

# VIRGINIA GAME FISH TAGGING PROGRAM



Fish tagging programs (mark and recapture programs) are one of the primary methods fishery biologists use to gather information about the migration, movement and growth of fish. This type of information is essential to understanding the life history and population status of fish species, which, in turn, helps determine the need for management measures to protect fish. With increasing effort directed toward improving marine fish populations, this knowledge is an important key in an effective management program.

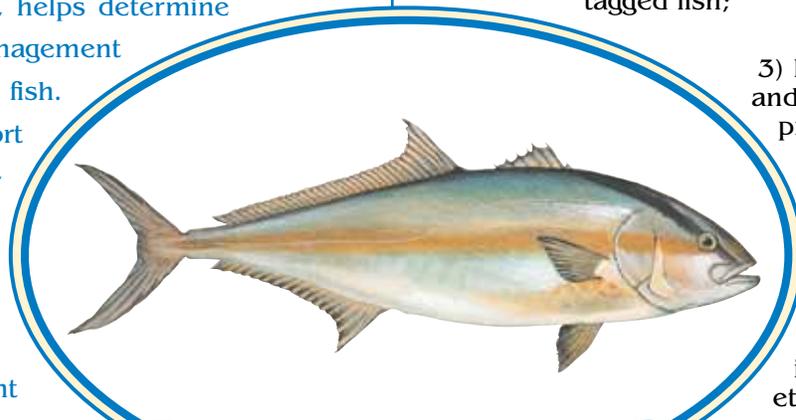
The Virginia Game Fish Tagging Program (VGFTP) was implemented in 1995 to provide recreational anglers an opportunity to assist in these conservation and management efforts. This is achieved in several ways:

1) by training recreational anglers to assist in tagging fish in a quality-oriented program;

2) by educating anglers about the tagging programs and what they should do when they catch tagged fish;

3) by promoting catch-and-release fishing and providing information on proper fish handling and release techniques to reduce release mortality; and,

4) by fostering a conservation ethic which challenges saltwater fishermen to work for the protection of their resources.



GREATER AMBERJACK



When on the water, be alert to the possibility that any fish you catch may possess a tag, and remember that tags come in many different sizes, shapes, styles and colors.



## PROGRAM DESCRIPTION

The VGFTP is a tightly focused tagging effort. Participants are limited in number and are required to sign-up on a "first-come, first-served" basis during an annual registration period. Then, prospects must attend a workshop to receive training in tagging and fish handling techniques and in the objectives and operation of the VGFTP. This ensures the efforts of program volunteers result in a high quality tagging effort.

Specific species of fish are targeted, which allows the program to address specific informational needs and to focus efforts on recreationally important fish not targeted by other tagging programs. Program participants are issued both large and small tags, so they may use tags that are suited to the size of the fish. T-bar tags (2.4 inches long), which are best suited for small fish (under 27 inches), are the primary tag type used by program participants. These tags are used in black sea bass, summer flounder, gray triggerfish, sheepshead, spadefish, speckled trout, tautog, juvenile cobia, juvenile red and black drum. Participants also are issued steel dart tags (approximately 6 inches long) for use in larger targeted species, such as adult cobia, red drum and black drum.

The result is a large group of trained taggers on the water all year. They provide a cost effective means to run a continuous tagging effort for recreationally important fish and a mechanism to take advantage of special situations that may develop, such as an exceptionally strong spawn and recruitment by a particular species in a year or exceptionally large concentrations of fish in a specific area. Since they are already trained and fully equipped, participants can tag large numbers of fish by simply alerting them to

the special situation and requesting them to target that species.

## PROGRAM RESULTS

Through 2008 volunteers tagged more than 160,000 fish, with nearly 15,000 recaptures of tagged fish reported to the VGFTP office. The information generated has assisted in the fisheries management process for several species of fish. Particularly valuable information has been generated for tautog, speckled trout, summer flounder, juvenile red drum, and cobia.

One of the most surprising results is the documentation of movement of certain species from Virginia to North Carolina waters and the short time in which such fish, even when very small, cover relatively long distances. The following examples are representative: 1) a small black drum (9 inches) tagged in Rudee Inlet on October 1, 1996 was recaptured in Atlantic Beach, NC ten days later on October 11th (a straight line movement of over 200 miles or an average of 20 miles per day); another young-of-the-year black drum (7.5 inches) tagged October 5, 2007 at the Yorktown Power Station discharge canal was recaptured in the surf at Kitty Hawk just 12 days later on October 17th having moved a distance of 114 miles (a net movement of 9.5 miles per day); 2) a speckled trout (12.5 inches) tagged on October 22, 2004 in the Virginia Beach surf (Sandbridge) was recaptured in Juniper Bay, Pamlico Sound five days later on October 27th having moved approximately 128 miles for an average of 26 miles per day; 3) five small red drum tagged September 1, 2002 inside Lynnhaven Inlet were recaptured 4-10 days later in North Carolina, one in the Kitty Hawk surf 4 days later, having



moved 72 miles, two were recovered in the Nags Head surf in 5 days and 6 days respectively, having moved 80 miles, another fish was recovered in the Avon surf in 5 days, having moved 133 miles, and one in the Ocracoke surf 10 days later having traveled over 160 miles.

The program also has produced the longest documented travel of a cobia along the coast of the United States. A 38-inch cobia tagged at York Spit in the Chesapeake Bay on August 22, 2000 was recaptured at an oil platform in the Gulf of Mexico approximately 36 miles southeast of the Mississippi River Delta on May 20, 2004.

Seasonal migratory patterns have been confirmed for both juvenile red drum and speckled trout, as well as summer flounder. Documented fall movements of juvenile red drum occur as far south as Little Inlet, South Carolina while tagged speckled trout were recaptured below Cape Lookout, North Carolina, as far south as Wrightsville Beach. Most flounder tagged during the summer/fall in Virginia waters are recaptured near their tagging site the same year or in the Bay or Eastern Shore seaside inlets the following year. However, some summer flounder have been recaptured as far south as Myrtle Beach, South Carolina and as far north as waters off Connecticut and Rhode Island. The lack of a seasonal migratory pattern for tautog also has been documented, with more than 2100 recaptures through 2007 showing a high degree of site fidelity and only random movements in a relatively small percentage of recaptured fish.

Complete program results are detailed in annual reports available through the Sea Grant Marine Advisory Services Office of the Virginia Institute of Marine Science (804) 684-7170 or through the office of the Virginia Saltwater Fishing Tournament (757) 491-5160. Due to the high costs associated with printing, hard copies are very limited. However, the complete annual report in color, for the series starting in 1995 is available online at the VIMS website — <http://www.fisheries.vims.edu/tagging/gamefishtag.htm>

## PROGRAM AWARDS

Recreational anglers participating in the VGFTP earn conservation certificates by tagging a minimum of 25 fish during the year. In addition, recognition is provided to the top taggers in each of the targeted species, the tagger with the largest number of fish tagged overall, and the tagger with the largest number of tagged fish recaptured during the year.

Fishermen contacting the VGFTP office with information about tagged fish they have recaptured are awarded VGFTP logo items for assisting with the program. Hats, t-shirts, and Plano utility boxes are among the logo items that have been offered participating anglers, and, for certain species of recaptured fish, pewter pins have been awarded.



## HOW TO PARTICIPATE

The VGFTP is open to the public, although the number of participants is limited. At the end of each year (usually in December) a registration period is established during which recreational fishermen may register to participate in the program for the following year. A maximum number of participants will be enlisted with approximately equal numbers coming from four geographic areas: 1) Eastern Shore; 2) Tidewater; 3) Peninsula; and 4) Middle Peninsula/Northern Neck. Anglers will be selected for participation on a "first-come, first served" basis in each region. Once the maximum number of participants from a specific region is reached, additional participants from that region will be accepted only if other regions do not fill their allocation of participants.

Program participants are required to attend a workshop on tagging, fish handling techniques, and the specific goals and operation of the VGFTP. This is a fundamental element of the program, which emphasizes the quality of its tagging efforts. Four tagging workshops are held annually during February – one in each of the program's regions. Workshops, which generally run 2-3 hours, are held on weekday evenings. Tagging kits, measuring boards and complete instructions are provided at no charge to volunteers attending the workshops.

Recreational anglers interested in participation should contact:

**Virginia Saltwater Fishing Tournament**  
**2600 Washington Ave., 3rd Floor**  
**Newport news, VA 23607**  
**(757) 491-5160**  
**(757) 247-8014 (fax)**  
**vswft@mrc.virginia.gov (e-mail)**

## PROGRAM SPONSORSHIP

The VGFTP is a cooperative effort of the Virginia Marine Resources Commission, through the Virginia Saltwater Fishing Tournament, and Virginia Institute of Marine Science, through the Sea Grant Marine Advisory Program. Funding is provided by Virginia's saltwater recreational fishing license.





## OTHER TAGGING PROGRAMS

There are many tagging programs operating along the East Coast. Some of these programs utilize anglers in the tagging of fish, while others involve fisheries managers and members of the scientific community. In Virginia, both the Marine Resources Commission and the Virginia Institute of Marine Science sponsor tagging programs for specific species of fish.

The ultimate goal of these tagging programs is to learn more about the targeted species of fish, so better conservation and fisheries management programs can be developed. When on the water, be alert to the possibility that any fish you catch may possess a tag, and remember that tags come in many different sizes, shapes, styles and colors. When you catch a tagged fish contact the organization listed on the tag to report your catch. You will be assisting fisheries managers in learning more about our valuable fishery resources. While some tagging programs require anglers to mail in the tag to receive the award, the Virginia Game Fish Tagging Program does not have this requirement. You need only call the telephone number printed on the tag (757-491-5160) to report the fish and its tag number. This provides anglers the option to record the tag number, release the fish with the tag in place and then phone in the recapture report for a reward. The added bonus with this scenario is the fish can then be recaptured multiple times and provide more detailed information regarding its movements.

## HANDLING AND RELEASING FISH PROPERLY

Participation in recreational fishing is motivated by many different desires and goals, including catching fish, catching trophy-size

fish, enjoying outdoor activities on the water, participating in special activities (tournaments, tagging programs, children's fishing and educational clinics, and many others), and being with friends and family in pleasing surroundings. Increasingly, catch and release fishing is becoming a part of recreational fishing as regulations require the release of certain sizes and species of fish, and recreational fishermen derive pleasure from seeing healthy fish return to the water. The importance of the social, environmental and educational motivations for releasing fish is growing among recreational fishermen, as they realize their role as stewards of fishery resources and enjoy their contribution. Learning the proper ways to release fish is an important part of this process.

**1. Plan Ahead.** Be prepared to release fish before you leave the dock or venture out on the beach or a pier. Use tackle that is strong enough to land fish quickly, minimizing the stress they endure and to prevent exhaustion. Set hooks quickly to minimize the opportunity for fish to swallow hooks. When practical, use barbless hooks and bend down the barbs on hooks to make removing the hooks less damaging. Learn about circle hooks for fishing with bait, and use them; they dramatically reduce "gut-hooked" fish and may increase the effectiveness of your fishing. Use artificial baits and avoid the use of treble hooks.

**2. Use the Right Equipment.** Have needle nose pliers, forceps and/or other tools for the removal of hooks from deeply hooked fish readily available. Remove hooks when they are embedded in the mouth, lips, or other hard parts of a fish's mouth or throat. When a fish is hooked deeply in a soft body part (stomach, for example), cut the line or leader as close to the hook or fish's mouth as possible and leave it. Never pull, jerk or rip a hook out of a fish; this will cause significant injuries to the fish.

**3. Minimize Handling.** Handle fish gently, but firmly to prevent them from excessive "flopping" around, as this can cause injuries. Never handle a fish by its eyes or gills! Use a wet cotton towel or wet cotton gloves when handling small fish; this will minimize the loss of protective "slime" and protect their skin. Large fish are best released by leaving them in the water and removing the hook. If you bring a large fish on board, use a large landing net; never use a gaff.

**4. The Right Release.** Return fish to the water carefully. Hold them upright, close to the water, and gently guide them into the water head first. A fish that is exhausted, unresponsive or stressed should be revived by moving it forward through the water until its gills are working vigorously and it is ready to swim away under its own power.





## What To Do When You Catch a Tagged Fish

1. The most important information on a tag is the tag number. This is the key to identifying the fish, making it critical the exact tag number is recorded. If you plan to release the fish and want to leave the tag in the fish, write down the tag number immediately. Do not attempt to memorize the tag number. The value of a tagged fish is greatly enhanced if it can be released and recaptured again (two or more times), providing a "road map" of its movements over a period of time.

2. If you do not have the means to write down the tag number (pen or pencil and paper) or if you cannot see the tag number clearly and you plan to release the fish, remove the tag and keep it. Do not depend upon your memory to remember the tag number; an error in remembering even one digit of the tag number will render the recapture of the tagged fish worthless. If it is legal to keep the fish and you decide to keep it, remove the tag for reporting purposes.

3. Measure and record the total and fork length of the fish. If you do not have a measuring device, estimate the length of the fish. Also, measure or estimate the weight of the fish. When you report the length and weight, it is important to state if the length and/or weight were estimated or measured.

4. Record the species of fish date of the catch, and exact location of the catch. Record any other information about the fish that might be important, for example, any wounds, unusual markings, or observations about the condition of the tag and place on the body of the fish where the tag was located.

5. Contact the office of the tagging program issuing the tag and supply them with this information. The telephone number of the tagging program office will be listed on the tag. If the tag was issued by the Virginia Game Fish Tagging Program, if you have a problem reading the tag and determining the proper agency to contact regarding a recapture, or if you need any help reporting the capture of a tagged fish, contact:

**Virginia Game Fish Tagging Program**  
**c/o Virginia Saltwater Fishing Tournament**  
**Commonwealth of Virginia**  
**Marine Resources Commission**  
**2600 Washington Ave., 3rd Floor**  
**Newport news, VA 23607**  
**(757) 491-5160**

6. When you report the recapture of a tagged fish, you will receive information about the fish (when and where it was tagged; size when it was tagged). If the tag was issued by the Virginia Game Fish Tagging Program, you will receive an award featuring the program's logo for helping with this conservation program.

