientific test," it is my firm conviction that a 12-pound dolphin like those shown here have a fighting edge on the famed muskellunge. Outraged? Send your comments to the editor.

# Wildlife Facts Replacing Barbershop Biology

By ARNOLD O. HAUGEN

The author of this article, Arnold O. Haugen, is leader of the Alabama Cooperative Wildlife Research Unit, Auburn, Alabama. The Unit is cooperatively sponsored by the Alabama Department of Conservation, Alabama Polytechnic Institute Agricultural Experiment Station, U. S. Fish & Wildlife Service, and the Wildlife Management Institute.



People frequently talk about the "good old days." Usually, however, they refer with pride to only some one condition. Could it be that the reflections associated with youth have colored memories with prejudices in favor of the "good old days"? Outdoorsmen especially like to refer to a time when hunting and fishing were so good they were practically "out of this world." However, if we study the records from the "good old times," we find that people had to live without most of our modern-day conveniences, that mostly unusual incidents are recalled and related, and that all species of game did not abound, as is sometimes reported.

The time has come when we must look forward, not back as did Lot's wife. We must face the future with a determination to do more constructive things for wildlife and to find better ways for managing and maintaining this important resource.

Almost everything we have around us today has been improved and modernized to make living more pleasant. We have progressed from the "horse and buggy days" to a life of convenience and gadgets; but many people do not yet realize that we have improved our lot mainly through painstaking research. While the advancement of many professions has kept pace with modern trends for fact-finding and better management, wildlife management, in many ways, still is in the pioneer stage of development.

Research in medicine, engineering, and agriculture, for example, is at least a century ahead of research in wildlife management. It is only within the past 20 years that research in game management has been conducted to any significant extent.

The pressure of human civilization has greatly affected our wildlife. In the past, the only inhabitants of what is now the United States were Indians, with a population estimated at about 800,000. This area today is populated by 160 million people.

Increase in human population and changes in land-use have vitally affected animal populations in many cases. For example, forest-living animals lost their home when the pioneer cut down the forests to make way for his fields, and the prairie-living animals like the buffalo and antelope lost their home when the prairie grasses were plowed under and fences were

erected. Yet farm game species, such as the bobwhite quail, increased in numbers as timberland was cleared.

## Rationing Wildlife

Most modern game laws to date have been aimed primarily at rationing the existing supply of wildlife. The alternative to rationing by means of bag limits and seasons is to develop production through management, and such management will have to find its source in research.

Almost every man who looks down the barrel of a shotgun even once a year believes he knows exactly what is wrong when quail, doves, rabbits, deer, or ducks increase. It is well to remember that a partial knowledge is often dangerous and observations made by people who only occasionally enjoy nature are incomplete and therefore limited in usefulness. Individual observations on wildlife problems and conditions are like individual entries in our bank accounts, in that by themselves they don't tell all the truth. In both our bank accounts and our game populations, it is the surplus that counts.

"Barbershop biologists" in some cases continue to have their say as to how game should be managed. Many of them have promoted both good and unsound ideas for game management. In most cases, they did not have enough information to do a good job of game management. That fact becomes obvious when we look at what has happened to many of our game species. Misguided efforts have resulted in serious depletion of many kinds of game and in extinction of others. Some of the extinct species in America are the heath hen, passenger pigeon, dodo, auk, and Carolina parakeet. If we are to increase game populations, game management must be accepted by everyone as a profession based on facts. The administrator today frequently finds it difficult to correct mistaken ideas that have prevailed in our wildlife profession for years. An example of a wasteful practice based on a mistaken idea was the stocking of quail, pheasants, or rabbits in areas where their kind already had decreased because proper food and cover conditions had been depleted. Some states spent hundreds of thousands of dollars on such restocking programs before research indicated their lack of success.

## Modern Professions Due to Fact-finding

If our wildlife managers are to raise their profession to the same level as that now occupied by medicine, agriculture, and forestry, we shall need to carry on intensive research of the same caliber that has made it possible to develop these professions.

The farmer now knows how to produce bigger and better crops of cotton, peanuts, and grain. He knows that certain fertilizers and trace elements are necessary for increased production. In areas where but a few bushels of corn could be grown on an acre at one time, many farmers now produce 100 bushels or more. The acreage that once produced a scrawny cow now frequently supports several well-fed cattle.

Engineering has advanced from the horse and buggy to the finest of automobiles, airplanes, and locomotives. Modern textiles have been vastly improved from the coarse cloth produced by Indians. Where there were once nothing but stagnant, muddy looking water holes, we now have modern productive fish ponds. Where people once fished only a few months each year, they are now encouraged to fish all year-around. All these things have come into being as a result of painstaking fact-finding.

Fact-finding must be done on a planned open-minded basis. In the past there have been cases where administrators demanded that their employees go out and get the facts to justify false beliefs. This is not true research. The real facts must come from open-minded investigations aimed at discovering the truth, regardless of what the outcome may be.

Fact-finding programs in the various state fish and game departments are now financed by means of federal excise taxes on arms, ammunition, and fishing tackle. Such funds, which must be matched with one dollar of state money for every three dollars of federal funds, are also used to acquire, develop, and/or maintain hunting and fishing areas in the various states, Hawaii, Puerto Rico, Virgin Islands, and Alaska.

Sixteen states and Alaska now have Cooperative Wildlife Research Units. These are jointly financed by the U. S. Fish and Wildlife Service, the Wildlife Management Institute, the State Fish and Game Department, and the College at which the Unit is located. The principal functions of the Research Units are to assist in training graduate students in the profession of game management, to promote and carry on original game research, and to help disseminate the facts to the public.

In many cases, basic research has been branded impractical. Many of us can well recall about 20 or more years ago when many people made fun of physicists who were splitting atoms in their laboratories. If the truth were known, probably a majority of the public at the time regarded atom research as being of no practical value. However, today we know that that type of basic research has made atomic energy possible.

The importance of basic research is illustrated fur-



A life of fear has just started for this young cottontail. It narrowly escaped death in the coils of this gray rat snake when its plaintive squeals brought help from a nearby farmer.

ther by results from a study by E. R. Kalmbach of the U. S. Fish and Wildlife Service who found that birds are sensitive to color, whereas rodents apparently are color blind. This knowledge led to a rodent control program with colored poison bait that was unattractive to valuable birds but was readily eaten by the destructive rodents.

It is recognized that not all research on game problems has been productive, and in many cases good results have not been made readily available to the public. As in manufacturing industries, however, enough experiments in game problems have produced usable facts to justify the research program. Many mistakes and wrong guesses have also been made by inexperienced game biologists. Such errors, however, should decrease as better trained and more experienced research workers become available. Each year more men with proven ability for fact-finding are becoming available for this important part of game management programs.

## Some Important Results From Studies

Many investigations have produced sound ideas for improved game management. Studies on the western duck sickness, which at one time annually caused the deaths of thousands of ducks, have produced gratifying results. Research not only discovered the cause of the die-off, but found that the losses could be decreased and in some cases eliminated by stabilizing water levels to prevent stagnation. Duck sickness, however, is still a problem in some areas.

Studies on deer in various areas have shown that the rate of reproduction varied with the quality and quantity of the food supply. An obvious solution to better production then will be to improve the food

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# muzzle flashes

By EDMUND McLAURIN

No marksman can shoot well with a gun of which he is afraid, yet many persons shoot poorly for this reason. Invariably members of this group are overgunned, psychologically if not in reality.

Assuming that a firearm is dependable mechanically and structurally strong, the only things left to possibly make a man afraid of his gun are its sound and fury, same being muzzle blast and attendant recoil.

Flinching, an elusive nervous reaction that has been termed "shooting paralysis at the wrong moment", and something fatal to consistently accurate shooting, is often based on fear of either a gun's recoil or its muzzle blast, or both. To avoid what they believe will be dire consequences in the form of feared recoil, or of ear-annoying muzzle blast, many shooters will jerk supporting shoulder away from the butt of the gun, close their eyes entirely, or raise their heads in an effort to get as far away from the gunstock as possible, at the final moment of trigger release.

Frequently there are logical reasons for such actions. It may be that the shooter is attempting to shoot a bigger gun than he is physically capable of firing for long periods with comfort and confidence. Again, the comb of the gunstock may be too high, causing the shooter to take considerable of the gun's recoil through the sensitive nerve that lies just below the cheekbones. The stock may be too long or too short, or the butt plate shaped so that felt recoil is concentrated and punishing instead of being disseminated over and absorbed by the full shoulder area behind the butt plate. A short, crooked stock and a narrow and curved butt plate can combine to give a shooter a good measure of a firearm's developed recoil, whereas a properly fitting stock, with more drop at comb than at heel, equipped with a large, flat butt plate can help make shooting the fun it is intended to be. Similarly, a large fore-end will also help the shooter cut down his

consciousness of recoil by transferring some of the gun's existent recoil to the left hand. A rubber recoil pad on the gun-butt will likewise absorb some of the recoil before it reaches the shooter's shoulder.

Newton's law, "for every action there must be an equal and opposite reaction", finds a working example every time a firearm is fired. Gases generated by the rapid burning of the powder charge exert a forward force that pushes the projectile out of the barrel. By so doing, an equal force is exerted in the opposite direction, and it is some of this developed recoil that the shooter feels a fraction of a second after each shot. Contrary to popular belief, recoil has nothing to do with "pushing against the air," and, in truth, produced recoil momentum resulting from escaping barrel gases would be higher if the gun were fired in a vacuum than when it is fired normally.

Mathematically, with a gun free to move rearward from recoil force, the law of motion is a rough approximation of the product of bullet weight and muzzle velocity as being equal to a gun's weight multiplied by the velocity with which the gun recoils.

Whenever gun experts get together, the subject of recoil is sure to be one topic of conversation. Phil Sharpe, the ballistics expert, who usually takes a scientific approach to firearms subjects, recently explained Newton's law as follows: "According to Newton's law, recoil in a gun takes place when the bullet moves forward. Now, there are 7,000 grains to a pound. A ten pound rifle will thus weigh 70,000 grains. Assuming, for example, that a 100 grain bullet were being used in a .300 H&H Magnum rifle, the difference in weight would indicate that the gun would weigh 700 times more than the bullet so that the recoil velocity would be about 1/700 of the bullet velocity, in a ten pound rifle. Other minor, but important, factors must be considered in making such calculations."

Jack O'Connor contributed a different line of thought on the same basic subject when he summed up recoil with the words, "Recoil increases as either the velocity, or weight of the shot charge, is increased, provided the same gun is used in making comparisons."

"The lighter the gun, the more the kick; the heavier the bullet, the more the kick; the shorter the barrel, the more the kick. Other things being equal, a .257 will kick less than a .270; a 7mm less than a .30-06; a .30-30 less than a .348. The same rifles will also kick more when fired with heavier bullets—like more recoil from a 220 grain .30-06 bullet than a 150 grain slug fired through the same gun."

This kick-back of a gun of known weight and established shell loadings is technically expressed as "free recoil in foot pounds" . . . . 33.6 foot pounds for a .375 Winchester used with a 300 grain bullet; 19 f.p. of free recoil from a .30-06 loaded with 220 grain bullet travelling at 2,400 foot seconds muzzle velocity. In the same vein, free recoil figures out 14.3 foot pounds for the .270 used with 130 grain factory loads kicking up dust at 3,140 feet per second muzzle velocity, but only 6.9 foot pounds of recoil for the .257 used with 100 grain bullet moving along at 2,900 feet per second muzzle velocity. More dramatic producers of free recoil are shotguns. With a 12 gauge, 7½ pound shotgun, featuring 26 inch barrels, single firing of a shell containing 1-1/8 ounces of shot and 3¼ drams of powder will result in 22.5 foot pounds of free recoil. Some shotguns and their loads develop as much as 32 or more f.p.'s of kick-back.

But the average shooter is usually not interested in how much free recoil a particular firearm and matched shell loading develops, but how much of that recoil he feels when he fires the gun.

Though the degree of recoil may be constant for a given gun and load used, the effect of recoil on different shooters is an unknown variable. Individual sensitivity to recoil depends on such things as gun fit, the way the weapon is held and fired, whether or not the shooter is gun conscious or target conscious, apprehension of anticipated gun-kick, and confidence in gun and shooting technique. Least likely to notice fully developed gun recoil are those shooters who use guns that fit perfectly, who are primarily target conscious, who shoot with both eyes open and from the shoulder

that corresponds to their "master" eye, and who hold their guns firmly but without any attempt to freeze gun and selves into tense statues of rigidity.

A very good reason why some shooters get punched in the face just about every time they fire a hard-recoiling gun is that they do not snuggle their cheeks firmly against the comb of the gunstock, usually because they are afraid of the gun's recoil even before they take aim. When fired with the cheek only lightly touching the gunstock, the rifle comes back as it recoils, but the shooter's face does not, and the firer may get smacked in the face, or have his shooting glasses broken, by the gun's recoiling bolt or solid breech. However, when the shooter firmly presses his cheek to the comb of the stock, his face will remain in position when the rifle jounces back from recoil and the two will recoil as one. This is why one shooter may fire a gun and never be bothered with recoil, while another may be jarred to the roots of his wisdom teeth, if not actually bruised.

Quite logically, a properly shaped gunstock and face-supporting comb will do much to reduce any consciousness and fear of recoil by teaming up rifle and shooter and giving the latter confidence in both himself and teammate.

Recoil has a great bearing on final accuracy. A rifle sighted-in perfectly from an unyielding, non-shock-

Aside from ammunition economy, one of the reasons for the great popularity of a .22 caliber rifle is light recoil. In a heavy target rifle of about ten pounds, like the one shown, recoil is so little as to go almost unnoticed. Shooters with tournament ambitions should start out with a .22 and master it in all four shooting positions before competing in the .30-06 caliber classifications.



A .270, like this one, used with 130-grain factory loads kicking up dust at 3,140 feet per second muzzle velocity, hits back at the shooter with 14.3 foot pounds of free recoil—more than that of the .257 used with a 100-grain bullet but less than the .30-06's rearward wallop of 19 foot pounds of free recoil from a fired 220-grain slug.

absorbing rest, like a vise or a cement block, will usually shoot to a new common center when later fired offhand. The reason can be traced to the original sighting-in from a hard surface; when fired from such a support a firearm will naturally recoil in the direction of least resistance—in this case, away from the hard rest, thus giving a different point of impact when later shot offhand, compared to dead-center accuracy performance from a vise or cement block firing platform.

Recoil from a rifle fired offhand while hunting will usually be less noticeable than the same recoil when the rifle is fired from a bench rest. A shotgun that seems to kick "just a little" when used afield becomes a roaring, bucking monster when fired deliberately from a rest, as when making shot pattern tests.

There is frequently a change of bullet impact, with the same sight

settings, when the shooter changes from one shooting position to another. The difference is probably least noticeable between change-overs from prone to standing position, and when shooting from these positions, a hunter may well use one sight setting with confidence. Seriously inclined competitive target shooters, however, will invariably make a click or two change in sight elevation as they change positions, because in their game a sighting error of as little as ¼ of an inch in bullet impact can mean a place listing far down the tournament scoreboard. Simply, recoil is felt in different degrees as one changes shooting positions.

Everything considered, the lighter a gun and its barrel, the more pronounced will be its jump and recoil. Theoretically, a perfect barrel weight would be one that would not move from the explosion of the powder charge and while the lead is moving from breech to muzzle, but to accomplish that objective barrels would have to be prohibitively heavy—for example, thirty pounds for even an old .45-70-500 black powder burning rifle, and there would still be some movement (mostly backward) from recoil.

Because the shotgunner wants a gun light enough to be easily carried and quickly shouldered, he must settle for a gun having recoil that may or may not be excessive for him. What recoil the shooter finds objectionable can be reduced by attaching a ventilated-type selective choke device to a shotgun's muzzle and a rubber recoil pad on the butt plate end. Riflemen will find a combination of muzzle brake and recoil pad effective.

Many modern firearms utilize a portion of developed recoil to operate their mechanisms as autoloading, thanks to John Moses Browning, genius among famous firearms inventors. Because he noticed how muzzle blast and recoil shock waves affected grass growing a few feet from his ground-level duck blind,

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As soon as the birds are located, Joe and Pee Wee set up the trap in an appropriate spot, usually near cover, in a cow trail or in some restricted opening where the birds might naturally pass. Lead in netting is only twelve inches high. Birds sometimes crawl under, seldom over, this foot of wire.

past decade sales of hunting licenses had almost doubled while much desirable game land was being converted to agricultural and forestry lands. Much of it was being fenced and posted and in some localities the resentment against the landowner manifested itself in trespass in which both game and landowner suffered in hunting violations, indiscriminate burning, and cattle and timber theft.

With these data in mind the Commission sought a solution that appears most difficult even today—the acquisition of private lands for hunting. Though the idea was an evolution of much group thinking, discussion and planning, behind the first concrete results were the efforts of Assistant Director O. Earl Frye, then the Commission's Chief Wildlife Biologist. "The problem," Mr. Frye said at the time, "is not one of supplying free hunting but one of supplying hunting at a price the average man can afford to pay." Though he sparkplugged the idea from its inception, Mr. Frye is quick to point out that "In all cases the acquisition of this land was a cooperative endeavor and that many Commissioners, Biologists, Wildlife Officers and sportsmen have worked together toward acquiring lands." He further points out that "Many of the big land holdings in Florida are in the hands of realistic, civic minded concerns or individuals who recognize the

## A PLACE IN THE SUN FOR THE HUNTER

By CHARLES FOSTER

**"POSTED," "Private," "No Trespassing,"**—the signs come with the regularity of the hunting seasons and for many years the game seeker has found himself in the field with more nimrods and fewer places to go. Will the average hunter eventually be squeezed from his sport? Is the pastime to become available for only the wealthy, privileged few, as in some parts of the world today? Must the landowner idly sit by while his lands are subjected to illegal trespass and malicious mischief?

There are two sides to the fence, as in all controversies. On the inside the landowner, by obtaining a deed in fee simple absolute, traditionally owns the land and all appurtenances thereof which are his to utilize as he desires. On the outside is the man with the gun who feels that the game belongs to the people, not the one upon whose land it happens to be at a specified time. And there is much to be said in favor of both these concepts.

Much thought, speech and action have been expended on the problem. In some areas federal and state lands have been opened to the hunter, but these lands comprise but a fraction of the potential game producing areas in our country. Some gun clubs have leased tracts for members and restocked the land, and this step in the right direction is good, though local and sometimes temporary.

Florida's Game and Fresh Water Fish Commission has been working seriously on the problem for a number of years and may well have hit upon the most workable and satisfactory solution for the hunter and landowner. In 1947 the Commission took a hard, realistic and pensive look at some statistics. For the

With the trap set up and partly camouflaged, Joe and Pee Wee vacate the area. In the background Barney is on the move to keep the covey together.



problem of supplying hunting for the average man and are willing to do their part toward solving it."

With these concepts as a working basis the Commission began its task in 1948 on the Gulf Hammock Wildlife Management Area, located on central Florida's west coast. Through an arrangement with a large lumber concern, the Commission fenced 120,000 acres, in return for a twenty-five year lease on hunting rights. Six full-time wildlife officers were assigned to the area to protect the game and assist the Commission biologists in improving habitat and providing game foods. These officers also cooperated with the landowner to protect his interests. The entire area had to be posted and a sign on each five hundred feet of fence designating it as a Wildlife Management Area. Financing the project was through Commission funds and the sale of special permits to hunt there.

In 1950 another area, the Steinhatchee, was added. Today it offers 225,000 acres opened to managed hunting. The success on these areas convinced Commission members it was on the right track and it has increased its efforts yearly to bring more privately owned lands into the management system.

Today nearly four million acres of public and private lands are under the Commission's management in twenty areas throughout the state. Wherever a hunter may be in Florida, he is within driving range of several of these reservations. Each year more lands are being brought under the management plan. Between 1952 and 1953 hunting seasons nearly a million additional acres were added. Approximately one million acres are either being restocked or are set aside for breeding grounds. Of the total amount open to hunters nearly two million acres are privately owned and the Commission's goal is to bring another five to six million acres into the program within the next five years.

The Commission has men in the field to contact landowners and draw up contracts for leasing private lands. These men are skilled in diplomacy and tact and have written up some attractive contracts for the landowner. It is significant to note that few of the areas are leased on a straight cents-per-acre basis. More benefits can accrue to the landowner under other arrangements, such as maintaining fences and gates, assisting in fire protection, patrolling the area to minimize illegal trespass. The greatest advantage to the landowner has been in general good will from the public who uses his terrain. Lands under the management plan have been subjected to fewer game law violations, for the hunter feels that the game is his, not the intangible property of someone else, and he has done well in conserving it for future hunters.

The twenty areas throughout Florida vary in size from 35,000 acres to 720,000 acres, though about half are over a hundred thousand acres and the rest averaging fifty thousand acres.

Financing the plan is through sale of hunting licenses and special permits. Since 1951 the Commission has sold five dollar permits to holders of hunting licenses which entitled them to hunt on all but a few of the management areas. One area requires no special license while another requires a five dollar daily permit and there are various special affairs, such as the Ocala archery hunt, that require special licensing. For the average hunter the five dollar special permit is an excellent investment. It allows him to use the majority of the areas on specified days, usually three or four days a week, from the middle of November to the end of December. Quail, deer, turkey, squirrel, even

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Barney and Joe begin the "drive." Quail are under palm trees in left of picture, being driven toward trap. This phase is the most painstaking element of trapping birds by this method. Timing must be perfect.



A baker's dozen. A palmetto fan has been stuffed in the funnel to secure the birds.

Back home the following day, Pee Wee takes birds from top box and separates the roosters and hens while Barney keeps tally. Of eighty-seven birds trapped in two days, forty-four were hens, forty-three roosters—about the usual proportion.



bear and waterfowl hunting are available on different reservations. Bag limits are generally the same as elsewhere, but the hunter must be checked in and out of the reservation and agree to a bag inspection at any time by any wildlife officer.

Not all the Commission's work is fence riding or patrolling an area. Restocking must be done in some cases to keep the game in balance with the hunting pressure, and the wildlife officer's day is usually one filled with activity.

A single phase of restocking is illustrated in the accompanying photographs taken in the Fisheating Creek Wildlife Management Area on the western tip of Lake Okeechobee, one of the finest quail and turkey ranges in the state. The land is principally owned by the Lykes Brothers Corporation whose chief business is cattle raising, steamship lines and citrus processing. The company has long been in Florida and is held in high esteem by those who know them. These men are not only Florida boosters, but are quite as ardent sportsmen as any hunter or huntress in the field. They were quick to realize the advantage of an arrangement with the Commission.

This area is divided into two sections on either side of Route 27 at Palmdale, Florida. On the eastern side there are 175,000 acres for breeding grounds which have not been hunted in over twenty years, and across the highway 100,000 acres open for managed public hunting.

The photographs illustrate two days' work for Commission personnel in this area last March. Wildlife Officers Barney Snell and Joe Crews were assisted by R. J. (Pee Wee) Smith, an interested hunter whose employer allowed him time off to assist with the trapping. Barney has been in the wildlife management business for many years and trapping quail by this unique "driving" method is not new to him. On this particular day's "drive" about forty-five birds were trapped. The day began about nine in the morning and finished about that same time in the evening, for the final drive was done in late twilight over fifteen miles from home. During these hours we rode about sixty miles, much of it across rough palmetto and pine woods where there were no roads. The pictures were made on several different drives, for once the quail were spotted the photographer had to stay with one of the three parties.

Trapping the quail must be done in early spring, before the birds begin to pair off and build nests. The birds are located with a specially trained dog that can be called off point and secured in one of the vehicles. As soon as the covey is located, Barney drives about in his vehicle to keep the covey from wandering. They cannot be driven without the vehicles, for the birds usually take to the air when approached by a man on foot.

"You can drive them like cattle," Joe said, though it is not quite as simple as the average viewer might think. Driving the covey is a nerve wracking, tense affair to keep from flushing the birds.

On the second day the birds were separated by sexes and tallied before Barney went into the hunting grounds to release them. It might at first seem that releasing is simple—all you have to do is liberate them. But Barney does not consider this job so easy. He releases the usual two pairs only in areas where food is sufficient, cover available and water nearby. Almost as soon as the birds touch the ground they begin feeding or start whistling to regroup, none the worse for trapping and transplanting.



Ladies first as Barney releases another potential covey for some hunter next season.

In March of 1953 Barney and Joe trapped and released about six hundred birds in the Fisheating Creek Management Area. The following season over three thousand birds were taken and a good stock was left to propagate for the next season. This past March over nine hundred birds were released in the same area, giving a potential four hundred and fifty new coveys for the coming season. How many will survive depends upon weather, food and other environmental factors, but there's a good chance that most will come through. Liberating these quail took us over about sixty-five miles of driving. The wildlife officer's lot is not easy during the transplanting season.

"I have lots of friends who come here to hunt," Barney said, "People from all over the state and visitors from the outside. They expect good hunting and I've always tried to see that they get it." This statement pretty well sums up the feeling of the Commission on its Wildlife Management Areas.

The Commission has been quite active on another front too—the education of the hunter. Through the department magazine and a variety of publications the hunter is continually reminded of the principals of good sportsmanship and the perpetuation of his game on his hunting area. Mr. Frye in 1948 had this to say about the first project: "Remember, Mr. Sportsman, the Gulf Hammock Wildlife Management Project does not belong to the Game and Fresh Water Fish Commission, it belongs to YOU. It is YOUR responsibility to do what you can to make it a success. YOU through recommendations to the Commission have had a hand in its management. YOU are the man who will benefit if it is a success."

And indications today are that it has been, is and will be a continuing success in Florida. The hunters have been happy about the experiment and the Commission feels gratified at the results of its labors. Admittedly Florida is more adaptable to this kind of scheme than some other states where control of the land is not in such large holdings. But the fact that a number of titleholders held a tract of land has never been a deterrent to the Commission's aggressive policy of making more room for the hunter. The experiment has been a real boon to the sportsmen, will grow in dimension and may eventually prove to be the best solution in providing a place in the sun for the hunter.

END.

# KISSIMMEE - OKEECHOBEE BOAT-A-CADE

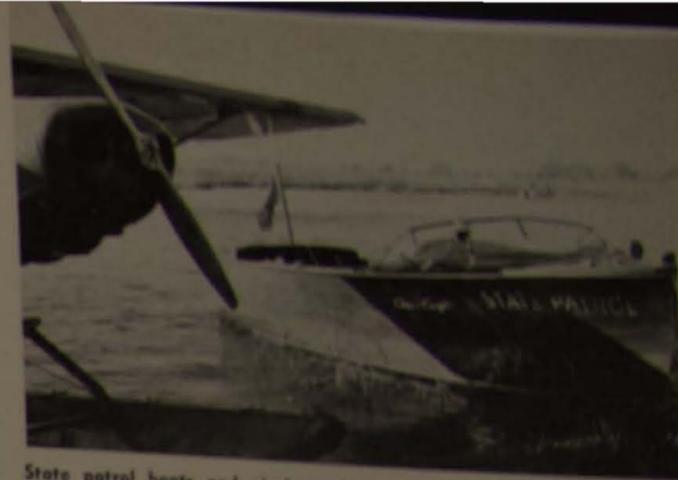


Boat after boat crammed the banks of Taylor Creek as Boat-A-Caders arrived at Okeechobee.



Okeechobee events included a feast, dancing, entertainment, and the crowning of a Boat-A-Cade Queen.

At Okeechobee, units of the river cruise prepare for the homeward lap with some going east to Stuart and the remainder heading west to Ft. Myers.



State patrol boats and airplanes kept a day long vigil against boat-jockeys becoming lost. Radio contact with official boats was maintained throughout the voyage.

On October 20th, the feeling of nautical wanderlust took a firm grip on the town of Kissimmee when a large concentration of boats of various sizes and types arrived for the start of the 5th Annual Kissimmee-Okeechobee Boat-A-Cade.

More than a thousand boat jockeys manning 406 assorted craft gathered on the northern shores of Lake Tohopekaliga for the 135 mile watery trek to Lake Okeechobee. From this point part of the fleet proceeded east to Stuart while the remainder headed west to Fort Myers.

Dick Makinson, chairman of the Boat-A-Cade and his very able assistants had the entire cruise well organized, with adequate nightly stopover arrangements which included evening barbecue meals and entertainment.

The first night's stop was at Camp Mack where the adventurers camped, fished and enjoyed a savory meal complete with music. After a night of camping on the banks of the Kissimmee, the flotilla proceeded down-river 75 miles to the EEEE camp and another gala evening of outdoor doings.

The third day of the cruise was an easy sail to the town of Okeechobee where a festive air prevailed. Dancing, feasting, and the crowning of a Boat-A-Cade Queen, Mrs. Dick Makinson, climaxed the 135 mile river jaunt.

On the fourth and final day, there came a parting of the ways as the fleet split up with some heading east, some west on the final leg of the journey. END.

Dick Makinson's "Venture" was flagship of the 5th Annual Boat-A-Cade and guided some 400 small craft on the river jaunt to Lake Okeechobee.



# SOUTH FLORIDA DIVISION

By E. T. "RED" HEINEN



Wildlife Officer Stansland releasing bobwhite quail. The restocking of depleted habitat is one important aspect of game management activity in the South Florida Division.

The administrative set-up of the division is unique in that Mrs. Dana Boose, "Betty" as she prefers being called, is the first woman to hold such a position in Florida. Mrs. Boose has long been interested in conservation and has been a member of the Florida Outdoor Writer's Association for several years. Because of her avid interest in the sportsmen's welfare, Betty promises to do all she can to promote better hunting and fishing, not only in the district she represents, but also in the entire state as well.

The South Florida Division is fortunate in having four Game Management Areas. These are the Fish-eating Creek Area in Glades County near Palmdale, the Lee County Area just out of Fort Myers, the Cecil Webb Quail Area in Charlotte County, and the Avon Park Bombing Range in Highlands County. All of these areas offer some of the best quail hunting to be found in the South while the Fish-eating Creek Area has earned nationwide recognition for its turkey production.

It should be pointed out here that wild turkey stock, live trapped from breeding grounds within the South Florida Division, has been shared with all other divisions in a state-wide restocking program. This turkey management project was originated in Har-dee, Manatee, Sarasota and DeSoto Counties and has proven so successful that these areas will probably be open for hunting next year. Similar programs have been started in other counties within the division as well as in other divisions.

Besides the popular turkey program, division personnel participated in obtaining supplementary data for the game technicians by trapping and banding quail in closed areas and releasing them in areas open to public hunting. The figures obtained from this study helped to confirm that quail restocking in some areas was not absolutely necessary, since it was found that quail are not as vulnerable to hunting pressure as is the turkey.

Division game technicians have continued their studies on dove and waterfowl. It is through these detailed studies that the means will be found to assure the continuance of good game populations. The increase in the number of days of hunting allowed dove hunters is the result of studies which showed that there was an inadequate hunter harvest being made of this important game species.

Besides the hunting potential of the counties within the division, the lakes and streams of the area have become known in fishing circles throughout the nation. Phosphate pits, lakes, streams, and homemade fish ponds combine to produce some of the nation's most fabulous fishing.

Technical studies of fish populations are being conducted by a division fisheries technician. Also being carried on are studies concerned with the determination of proper stocking ratios of fish, weed control, various aspects of the pollution problem, and the continuation of investigation work on Lake Reedy near Frostproof. This lake was one of several selected to receive extensive seining and removal of all species of fish, with the exception of bass, about three years ago. Periodic checks are being made to see how the fish populations are reacting. The latter activity includes creel census investigations. Additional rough fish control work is planned for the near future.

From the Winter Haven bass hatchery, almost half a million bass fingerlings a year are distributed throughout the state from Miami to Jacksonville. Here again is shown the cooperation that is so necessary between divisions of a state-wide organization. A new bream hatchery has been developed near Winter Haven for farm pond stocking. Approximately one hundred farm pond requests have been processed during the past year.

While the Law Enforcement part of the division is in a sense a separate branch, enforcement of the game and fish laws is in no way restricted to Wildlife Officers. Technical men, the Educational Officer, and the Pilot have all participated in making arrests during the year. The Law Enforcement men are divided into three groups, each group headed by an Area Supervisor working directly under the division director. This organization is standard in all divisions. Each Wildlife Officer is charged with the responsibility of representing the Director in Tallahassee to the sportsmen.



An important aspect of wildlife conservation is concerned with the youth of Florida. Here a group of Junior Conservation Club boys from Weechaha "learns by doing" as they service one of the quail feeders which are in use in the South Florida Division.

One of the most important all around tools of the division is the airplane. Only recently it has been converted from a land plane to one that can land on water. Now, many fishermen will have their licenses checked by our flying wildlife officer. Not only is the plane used for checking lakes and fishermen, but it is used very effectively at night, assisting in the apprehension of fire-hunters. The liaison between mobile radio units in cars and boats working with a control plane is quite evident. This method of coordinating patrols and investigations is being used constantly to good advantage. Many thousands of miles of air patrol have thus been logged.

During the past year the men of the South Florida Division have traveled approximately 550,000 miles in the performance of their duties. This means that the average officer travels about 1,760 miles a month. During this time the men made 610 arrests and checked 38,807 licenses. Dividing their time between land and water patrol, they are also required to attend meetings, give speeches, attend court hearings, assist with game and fish management activities being conducted by technicians, sell commercial licenses, fill out various reports, and keep up their equipment. Seldom does an individual have to be so well versed in so many varied subjects. Truly the men in this division are to be congratulated for the fine way they have accepted and performed their numerous duties.

The feeling of cooperation and comradeship within the division was demonstrated most recently by the establishment of a Group Blood Bank for the use of division personnel and their families. Within a few days after it was established, the bank furnished nine pints of blood for the wife of one of the men.

The Information and Education program in the division has been carrying the conservation programs to the public with its work in State and County Fairs, news releases, radio programs, public speeches, showing of movies and the all important Junior Conservation Club work.

The South Florida Division will continue to bring good conservation practices and programs to the public and to work untiringly for the betterment of hunting and fishing for all the people. END.

Large numbers of gar and other "trash" fish are removed from South Florida waters to encourage greater production of game fishes for the sportsman.

Rough fish removal is one of the activities carried on by Division personnel in an attempt to improve sport fishing in South Florida.





# Career Man in the Wilderness

By ALICE JOHNSON

As we stepped ashore after a day of fishing, my son's eyes became riveted on a highly polished Ford parked a short distance from the landing. A uniformed wildlife officer was busy talking on a two way radio hook-up. On the car door was emblazoned the gold and green emblem of the Game and Fresh Water Fish Commission.

My son was busily taking in every detail of the scene. Suddenly he said, "Dad, I believe a job like that officer over there has would be the sort of thing for me when I get out of school. I think I'll talk to him and see what I'd have to do."

We ambled over to the state car and as the officer cradled the "mike" Larry introduced himself. The man proved to be Dick Bryant, one of the Wildlife Officers attached to the Game Commission's Southern Division.

Over some hot coffee in the camp's snack bar, Larry started firing the questions at Mr. Bryant. The Wildlife Officer gave the boy his full attention and when at last the questions ran out, said, "Son, the Commission is always interested in likely lads such as yourself for future Wildlife Officers, but remember, there's plenty of tough, hard work that most people don't see."

"You not only have to know the outdoors but like to rough it and be ready at all times for the various chores that seem to come night and day."

Here Larry interrupted and told of his extensive Boy Scout activities and how much he enjoyed them. I knew the boy liked his outdoors and was capable for he had accompanied me on many a hunting and fishing trip.

Dick Bryant continued, "A good general knowledge of birds, animals, and fish and their habits and habitat is most necessary. If you can absorb these items you will be able to understand what our game and conservation laws are all about and why they are so important."

Larry already understood Florida's game and fish laws and had been active in various conservation projects carried on by his school conservation club.

When he mentioned this, Dick Bryant sat back and

said, "Well, the next step then is to go see the Game Commission Director of your district. If he considers you qualified for a job with us and has an opening, he'll channel the application through to the Commissioner for final approval."

I could see that my son had gained a certain amount of confidence from the conversation so far, and he boyishly asked, "Would I get a job like yours, Mr. Bryant?"

"Let me tell you about this job, lad," Dick replied, "And then you can judge whether or not you'd be ready for my type of work."

"Let's look over what I call a routine day and see what has to be done. First of all, you have to be an early riser. Just the same as if you were going hunting or fishing. With the sportsman in the field that early, we have to be there before them."

"What time do you usually get up?" asked Larry.

"About five a.m.," answered Dick, "and sometimes sooner, especially when some special law enforcement work is coming up. I usually open the day by starting a patrol of the 250,000 acre area assigned to me. Wildlife Officers spend those early morning hours checking hunting and fishing licenses, catches, and methods that are used to obtain game and fish."

"It isn't all law enforcement, though, for we are asked many questions and are required to supply the answers."

"We have found that plenty of fraternizing between enforcement officers and the sportsmen make for much better relations and helps to build up a better knowledge of local conditions."

"Do you use that car just for patrols?" asked Larry again, "And how do you keep your uniform so clean all the time?"

Dick Bryant laughed, looked at his clean khakies and then at the car outside. "No, son, we don't always look like this. Many times we use a boat and outboard, sometimes swamp buggies, and even take to the air on occasion. The Commission has an airplane assigned to each of its five divisions and they come in mighty handy at times."

"As far as these khakies go, don't forget that we are out in all kinds of weather. I've been soaked to the skin more times than I care to remember and it isn't possible to stay clean when you are chasing through the woods or handling some of the more menial tasks involved in this work."

"Don't forget, son, when you're after a violator you have to have all the evidence before you can make a case against him."

I broke in, "I suppose your job is finished after the arrest is made, eh?"

"Not by a long shot," retorted Wildlife Officer Bryant. "That is only half the task for we must appear in court and convince the jurists that the man has erred and should be punished."

Larry and I sighed and sat back thinking that Dick had finally reached the end of a "normal" day, but found he had a long way to go yet.

"The evening is a darned busy time too," he continued, "especially during the hunting season. There are various curfews that have to be maintained and many hunters hate to quit just because the sun has set. Checking bags and illegal shooters keeps us busy well into the night."

"When do you eat?" asked Larry like a normal, healthy youth.

"When and if," Dick replied. "When the shooting hours are well over with and everything appears calm, we slowly patrol homeward. But even then, that ole radio will usually blast an appeal from another officer who needs help with a violator or some illegal actions might have to be checked."

"Y'see, son, a Wildlife Officer is just about dedicated to his work, just like your town policeman on the beat. Our job of law enforcement is only a small part of the general conservation program required for the protection of our wildlife resources, so a general knowledge of game and fish is necessary in order that we can try and figure how the greedy poacher or intentional violator will think."

Larry piped up again, "How can you creep up on these crooks if they're working outside?"

"Sometimes," continued Dick, "we have to crawl through the swamp, or cut a trail through the heavy brush and as luck would have it, sometimes we fail to apprehend them even then."

"Sometimes we don't emerge from the area until well after eight o'clock and by then a man can feel pretty beat."

Again I thought Mr. Bryant had completed his "normal" day, but he finished his coffee, sat back and started telling us more.

"There is still the daily report to be made, and chance of the radio giving forth again, and then often there is work to be done at fairs and exhibits or with the many Junior Conservation Clubs springing up all over the state. If you get right down to it, I hardly can say when the normal day of a Wildlife Officer ends."

Larry wasn't looking so enthused by now and Dick Bryant evidently noticed it.

"Look lad," Dick went on soberly, "Wildlife Officers are sometimes considered peculiar people. I once read where they are a special breed supposed to have courage, endurance, good physical stamina and, above

all, be possessed of a devotion to duty. The quality of a man desiring to carve a career for himself in the wilderness must include a great love of nature and protective instinct towards our natural resources. You have to downright enjoy the work because you'll never get rich at it."

With that, Dick pushed back his chair and stood up. "Must get on with the job now, but first look this over, son. It's an application, in case you still want to be a Wildlife Officer."

Larry looked it over carefully and, putting it in his pocket said, "I don't think I have the necessary experience yet, sir, but I'd sure like to think it over."

Bryant winked at me, gave Larry a friendly slap on the back. We shook hands all around. My son and I stood there in the clearing while Dick Bryant got in his polished car, checked in on his radio for calls, and drove away.

During the ride home, my son thoughtfully studied the terrain, the lakes and swamps, the stretches of jungle. The Wildlife Officer's job, stripped of its glamour, had got down to hard cold facts. But in the lakes, fish jumped and herons swooped. Otter slid down high banks into the sloughs, deer leaped across the road. Water turkeys perched on fallen, half submerged trees to dry their wings. I knew my son was contrasting his normal boy's day, with its even routine, three square meals, and soft bed which he had taken for granted, with the rugged career described by Dick Bryant.

He said after a long silence, "I still want to be a Wildlife Officer like Dick but—" He paused, then continued thoughtfully. "I guess I had better learn a lot more and toughen up some, don't you think?"

I agreed. Secretly I believe if my son does fill out that application when he decides he can qualify, he will then be really entering "man's estate." END.

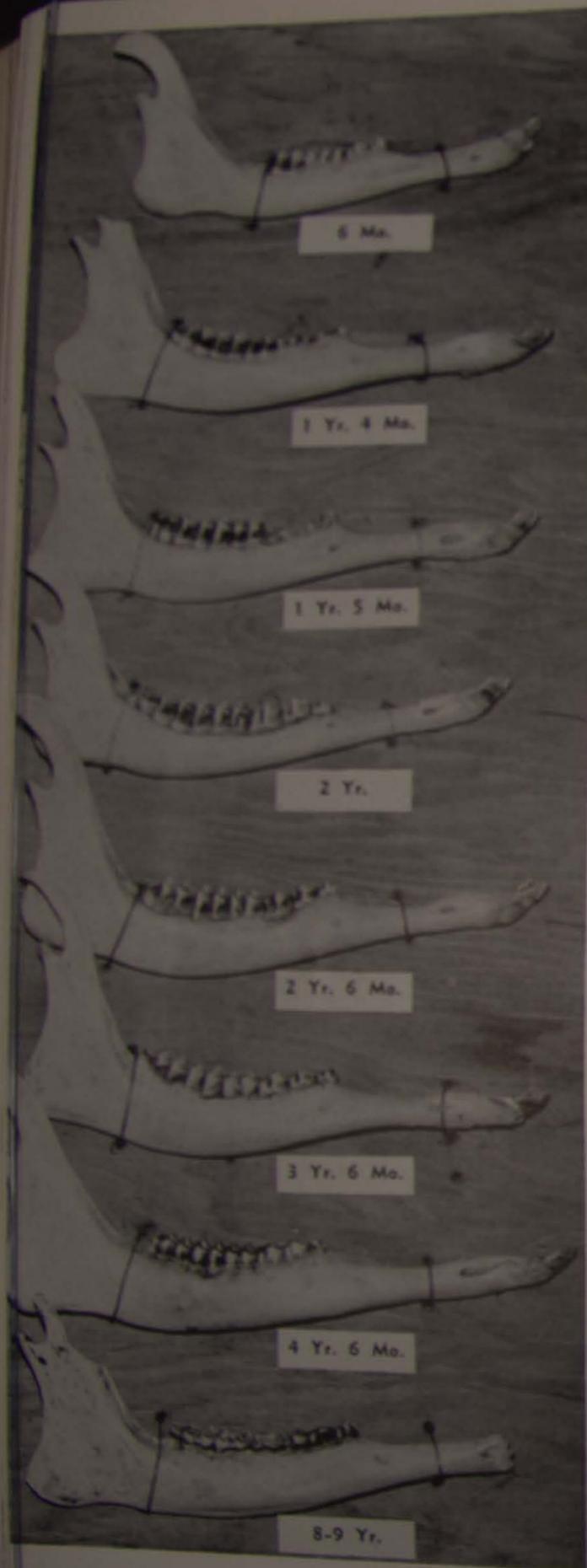
Wildlife Officer Dick Bryant of the St. Petersburg area is a typical "Career man in the wilderness."



# HOW OLD WAS HE ?

## OCALA FAWN STORY

By FRANK NOWAK



When a group of admiring and perhaps envious hunters gather around the carcass of some craggy antlered old forest monarch, or even that of a junior edition of the big boy, one of the questions that is almost certain to be posed is "How old was he?"

Nor are sportsmen the only group interested in determining the age of individual deer. Wildlife specialists have long been attempting to discover a reliable criterion for assigning deer to particular age groups. Such information has an important function for, among other things, the age grouping of bagged deer is one method of keeping tabs on the condition of the herd. A preponderance of over-aged bucks, for example, would be an indication that the particular herd in question is being underharvested. Similarly, a goodly representation of younger bucks plus a smattering of older deer would indicate that the herd is in good condition and undergoing a favorable rate of harvest.

The method of basing the age of a buck on the number of antler points has been so thoroughly debunked in outdoor literature that it is hardly necessary to comment further on the subject.

The condition and development of the teeth as a means of assigning a deer to a particular age group has been under study in many sections of the country. Due to differences in such factors as food composition, presence or absence of certain soil elements, and the amount of abrasive materials in or on food plants, there is a considerable amount of variation in the appearance of the teeth of deer in various parts of the country.

It is therefore apparent that aging by tooth condition is a matter of setting up certain criteria for the individual area or section under consideration.

The appearance of the teeth of a three year old buck from Pennsylvania would be expected to vary considerably from the dentition of a buck of the same age taken in Florida. With this in mind, considerable time and effort have been devoted by Game and Fresh Water Fish Commission game technicians to the study of the condition of the teeth of Florida deer.

In a discussion of age grouping by teeth, it is necessary to use certain technical terms. However, the novice need not be dissuaded from attempting the project which actually is not as overwhelmingly difficult as casual examination of the accompanying chart and terms would seem to indicate.

The illustration shows the various structures to which references are made.

The following material is based on deer ageing studies conducted by Richard F. Harlow, Game and Fresh Water Fish Commission technician.

**I 6 months age class**  
Only milk premolars showing.  
3rd premolar has three cusps.  
1st molar only showing.  
A buck in this age class would usually have antlers in "button" stage.

**II 1 year 4 months to 1 year 6 months age class**  
Milk premolars worn nearly to jaw bone, sometimes being pushed off by erupting permanent premolars.

All permanent premolars beginning to erupt. Usually when food conditions are good bucks in this age class may have from 4-10 antler points. If food conditions are poor spike horns are common and antler beam spread may be reduced.

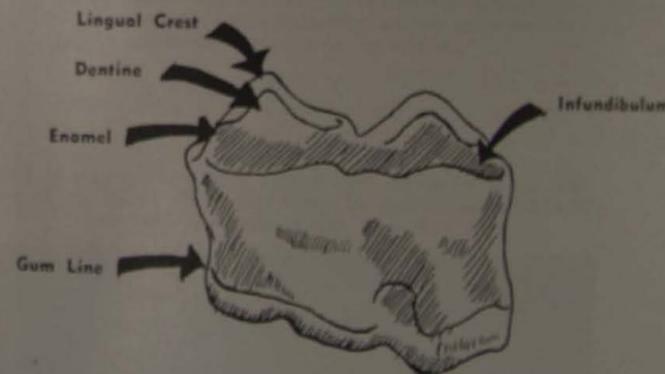
**III 2 years age class**  
Milk premolars shed and replaced by permanent premolars.  
3rd premolar no longer three cusped.  
3rd molar barely visible.

**IV 2 years 6 months age class**  
All permanent premolars and molars fully developed. All lingual crests sharp and unworn.

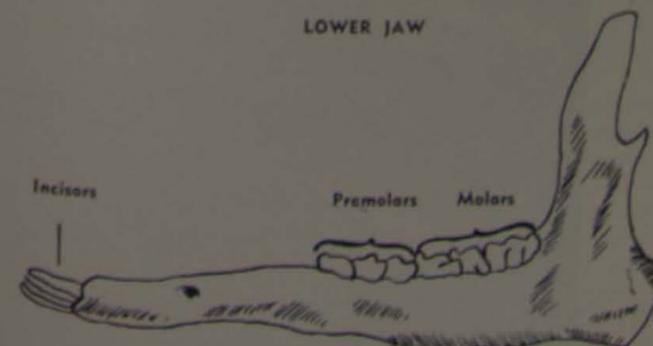
**V 4 years 6 months age class**  
Premolars little worn.  
Lingual crest of 1st molar worn considerably.  
Dentine wider than enamel.

**VI 8½ to 9½ year age class**  
Infundibulum worn away on 1st molar.  
Premolars and molars worn to within 2-3 mm of gum on cheek side and 2-5 mm on lingual side.  
Abnormal wear sometimes makes age classification difficult. Old bucks often revert back to spikes in antler development.

SIDE VIEW OF MOLAR



LOWER JAW



Deep in the wilds of the Ocala National Forest is a preserve known for its eerie beauty, the majesty of its ancient trees, and the silence that overlays the land.

Andy Carroll belongs to these woods as few men can ever belong. His mother was an Indian and he is proud of the understanding that generation upon generation of ancestors living close to nature has given him.

For going on ten years, Andy has been deputy sheriff in the area of Salt Springs. He is ready to defend the cause of law and order when the need arises. He is also an honorary game warden and is hired by the Salt Springs Corporation which owns the preserve to look out for the wildlife within its boundaries.

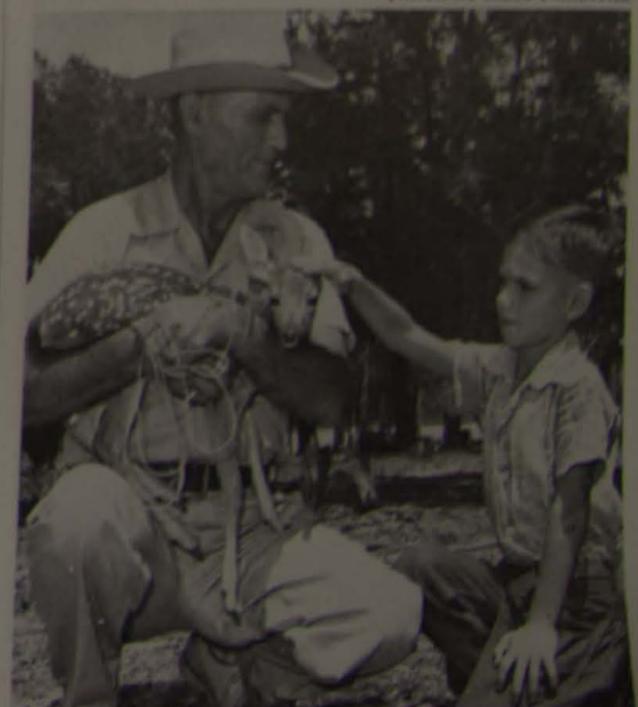
The screw worm is one of the most serious hazards with which the deer of the Ocala Forest area are faced. In an open wound on the deer's body, such as that caused by a dog bite or a scratch from a barbed wire fence, the blowfly lays its eggs. The eggs hatch into the larvae or screw worm which eats into the flesh of the animal. Eventually the worms will sufficiently damage vital tissues to cause the animal's death.

To treat the wounds, Andy opens the sore and allows it to drain. He then makes a poultice which is saturated with a solution of penicillin and bound into place. Every day he adds two cubic centimeters of this solution to the infected area. He has also used a commercial screw worm medicine which is manufactured in Florida. Andy feels he is experimenting and would like to know a sure way to gain the upper hand on the screw worms.

Andy has been successful in treating a number of fawns. He nurses them back to health and when they are old enough to care for themselves, he takes them back to the place where they were found and releases them to make their own way in the world. END.

Andy Carroll shows a young admirer, Whitney Thornton, one of the fawns he has nursed back to health.

PHOTO BY DADE THORNTON



# AROUND THE STATE

Mrs. Ima Lait, Auburndale, Florida, got this bass while trolling in the Chain-O-Lakes in Winter Haven. Mrs. Lait played the 10 1/2 pounder for ten minutes then lost it right at the boat but it was accidentally snagged by some friends trolling in another boat behind the Laites.



Joe Edd Ward, Commission Fish Management Officer, displays a 67-pound alligator gar taken during recently conducted striped bass investigation work on Northwest Florida's Perdido River. Although two other species of gar are widely distributed in Florida, the Alligator gar occupies only a restricted range in the extreme northwest portion of the state.

New law in hunting? Bud Boyett went under water at Florida's Weekiwachee Springs to prove you could sneak up on a duck—if you didn't mind getting wet!



## MUZZLE FLASHES

(Continued from Page 28)

Browning hit upon the idea of utilizing some of a gun's developed recoil to operate the reloading mechanism. From such application came the Browning and Remington autoloading shotguns and other arms based on Browning's patent. The recoil force had been there all the time; Browning was simply the first gun designer to recognize its potential value and incorporate it beneficially in firearm mechanisms.

As for fear created by the noise a gun makes when it is fired, there is little a shooter can do to eliminate this objectionable phase of firing except to plug his ears with cotton or specially-designed ear plugs, or change to a firearm that does not give such a loud report. Often a longer barrel will seem to reduce noise by putting the muzzle blast farther from the shooter's ears. It is surprising how two inches of added barrel length will seem to reduce the sound of a shot. It is equally astonishing how an attached muzzle brake, while cutting down on felt



Shotguns rate high among the heavy kickers in the firearms field, giving shoulder jolts that may represent as much as 24, 32—and sometimes 41—foot pounds of free recoil. But because the shotgunner is apt to be more target conscious than gun conscious and shoots offhand, he notices recoil even less than when shooting a large caliber rifle from prone position or bench rest. But try shooting a shotgun the same way if you would like to feel its full recoil.

recoil, can accentuate noise to the point that eardrums take a beating every time a shot is fired. A muzzle brake is definitely not a silencer.

To shoot well the man behind a gun should never be afraid of its kick or its voice. If you do not enjoy shooting your present heavy caliber rifle, or big bored shotgun,

look around for a gun that will do much the same job but with less kick and fuss. It is a mistake to struggle along with any firearm that is not a pleasure to shoot; there are too many others that are! END.

The editor of "MUZZLE FLASHES" wishes all readers a Very Merry Christmas and a Happy, Prosperous New Year.

If possible, he would like to shake the hand of every one of you as he extends his greetings of the holiday season. Alas, he cannot!

But he does have mailing privilege of a quantity of color reproductions of two different, finely executed hunting paintings—one of a hunting camp in deer country and the other of a bunkhouse before a morning's duck shooting—ideal for a club room or home den. Both will be mailed post-paid on request to FLORIDA WILDLIFE, marked for the attention of the "MUZZLE FLASHES" department.

## SHOOT CROW---EAT CROW

(Continued from Page 11)

"To brown a mite," he would say.

Many a cold fall and winter afternoon I'd sit in Hank's Cabin not twenty-five miles from downtown New York City and munch on crow and homemade bread. For dessert, I'd have one of Hank's stories. He was a wonderful teller of tales. I was an avid listener.

I would come home too full to eat supper. But grandparents, I've discovered, are smarter than we think. Grandpa would understand, and he would tell me that there was a lot to be learned in this world that wasn't inside books—that I could learn a lot from Old Hank. He was right.

I once asked Hank why crow meat was not more generally eaten. He told me that Old World superstitions marked crow as a bird of evil, akin to the raven, an ill omen of things to come. Then he would chuckle and say, "there's nothing wrong with crow that proper cooking can't correct."

Once in a while, after Hank passed away, I tried to cook crow myself. They were tough and tasteless, and I decided they needed a master's touch.

Not so. Several years ago, on a crow hunt with friends, I remembered Old Hank and determined to cook up a batch of crows. We'd been out on some off-season shooting using some high-powered small bore stuff and bagged many. Using the same seasonings I would have used in cooking quail or pheasant, I went to work. Several of my loud-mouthed companions sneered and hooted at the idea of "eating crows." I disregarded their jeers and cooked them anyway. The results were delicious. The flesh of crow, properly seasoned and cooked, is as firm and sweet as any other game bird.

The crow is not a popular bird. There is not a state in the nation where he cannot be killed on sight, hence

they offer fine off-season sport. Whether or not they are the useless predators they are thought to be is another question. The crow has to be judged as harmful or beneficial to man on a local basis—for his feeding habits vary with the locality, the season and the availability of food. No doubt about it, killing of waterfowl by crows may be serious at times, but their depredations on upland game birds are much less than generally thought. Biologists have proved that the bulk of a crow's diet consists of crop-destroying beetles, caterpillars and grasshoppers. Crows do raise the devil at times with grain crops. We cannot excuse them for this, and for it they are and should be severely punished.

Several years ago, Dr. E. E. Good, a member of the Ohio Co-operative Wildlife Research Unit, made an exhaustive study of the crow and his capacity for good and evil. Dr. Good concluded his talents for both are exceptional. He also recommended this: more sport shooting and less bomb roosting of this interesting if controversial bird.

Dr. Good also suggested that while the crow can be a local problem since they are migratory to a degree, and flock back year after year to the same place, roost and bombing in winter does very little good. You can't blow them up when they aren't around. But they are good shooting all year around, and if more off-season sport by hunters went on the crow population might more likely be proportionately reduced.

I concur. I remember the cornfields of Long Island. I remember the view of a lookout bird over the iron sights of my rusty, trusty .22. I have hunted the crow off-season in many states. I know that crow hunting is fine sport.

And listen: Eating crow is not a humiliating but a delightful experience. Try it. END.

(Continued from Page 27)

supply, which in many states can be done by harvesting more deer. The deer which remain, therefore, will have better food, which in turn will result in a production of more fawns per doe.

Studies in California have made it possible to produce quail in desert areas by constructing artificial watering devices known as "gallinaceous guzzlers." Similar results from water hole development have been reported from Arizona.

A study on the fox in relation to pheasants in New York showed that control of this predator did not result in an increase in pheasants. Indications from food habit studies in Alabama are that the fox is not a serious enemy of the quail, but that rabbits provide his main bill of fare. Cotton rats and smaller predators eaten are to his credit. The ecological effect of the fox has long been argued from cracker barrels, around pot-bellied stoves, and beside campfires at night. Whether the fox was judged saint or sinner often depended on whether the debater was a bird hunter, rabbit hunter, or a person to whose ears the sound of the fox horn was the sweetest music of all. The final answer to this age-old controversy is still in the form of a Gordian knot. Since eradication is financially impracticable, even if such degree of control had been proved desirable, we may as well strive to make greater use of the fox as a sporting animal. Reduction in numbers will be practical only in local areas where he is in such abundance as to be causing damage through rabies and/or predation on poultry or livestock.

Results from Arizona indicate that coyote control on antelope ranges was followed by an increase in the per cent of young animals in newly established herds. That state accordingly has justification for increasing efforts to control this predator on antelope ranges.

Results from the Alabama Cooperative Wildlife Research Unit, located at the Alabama Polytechnic Institute, Auburn, Alabama, are indicative of facts contributed by various Research Units in the country. Investigators have found bicolor lespedeza, a shrub imported from Asia, to be an important year-around quail food. The value of part-ridge peas for quail was discovered

through a fact-finding program carried on at the Alabama Research Unit a few years ago.

Facts about the biology of the squirrel, mink, and muskrat have influenced readjustments in the open seasons. Cooperative efforts of biologists of the Research Unit, the Alabama Department of Conservation, and the Fish and Wildlife Service were instrumental in finding the cause of the serious die-off of mourning doves in Alabama in 1950 and 1951. The birds were found suffering



The fox, like all other meat eating animals, was created to live at the expense of other animals. Man frequently does not like competition from Reynard.

from dove canker, a disease caused by a protozoan parasite.

Livers of deer taken on sandy upland areas in Alabama have been found suitable for table use, whereas livers of deer taken along swampy river-bottoms in the southern part of the state were so infested with parasites, known as giant liver flukes, that they were unfit for human food.

Studies which indicated that ammate, a substance used to kill weeds and unwanted trees, did not kill deer, have made it possible for a public agency to resume using that chemi-

cal in its forest stand improvement work. Previous to these studies, it was believed by many that ammate was poisonous and that it was the cause of the die-off of deer in the Southeastern states in 1949.

Many Problems Still Unsolved

Some important problems that need attention studies on the effects of various diseases and parasites on wildlife. Currently there is urgent need for studies on rabies in the foxes and on practical population control to certain levels. There is considerable need for studies on the effect of food and cover development on game species in various types of areas. Modern trends in land use are seriously affecting many of our game species, and practical ways must be found to improve present agricultural areas for various farm game species. If modern trends continue, the cottontail rabbit in many areas will replace the quail as the most important game species in the Southeast. In that case, we will need facts on which to build a management program for rabbits. Information is needed on the possibility of safe and effective use of fire as a tool in game management. Fire, like a plow or a doctor's scalpel can be used right or wrong. We need to determine what species of trees are most important as food producers for wildlife so that foresters will know what species to leave for game. A knowledge of the effect of various poisons and pollution on wildlife is urgent. Data on how to best manage artificial impoundments for waterfowl and how to best manage furbearers for more income is still inadequate.

The welfare of the nation's wildlife resources depends on fact-finding. If game managers and administrators in years to come are forced to rely on best guesses, as they frequently have been forced to do in the past, the end in store for many of our game species will be disastrous. Facts for sound management become available mainly through persistent hard work by competent personnel. By helping to promote such investigations, each one of us can share in the profits in years to come. If our children are to enjoy the opportunity to hunt and fish in years to come, we will have to promote and protect that great American privilege. END.

FEDERATION NOTES

President H. R. Wilber, M.D., DeLand  
Vice President S. H. DuBon, Miami

Frank Gill, Editor

OFFICERS  
Treasurer Don Southwell, Ormond Beach  
Recording Secretary Fred W. Gill, Zephyrhills

Directors of the Florida Wildlife Federation have unanimously selected Dr. H. R. Wilber of DeLand as Florida's delegate to the 1955 Annual Meeting of the National Wildlife Federation to be held in Ottawa next spring. Decision to send the Federation's President was made at the Organizational meeting of the Board of Directors held at Cocoa on November 14th.

Despite torrential downpours which were general throughout the state on that day, approximately 20 Directors were present at the meeting. M. F. Wooten, Director from the North Brevard County Sportsmen's Association arranged for the meeting at the American Legion Hall in Cocoa. He welcomed the visitors on behalf of his Club and introduced Garry Bennett, Mayor of Cocoa and prominent sporting goods dealer of that city. Mr. Bennett extended greetings on behalf of the City and offered his services to the Federation in any possible way he might be of assistance. He pledged his personal support of the Federation in their efforts to further the interests of Conservation and commended the organization for the tremendous progress it has made in the past year.

Dr. Wilber announced the appointment of the Chairmen of many of the standing committees. Among the Committee Chairmen appointed were: Executive Committee, S. H. DuBon, Miami; Legislative Committee (State), Eric Watson, New Smyrna Beach; National Affairs Committee, Helen Sullivan, St. Petersburg; Water Pollution, Zera Giles, Leesburg; Fresh Water Fish Committee, A. P. Oliver, Welaka; Salt Water Conservation Committee, Manuel Johnson, Tarpon Springs; Water Control and Drainage Committee, Chuck Schilling, Jensen Beach; Airboat Affairs, DeWitt Upthegrove, West Palm Beach; National Wildlife Week, Mrs. Charles Schilling, Jensen Beach; and, Junior Conservation Clubs, Howard Wienicke, St. Petersburg. A complete list of all the appointments including the membership of each Committee will be announced at an early date.

In addition to committee appointments, a tentative budget for both the State Legislative Committee and the National Affairs Committee was adopted.

Construction on a permanent type exhibition building at the Pasco

County Fair Grounds is scheduled to begin on the 15th of December according to announcement by Murray G. Wallace, President of the Pasco County Fish and Game club.

The Pasco County Club, an affiliate of the Florida Wildlife Federation, has sponsored Conservation and Wildlife Exhibits at the Pasco County Fair the past two years. So successful have these exhibits been in the past, it was decided to construct a concrete block building for a permanent site for the displays.

Sufficient space has been allocated to the Club to provide parking space for the Game and Fresh Water Fish Commission's Wildlife Trailer which has been scheduled for the Fair for this year. The building itself is expected to be large enough to furnish representatives of the Florida Wildlife Magazine with space to advertise the Magazine and to accept subscriptions to it. In seasons past there has been considerable interest shown by prospective subscribers to the Magazine and Club Officials decided to offer free space to the Magazine in order that all the Conservation and Wildlife interests might be concentrated in one location. END.

**HUNTER'S BULLETIN**  
Good Hunters Are Sportsmen

Obey Your Game Laws	Practice conservation—feed game in winter, furnish cover
Join and support your sportsmen's club	Practice sportsmanship—teach it by your example



Among those present at the October meeting of the Florida Wildlife Federation in Leesburg were, left to right, Dr. H. R. Wilber, Joe E. Bell, Charles Callison, John Findlay, Dr. R. M. Sheets, Dr. Guy Paschal, and Charles Schilling.



By BOB DAHNE

**T**ROLLING FOR speckled perch is getting to be quite an art around Florida lakes. And a highly productive one.

Not so long ago, the accepted method of bream fishing was still fishing. Best baits were worms and minnows. A few people held out for crickets or small grasshoppers. And, of course, there were always a couple of fly-fishers around who were anxious to match their whippy rods against the wily sunfish clan. But that was it. You either still-fished or used a fly, and that was all there was to it.

Times have changed. Take modern "speck" fishing, as an example. Floridians have long held speckled perch to be a top quarry in southern waters. This is the same fish known to Northerners as "black crappie." Midwesterners often use the name of "calico bass." Other fishermen may know the "speckle" under any one of about 60 different names, ranging from "Campbellite" through "tin perch" and "tinged crappie."

But under any other name, it's all the same fish. Call it perch or crappie, the Florida "speck" is an honest opponent for any fisherman.

A few years ago, speckled perch fishing was done mainly by live-baiters. If you were panfishing for any of the sunfish—such as crappie, bream, perch and their cousins—you just naturally used the long cane pole with bobber and bait.

But the current rage is to use rod and reel, boat and motor, light leader and yellow feather. And there's a reason for it.

Speck trollers consistently turn in their bag-limits. The average troll-caught fish are larger. And the fishermen truly enjoy themselves in the process.

While trolling for specks, a person can cover a lot of water in a hurry, and fish it thoroughly. Which is a definite advantage not usually enjoyed by either still or fly fishermen.

If you are not thoroughly familiar with the lake you are going to work, or if the fish are scarce or scattered, you can do yourself a lot of good by using the troll system.

One of the best lures for this is

a small all-yellow nylon feather. Find a light one with a comparatively heavy head. A delicate plastic skirt around the base of the head seems to be a help. Evidently, a skirted feather throws out a stream of bubbles that is highly appetizing to speckled perch.

The long leader should be of light nylon or gut. Tie the leader directly to the feather, without a swivel in-between. Now cut the leader off about 18 inches from the feather. Tie in a small barrel swivel. Then put about 18 inches of leader between the swivel and the fishing line.

This is all the rig you need, except for two or three split-shot or clincher sinkers. You add the sinkers directly to the leader, just above the swivel. Placing the sinkers above the swivel prevents them from sliding down and fouling the feather.

Now beginning from the bottom or business end, your trolling rig looks like this: Small yellow feather. About 18 inches of light leader tied directly to the feather. Then a very small swivel. Then about 18 inches more of leader. Lastly, sinkers riding on the top length of leader.

When trolling a rig like this, it's always best to vary two things, depending on your luck. If your luck is excellent, don't change a single thing. But if your luck is indifferent or downright bad, then vary the speed at which you are trolling, and vary the number of sinkers on the rig.

Normally, you troll at a fairly slow speed. But, surprisingly enough, speckled perch often hit best just when you gun the motor to a slightly faster rate of speed.

Here's an instance of this: You are trolling at a reasonable speed. No fish. You get mad. You bang the speed lever over. The motor roars. The boat picks up speed. Whomp. A speckled perch hits the feather.

Why? Maybe the speck was following your lure and thinks the feather is suddenly going to escape him. Perhaps the sudden increase

of speed alerts the fish into striking. Or maybe anything else.

But it often works. So it's worthwhile to remember the formula—Troll, Gun-it, Catch-it.

The other rule, of adding or deleting sinkers from your line, forces the feather to ride at a higher or lower depth of water. The depth at which you are trolling is important.

Why? Well, depending on the temperature of the water and the season of the year, all fish, including specks, are found at different levels at different hours.

So, if trolling isn't so good, don't be afraid to change your speed of trolling or the depth at which you are trolling.

Another interesting thing about speck trolling is that you can work both long and short lines. By trolling a long line behind the boat, you may get quite a few specks—and they really hit with a thud on a long line.

But specks will also hit a feather that is being trolled on a short line—right in the wake of the boat.

Specks aren't afraid of your motor, the propeller, the noise or the wake. They'll often hit your lure right in the middle of it all.

So try to fish several lengths of line behind the boat at all times. A short line, a medium-length line, and a long line will cover all eventualities.

If you want to try something new in speck fishing, try trolling. Vary your speed, your distance and your depth, and you'll do all right.

You'll cover a lot of ground. You may skim across the tops of quite a few "speck holes," but leave those to the still-fishermen and the fly artists. You'll have trouble returning to the exact same spot anyway. But there are an awful lot of good perch spots in almost any lake. And if you troll, you'll skim the cream of them all.

END.



"Yeah, a moon like that does something to me, too—makes me wish I was fishing."

FLORIDA WILDLIFE

## THE OLD SKIN GAME

furs, and skins for shipment must bear name and license number of shipper. License required to take, deal in, or buy hides and furs. Dealers and buyers must report each two weeks during season when hides may be bought and sold, giving name of trapper, license number and number and kinds of hides bought. Common carriers may not lawfully receive for shipment or transport hides or furs which do not have marked thereon names and number of dealer or trapper.

Unprotected animals include weasel, skunk, opossum, red and gray fox, bobcat, and raccoon.

## IN THIS CORNER

the brake was off, the line started going out at great speed. Wishing to hook the fish, I yanked mightily. Naturally that didn't help matters any, as the drag was off. It took me just one haul to realize that obvious fact, and I fumbled for the brake lever. I couldn't find it. So with pure, dumb, reactive instinct, I jammed my right thumb against the wildly spinning reel. The screech I let out was heard two miles up and down the coast, according to Lew Parkinson, captain and owner of the boat. I thought my digit was being torn off.

Glossing over the gruesome details, I finally managed to set the brake and got on the business end of as lively an ocean scrap as I've ever experienced. My adversary was a dolphin, a 12-pounder, and it took me 15 minutes to get it to gaff. The boat pitched considerably, making for uncertain footing, which possibly contributed to the somewhat lengthy time it took to subdue the fish.

If the reader has followed me this far, he may have noted that it took 12 minutes to land a 15-pound muskellunge. In contrast, it required 15 minutes to land a 12-pound dolphin. Inasmuch as approximately the same tackle was used on both gamesters,

(Continued from Page 23)

License Fee	
Series N—Resident, County	\$ 3.25
Series O—Non-Resident, County	23.50
Series P—Resident, County	23.50
Series Q—Resident, State	10.50
Series R—Non-Resident, State	100.50

Report of game and fur-bearers taken in previous season must be filed with County Judge when applying for hunting or trapping license. Failure to file data on blank form attached to application is cause for refusal of license.

END.

(Continued from Page 23)

It would appear the dolphin has the edge on the muskie in the fighting department. How much importance such an observation has in the realm of scientific experimentation is a moot question. However, it can be classed as an interesting conjecture, besides being a handy bit of information to interject when the subject turns to the fighting characteristics of different fish.

The dolphin episode had a devastating after-effect on my morale and local reputation (the latter being a questionable commodity). Somehow the sports department of the West Palm Beach Post-Times got hold of the information that I had thumbed the reel while deep sea fishing. I was subjected to an unmerciful kidding in the paper the next day.

In discussing this story with Hansen, that worthy gentleman told me of an experience he had fishing a river mouth in northwest Florida that was part salt and part fresh water. He said he caught fresh water fish on one side and salt water species on the other side. I have

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subsequently wondered what would happen if two such fish (one of each species) were hooked on opposite ends of the same line. In order to have any scientific value, there must be no angle between these two fish. Let them battle it out between themselves, and may the better fish win. Such an encounter would really prove something. The facts would be laid plain before the observer with no human opinion to cloud the issue. At any rate, such an experiment would be highly interesting.

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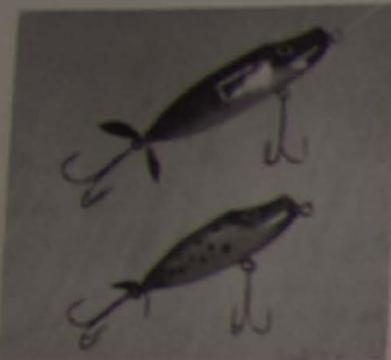
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"Know what I like about fishing in Florida?"



JANUARY, 1955

# FLORIDA WILDLIFE FIELD TESTS AND TELLS



TWO of the best fresh and salt water plugs to come to our attention, both in proven performance and excellence of executed workmanship, are the surface-running, plastic Dilly plugs, in regular bait casting and spin fishing sizes, products of the Chase Rod & Tackle Company, St. Petersburg.

Available with and without commotion-causing spinners, in a choice of two combinations of colors—red back, yellow belly; and green back, yellow belly—the Dilly plugs are beautifully finished, with their sparkle, reflective qualities and coloration molded right in the bodies so that the baits retain their radiance and smoothness throughout lifespans determined only by the plug-stealing abilities of the big fish you hook.

While recently field testing the Dilly plugs at various points in Florida, it was interesting to note that other anglers were taking fish on them, too. Jim Norton, Inverness angler, caught eight bass in less than forty minutes, using a green-backed Dilly, and Mrs. R. L. Thomas, Oklawaha Fish Camp, Oklawaha, had five strikes on five expertly placed casts, landing four fish and losing one.

Try using the green-hued Dilly for fresh water and the predominantly yellow and red one for salt water casting or trolling. Fasten leader or line directly to the plugs, without snaps, when you rig for bait casting.

\$1.25; in sporting goods stores, or by mail from Chase Rod & Tackle Company, 4100 - 42nd Avenue, North, St. Petersburg.



A certain schoolbook devoted to American history confidently declares that Daniel Boone was never lost in his life, but it does concede that at one time he was "mighty confused for a number of days." Boone would have been right on course had he carried and used a compass.

For the modern hunter who wanders far afield, a compass is an essential item of equipment, but it is just another article to carry and keep track of if merely carried on one's person. A pocket compass is one

item of hunting equipment that is easily forgotten in the rush to get started, and, unless pinned securely, it can slip from a hunting coat pocket with perplexing surreptitiousness.

If you install one of those practical Fra-Mar grip compasses on the pistol grip of your rifle or shotgun, you can have a reliable compass handy all the time you are out hunting.

Simply remove the present pistol grip cap of your rifle or shotgun and install an attractively checkered, unbreakable plastic grip recessed to take a small, luminous, shock resistant, waterproof compass featuring jeweled bearings and a solid brass case. One screw holds the plastic grip in place; a dab of Dupont or Ambroid cement and a press fitting will give you permanent installation of the compass in your gun's pistol grip.

Adds to the appearance of your gun, too. \$2.95 from Fra-Mar Company, 3 Jones Avenue, Wilmington, Massachusetts.



READERS who have used Gard Waterproofing Solution, that amazing, modern chemical that is sprayed on outdoor clothing to waterproof it without changing its texture, know that the brand name stands for quality.

From the research laboratories of the same manufacturer, Gard Industries, Wilmette, Illinois, we have a new product—Gard Anti-Rust Spray, a silicone and polar compound that actually displaces moisture, neutralizes fingerprints, and promises up to five years protection indoors and one year of rust insurance outdoors.

Frankly, the new product has not been field tested by FWFT&T for five years, or even one year, but tests conducted for almost three months on articles subjected to natural salt spray, plus home immersion in brine testing tanks, have convinced us that Gard Anti-Rust Spray definitely gives lasting protection under extreme conditions. Unused razor blades, cleaned with alcohol and air dried before coating with Gard Anti-

Rust Spray, have withstood 61 days of brine tank confinement without any visible signs of beginning rust formation. Very few products so tested survive beyond 30 days in the brine bath before rust becomes evident in an early or rapidly advancing stage.

Gard Anti-Rust Spray is packaged in a handy push-button container. A press of the control button releases a non-creeping, self-healing film of compound that will withstand considerable handling without losing its protective qualities. Tests indicate that the new product is completely compatible with other lubricating oils and greases.

The regular size can is \$1.25 and will last a long time. Sold with a money-back guarantee of satisfaction by leading Florida sporting goods stores, or an order direct from the manufacturer. A good product!



LATEST handgun model to be announced by the Colt people is the Colt "Marshal" double-action revolver, chambered for the .38 Special cartridge and made in a frame design that makes it a hard service sidearm for the shooter who lives an active and rugged outdoor life.

The "Marshal" is a pistol that can be given downright abuse and still be able to pitch hot lead with accuracy, in combination with perfect balance and feel, when called on to perform.

This department first test fired a sample of the new Colt from a cradle-type rest to prove its accuracy at 20 and 50 yards. The test model was then carried around in a jeep, mixed up with a lot of outdoor gear, for ten days. At intervals during this period, the "Marshal" was given repeated accuracy tests. Evidently Colt has used the finest and toughest of steels in manufacturing the "Marshal"; no changes in accuracy, cylinder alignment, latch pin action, or ejection of empties, could be detected—and if a revolver has any latent weakness, abuse by travel in a jeep perambulating Florida's backwoods will bring it out in short order! The action, used both single and double, remained smooth and positive.

The "Marshal" is available in two barrel lengths—4" and 2"—and in either dual tone blue or nickel finish.

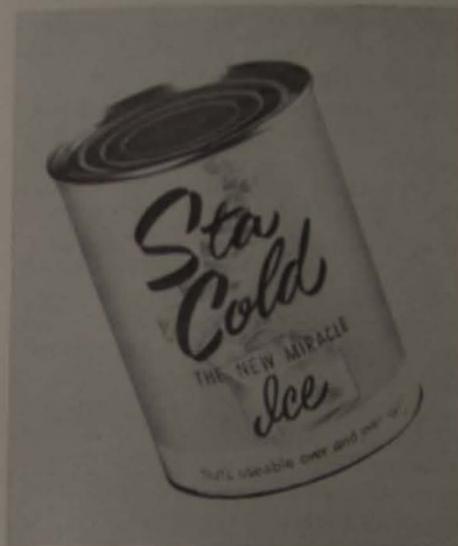
The fixed front sight on this gun is wide, enabling the shooter's aiming eye to get a faster and easier-to-see sighting picture, when aligned properly with the rear sight notch that is made right into the handgun's frame. On the four-inch barrel length model the front sight mikes .125"; on the two-inch barrel offering it spreads the jaws of a measuring micrometer .110" wide. The rear sight notch on both is .135".

The "Marshal" is 9 1/4 inches overall, and weighs 31 ounces in the four-inch barrel listing. The stump-nosed, pocket version is 7 1/4" overall and weighs two ounces less than its brother.

Both the frame and the full-checked walnut stocks are rounded at the butt to fit the shooter's hand firmly and to give a uniform positioning of the hand from shot to shot. A grooved trigger and a grooved hammer spur help you shoot better, too.

The "Marshal" will safely handle the .38 Special cartridge in all standard mid-range, regular and high speed loadings.

For general outdoor use, FWFT&T recommends getting the "Marshal" in the four-inch barrel length and in blue finish, at \$64.60, instead of the bright nickel finish at \$71.05. For the minority group of readers whose occupations require them to carry secreted, protective weapons, the two-inch model, in either finish, would be better.



WE'VE all probably used canned heat on one occasion or another and found the packaged chemical mighty convenient as a quick source of needed heat for small-scale cooking and heating.

Now, in Sta-Cold, product of Home Mfg. & Sales Company, Piqua, Ohio, we have the reverse—ice in cans! The new product comprises a safe-to-use chemical solution in sealed tins that are never opened. To make ready for multiple uses, place a can or two of Sta-Cold in the home deep freezer or refrigerator and freeze solid. Thereafter you can use the frozen chemical to refrigerate lunches and beverages for picnics, beach and barbecue parties, hunting and fishing trips, to keep the baby's milk formula cool and fresh while travelling and any number of other specialized uses. No water—no mess—the solution never gets outside its sealed container. Reusable again and again over a three-year period.

As a refrigerant, Sta-Cold lasts longer than ice, too—up to 72 hours under the best temperature conditions, and at least 12 to 24 hours on a hot Florida day. Each can of Sta-Cold is equivalent to three times its weight in ordinary ice.

For best results, use Sta-Cold with insulated food bags and put it on top of the food or beverage to be refrigerated (because cold travels downward).

Readers belonging to the medical profession will find Sta-Cold and a small insulated bag perfect for carrying insulin and other solutions that must be kept cool. Those who are photographers will find practical use for Sta-Cold in the darkroom.

Distributed in Florida by Chester L. Glass, 2043 Alameda Avenue, Sarasota. 49c per can. FWFT&T recommends stocking five or six cans, keeping two in the freezer at all times and the others for supplementary use as needed.

## SPANISH MOSS (Continued from Page 18)

the spring and summer moss contains young strands which are not tough enough for commercial purposes.

Once the moss is gathered, it must be cured. There are several methods of curing. One of the most widely used is called "pitting." The fresh or green moss is thoroughly wetted down, then packed in trenches or pits about four feet wide and equally deep. Several tons of green moss may be placed in a pit. Heat and moisture begin to rot the fibrous outer coating of each strand, leaving a tough, hair-like core. Two or three months after the moss was first pitted, it is turned over; the center of the pile is pitched to the outside and the outside to the center. The moss is again soaked with water and left for another two or three months. At intervals the pits are inspected, to make sure that the moss is not actually fermenting. In general, the best grade of moss is pitted for about six months, during which time it loses about 75 per cent of its weight.

The hair-like fibers that remain after pitting must be hung on lines to dry. Then they are put through a ginning process, which combs them and frees them of bark, twigs, and other debris. Sometimes the moss is ginned twice, to produce a high grade of finished product. The ultimate yield of fiber weighs about one-tenth as much as the original green moss. This fiber is baled in a press; the bales are covered with burlap and then wired.

If properly prepared, the hair-like moss fiber is tough and long-lasting. It is used to stuff mattresses and also the cushions of automobiles, airplanes, and railway cars. However, its most important industrial use is in the manufacture of upholstered furniture. For this purpose it is superior to horse-hair and other substances, being more resilient, cheaper, and cleaner. About 90 per cent of all the moss fiber produced goes into sofas, padded chairs, and the like.

The moss industry has been exceptionally important in Louisiana. It began there shortly after the Civil War and has continued to the present day. Spanish moss grows abundantly in the Louisiana bayous, and yields an especially fine grade of fiber. In 1937 it was estimated that about \$750,000.00 worth of moss fiber was produced annually in that state. Florida ranks second in moss production, South Carolina third. According to the best trade estimates, the total value of the moss industry in the southern states may amount to \$3,000,000.00 a year.

Thus, Spanish moss has both esthetic and commercial value. Fortunately, it grows so rapidly that there appears to be little danger of depleting the supply. One might truthfully say that, in Florida, "money grows on trees." END.

## DIRECTOR'S DESK

(Continued from Page 7)

Your Game & Fresh Water Fish Commission may be compared with a farmer's "hired hands." We are employed by the sportsmen of the state who foot the bill through the purchase of hunting and fishing licenses. We manage (or farm) the wildlife crop, reserving for "seed" a certain proportion of the population. We attempt to prevent "vermin" (the poacher and game hog) from making inroads on your property, and you, the hunter and fisherman, harvest the crop, the annual increase in fish and game.

No longer do we seek to preserve game merely for the sake of preserving it. Wildlife is a crop like any other. It should be grown for use. We have gone from one extreme to the other in our thinking regarding our wildlife heritage. Now on the middle road, we have arrived at the conclusion that Conservation means wise use, not abuse or disuse. END.

Editor, Florida Wildlife:

I respectfully submit the following corrections in regard to Mr. Jim Stokes' account of the Florida State Fox Hunt.

My hound, "Black Gal" won:

Highest	General Average	all age—Field
1st—Speed and Driving	" "	" "
1st—Endurance	" "	" "
6th—Trailing	" "	" "

This makes her Florida Field Champion 1954.

She was not bred or trained by Mr. John D. Stephens.

There is no such thing as "Endurance Class."

Hounds are scored on (1) Hunting (2) Trailing (3) Speed and Drive (4) Endurance.

The typical foxhound is not "trained." They hunt and run instinctively.

BERT BUTLER,  
Pt. Washington, Fla.

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half bucks and half does. The Commission would like to release three does to one buck, but with a practically free gift of valuable deer, who's going to complain?

Tangible proof of the success of the deer stocking program is forthcoming from two separate areas. In 1949 there were very few deer in Gilchrist County near Gainesville. During that year only 25 of the animals were released in that county. Today deer appear generally throughout Gilchrist — a situation with which the sportsmen of that area can find no fault.

Back in 1948 the Game Commission purchased the Palm Beach Management Area — some 52,000 acres in that East Coast county. At the time of purchase there were almost no white tails in the areas, as far as was known. Twenty bucks and does (combined) were released during the winter of 1948-49. Hunting was not allowed until the fall of 1953 and 39 bucks were taken. Based on that kill figure, the 52,000 acres now support upwards of 150 deer — a good showing for the type of range prevalent in that section of Palm Beach County. (Author's note: I'll have to try it sometimes. The area is practically in my back yard).

There are several factors that control the establishment of deer. For one thing, up to a point, they profit by man's undertakings. For instance, an uncut forest will not support as many deer as partially cutover wood-

lands. Proper cutting of timber can increase deer browse several hundred percent and is better than food plots. Deer like open glades and clearings in forests. The same thing applies to turkeys, which is one of the reasons the two species are nearly always present on the same type of range.

Such openings produce more food for deer than does a dense forest. The ideal habitat for deer is partially open forest, numerous glades and plenty of "browse" (mainly young tree shoots and similar vegetation). Now that loggers have left huge areas of cutover timber, deer are getting a good chance to increase in many parts of the state.

Invariably when stocking an area the Game Commission insists on a closed season from three to five years in order to give the animals time to get firmly established. The wisdom of this procedure has been proved time and again, as witness the two examples already cited.

Commercial killing of deer reached its height in the early 1920's and was most prevalent in the northwestern part of the state. Jack-lighting was pretty widespread and was the principal method employed by the illegal killers. Both the hides and meat of the animal were sold on the "black market" of the times. During the past 30 years, market hunting has slowly but steadily declined, due in part to education and to stepped up law enforcement. Today, illegal killing of deer is not the threat to Florida's herds that it once was.

Concerning the Commission's deer stocking program, a hassle has developed in the last year or so with authorities at Eglin Field. This federal area of some 410,000 acres in

northwest Florida is oversupplied with deer. Most of the congestion occurs on the extensive bomb ranges, the huge runways and other security areas where no hunting of any kind is allowed.

Every informed sportsman knows, or should know, that any deer range has a limit to the number of animals it can support. Once that limit is reached, it becomes a grim battle for survival—the competition for food is savage. Deer will not leave their home range of their own free will, so when an area becomes overpopulated, the food runs short and the dismal spectre of starvation haunts the herd.

That situation has been encountered in Pennsylvania and Michigan where deer have died by the hundreds during winters for no other reason than lack of food. Many literally starved to death.

A similar situation threatens at Eglin Field. The Commission wants to trap the surplus deer and transport them to other areas of Florida which most certainly could use them. The Commission has made it clear that it wants to trap surplus deer from only those areas which are closed to hunting. Right now as many deer are being killed at Eglin Field by being run over on roads and airplane runways as the Commission would like to remove. In addition, yet more deer are dying of malnutrition and disease brought about by lack of food.

In the face of these facts, officials at Eglin Field have steadfastly refused to allow the Commission to trap any deer on the federal area. They are adamant in their refusal and are being vociferously backed by Congressman Robert Sikes who claims he is "protecting" the interests of his constituents by insisting the surplus deer remain at Eglin

Field regardless of the fact that the area cannot support them. The surplus deer at Eglin Field would be a lot better off somewhere else in the state. There are plenty of areas in Florida that can support the deer that Eglin Field is unable to do. It would appear that here is an opportunity for Florida sportsmen to do a bit of agitating to get the Air Force officials at Eglin Field to change their minds.

What the Commission proposes to do will in no way reduce the deer hunting potential of Eglin Field. If anything, it will increase it, as removal of surplus deer would minimize the danger of disease—which at present is a very real hazard, due to congestion.

Unless my knowledge is erroneous, the commanding officer of a military base usually has the final word in matters of this nature. Perhaps the commanding officer of Eglin is not aware of the biological factors involved in this situation. It is also possible that Congressman Sikes is equally uninformed. In that case, a little enlightenment might be in order.

At all events, as stated earlier in this article, sportsmen in Florida can look forward to improved deer hunting in the future unless something totally unexpected happens to the steadily increasing herds of these valuable game animals. END.

Myakka River State Park, 26,746 acres, near Sarasota, is Florida's largest State Park.

**"AN AMAZING NEW HEARTWORM FORMULA"**

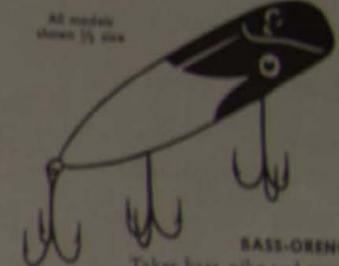
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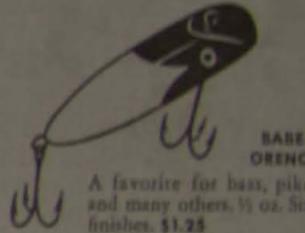
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# FLORIDA SPORTSMAN GUIDE

The Florida Sportsman Guide is a new section devoted to hunting and fishing camps, bait and tackle dealers and especially those serving the sportsman in Florida. Considerable space will be available to such establishments at a special "Guide" advertising rate.

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<p><b>A FREE FISHERMAN'S HANDBOOK</b></p> <p>Anyone catching a tagged fish in Florida's fresh waters will receive a free copy of the Fisherman's Handbook if they will send tag, date of catch, location, total length in inches, and weight to the Game and Fresh Water Fish Commission, Tallahassee, Florida.</p>			

## WONDROUS WHITTLING

(Continued from Page 18)

Weiser then carefully removes all background to a depth of 1/16", or slightly deeper, making smoothing cuts at all times to reduce the work required for later finishing.

Attendant relief work is next executed very carefully with a small-bladed pocket knife. Background emphasis for the relief work is obtained by lightly punching the wood surrounding the scroll patterns with a leatherworking tool, for a stippled effect. He also goes around all scrolls and edges with his pocket knife to obtain sharp, distinct outlines, and uses the same tool to make the small, shallow cuts that give life to leaf designs and similar decorative patterns.

When all sanding is completed, Weiser may water-stain portions of his backgrounds for added contrast and emphasis of the executed carvings. For this work, he uses the wood stains developed by the same firm that markets the PDQ stock finishing preparation. Most times, he applies the stains undiluted, by deft touches of tiny brushes.

One fortunate and appealing feature of stock inlay and relief carving, Weiser says, is the fact that the woodworker does not have to make substantial investments in special tools. Inlay and carving chisels, for

example, need not be purchased. Fine cutting instruments can be made from a 3" section of ordinary hacksaw blade, filed on one end and then oil stoned to a sharp cutting edge. With this homemade tool, very fine points can be cut in the gunstock's wood for the ends of diamond pattern inlays, to a degree not possible with a standard chisel.

Other required tools — a metal scriber, a pocket knife sharp enough to shave arm hair, a 3/16" wood chisel for rough routing, a pin vise, four or five sizes of straight-shank steel drills, putty knife, oil stone and companion items — are not expensive. An electric Handee-Tool is just that, and saves much time, as does an Exact-O kit, but is not necessary.

With the detailed working instructions which Weiser has given for inlay work and relief carvings, readers of FLORIDA WILDLIFE should be able to do their own — and very creditable — firearms decorating after a little trial and error experimentation on a stock from an old, discarded gun.

But if anyone should find the ornamentation of his favorite firearm too difficult, or speculative, for his own demonstrated skill, he can "let George do it."

END

## FISHING BRIDGE

(Continued from Page 15)

are available for the fisherman who wishes to bring his family with him. There is, also, a small hotel, clean and moderately priced, on the mainland side of the bridge where one may obtain comfortable accommodations for short or long duration.

Yes, I say again, Pine Island Bridge is the "fishiest fishing bridge" for its size in the State of Florida, according to my book. END.

The author and Banks Pearce display a catch of fish, including a 19 1/2-pound snook, caught off the Pine Island Bridge.



FLORIDA WILDLIFE

## REGULATIONS FOR 1954-55 HUNTING SEASON

OPEN SEASON FOR TAKING GAME BIRDS AND GAME ANIMALS		OPEN SEASON FOR TAKING MIGRATORY BIRDS	
DISTRICT	BUCK DEER With One or More Antlers	RAIL AND GALLINULE (Marsh Hen)	WATERFOWL AND COOT Duck-Geese-Goose
Day's Bag	1	15	4 Including 1 Wood Duck
Season's Bag	2		Duck Stamp Required for Duck and Geese
1st District	Nov. 20 - Feb. 1 1st 9 days open, Dec. 25-Jan. 1 open, Mon. Tues. & Fri. closed at all other times. EXCEPT Hardee, Manatee, Sarasota, Pinellas, DeSoto, Polk and Hillsboro South of St. Rd. 92 CLOSED.	Sept. 9-Nov. 17 Hunting permitted every day.	Nov. 20-Dec. 25 Hunting permitted every day.
2nd District	Nov. 20 - Feb. 1 1st 9 days open, Dec. 25-Jan. 1 open, Mon. Tues. & Fri. closed at all other times. EXCEPT Alachua, Bradford, Clay, Union, that part of Baker and Columbia south of U. S. 90 from Jacksonville to Lake City, and that part of Columbia and Suwannee south and east of St. Rd. 247 from Lake City to the Suwannee River CLOSED. SPECIAL SEASON GIBBLET CO. DEC. 1-DEC. 12 ONLY. Mon. Tues. & Fri. closed.	Oct. 11 - Oct. 30 and Dec. 11 - Dec. 30 Hunting permitted every day.	Nov. 20-Dec. 25 Hunting permitted every day.
3rd District	Nov. 20 - Feb. 1 Hunting permitted every day EXCEPT Bay and that portion of Gulf and Calhoun West of St. Rd. 71 CLOSED. Okaloosa, Santa Rosa, Washington and Escambia Counties closed Jan. 2.	Oct. 11 - Oct. 30 and Dec. 11 - Dec. 30 Hunting permitted every day.	Nov. 20-Dec. 25 Hunting permitted every day.
4th District	Nov. 20 - Feb. 1 1st 9 days open, Dec. 25-Jan. 1 open, Mon. Tues. & Fri. closed at all other times. Monroe Co. closed to Key Deer.	Oct. 11 - Oct. 30 and Dec. 11 - Dec. 30 Hunting permitted every day.	Nov. 20-Dec. 25 Hunting permitted every day.
5th District	Nov. 20 - Feb. 1 1st 9 days open, Dec. 25-Jan. 1 open, Mon. Tues. & Fri. closed at all other times.	Oct. 11 - Oct. 30 and Dec. 11 - Dec. 30 Hunting permitted every day.	Nov. 20-Dec. 25 Hunting permitted every day.
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