I EW ERSEY Fish & Wildlife Digest







A SUMMARY OF RULES AND MANAGEMENT INFORMATION

New Jersey Department Of Environmental Protection - Division of Fish & Wildlife

Vol. 14 No. 3 May 2001

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Conserve Wildlife License Plates **Support Endangered and Nongame Species** See page 20



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Internet: www.state.nj.us/dep/fgw	
Endangered & Nongame Species	609-292-9400
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NJ Consumer Health Service	
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Shellfish Water Classification	
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Land Management 856-629-5006 Wildlife Damage Control 856-629-7224 Wildlife Education 856-629-7214

On the Cover: A 95 foot tug boat sunk in 1986 on the Sea Grit artificial reef. Photo by Herb Segars.

New Jersey's Marine Fisheries Resources



Bob McDowell, Director

Did you know New Jersey consistently ranks among the top states when it comes to saltwater fisheries? In a typical year over 900,000 anglers take more than five million fishing trips. That puts our state third in the number of anglers and second in the number of fishing trips along the east coast, with New Jersey residents comprising 57% of those participants.

More than fifty species of marine fish are caught in New Jersey's waters. The big three (as you might expect) are summer flounder, bluefish and weakfish. New Jersey anglers land more of these species than any other state, with a 1999 harvest of 1.5 million summer flounder, 809,000 bluefish, and 583,900 weakfish. Other important species (and New Jersey's landings rank) are: black sea bass (2), striped bass (4), tautog (2), winter flounder (1) and yellowfin tuna (3).

Although most fishing trips in New Jersey take place on private or rental boats (55%), many anglers (12.3%) take advantage of the 90 party and over 400 charter boats that dock here. Other anglers (3.3%) fish from the many beaches, jetties, bridges and other structures along the 120-mile New Jersey shoreline.

While providing recreation and food for the fisherman, New Jersey's recreational fishery contributes significantly to the state's economy. The previously mentioned party and charter boats, many marinas, bait and tackle shops and retail boat outlets provide thousands of jobs and hundreds of millions of dollars in sales, state taxes and salaries.

New Jersey also has an impressive commercial fishery. With annual landings value of approximately \$95 million, New Jersey is ranked sixth along the east coast. The recreational and commercial fisheries combined are estimated to contribute in excess of \$2 billion annually to the New Jersey economy. Marine fisheries management decisions have direct economic and social implications to these fisheries, so it is essential that these decisions are based upon the best scientific information available.

Virtually every fishery is under management by state and/or federal resource agencies, the federal councils (Mid-Atlantic Fishery Management Council in our

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Where to Write Us

New Jersey Division of Fish & Wildlife P.O. Box 400 • Trenton, NJ 08625-0400 Internet: www.njfishandwildlife.com

New Jersey Fish & Wildlife Digest

Published by NJ Fish and Wildlife P.O. Box 400, Trenton, NJ 08625-0400 www.njfishandwildlife.com

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The Division of Fish and Wildlife is a professional, environmental organization dedicated to the protection, management and wise use of the state's fish and wildlife resources

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> Partial Funding for the Digest is provided by the Federal Aid in Sportfish Restoration Program

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NEW JERSEY DIVISION OF FISH & WILDLIFE, DIGEST EDITOR, PO BOX 400 TRENTON, NJ 08625-0400

Did You Know?



New Jersey's resident saltwater anglers spent more in 1996 than the total U.S. earnings of Titanic - the number one box office film in U.S. history.



Did you know....

New Jersey's ranks fourth in the country in terms of the number of saltwater anglers (841,000 from last 1996 federal survey) - only California, Florida, and Texas have more saltwater anglers.

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area), the Atlantic States Marine Fisheries Commission and/or the New Jersey Marine Fisheries Council. In 2001, we are fortunate to be able to speak about recovered stocks (striped bass) or recovering fisheries (summer flounder, black sea bass) which have come about largely due to cooperative coastwide management among all the above organizations. Yet with the annual adjustments to recreational management measures (size limits, possession limits, seasons) usually being more restrictive, anglers continue to question the management *process* and if, in fact, things are *really* getting better.

Data is essentially the driving force behind every fishery management plan. The basic information on population size, age of individuals in the population and harvest amount are examples of data elements which directly impacts the implementation of management measures. *It is critical this information is as thorough as possible*. One only needs to attend a few public hearings to learn the public has very little confidence in the information that is driving the various fisheries management plans.

The division is committed to improving the quantity and quality of marine fisheries information. Funding sources must be found to provide the data to adequately address all of our fishery management issues including the regulations enforcement. New Jersey's marine fisheries program is funded through an annual appropriation from the state's general treasury and from the Federal Aid in Sportfish Restoration Program. For New Jersey to advance our scientific database from which fishery management decisions originate, we must develop a level of funding commensurate with the value of the marine fisheries resources. Remember those tremendous economic values mentioned earlier?

The management of our marine fishery resources presents a significant challenge. Today, more than ever, current and adequate information on these resources and their use is essential for proper management. The Division of Fish and Wildlife remains committed to exploring alternatives for adequate funding to ensure the highest quality fisheries management decisions.

Motor Boat Regulations

for information write:
Division of Motor Vehicles
P.O. Box 403, Trenton, NJ 08625-0403
or contact your local DMV
office for a boat "NJ" number

Hull numbers are issued by State Police after their inspection.

State Police Troop "F"

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Marine :	Law	Enforce	ement Stat	tions	

War nie Eaw Emorechient Stations			
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North Wildwood	609-522-0393		
Atlantic City	609-441-3586		
Burlington	609-387-1221		
Ocean	609-296-5807		
Point Pleasant	732-899-5050		
Monmouth Cty. Det.	732-842-5171		
Lake Hopatcong	973-663-3400		
Newark Bay	973-578-8173		

REGULATORY UPDATE

By Bruce Halgren, Supervising Biologist

Regulatory changes for the 2001 fishing season include important recreational species such as bluefish, summer flounder, black sea bass, scup, black drum, winter flounder and lobster.

Bluefish:

Good news! The possession limit for bluefish will be increased from 10 fish to 15 fish. There is no closed season and no minimum size for bluefish.

Summer Flounder (Fluke):

Anglers had a very successful summer flounder season in 2000. In the area from Maine to North Carolina, estimated fluke landings significantly increased from the 1999 level. Unfortunately, last year's good harvest exceeded the management target level and the regulations for 2001 will be adjusted to bring the recreational harvest back to the coastwide target level of 7.2 million pounds, established by the Atlantic States Marine Fisheries Commission (ASMFC). New Jersey's size limit of 16 inches, along with an 8 fish possession limit and a season from May 12 to September 11 are designed to reduce harvest from the 2000 level by 34%. Anglers should take note that the recreational summer flounder limits for federal waters (greater than 3 miles from the coastline) are more restrictive than for state waters. The federal fluke regulations are anticipated to be a 15.5 inch size limit, a 3 fish possession limit and an open season from May 25 through September 4.

Black Sea Bass:

A similar situation exists for black sea bass as was discussed above for summer flounder. Anglers experienced a very good year for black sea bass in 2000, exceeded the target harvest level by more than 1.5 million pounds and will see somewhat more stringent regulations for 2001 to maintain compliance with the ASMFC coastwide management plan. The minimum size limit for black sea bass will increase from 10" to 11", a possession limit of 25 fish will be in effect and the open season will extend from May 10 through February 29.

Scup (Porgy):

Scup regulations for 2001 will include an increase in the minimum size limit from 7 inches to 9 inches, maintenance of the 50 fish possession limit and will establish an open season from July 4 through December 31. Scup recreational landings for 2000 are estimated to have more than doubled the 1999 landings. The majority of the increases occurred in the states of New York, Rhode Island and Massachusetts, but New Jersey anglers also caught more and larger fish.

Black Drum:

The traditional black drum fishery in New Jersey targets large fish in the Delaware Bay during the spring and early summer. These fish can range in size from "puppy drum" of 15 to 20 pounds, up to 85 or 90 pounds (the state record black drum weighed in at 102 pounds, 12 ounces). In response to constituent concerns that large numbers of small black drum were being taken by anglers, and to reduce the potential for a large expansion of the commercial fishery, the New Jersey Marine Fisheries Council approved steps to manage the black drum fishery. The new regulations establish an annual commercial quota, a 16 inch minimum size limit for the commercial and recreational fisheries and a 3 fish recreational bag limit.

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New Jersey's Free Freshwater Fishing Days

Saturday and Sunday, June 2 & 3, 2001

On these two days, residents and non-residents may fish New Jersey's public fresh waters without a license or a trout stamp.

All other regulations, including size and daily catch limits, remain in effect.



Regulatory Update

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Winter Flounder:

The recreational minimum size limit increased for winter flounder

from 10.5" to 11" on January 1, 2001. This was the final step in a two year program designed to increase the size limit for winter flounder from 10 to 11 inches in length. The split, open season will remain as it has been with a spring open season from March 1 through May 31 and a fall open season from September 15 through December 31. There is no possession limit for winter flounder.

Lobster:

In coordination with the ASMFC lobster management plan, the division has implemented a limited entry program for the commercial lobster fishery. To allow for a continued recreational pot fishery for lobster, the division will continue to offer licenses to take lobster by pots or traps for personal consumption. Under the new permit system, the recreational use of a lobster license will be limited to no sale and a limit of ten pots or traps.

American Eel:

A possession and harvest limit has been established for the recreational use of American eels. Anglers may not take more than 50 eels per person per day. Anglers may, however, keep more than 50 eels in storage for personal use provided they possess no more than 50 eels per person while fishing.

General:

Also new for the 2001 fishing season is a regulation concerning the sale of fish caught with recreational gear and a regulation to encourage ethical fishing practices. The first is a requirement that any fish taken with recreational gear (such as rod and reel, spear gun or hand line) and subsequently sold, must adhere to the larger size limit established for either the recreational or commercial fishery. The second is a requirement that any fish which is intentionally killed shall become part of the fisherman's daily possession limit. This means an angler may not throw back a dead summer flounder in order to keep a larger summer flounder he or she later catches, in order to remain within the daily possession limit. This regulation would also restrict an individual from intentionally killing and throwing back a fish he or she considers a "trash" fish.

Additional commercial regulations have been implemented for American lobster, Atlantic croaker, spiny dogfish, shad, scup, black sea bass, summer flounder, tautog, weakfish, blue crabs and horseshoe crabs and are summarized in the division's 2001 Commercial Regulations publication, found at the New Jersey Division of Fish and Wildlife's web site: www.njfishand-wildlife.com.

Circle Hooks Can Save Many Fishes' Lives

Peter Himchak, Principal Fisheries Biologist

After the long awaited tug on that fishing line, and the rewarding experience of reeling in an elusive prey, the recreational angler is faced with a dilemma: Do I keep the prized fish for the dinner table or do I release it?

Fish may be released for many reasons. Obviously, fish must be released if they are below the minimum size limit, above the daily bag limit, or are caught during a closed season for that species. Many fish caught meeting all legal requirements are nonetheless released by an increasing number of recreational fishermen who choose to release them out of a conservation ethic

that says: fish released today will be around for future enjoyment. The desire to tag and release fish also figures prominently in catch and release fishing practices. Tagging programs have always been popular with fishing clubs whose members are eager to participate in scientific investigations by tagging fish and following them in subsequent years. Encountering fish previously tagged by coastal fisheries agencies and releasing them is also an excellent opportunity for recreational anglers to contribute to the ever-growing body of knowledge for saltwater species' migration patterns and determining fishing mortality rates

It comes as no surprise that guidelines on releasing fish to minimize stress and injury to the fish frequently appear in print. Nonetheless, it is important to reiterate here:

Proper Handling And Releasing Techniques

- Fighting a fish to exhaustion leads to high catch and release mortality.
- Keep the hooked fish in the water as much as possible.
- Minimize physical injury to fish destined for release.
- Carefully remove hooks using a dehooker or needlenose pliers.
- Cut the line and leave the hook in fish that have been gut hooked.
- Should removal of the fish from the water be necessary, handle the fish carefully using wet cotton gloves or other similar material to minimize loss of the protective fish slime.
- · Avoid touching a fish's gills.
- Carefully place the fish back in the water.
- Try to revive a lethargic fish prior to release.

Most recreational anglers are already familiar with proper handling and release techniques and practice them conscientiously.

One additional contributor to minimizing hook and release mortality for those fish taken by bait fishermen has evolved in the form of circle hooks. The point of a circle hook is turned inward as compared to a conventional j-hook and is preferably not offset from the shank of the hook.

Consequently, circle hooks typically result in most fish being hooked in the jaw rather than more deeply in the gut. By significantly curtailing physical injury to the fish, hook and release mortality is greatly reduced.

The Maryland Department of Natural Resources has been conduct-

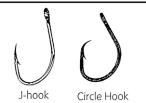
ing studies on several saltwater fish species since 1996, evaluating factors that influence the survival of fish caught and released by recreational anglers. Most recently their attention has turned to evaluating the impact of using circle hooks over conventional hooks when bait fishing for striped bass. Under strict guidelines that replicated all aspects of hook and release fishing, the Maryland study demonstrated that 9.1% of the striped bass caught on conventional hooks died following release, whereas only 0.8% of the striped bass caught on circle hooks died after release. Quite a noticeable decrease in hook and release mortality! The study further explains that this decrease in mortality is attributed to the fact that circle hooks produce minimal hook wounds and it is the location of a hook wound that largely influences

location of a hook wound that largely influences the survival of released fish. Of course, environmental factors such as water temperature and salinity also greatly influence the survival of released fish.

A similar evaluation of the use of baited circle hooks over conventional baited j-hooks in decreasing the mortality of hook and release fishing for striped bass, was conducted recently by the Massachusetts Division of Marine Fisheries. Their field investigations similarly showed a substantial reduction in mortality for fish hooked and released using baited circle hooks. Again, it was the reduction in the lethal wounding/physical injury, 27.5% mortality for j-hooks and 1.6% mortality for circle hooks that

accounted for the significant decrease in hook and release mortality.

Interestingly, both studies present data that support catching more fish using circle hooks when bait fishing than using conventional hooks. Also, the mean size of the fish caught was uninfluenced by the type of hook



being used.

What can all this mean for New Jersey, particularly for the state's striped bass sportfishery? Consider that in 1999, approximately 1.4 million striped bass were caught in New Jersey marine waters according to the Marine Recreational Fisheries Statistics Survey, and that over 1.1 million of these fish were released. Applying the conventional 8% hook and release mortality estimate used in the interstate fisheries management plan for striped bass, approximately 91,480 striped bass were killed as a result of having been caught and released. For those fishermen using baited hooks rather than lures, this 8% hook and release mortality estimate can be severely curtailed.

The acceptance of circle hooks among bait fishermen is increasing and the popularity of circle hooks grows. It likely the use of circle hooks will continue to expand in sportfisheries where baited hooks were common, as anglers continue to demonstrate their conservation ethic by releasing many legal size fish for tomorrow's enjoyment.