

About the Tarpon Genetics Recapture Program

Adapted from "Tracking Tarpon: DNA, science and you" FWC-FWRI Dec. 3, 2009



Photo credit: FWC- FWRI

Recreational tarpon fishing lures people from all over the world. Few tarpon are harvested, but fishing pressure is high. Tarpon are targeted hard when the fish are present, so the fishery resource needs to stay healthy to support the demand of anglers and to continue to generate the revenue for the state. Fortunately, anglers have a simple yet effective way to help protect their valuable tarpon fishery.

The Florida Fish and Wildlife Conservation Commission's Fish and Wildlife Research Institute (FWRI) encourage anglers throughout the state to genetically sample their tarpon, regardless of size, prior to release for

identification purposes. A small sample of skin cells collected from the outer jaw of a captured tarpon provides enough DNA to determine whether the fish was previously caught.

The Tarpon Genetic Recapture Study's motto is "*Any tarpon, anywhere, any size.*" It does not matter if the tarpon is five inches, 15 inches or 55 inches. Small tarpon are targeted year-round in Florida. Information on recaptures of these small, immature fish can provide researchers with information on habitat preferences, residency, and site fidelity (*being caught in the same area year after year*). It is important that the young fish survive to become mature adults and learning about them and their habitats is critical for their conservation.

Recapture information from older and larger fish can provide researchers some insight on the connectivity of the coastal and inshore waterways for tarpon movements, site fidelity and evidence of long-term survival of sexually mature tarpon.

Tarpon can be identified using DNA fingerprinting, or "fin printing," techniques. Unlike conventional tagging methods, DNA will not break and does not rely on technology to work. It will not fall out of the fish. It will not rub off the fish. It will not get covered in algae making it hard to see. It cannot be permanently removed from the fish by another angler, and it never needs to be repaired. All of the lab work is done in house at the FWC-FWRI lab in St. Petersburg so there is no extra expense to ship samples elsewhere for processing, making it a very cost effective program.

How to Get Involved

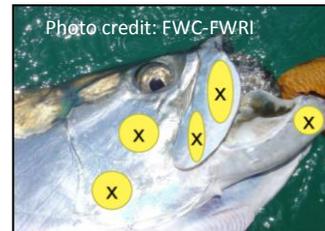


Anglers can request a free DNA sampling kit be mailed to them by calling toll free 1-800-367-4461, or by emailing tarpongenetics@myfwc.com. They can also pick them up from participating tackle shops and retailers.

Each kit has enough material to sample 3 tarpon.

Taking a DNA sample is a simple 3 step approach:

1. Scrape the jaw with the provided sponge to remove some skin cells. The illustration to the right indicates appropriate locations to take samples.



2. Be sure the sponge has silver tissue on it. You may need to scrape hard to ensure skin cells come off. Researchers need the silvery cells, not slime.



3. Place the sponge with silver skin cells into the labeled vial and record your data on the data sheet provided in the kit.

"Capture location" should be described well enough for researchers to pinpoint it within a mile or less on a marine map. FWC does not report detailed capture locations and landing times to the public.

Specimen ID Number: Mat _____ - _____	Date: _____	Time: _____
Approximate Fish Length: _____ ft _____ inches	Did the fish survive release? Y N	
Capture Location (please be as specific as possible): _____		
Participant's Name (optional): _____		
<i>If you would like to participate in the tarpon recapture annual prize drawing, and have not already done so, please provide your contact information on the back of this slip.</i>		



Other Helpful Sampling Tips

- Samples do not need to be refrigerated.
- Kits do not expire.
- The liquid inside the vials are not hazardous to touch or mail.
- Anglers can sample day or night.
- Anglers who return samples (*with completed information*) get their names entered in an annual prize drawing.



Drop-Off Locations

Anglers in Collier County can pick up DNA kits or drop off samples at the locations listed below. Tarpon team members contact the shops monthly to pick up samples and resupply the DNA sampling kits.

- Captain Pete's Bait and Tackle
- Angler's Answer
Mangrove Outfitters
- Rookery Bay National Estuarine
Research Reserve
- Marco River Marina
- Caxambas Pass Ship Store
- Calusa Island Marina
- Port of the Islands Marina Ship Store
- Parkway Hotel and Marina

For a listing of collection sites statewide visit:

http://research.myfwc.com/features/view_article.asp?id=32093

What Happens if Your Tarpon is a Recapture?



If your tarpon is recaptured, you will receive a phone call, e-mail, or a letter with a link to an Internet page providing a map of your tarpon's sampling locations and other details. Recaptures are also tabulated and discussed in the annual newsletter that FWC distributes to participating anglers.

To learn more about the Tarpon Genetics Recapture Study visit:

http://research.myfwc.com/features/view_article.asp?id=26602

or contact:

Bryan Fluech
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Solutions for your Life

The Extension Service is an off-campus branch of the University of Florida, Institute of Food and Agricultural Sciences and department with the Public Services Division of Collier County Government. Extension programs are open to all persons without regard to race, color, creed, sex, age, handicap, or national origin. In compliance with ADA requirements, participants with special needs can be reasonably accommodated by contacting the Extension Service at least 10 working days prior to the meeting. Contact Extension at (239) 353-4244 or by fax at (239) 353-7127.