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**August
1967**



What's Been Done

A progress report on major developments in Fish and Game in New Jersey this past year

By L. G. MacNamara,
Director

The 1967 fishing season was officially launched on April 8 with water conditions vastly improved over those of the previous year. The breaking of the drought has been a beneficial natural phenomena. But, significant assistance was given to hatchery production by the installation of 44 electric pumps for improved aeration of hatchery waters. These installations, with the electrification of the entire hatchery area, contributed to better working conditions and added a needed safety factor for those who work at night. The construction of two lakes during the past fiscal year has not had an immediate effect on our fishing opportunity. However, when fish populations are established, these waters will play an important role in future fishing activities.

With summer here, the Division of Fish and Game and, particularly, the Fish and Game Council have directed attention to hunting, another consumptive use of our fish and wildlife resources. As urbanization extends its tentacles into our rural areas, hunting becomes essential to the management of our game populations.

Population dynamics is a very important phase of the management of a species, not only for the species, but also for those citizens who produce truck, operate nurseries, and for horticulturists and home owners who have spent considerable sums of money for landscaping and home beautification. Population dynamics as applied to wildlife is not well understood by those who sponsor passive utilization of our wildlife resource. The creation of inviolate areas has resulted in considerable economic damage to property owners in the proximity of these areas due to the presence of an increasing deer herd. Hunting is essential to the management of our deer populations and hunting effort must be directed to those areas where deer populations are high and economic damage is present. An efficient deer management program has been developed by the Council. But, cooperation must be received from those who sponsor closed areas if the resource is to be used intelligently, economic damage reduced, natural vegetation protected, the herd stabilized to conform with the ecology of the area, and starvation and disease prevented. The Division of Fish and Game of the Department of Conservation and Economic Development has a major responsibility to ensure that there is a wise and full use of our wildlife

Continued on Inside Back Cover

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Cover—"The Stickleback"—National Wildlife Federation

How many of you fishermen have ever seen a stickleback? How many of you even know what a stickleback is? Sticklebacks are actually quite common and are widely distributed—some in salt water, some in brackish water, and some in fresh water. Others move freely from one environment to the other. The reason you never caught one? The members of the stickleback tribe (There is a whole family, Gasterosteidae, of them.) are just little fellows two to four inches long. The stickleback's greatest claim to fame is its unique and wonderful habit of building its complex nest, as shown on our cover.

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In Summer's Heat the

Hidden Hordes

Make Ready for Winter

By Dr. George Burger, *Wildlife Biologist*
Remington Arms Company, Inc.

National Wildlife Federation Photographs

This is the time of the late-summer doldrums, of the dog days. The mid-day sun sears the land in a brassy haze. The woods, fields and marshes are silent. Leaves wilt and droop in the listless air. At no other time, save the sub-zero days of the northern winter, does the outdoor world seem so still.

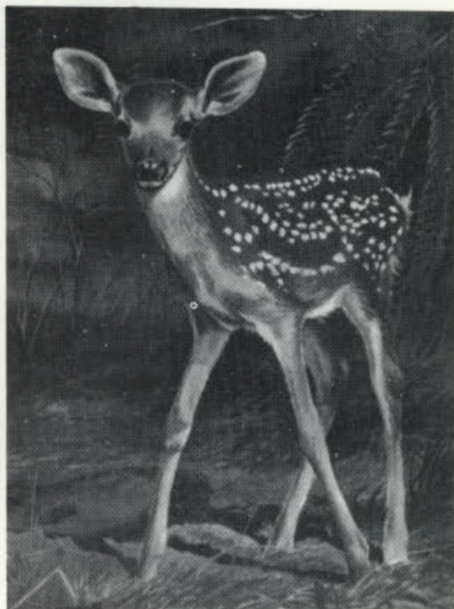
Wildlife Abundance

The appearance is deceiving. Hidden by the lush vegetation, the land throbs with life. Wildlife populations are at their annual peak, ranks swollen by young'uns hatched or born in earlier months. There's little hint of this abundance at mid-day. But venture a-field at dawn and you enter a different world. The air pulses with bird song. Roadsides and woods edges in Hunterdon County are alive with cottontails, in a stepladder of sizes; with tidy, bright-eyed families of quail in south Jersey; with cautious does and stilt-legged fawns in Stokes Forest.

Broods of Birds

Here and there a hen quail, pheasant, or grouse doggedly incubates a late clutch of eggs, her

earlier efforts thwarted by weather or nest-robbing varmints. If she succeeds, hunters in the fall will



A stilt-legged fawn in Stokes Forest

call her late-hatched brood "squealers," and some will mistakenly give her credit for raising two broods.

The waterfowl marshes from the Overpeck Meadows to Delaware Bay are strangely quiet, even in

← *The time of the late-summer doldrums. A tidy quail family in south Jersey*



Young wings must be strong to carry those who will migrate. Brant on the wing

. . . Hidden Hordes

early morning. Gone is the riot of sound and color of the spring courtship displays. The brilliant plumage of the drakes has disappeared, replaced—in a molt unique among all birds—with drab, hen-like feathers. Most of the drakes themselves have vanished from the marshes, banding together on more open waters before this molt deprives them of all flight feathers.

Getting Ready

While the drakes seek the safety of open water, the hens, also molting and flightless, remain close to cover with their broods. For some, the peace will be disturbed by crews of waterfowl biologists, taking advantage of the molting period to round up, count, and band the earth-bound birds.

By mid-morning the flood of life

ebbs into the shade, for a long siesta through the heat of the day, to venture forth again with the lengthening shadows of late afternoon. Stuffing themselves on the abundance of late summer, the wild youngsters—all unconsciously—are racing against time.

All too soon the days will be much shorter; the hint of frost will be in the air. Young wings must be strong, and new feathers full, to carry those who will migrate beyond the reach of winter. The youngsters who remain—the earth-bound mammals and the nonmigrant birds—must develop strong bodies, well fortified with reserves of fat.

Men throng the beaches, huddle in air-conditioned rooms, and cluster around fans. But in the dog days, the hidden hordes make ready for winter. #

Who Shoots Coot?

or More on Sea Duck Shooting

By Robert E. Mangold
Bureau of Wildlife Management

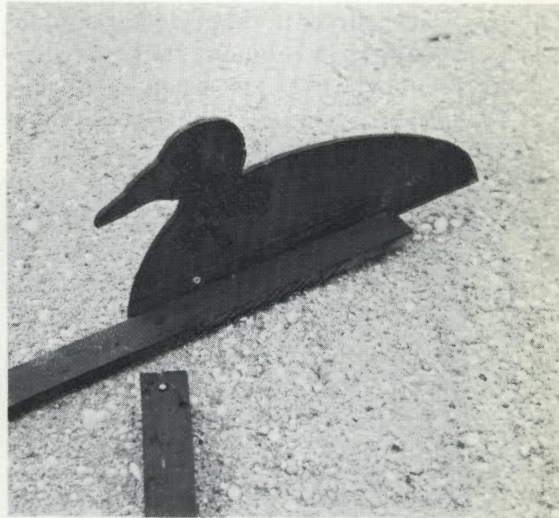
Photographs by the Author

Two years ago I wrote an article on a half bass-coot shoot, which was published in *New Jersey Outdoors* October, 1965. At that time the duck hunting regulations only permitted us to hunt scoters or "coot" and other sea ducks during the regular duck season. Last year, for the first time, New Jersey enjoyed an extended sea duck season on scoter, eider, and oldsquaw. The season opened on September 26 and continued until January 10, with a daily bag of 7 and a possession limit of 14.

Decoys

This changed season affected my hunting in several ways. When I wrote the first article on a "coot" shoot, I had used a single string of oversized black duck decoys. After the 1964 season closed, I made a set of five floating triangles with the "coot" silhouettes on the points of the triangle painted flat black. These floaters were all attached to a single line and that rig anchored separately. In addition, all the empty plastic jugs I could find were rounded up, painted black, and attached to a single

line, and anchored separately. I didn't use the black duck decoys as this was rough work, and I



Silhouette scoter, or coot, decoy

wanted to use the black duck decoys in the bay and creeks. The jugs and triangles were easier to handle in the ocean.

Boats

With the rig ready, I was set to try my luck again in 1965. This time, because I had "talked up" the fun so much, I had company.

. . . Who Shoots Coot?

Mitch decided to try it too, and had a pale green open boat he wanted to experiment with. I used a blue garvey with a cabin. On this trip I drew a blank, while Mitch had fine shooting. That blue garvey was keeping the birds out! On different occasions we used pale green, grey, or white boats of several types, and these colors worked fine. Bill even used a 23-foot white skiff with a windshield and was successful!

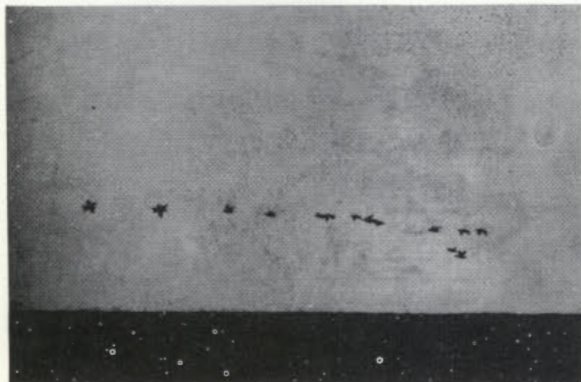
Weather

Of course, it's more comfortable to hunt on a calm day, but so far as the birds are concerned, you can enjoy a good shoot in any weather

before the end of the shooting season, there are several locations where "coot" and oldsquaws remain overwinter. There is hunting to be found all season off the Jersey beaches.

Fishing

The first day Mitch and I decided to try it last year was September 27; the small weakfish had been plentiful, so we took our rods along. That morning we got 14 "coot" (one white wing and 13 American Scoters) and about 50 weakfish. It was hard to decide whether to drop a bucking rod and try to grab a gun and be ready for an approaching flight, or stay with the rod and try to land the fish first! There was one old fisherman



A string of coot migrating southward over the open ocean

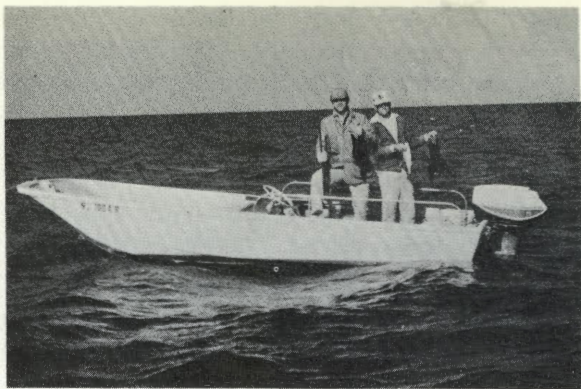
you care to try it in. We usually pick a day of no wind or a light west wind, and under these conditions, there is no chop.

Migration

The birds begin to migrate south about the end of September, and while the migration is completed

nearby who heard the shooting and came over to see what was going on. We heard him remark to his buddy "Now I've seen everything!".

The next trip out, three of us got 17 "coot" and 3 blue fish. The shooting held up well all season, and even on the last day, two of



*The big, white boat
does not spook the sea
ducks. These hunter/
anglers have coot
and bluefish*

us got our limits, of which two were eiders.

Combination

As I think about it, it is very unusual to be able to combine a hunting and a fishing trip into one, but that is one of the attractions of a "coot" shoot. Depending on the season, there are several kinds of fishing to experiment with—striper, weakie, or blue fish.

Tricks

Over the past few years we've learned quite a lot about this sort of waterfowling, and most of the fellows who have gone out with us have enjoyed good sport. While the shooting is somewhat better at

the crack of dawn, it is also good most of the morning, and many times continues all day. It does not take an expensive set-up of decoys—if one can locate a dozen empty plastic jugs, a little flat black paint, a hundred feet of strong line, and a sash weight, he can be in the "coot" shooting business!

Rigging

As for rigging, I prefer to set two strings of decoys, using one of the plastic jugs and one of silhouette triangles set parallel. Then I anchor the boat so it will be a little upwind and inshore of the decoys, preferably southward of

*The splash of a
downed coot falling
among the decoys*



. . . Who Shoots Coot?

the decoy spread. During migration, most of the flocks will be moving southward, so with your boat south of the decoys, it is eas-



An oldsquaw and two scoters

ier to spot oncoming flocks. When I anchor, I prefer to have the anchor line attached to a buoy so I can readily cast off, retrieve my dead birds (when I can hit 'em!) return, pick up the buoy, and be anchored in the same location.

Shot

These birds, particularly the white wings, are hard to stop, so

heavy loads of 5's or 4's are the right medicine. Of course, your shooting location is weaving and bobbing so on the first (and with me, every) time you go out, take plenty of shells! There is lots of empty space all around each of those birds!

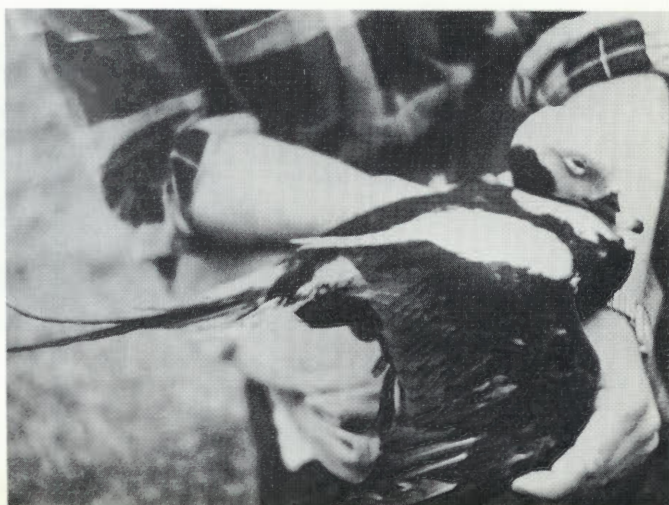
Where

We usually go out and just sit and drift awhile when we first get out in the morning to determine where the birds are flying. Some days they're just off the outer bars, and other days perhaps nearly a mile from the beach. Sea "coot" can be hunted anywhere along the ocean front, but it's probably best from Barnegat Inlet south to Cape May point.

Species

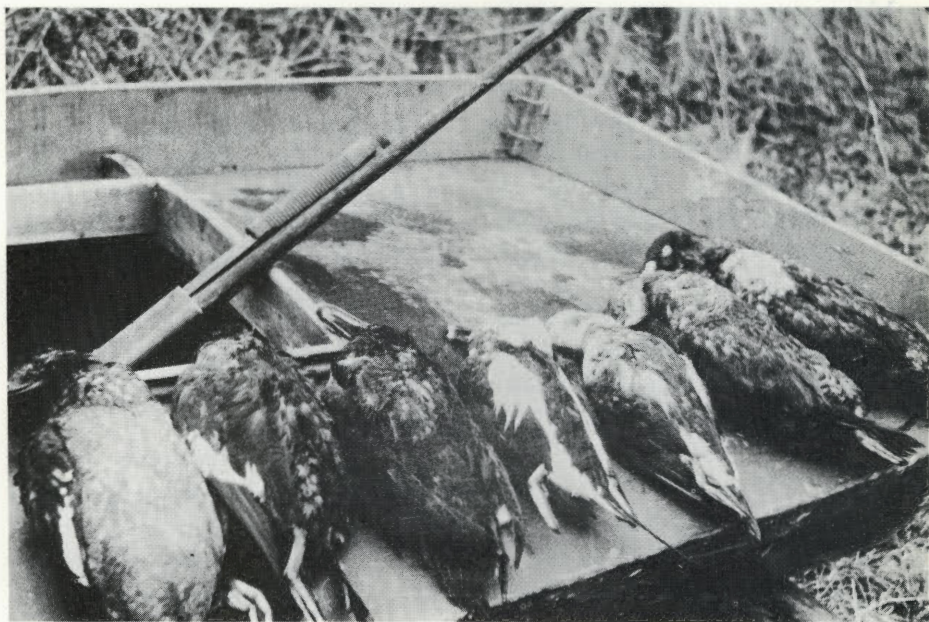
There are three "coot" species and all of them are found off the Jersey beaches in the fall. The biggest and easiest to identify is the white winged scoter, and as the name implies, has a broad white patch on the upper wing of both sexes. A smaller species is the American scoter, the male of this species having an orange knot on the base of its bill while the rest

*The drake oldsquaw
is a colorful bird, with
its striking black and
white pattern and
long, spike tail*



of the bird is black. The surf scoter male is also black, but has two white patches on its head, which is why it is sometimes called "skunk-head coot." Other species in the sea duck category are the oldsquaw and eider. The eider is rather rare as far south as

black ducks I've tried. A recipe my wife used is to take the skinned breasts of about 6 or 7 "coot" (the immature birds are preferred, but the adults can be used), soak overnight in salted water, heat a deep pot, and brown the breasts (which have been sprinkled with savory



A good bag of sea ducks. At the left are three scoters, in the center two oldsquaws, and at the right two eiders

New Jersey, but is occasionally seen, but the oldsquaw is quite common in the deeper bays and the mouths of the inlets. The male oldsquaw is a colorful bird, with its striking black and white pattern and long spike tail, and is a noisy bird with its ringing "Ha Ha HAh!"

Eating

As to eating them, their flesh is not as good as, say, a corn-fed mallard, but is better than some

salt and dotted with butter). Remove the breasts, let the pot cool, put in about half a cup of water and two small onions, chopped fine, replace the breasts, and simmer for 2 to 2¼ hours. I prefer them cold, sliced and in a sandwich.

If you would enjoy a new experience in waterfowl hunting with boating and the added zest of fishing thrown in, I would recommend that you give "coot" shooting a try. #

Population Manipulation

By R. W. Eschmeyer,

Formerly Sport Fishing Institute

We don't like the term "population manipulation" but use it for want of something better. It involves managing fish populations in such ways as to provide optimum numbers of catchable-size fish. It may involve playing predatory game fish species against their prey (the pan fishes), or controlling the less desirable species, preventing overpopulation; and, in some instances, eradicating entire fish populations and starting over by restocking with more desirable species.

Obviously, we can't manipulate fish populations intelligently unless we know what species are present and the relative abundance, size-classes, and rates of growth of these species. We also need to know what species can contribute the most fishing under various amounts of fishing pressure.

We need to know, too, what species are desired by the angler in New Jersey. Often, a fish which is a "weed" species in one area is a highly prized species in some other region. There's the question, too, of the relative "catchability" of a species. For example, brook trout are more catchable than brown trout; the chain pickerel is more catchable than the large-

mouth bass. We also need to know the individual habitat needs of the various species.

Population manipulation hasn't progressed far, except in a few aspects, because we still don't know enough to handle it intelligently. But it has a big future.

We also don't know enough about the subject to give a brief concise over-all picture of it. So, the comments here are limited to a few aspects.

The Farm Pond

The farm pond, with largemouth bass and bluegills (other combinations of predators and prey species — or trout alone — are also used), is probably the simplest habitat with which fishery workers deal. Yet, fishery workers disagree rather decidedly on how it should be managed. This disagreement can be attributed mainly to the fact that conditions differ, and that management methods which are successful in one area often don't pan out in another area.

The objective, in the farm pond, is to produce continuing supplies of both catchable-size bass and bluegills in reasonable numbers. This can be done only if the bass keep the bluegill population reduced in numbers (by eating them) to

where there's adequate food for the bluegills which survive—and only if enough young bluegills are produced to give the bass enough food to permit rapid growth.

The “balance” between predator and prey is a rather delicate one. Usually, after a few years, the bluegills become overabundant and stunted—regardless of the stock-

toward too many bluegills, the pond owner can use various population manipulation “devices” to maintain balance or to restore it.

1. Fish the pond hard and often. Remove all bluegills caught, regardless of size, but return a reasonable number of the bass caught.

2. Keep the pond free of aquatic vegetation. The small bluegills find



ing ratio used at the start. The stunted bluegills make serious inroads on the supply of bass eggs and fry, reducing the future “predator” population effectively. It’s a one-way affair, and is unlikely to correct itself. Only about one pond in a thousand gets any kind of management—including nearly enough fishing.

The other extreme—overpopulation and stunting of bass—is much less likely; it can often correct itself because bass can keep their own populations down effectively (when food is in short supply) by eating their own young.

Knowing that the tendency is

excellent protection in dense weed beds, are less available to bass.

3. Destroy most of the bluegill beds. A few nests can produce a lot of young. Destruction of most of the beds by mechanical disturbance or chemical poisoning—when the eggs have been laid—will reduce bluegill production.

4. Partial poisoning. Studies on partial “poisoning” with rotenone indicate that, at mid-day, use of rotenone along the margin would take mostly bluegills, few bass. The same procedure, used early or late in the day, would destroy large numbers of bass as well. The fact that small bluegills are inshore in

... Population Manipulation

mid-day, when bass are in deeper water, permits destruction of bluegills without harm to the bass.

5. Where ponds are seinable, excess bluegills can be removed by seining. Or, they may be removed by trapping.

6. Where conditions permit, the pond can be drained and the desirable numbers of fish can be returned. Or, the population can be removed by use of rotenone. However, the fish are killed by this process and the pond will not provide fishing until new stocks have grown to catchable size.

7. A fellow we had lunch with once had his own simple answer to the bluegill overpopulation problem in his 1½-acre pond. He bought several hundred dollars' worth of adult bass and hoped to add several hundred more dollars' worth in a few months. This method is effective, but we don't advocate it for general use for obvious reasons. The method is too costly, except in isolated instances on private waters, regardless of effectiveness.

Lake Rehabilitation

Often—where the fish populations are made up largely of numerous stunted fish or undesirable species—the easiest way to restore good fishing is to drain out the water (if possible), or to exterminate the population by chemical means, then restocking.

There are limitations, of course. Most waters can't be drained. Use of rotenone is expensive, it rarely

results in a complete kill of all fish, and it will kill fish in the outlet stream.

Despite the limitations, rehabilitation has become an important tool. New Jersey has treated lakes destroying the fish populations and, by subsequent stocking, created excellent trout fishing where angling was poor prior to rehabilitation.

Partial "poisoning" is effective where certain fish concentrate, usually at spawning time. Such fish as adult carp, suckers, and some pan fish species, can be reduced very decidedly by this method.

Rehabilitation of streams has also been tried recently, in a few



instances, to reduce the rough fish. In one major attempt, rough fish from downstream soon repopulated the treated areas. Its value in stream management is still not determined.

Rough Fish Control

In waters which are well suited to rough fish, control measures often help fishing for the more desirable species. Experience shows that control of rough fish must be

substantial and persistent if it is to be effective. Otherwise, recovery to their original abundance is apt to be rapid.

Some years ago a big lake was taken over by the U.S. Fish and Wildlife Service and made into a national wildlife refuge. Carp interfered with the success of the refuge. They became extremely abundant. Much of the food for waterfowl disappeared. The bass and crappie mostly disappeared.

A seining area was baited with grain to attract the carp. In 1949, when bait was first used, the take of carp rose to 110,000 pounds. In 1950 it jumped to 360,000 pounds, and in 1951 to 745,000 pounds.

As a result, the water in this shallow 30,000-acre lake became much clearer. Waterfowl food plants increased greatly. Bass and crappie increased quite decidedly. Fishing has improved as a result of the carp control program.

There are other examples to demonstrate the importance of vigorous rough fish control on some waters. Such control can be exercised in a number of ways, including use of commercial gear, local "poisoning," and possible innovations in electrical shocking devices.

In some areas the problem is being partially solved by liberalizing regulations, and by creating a greater demand for rough-fish fishing. Some of these fish are excellent fighters; and some, from unpolluted waters, have good food qualities. In this connection, two personal experiences come to mind.

On more than one occasion persons have commented on the excellent taste of the "walleye" fillets they were eating, not knowing that carp fillets had been substituted. Too, the "fights" which we recall most vividly were with big carp on light tackle. We didn't know that carp weren't fit to eat or fit to catch until we left home and brushed up against "sophistication"!

Water Level Fluctuation

For many years fishery workers and sportsmen believed that a permanent water level was essential to good fishing. We now know that fluctuating levels, properly manipu-



lated, can greatly benefit angling by influencing the fish population favorably. This factor could be important in the management of Spruce Run and Round Valley Reservoirs.

To cite a single example, a biologist of the Illinois Natural History Survey experimented with summer drawdown on Ridge Lake in Illinois. He found that extensive late-summer drawdown keeps the abundance of small bluegills under control. Large numbers of them are eliminated by stranding as the water recedes or by being eaten more readily by bass when they become

... Population Manipulation

exposed and concentrated in a smaller area. This results in increased success of bass spawning the following spring when the lake approaches its normal area again.

Providing Forage

To have reasonable supplies of catchable-size fish, all steps in the food chain must be well represented. Fishing can sometimes be improved decidedly by finding the weak link in the chain and strengthening it.

In one such case, a reservoir of about two thousand acres had very poor fishing. Sampling in a bay of several acres produced a few catchable-length, but thin, bass and some numbers of badly stunted bluegills. Because of extensive winter draw-down, there was little insect life on the bottom. The only available basic food was the plankton—microscopic plants and animals. This food in the amounts present would raise the bluegills and young bass to sizes of a few inches; thereafter, they needed bigger food organisms. The big bass had little fish as food. But the stunted bluegills tended to take advantage of the very shallow water. The most readily available food for big bass was little bass, and the supply of these was limited.

Gizzard shad, plankton-eaters, were introduced. After they were established a bay was sampled again. Now, there were more big bass and they were in better condition. Young-of-the-year bass were well represented, too; many had

survived because predation on them had lessened. There were many young-of-the-year shad, just the right size to serve as food for the big bass. As expected, there were also numerous small bluegills as stunted as ever. The introduction of alewives for trout in lakes in New Jersey is a similar situation.

The game fish population had changed decidedly and fishing had improved. The weakest link in the food chain had been strengthened. Perhaps we should add that there are places where shad or herring should **not** be planted; this should not be construed as an endorsement for the indiscriminate introduction of these fish.

In General

This is admittedly an unsatisfactory discussion of population manipulation. But, it does indicate clearly, we hope, that this management tool has a big future. In general, we're still too short on factual information to apply it effectively.

As may have been observed, it isn't easy, at times, to draw the line between habitat improvement and population manipulation. But, the point is of academic interest only.

In the past our efforts have been aimed mainly at managing fishing by placing various and sundry restrictions on the angler. Some of these are needed. However, prior consideration should be given to managing the fish populations themselves. On many waters the angling affects the actual fish populations only to a limited degree. #

*Robert Dorf of Freehold
with his 22-pound, 15-ounce
northern brown bullhead*



State and Possibly National

Record Brown Bullhead

On May 13, 1966, Robert Dorf of R.D. #2, Freehold, caught a northern brown bullhead, *Ictalurus nebulosus* from Spring Lake in Spring Lake. The female fish measured 33- $\frac{3}{4}$ inches in total length and 22- $\frac{3}{4}$ inches in girth. It weighed 22 pounds, 15 ounces. This undoubtedly establishes a new state record as it far exceeds the previous record for this species of 4 pounds, 3 ounces, taken from Cushetunk Lake in 1951.

Catching of the fish was witnessed by Robert Fescharek, P.O. Box 1566, Point Pleasant Beach, and officers of the Spring Lake Police Department. It was caught on 6-pound test monofilament with a pork rind eel for a lure.

Weighing of the fish was done by Mrs. George Guy of Guy's Sportshop in Belmar and witnessed by William Richmond, an employee of the store. Scales used for this purpose are checked periodically to assure accuracy as the shop is an official weigh-in station for the *Asbury Park Press* Striped Bass Tournament. Mrs. Guy also measured the fish. I corroborated her measuring and identified it.

Recent *Field and Stream* Record Fish lists do not include the brown bullhead. But, I plan to check with the editors to see if they will consider this fish as a record for this species.

#

—A. Bruce Pyle
Bureau of Fisheries Management

The Eastern Skunk

Species:

Mephitis nigra

General Characteristics:

Total length about 23 to 24 inches; tail about 9 inches; hind foot about 2½ inches; weight about 5 to 8 pounds. A robust, black, long-haired animal usually with two broad white stripes down the sides of the back, seldom mistaken for any other animal.

Dentition:

$$\begin{array}{r} 3-1-3-1 \\ 3-1-3-2 \\ \hline =34 \end{array}$$

Range:

All of the state.

Life History:

Skunks frequently live in holes or dens or occasionally under buildings. They line the dens with vegetation to form a nest. The gestation period is about 63 days and the 4 to 7 (average 5) young are born in late April or early May. The young weigh about one ounce at birth, nurse about 6-7 weeks, and then begin to follow the mother on nightly foraging trips. Food of adults includes small rodents such as mice, cold-blooded vertebrates, insects, grubs, vegetation (such as corn), and carrion. Occasionally skunks kill poultry, eat eggs or bees, break down corn to get milky ears, or uproot crops in search of insects. Much of their food is obtained by digging. Skunks begin to fatten in midsummer, and are very fat when winter sleep begins. This is not true hibernation, and on warm nights in winter skunks may be out. The skunk is usually nocturnal, but is sometimes seen in late afternoon, or early morning. Skunks are quite deliberate in their movements, apparently feeling safe with their "chemical warfare equipment," and it is true that most animals and man give the "woods pussy" a wide berth. The fine spray of amber-colored liquid may be effective up to 15 feet in calm air, and even further down-wind. Skunks make quite interesting pets, and can be descented by those who do not wish to gamble.

Environmental Resistance:

Weather—Skunks are able to avoid the cold winter by a deep sleep, somewhat like hibernation. Occasionally, heavy rains may flood a burrow, however, and drown young animals.

Predators—Relatively safe from most, except the great horned owl.

Diseases—Subject to several diseases common to many carnivores, such as fox encephalitis, distemper, and rabies.

Trapping—Easily trapped. Some years the pelt brings a fair price, but in recent years the price has been low. Skunks without the white stripe usually are more valuable than those with the stripe #

THE SKUNK

THERE ARE FOUR TYPES OF SKUNKS, HOG-NOSED, HOODED, SPOTTED AND STRIPED.

THEY FEED ON MICE, INSECTS, FROGS AND GARBAGE.

THEY'LL DIG IN YOUR LAWN LOOKING FOR GRUBS. PUT SOME INSECTICIDE ON IT.

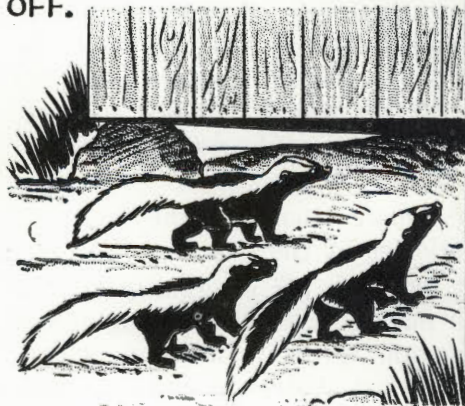
AN OIL IS SECRETED IN TWO SAC-LIKE GLANDS UNDER THE SKIN AT THE BASE OF THEIR TAILS. IF AROUSED THEY MAY SQUIRT IT AT ENEMIES.

SKUNKS HUNT IN THE AFTER-NOON AND ARE ACTIVE THROUGH THE NIGHT.

COMMON SKUNK IN NORTH AMERICA IS THE STRIPED SKUNK.



DON'T LEAVE ANY OPENINGS BENEATH BUILDINGS AS THEY WILL MOVE IN. CLOSE THEM OFF.



BURN GARBAGE AROUND A CABIN AND GET RID OF FOOD IN TIN CANS.



Conservation Awards

Commissioner Robert A. Roe and Wildlife Manager Fred Ferrigno were among the recipients of 1966 Conservation Awards, presented last fall by the New Jersey State Federation of Sportsmen's Clubs, the National Wildlife Federation, and the Sears-Roebuck Foundation.



The above picture shows Commissioner Roe receiving his award, a black bass statuette, from Judge Louis D. McGregor of Detroit, President of the National Wildlife Federation. Flanking them are (L) Fish and Game Councilman Ralph Allocca, Chairman of the Awards Program, and (R) State Secretary of Agriculture Phillip Alampi, who was Master of Ceremonies. At the microphone is Mr. Buzby of the Sears-Roebuck Foundation.

Commissioner Roe was named Water Conservationist of the Year and Biologist Ferrigno, Wildlife Conservationist of the year.

Commissioner Roe was honored both for his emergency actions to preserve water for essential uses during the recent drought and for carrying out and planning a program to insure a future supply of clean water. His keen interest in pollution abatement and in recrea-

tional use of reservoirs were commended. Mr. Ferrigno's continuing research dealing with wetlands, particularly with regard to controlling mosquitos while preserving fish and wildlife habitat, was cited.

Other award recipients included: William H. Downes, Conservation Coordinator of Rockaway Township, State Conservationist of the Year, Newton G. Layton, Chairman of the Salem-Cumberland Soil Conservation District, Soil Conservationist; Dr. Silas Little of the Northeastern Forest Experiment Station of the U.S. Dept. of Agriculture, Forest; Robert M. Hannd, of the Rutgers Extension Service,

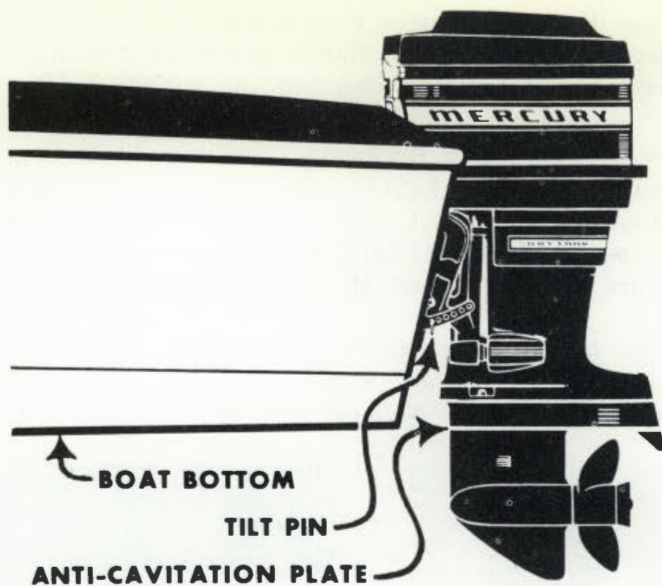
In the lower picture Mr. Ferrigno receives a buffalo statuette from Judge McGregor and Secretary Alampi with Carl N. Fenderson, Northeast Field Representative of the National Wildlife Federation in the background.



Conservation Education; Carl Wildrick, an Eagle Scout of West Caldwell, youth; the Red Bank Daily Register, Communications; the Passaic County Fish and Game Protective Association, Conservation Organization of the Year.

Councilman Allocca was extremely pleased with the growing interest in the program in its second year. He hopes it will continue as a stimulus to public awareness of the state's valuable natural resources. #

Fig. 1



WRONG! BOW UP



WRONG! BOW DOWN



RIGHT! PLANE OR EVEN KEEL

Fig. 2

OUTBOARD MOTOR TILT VITAL BUT MISUNDERSTOOD ADJUSTMENT

Every school kid remembers the phrase "for want of a nail, a shoe was lost, for want of a shoe a horse was lost, etc." The end result of the lack of a nail was that a battle was lost. Moral: little things mean a lot.

This lesson applies to recreational boating. For instance, for want of a correct tilt pin setting on your outboard motor as much as one-quarter or more of your boat speed may be lost. That estimate comes from the Kiekhaefer Mercury people who feel tilt pin adjustment is a vital but often misunderstood facet of outboarding.

Tiltability is the feature which permits successful installation of an outboard motor on a wide variety of boats with different transom angles and hull configurations. That is, by changing the setting of the tilt pin which fits through two holes in the clamp bracket, the outboard can be tilted fore and aft from a vertical axis.

To determine the correct tilt angle, set the tilt pin of the outboard motor so that the anti-cavitation plate is parallel with the boat's bottom. Do this while the boat's on your trailer—it's much easier then.

When you're in the water, check the performance of your boat to make sure you're at the right tilt pin setting. If tilt angle is correctly adjusted and the boat is properly loaded, a well designed boat will ride level and plane without porpoising on all but very rough water.

Usually your dealer will have set the motor up in the right pin hole. Don't be too anxious to change. If a boat is riding bow high or stern high, try to correct the problem by redistributing your load. If this doesn't work, consider changing to a different pin hole.

When the tilt pin is in a hole too far from the transom, the outboard motor's thrust tends to push the stern down and the bow up. Often the bow will then interfere with the operator's vision. The stern digs into the water, wasting your power, and the windage drag on the hull is increased enormously.

This also wastes power. Because the anti-cavitation plate is being pulled at an angle through the water, unnecessary underwater drag and wave action also results.

When the tilt pin is too close to the transom, the bow tends to dig in and the stern rides high. A large, wide bow wake and a big stern wake result. The boat, which was designed to plane, is forced to plow through the water. Since the prop is too far forward and is biting into semi-disturbed water, cavitation may result. #

Please include your *correct* Zip Code with all correspondence.

Willow Oak

(*Quercus phellos*)

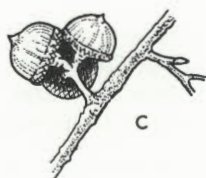
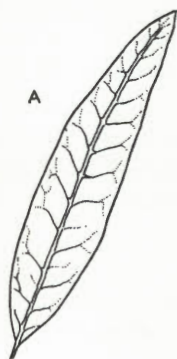
Willow oak, sometimes called peach oak or water oak, is a member of the red oak group. It is usually found growing on wet sandy soils, along streams, and along the edges of swamps. It thrives on higher, well-drained soil, and it is popular in many parts of the country as an ornamental street tree.

Range:

It is a Coastal Plain species, extending through New Jersey to northern Florida and west to Texas. In the Mississippi Valley it extends north to southern Missouri.

Leaves:

Resemble willow leaves. They are deciduous, 2 to 5 inches long,



Willow Oak

A. Leaf

B. Twigs, with buds

C. Acorns, on twig

$\frac{1}{2}$ to 1 inch wide, lanceolate, and alternate. The margin is entire or slightly wavy, terminating in a sharp bristle-pointed tip. (See figure A.)

Twigs:

Slender, smooth, reddish-brown with a sharp pointed terminal bud one-eighth of an inch long covered with dark brown scales. Lateral buds are smaller and arranged alternately. (See figure B.)

Flowers:

Yellowish male flowers are borne in 2- to 3-inch clusters when leaves are about one-third developed. They occur in the leaf axils of the previous year's growth. Female flowers develop singly or in two's from the leaf axils of the current year's growth.

Fruit:

A greenish-brown acorn that is borne sessile or on a short stalk, either singly or in pairs. A mature acorn is about one-half of an inch in diameter and is enclosed at the base in a saucerlike cup that is covered with thin hairy scales. (See figure C.)

Uses:

It is desirable as an ornamental, especially for street trees. Willow oak will grow 80 to 90 feet tall and 2 to 3 feet in diameter.

When harvested for forest products, it is used for rough lumber, ties, and fuel. The acorns serve as game food. #

—Austin N. Lentz, *Extension Specialist in Farm Forestry*
Rutgers—The State University
Drawings by Aline Hansens

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Council Highlights

May Meeting

The open session of the regular monthly meeting of the Fish and Game Council was held in Trenton on May 9. In addition to the Council members and Division personnel present the following persons attended: Bill Backus, John Briel, Ed Conklin, and John Russack.

Prior to the session Councilmen Joseph Alampi, Fred Space, and Frank Alloca were sworn in before Commissioner Roe for new terms as members of the Fish and Game Council.

Wildlife Management

George N. Alpaugh, Chief of the Bureau of Wildlife Management, reported that a shipment of 5,000 pheasant eggs, 2500 pure black necks and 2500 pure Mongolian, has been received from England. These were purchased to improve the stock at our farms and will be bred pure. Liberations will be made of crosses.

Reports from the field indicate that reproduction of game birds and animals in the wild has been very good. Many young rabbits have been observed, as well as pheasant nests.

Mr. Alpaugh made reference to the recent oil slick off the southern New Jersey coast which adversely affected several thousand sea ducks and was responsible for the death of large numbers of these birds. The source of the oil never was established.

Councilman Alampi commended Chief Alpaugh and the Bureau of Wildlife Management on their action in conducting workshops with 4-H Agents in regard to the chick program. He thought this stimulated interest and should result in better birds.

Coastal Patrol

Newman Mathis, Chief of the Coastal Patrol, reported that only one dragger was observed operating within the 3-mile limit during the month. In the Delaware Bay, the same system used last year regarding the lift period for nets has been in effect and operating very satisfactorily. Catches of shad have been extremely light, while menhaden have been more prevalent in Delaware Bay. Many small stripers have been present in Great Bay and the coastal patrol has been keeping fishing operations under surveillance. During April, 23 cases involving short striped bass and under-size lobsters were filed.

Law Enforcement

District Conservation Officer Alfred Jones reported on the activities of the law enforcement unit in the absence of Chief Coffin who was

ill. He reported that conservation officers conducted 10,838 inspections of licenses, guns, creels, and bags. Officers made 278 apprehensions and issued 47 warnings. The officers also spent time investigating 19 deer damage complaints and recovering carcasses of deer killed accidentally and illegally.

Fisheries Managment

Robert A. Hayford, Chief of the Bureau of Fisheries Management, reported that returns of the Donaldson and regular New Jersey strains of rainbow trout from the pre-season and in-season stocking in Spruce Run Reservoir totaled 122 and 121, respectively. For the first week of the trout season the returns of the 500 large Donaldson rainbows stocked during January 1967 were 93 from the reservoir and 47 from the tributaries. Hold-over trout have been making up a goodly portion of the catch in the tributaries and this is significant when the low water conditions of last year are taken into consideration. He stated that 15,000 northern pike sac fry obtained from the Pennsylvania Fish Commission have been placed in the new impoundment at Stafford Forge. In-season stocking of trout was continuing and it was expected that approximately one-half million fish would have been stocked when the final distribution was made.

Public Relations

William E. Peterman, Supervisor of Public Relations, reported that his unit participated in a departmental teachers' workshop. In former years cooperation was extended to schools on an individual basis. With this new workshop arrangement it will be possible and easier to reach a much greater number of teachers and acquaint them with our outdoor conservation education program.

An exhibit installed at the Middlesex County Junior Sportsmen's Show suffered the loss of a projector, slides, and other equipment due to the activities of vandals who broke into the building and stole the equipment. While the items are covered by insurance, many of the slides are irreplaceable.

Federation Message

Chairman Hart, speaking in behalf of Al Toth, President of the New Jersey State Federation of Sportsmen's Clubs, who had telephoned earlier in the day, expressed the deep appreciation of Mr. Toth for the splendid cooperation of the Council and the Division of Fish and Game with the State Federation during the past year. Working in harmony had resulted in the accomplishment of many worthwhile projects.

Estuarine Inventory

William Backus inquired what action had been taken by the state with regard to an estuarine inventory aimed at protection of wetlands

. . . Council Highlights

from pollution and development. Chairman Hart explained that, while the Division of Fish and Game itself was not undertaking such a study, there was an interested committee known as the Marine Resources Committee, chaired by Charles Banks Belt of New York, and including Director MacNamara and Chairman Hart in its membership, which has been successful in securing a grant from the Baruch Foundation for the explicit purpose of preparing an inventory of all estuarine lands on the eastern sea coast.

Night Coon Trials

William Decker of Somerville appeared before the Council seeking permission for the running of night coon dog trials outside of the regular field trial season. He stated that several states allow these night trials and it would be advantageous to New Jersey coon hound enthusiasts in gaining points for their dogs if such trials could be run here.

The matter was referred to the Game Committee for consideration and recommendations. In the meantime, Mr. Decker was advised to submit his request in writing. #

How Duck Laws Are Made

Many people are unaware what lies behind the making of waterfowl regulations. First of all, the New Jersey Division of Fish and Game has full-time waterfowl biologists who are specialists in the studies of ducks and geese. Over a period of years, accurate information on the migration of different species of waterfowl through New Jersey has been gathered so it can be fairly well predicted when different species of native-raised birds will leave the state and when ducks and geese will arrive from the north and reach a peak in migration.

All the states along the Atlantic Coast belong to the Atlantic Waterfowl Council. The Council holds an annual meeting at which time representatives of the U.S. Fish and Wildlife Service report the status of waterfowl throughout North America. At this meeting, members of the Council from the different states have an opportunity to voice criticisms of past regulations and to indicate where they believe a modification of these could be made to benefit their state without hurting the overall waterfowl population. At such time the Director of the Division of Fish and Game draws heavily on information gathered by personnel of the Division. This information must be equated against information gathered by all the states and the Fish and Wildlife Service.

After a thorough discussion of the many problems involved, representatives are chosen to attend the important regulation forming meeting held in Washington during August. Before attending this meeting the representatives are advised of the Atlantic Waterfowl Council's wishes.

The establishment of regulations for migratory game birds is in the hands of the Fish and Wildlife Service. The Service meets with representatives from all flyways and then sets up the overall framework of regulations from which the individual states indicate their choice. #

Nantuxent Tract

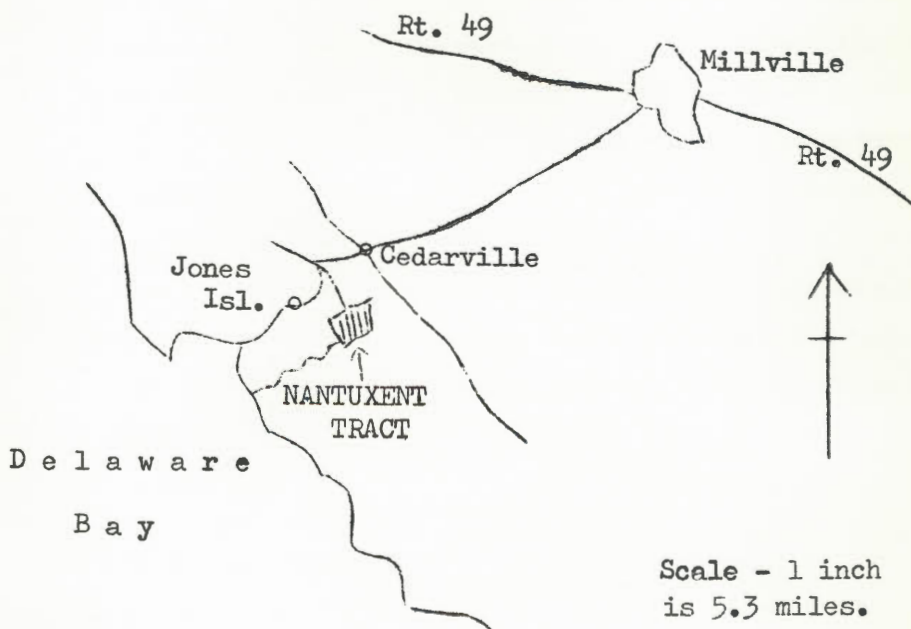
The Nantuxent Public Shooting and Fishing Grounds is located in Cumberland County and comprises about 787 acres of which half is upland and the other half tidal marsh. The tract is bounded on the east and south by Nantuxent Creek and on the west by Jones Island Road.

There is excellent upland hunting for quail, rabbits, squirrel, and stocked pheasants. The tidal marsh offers good duck shooting and also muskrat trapping during the open season.

A boat launching site at Newport Landing provides access to Delaware Bay.

The Bureau of Wildlife Management manages this tract primarily for upland game. Food and cover are managed through crop rotation to maintain the natural cover and wildlife food. This tract is stocked with both pheasant and quail.

To reach the Nantuxent Tract from the town of Millville, take the Cedarville-Millville Road west out of Millville and proceed about 9 miles to the town of Cedarville. At Cedarville, take the Jones Island Road about 2.5 miles and then make a left turn on a black-top road and proceed 2/10 of a mile to the entrance of this tract. #



Violators Roundup

<i>Defendant</i>	<i>Offense</i>	<i>Penalty</i>
J. J. Mas Sarda, 18 Washington Ave., Lk. Hiawatha	Procure lic. wrongfully	100.
Walter S. Hyndshaw, 303 Bliss Blvd., Phillipsburg	Uncased weapon	100.
Thomas R. Villone, 1998 Westfield Ave., Scotch Plains	Hunt waterfowl wrong hrs.	20.
Preston Giles, 97 Mulberry St., Carteret	Kill coot closed season	20.
Norman Alva Hannibal, 986 Main St., Rahway	Poss. buckshot illegal season	100.
Norman Alva Hannibal, 986 Main St., Rahway	Poss. firearm & bow & arrow while hunting	20.
Daniel W. Randolph, 560 Apt. H Capabianca Plaza, Rahway	Poss. firearm & bow & arrow while hunting	20.
James Schmidt, 159 Armstrong Ave., Jersey City	Hunt before hours	20.
Richard Cole, 627 Newark Ave., Jersey City	Hunt before hours	20.
Salvatore Cupano, 233 Baldwin St., New Brunswick	Dis. firearm across mun. rd.	20.
Robert J. Royce, New Providence Rd., Mountainside	Dis. firearm across mun. rd.	20.
Ancadio R. Beceino, 1236 Kline Pl., Rahway	Dis. firearm w/in 300' of dwelling	20.
Frank Marino, 605 Drake Pl., Westfield	Dis. firearm across mun. rd.	20.
Anthony Spano, 1797 Burrett Ave., Union	Poss. red Tail hawk	20.
Thomas Crouse, R.D. #1, Bloomsbury	Loaded gun in auto	20.
Dennis Kenhelen, 8 Henry St., Palmyra	Hunt before hours	20.
James Spencer, 300 Hendrickson Ave., Beverly	Hunt before hours	20.
Gilbert Vandermark, 1520 Lake Dr., Burlington	Hunt before hours	20.
Francis Robt. Kessler, 153 Sunset Ave., Newark	Illegal firearm	20.
Richard Richey, 220 E. Commerce St., Bridgeton	Uncased weapon	100.
Richard Richey, 220 E. Commerce St., Bridgeton	Illegal missile	100.
Richard Finlaw, R.D. #3, Canton	Hunt waterfowl wrong hrs.	20.
Michael Biscoglio, Panther Rd., Vineland	Hunt waterfowl wrong hrs.	20.
Ralph J. Ferrara, 184 E. Terhune Ave., Lodi	Loaded gun in auto	20.
Charles Sociewski, 527 Park Pl., Lyndhurst	Pos. 1 hen pheasant over limit	20.
Dave Koblen, 603-74th St., N. Bergen	Take black-bellied plover closed season	20.
George D. Maraga, 43 Van Houten Ave., Jersey City	Take yellow-leg snipe closed season	20.
George D. Maraga, 43 Van Houten Ave., Jersey City	Take black-bellied plover closed season	20.
Ronald Alber, 34 Clinton Rd., Fairfield	Take black-bellied plover closed season	20.
John Brotcher, Jr., 110 Ravine Ave., W. Caldwell	Take 2 black-bellied plover closed season	40.
Joseph S. Kostrub, 260 Delaware Ave., Roebling	Poss. 3 brant over limit	60.
Nicholas F. Belgrasch, 504 Lippincott Ave., Riverside	Poss. 3 brant over limit	60.
Dave Koblen, 603-74th St., N. Bergen	Take yellow-leg snipe closed season	20.
Richard M. Trawinski, 512 Park Place, Lyndhurst	Take black-bellied plover closed season	20.
Richard M. Trawinski, 512 Park Place, Lyndhurst	Take yellow-leg snipe closed season	20.
John H. Fulmer, 621 Main St., Metuchen	Kill duck closed season	20.
Theodore Frank, 625-8th St., Carlstadt	Illegal missile	100.
Albert Wallin, 442 Highland Ave., Clifton	Hunt before hours	20.
Dennis Dorzuic, 21 N. Evergreen Ave., Long Port	Illegal firearm	20.
Russell J. Kaminsky, Pine Crest Mobile Homes, Rt. 72, Manahawkin	Hunt w/aid of lights	20. Prob.
Russell J. Kaminsky, Pine Crest Mobile Homes, Rt. 72, Manahawkin	Uncased weapon	100. Prob.

Defendant

Theodore J. Martin, 7 Manning Dr., Manahawkin
Theodore J. Martin, 7 Manning Dr., Manahawkin
George A. Stampoulos, 37 Concord St., Jersey City

Richard Herder, Jr., P.O. Box 372A, Newton

Thomas A. Hoffman, 23 Hughes Pl., Singac
Vincent Romeo, 8142 Ashwood St., Philadelphia, Pa.
Earl Munn, 100 S. Maiden Lane, Somerdale
William Stewart, Cedar Ave., Hammonton
Thomas Bechtel, Old Black Horse Pike, Blackwood
James McGlinchey, 2021 S. Winthrop Ave., Lindenwood
James H. Pierce, Box 17, Wiley St., Whitesboro
Charles T. McDonald, 4 Friendship Dr., Salem
Everett Pickett, 195 Midfield Rd., Colonia
Bernard C. Jones, 30 Union St., Salem
William Chatenke, Box 409, R.D. #1, Washington
Chas. J. Weisul, 660 Corliss Ave., Phillipsburg
Walter Whitman, 77 Manchester Ct., Wayne
Robert Jost, 81 Manchester Ct., Wayne
David Mowder, 268 E. Washington Ave., Washington
Thomas DeBacco, R.D. #1, Washington
Michael Gillis, Arthur St, Philadelphia, Pa.
William J. Moyer, Box 1063, Lacey Rd., Forked River
William J. Moyer, Box 1063, Lacey Rd., Forked River
Edward Polus, 32 Putman, Fords
Frank DeCoprio, 956 Adams Ave., Elizabeth
Edward Slesarck, 608 Charles St., Perth Amboy
Al Piorkowski, 35 Putman Ave., Fords
William Mandikas, 265 McClellan St., Perth Amboy
Allen Patterson, 113 So. 9th St., Newark
Richard Horvath, 91 Russel St., Woodbridge
Hubert Brown, 258 Oakwood Ave., Orange
John E. Boise, 75 Prospect Rd., Parsippany
Michael Cariola, 173 Anderson St., Trenton
George Lesko, Ringoes-Sergeantsville Rd., Stockton
Alfred Dublois, 18 Oak St., Bordentown
Walter F. Falkler, 36 Long Point Dr., Bricktown

Gary Lee Crutchley, 2700 Madison Ave., Trenton

James M. Franks, 267 Clover Ave., Trenton
Elwood Saunders, 69 Carpenter St., Salem
Raymond Mead, 3339 W. Park Dr., Bridgeton
Walter Evans, 223 Grant Ave., Bellmawr
Paul D. Carillo, 421 No. 32nd St., Camden
Paul D. Carillo, 421 No. 32nd St., Camden
Jack Harvey, Box 35, Alloway
Russell W. Cranmer, Edgewood Lane, Malaga
Robert N. Willis, 802 Carpenter St., Glassboro
Gary Everingham, R.D. #7, Bridgeton

Louis Maglione, Apt. 1-A, Stratford Gardens, Stratford
James Ragonese, Oldmans Creek Rd., Swedesboro
Harry A. Hill, Jr., 168 Maple Ave., Rahway
Sidney Pashkow, 630 Parsippany Blvd. R.D., Boonton
James P. Brennan, 298 Extonville Rd., Allentown

Offense

Penalty

Hunt w/aid of lights 20. Prob.
Uncased weapon 100. Prob.
Take yellow-leg snipe
closed season 20.
Use spinning gear in fly-
fishing area 20.
Fail to produce license 20.
Wrongfully procure rs. license 20.
Ducks after hours 20.
Fish no license 20.
Ducks after hours 20.
Ducks after hours 20.
Hunt geese closed season 20.
Hunt ducks after hours 20.
Poss. 1 cormorant 20.
Hunt ducks after hours 20.
Hunt before hours 20.
Hunt before hours 20.
Hunt before hours 20.
Hunt before hours 20.
Hunt before hours 20.
Hunt no license 20.
Carry gun in woods on Sunday 20.
Hunt deer w/rifle 100.
Dis. firearm across mun. rd. 20.
Hunt before hours 20.
Dis. firearm across mun. rd. 20.
Dis. firearm across mun. rd. 20.
Fail to display tag 5.
Fail to display tag 5.
Hunt before hours 20.
Illegal firearm 20.
Discharge firearm from road 20.
Illegal firearm 20.
Hunt no license 20.
Hunt wrong hours 20.
Hunt w/aid of lights carried
on vehicle 20.
Hunt w/aid of lights carried
on vehicle 20.
Uncased weapon 100.
Poss. of protected bird 20.
Hunt while on revoked list 100.
Loaded gun in auto 20.
Hunt before hours 20.
Tag not displayed 5.
Poss. untagged parts of deer 100.
Illegal missile 100.
Loan hunting license 20.
Poss. 1 black duck closed
season 20.
Loaded gun in auto 20.
Hunt waterfowl wrong hours 20.
Kill pheasant on game refuge 50.
Hunt waterfowl wrong hours 20.
Illegal firearm 20.

. . . Violators Roundup

Defendant	Offense	Penalty
Willie B. Wilson, 664 Green Ave., Brooklyn, N.Y.	Hunt no license	20.
Conley Morrison, R.D. #1, Farmingdale	Hunt before hours	20.
John Bostic, 2093 Dean St., Brooklyn, N.Y.	Hunt before hours	20.
Raymond Bennett, Box 236, Asbury Park	Hunt before hours	20.
Peter Avallone, Jr., 146 Renshaw Ave., E. Orange	Hunt before hours	20.
Frank Sica, 146 Renshaw Ave., E. Orange	Hunt before hours	20.
Michael Boleslewski, 36 N. 25th St., Camden	Poss. illegal missile	100.
Harry C. Cooper, 722 Bailey St., Camden	Hunt before hours	20.
John Rossi, 1 Cornel Rd., Ivystone, Atco	Hunt before hours	20.
Robert I. Jones, 8404 Park Ave., Pennsauken	Loaded gun in auto	20.
Robert L. Pope, 3466 Gladwin Ave., Pennsauken	Loaded gun in auto	20.
Hobart Pease, Jr., 8207 Marion Ave., Pennsauken	Loaded gun in auto	20.
Raymond Gowie, Sylvan Lakes, Burlington	Hunt while on auto	20.
Charles Carey, 86 Pawnee Rd., Lakewood	Hunt before hours	20.
Michael Chapman, Taunton Blvd., Marlton	Illegal missile	100.
Anthony M. Lowery, 45 Andrew St., Bayonne	Hunt before hours	20.
Gerold Marafite, 322 Broadway, Bayonne	Hunt before hours	20.
James Dayton, 227-15th Ave., Belmar	Poss. illegal deer	100.
Joseph Donnelly, Jr., 150 Armstrong Ave., Jersey City	Hunt before hours	20.
Ardovina Jessamine, R.D. #1, Phillipsburg	Illegal firearm	20.
Josh Brundage, 119 Vine St., Trenton	Gun on Sunday	20.
Josh Brundage, 119 Vine St., Trenton	Illegal missile	100.
Vance Haggerty, 90 Willtop Rd., Netcong	Fail to display tag	5.
Ralph J. Fioretti, Jr., 181 Alpine Dr., Paramus	Hunt no license	20.
Ralph J. Fioretti, Jr., 181 Alpine Dr., Paramus	Hunt at night w/light	20.
Ralph J. Fioretti, Jr., 181 Alpine Dr., Paramus	Attempt to kill deer at night	100.
Ralph J. Fioretti, Jr., 181 Alpine Dr., Paramus	Illegal missile	100.
Gerald D. Coya, c/o Gen. Del. Rt. 206 Stanhope	Hunt no license	20.
Gerald D. Coya, c/o Gen. Del. Rt. 206 Stanhope	Hunt w/aid of lights	20.
Gerald D. Coya, c/o Gen. Del. Rt. 206 Stanhope	Hunt deer at night	100.
Gerald D. Coya, c/o Gen. Del. Rt. 206 Stanhope	Illegal missile	100.
Ross Capps, 256 Irving Ave., Bridgeton	Hunt before hours	20.
M. Elliot Capps, 256 Irving Ave., Bridgeton	Hunt before hours	20.
Fred O. Dooley, Box 125, Mauricetown	Fail to display tag	5.
Peter W. Ciampa, Hampton Lakes, Vincentown	Procure license wrongfully	100.
Joseph M. Horton, Box 112, Ridge Ave., Browns Mills	Illegal missile	100.
Andrew Cebulski, 2 Hines Hill, Sayreville	Fish no license	20.
George Stahavavich, 17 Guilelen St., New Brunswick	Fish closed waters	20.
Terry Povendo, 24 Heathcote Ave., Metuchen	Angle closed waters	20.
Lawrence S. Cioffi, 166 E. 96 St., New York, N.Y.	Unlawfully poss. deer	100.
Reynold Seig, 207 Frespond Rd., E. Brunswick	Angle closed waters	20.
Branford Roxbury Corp., P.O. Box 447, Succasunna	Pollution	500.
James S. Husar, 70 Marion Ave., New Providence	Hunt w/rifle on private property	20.
Ronald Bassin, 415 Claremont Ave., Montclair	Hunt on Game Refuge	50.
Benjamin F. Dheel, 104 S. East Ave., Pitman	Loaded gun in auto	20.
Michael J. Krulewicz, 1891 McCarter Hwy., Newark	Fish closed waters	20.
Herman J. Siedel, Mt. Arlington Rd., Ledgewood	Unlawful poss. deer	100.
Carmello H. Sinatra, 139 DeMott Ave., Clifton	Hunt before hours	20.
Jessie Jones, Jr., 43 Pleasant Way, Montclair	Hunt before hours	20.
Jessie Jones, Sr., 85 More Ave., Montclair	Hunt before hours	20.
Anthony J. Wright, 11 Haven Ave., Totowa Boro	Carry gun in woods on Sunday	20.
Louis Lombardi, 225 Wayne Ave., Clifford Park	Kill pheasant illegally	20.

Defendant

Brantley J. Fisher, 1713 S. 6th St., Camden
 Frank La Corte, 61 Pennsylvania Ave. Beverly
 Michael Carr, 339 Park Ave., Old Bridge
 Bill Lukas, 46 Parsonage Rd., Metuchen
 Joe F. Molasky, 57 Boltix St., Edison
 James Manney, 11 Peterson Ave., Edison
 Gerard Marnick, 415-3rd St., Dunellen
 Douglas Greene, 46 Duer St., No. Plainfield
 William J. Soden, 114 Bucklew Ave., Jamesburg
 Jerry King, 13 Cedar Ave., Highland Park
 Vincent Hines, Sr., Box 114B R.R. 1, Old Bridge
 Vincent Hines, Jr., 85 Madison Garden Apts.,
 Highway 34, Old Bridge
 Thomas Schoeman, 19 Erie Ct., Parlin
 Richard Vernon Irons, 882 Briar Ave., Toms River
 Richard G. Weidenhoffer, Co. 1, Fort Monmouth
 Donnie R. Belcher, 53 Mary St., Bordentown
 Donald H. Fidel, Fawn Lake Village, Indian Mills
 Daniel Muntone, 11 Marshall Ave., Middlesex Boro
 Fred C. Carl, 135 Lowell St., Carteret
 Kenin R. Adams, 13 Mayfield Pl., Metuchen
 Thomas Chabok, 410 N. Washington Ave., Dunellen
 Ralph Lemongellio, 785 Green St., Iselin
 Robert Lemongelli, 13 Henry St., Iselin
 Joel Alston, Sr., 146 Hobson St., Newark
 William J. Parks, 187 Brunswick St., Newark
 Henry Page, 146 Summit St., Somerville
 Bruce J. Page, 272 Perrineville Rd., Jamesburg
 John Ingerto, 2 Gray Drive, S. Plainfield
 William Kimbrough, 4 Brandies Rd., Parlin
 William De Marsico, 123 Laurelhurst Dr.,
 Cliftwood Beach
 Gabe Kozma, 788 Chamberlin Ave., Perth Amboy
 Alfred Randeau, 44 Eisenhower Dr., Sayerville
 Joe Pisack, 1804 Bradford St., Plainfield
 Richard J. Wira, Liddle Ave., Fords
 Woodrow George, 1269 George St., Plainfield
 Howard Davis, 957 W. 4th St., Plainfield
 Robert Comito, 7 Forest Ave., Metuchen
 Arnold Collins, 523 Spring St., Elizabeth
 Joseph T. Kosa, 18 Garibaldi Ave., Newark
 Charles Monath, 86 Barbie Ave., Highlands
 Reed T. Flickinger, 1147 Lafayette St., Cape May
 Richard Verity, Station Rd., Goshen
 Al Boyea, 343 Rosewood Terr., Linden
 Henry Settembrino, 726 Third Ave., Lyndhurst
 Ferschman Leo, 111 De Mott Ave., Clifton
 Robert Seymore, 17 Parker Rd., Mt. Arlington
 John E. Gray, 97 Deerfield Pike, Bridgeton
 Moreland, Floyd E., 820 Johns Rd., Cherry Hill
 Marcelino Martinez, 208-38th St., Union City
 Harrison Parn, Jr., 77 Keer Ave., Newark
 Willie Flowers, 740 S. 15th St., Newark
 Peter Brozowski, Jr., 100 Willy St., Woodbridge
 Donald T. Bray, 48 Division Ave., Belleville
 Sylvester McOwen, 44 Fairfield Rd., E. Brunswick
 Rudolf Cszimagia, 27 Dover Ave., Somerset

Offense

Penalty

Illegal missile 100.
 Loaded gun in auto 20.
 Hunt waterfowl wrong hrs. 20.
 Hunt waterfowl wrong hrs. 20.
 Hunt waterfowl wrong hrs. 20.
 Hunt waterfowl wrong hrs. 20.
 Hunt waterfowl wrong hrs. 20.
 Hunt waterfowl wrong hrs. 20.
 Attempt to kill sea gull 20.
 Hunt waterfowl wrong hrs. 20.
 Hunt waterfowl wrong hrs. 20.
 Hunt waterfowl wrong hrs. 20.
 Illegal missile 100.
 Illegal firearm 20.
 Loaded gun in auto 20.
 Loaded gun in auto 20.
 Illegal firearm 20.
 Hunt before hours 20.
 Uncased weapon 100.
 Illegal firearm 20.
 Hunt before hours 20.
 Hunt no license 20.
 Hunt before hours 20.
 Hunt before hours 20.
 Hunt before hours 20.
 Hunt before hours 20.
 Hunt before hours 20.
 Hunt waterfowl wrong hrs. 20.
 Poss. protected bird 20.
 Hunt before hours 20.
 Hunt before hours 20.
 Hunt before hours 20.
 Illegal firearm 20.
 Illegal firearm 20.
 Illegal firearm 20.
 Illegal firearm 20.
 Illegal firearm 20.
 Illegal firearm 20.
 Hunt before hours 20.
 Hunt before hours 20.
 Kill protected species 20.
 Illegal poss. doe deer 100.
 Hunt before hours 20.
 Hunt no license 20.
 Hunt before hours 20.
 Carry gun on Sundays 20.
 Hunt deer closed season 100.
 Gun on Sunday 20.
 Dis. firearm across road 20.
 Hunt before hours 20.
 Hunt before hours 20.
 Loaded gun in auto 20.
 Illegal missile 100.
 Loaded gun in auto 20.
 Illegal missile 100.

. . . Violators Roundup

<i>Defendant</i>	<i>Offense</i>	<i>Penalty</i>
George Karekos, 500 Haddon Ave., Camden	Hunt closed season	20.
David Tolbert, 516-3rd Ave., Warminster, Pa.	Hunt closed season	20.
Anthony Costellano, 384 No. 6th, Newark	Illegal missile	100.
Anthony Costellano, 384 No. 6th, Newark	Hunt after hours	20.
Ronald Russomano, 87 No. 13th St., Bloomfield	Hunt after hours	20.
John F. Proctor, 23 Hamilton St., Somerville	Loaded gun in auto	20.
Walter Langley, Jr., Rt. #40, Elmer	Illegal posting (2 signs)	40.
Walter Voeckler, 34 Park Ave., Elmer	Poss. rifle slug while hunting deer	100.
Donald Demarest, 33 Second St., Sussex	Illegal missile	100.
Donald Demarest, 33 Second St., Sussex	Fail to display tag	5.
Paul D. Owens, 21B Laurel Blvd., Browns Mills	Illegal missile	100.
Paul D. Owens, 21B Laurel Blvd., Browns Mills	Loaded gun in auto	20.
Edward J. Smith, Colts Neck Rd., Farmington	Hunt raccoon closed season	20.
Herman Williams, 5 Mains St., Glassboro	Hunt no license	20.
Santiago Mivrel, 105 Main St., Woodbury	Hunt before hours	20.
Fred Kimble, Clementon Manor Apts., Clementon	Set traps w/o metal tag	20.
Joseph Kijek, 12 Lafayette Place, Denville	Loaded gun in auto	20.
William Frankenberg, 17 Central Ave., Tenafly	Loaded gun in auto	20.
Leon M. Rogers, 118 Steiner Ave., Trenton	Gun on game refuge	50.
Richard M. Flock, Conover Rd. R.D. #1, Cranbury	Hunt no license	20.
Joseph McBratney, 1116 Virginia St., Elizabeth	Uncased weapon	100.
Julio Armellini, Oak & Brewster Rd., Vineland	Hunt before hours	20.
Theodore Eldrige, R.D. #1 South Lane, Hightstown	Hunt before hours	20.
Julian J. Harhigh, R.D. #1 South Lane, Hightstown	Hunt before hours	20.
Joseph Globis, 59 Broadway, Freehold	Use rifle while hunting deer	100.
Joseph Globis, 59 Broadway, Freehold	Hunt deer at night	100.
Joseph Globis, 59 Broadway, Freehold	Hunt from auto w/aid of lights	20.
Joseph Sodley, Rt. 130, Sadley Farms, Robbinsville	Loaded gun in auto	20.
Tadeuez "Ted" Skwarek, QuakerBridge & Village Rd., Lawrenceville	Fail to display license	5.
Harold A. Sipple, 1767 Long Hill Rd., Millington	Loaded gun in auto	20.
Ronald Noblet, 332 So. 4th St., Millville	Hunt deer closed season	100.
Peter Ridgeway, Delsea Dr. & Smith Rd., Vineland	Dis. firearm upon road	20.
Frank Poloff, 129 Howard Ave., Bridgeton	Dis. firearm upon road	20.
Kenneth Mead, 339 W. Park Dr., Bridgeton	Fail to display tag	5.
Ashton Milburn, Rt. 1, Box 352-B, 12th & Peter Ave., Williamstown	Loaded gun in auto	20.
Ronald E. Roche, 1119 York Rd., Cherry Hill	Illegal firearm	20.
Mike DiMeo, 570 Middle Rd., Hammonton	Illegal missile	100.
Mike DiMeo, 570 Middle Rd., Hammonton	Hunt deer closed season	100.
Fred R. Earle, 583 McBride Ave., W. Paterson	Hunt no license	20.
Clifford V. Jenkins, 583 McBride Ave., W. Paterson	Transfer license	20.
George Reisberger, 620 Westwood Ave., Westwood	Hunt small game closed season	20.
Jeffrey B. Kern, R.D. #1, Box 466A, Cape May Court House	Pursue deer by auto	100.
Jeffrey B. Kern, R.D. #1, Box 466A, Cape May Court House	Pursue deer by auto	100.
John Keelan, 16 Shellflower Lane, Trenton	Illegal firearm	20.
Franklin Cassidy, 222 Grand Ave., Matawan	Unplugged gun	20.
Dennis Booth, 2nd Ave., Malage Rd., Mays Landing	Poss. wild deer	100.
Dennis Booth, 2nd Ave., Malage Rd., Mays Landing	Hunt w/aid of lights	20.

. . . What's Been Done *Continued from Inside Front Cover*

resources. We have a bountiful supply of this resource in New Jersey. It is to the best interests of all citizens that it be properly managed and not wasted.

More notable progress has been made in the acquisition of land under the Green Acres program during the past year. As of May 1 a total of 18,780.45 acres of land and water has been assigned to the Division of Fish and Game. This acreage, added to previous purchases made by the Public Shooting and Fishing Grounds Fund, brings a total of 122,480.78 acres under Fish and Game administration.

As a result of the Green Acres acquisitions the opportunity for waterfowl hunting has been substantially enhanced. Areas of considerable acreages are distributed along our shores. It is planned that these areas will be adequately posted as public areas for the 1967 season. New Jersey has an enviable historic reputation for the intriguing sport of wildfowling, and public marshlands at Manahawkin, Port Republic, Marmora to Wildwood, Tuckahoe, Dennis Creek, Heislerville, Berrytown, Egg Island, Nantuxent, and Mad Horse offer the properly-equipped wildfowler an unparalleled opportunity to continue this ancient and exhilarating outdoor activity.

During the fall of 1966 the newly-acquired Whittingham Tract, a Green Acres purchase, was opened to hunting. The fall of 1967 should bring the initial opportunity for this recreation on the Black River Tract in Morris County and the Assunpink Tract in Mercer and Monmouth Counties. Notable additions were made to the Greenwood Forest Tract and an excellent deer herd is developing on that area. Field trials will eventually be run on the Whittingham Tract, and the Assunpink purchase is scheduled to be the New Jersey State Field Trial Area. It is possible that the first field trial will be held on the Assunpink during the fall of 1967.

The pattern of future hunting and fishing as well as other recreational pursuits is becoming fairly well established. All state-owned lands will receive multiple use. Wildlife can possess considerable diversity within and between populations. Some areas will need to be hunted if desired ecology is to be maintained, others to a lesser degree, and probably some not at all, depending on those many complex factors that affect and sometimes govern a species and the public use that is predominant on an area.

Field reports indicate that the 1967 seasons will offer improved hunting opportunity to the licensed sportsman in that a greater acreage of public lands are available to him. Most significant have been the field reports that our main game species have reproduced satisfactorily throughout the state. The Fish and Game Council has taken this improvement into account in setting the 1967 hunting regulations. #

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As defined in the
1967-68 Game Code

Bow and arrow means longbow only

All crossbows or variations
thereof are prohibited.