Davis

DNA doesn't lie - tales from tarpon recaptures

As of August 1, 2013, 194 tarpon had been recaptured since the Tarpon Genetic Recapture Study's inception. That means 194 tarpon have been caught and sampled for DNA more than once. The total number of angler-submitted samples at that time was 18,054, of which 12,906 had been analyzed. The remaining 5,148 DNA samples were not yet completed or were analyzed but could not be added to the database because the quality of the sample was not sufficient. These numbers (samples and recaptures) will continue to increase, as many more 2013 samples have been returned since then. Here are some of the tarpon tales revealed by the DNA samples submitted by anglers in 2012. And remember, DNA doesn't lie!

1) *It's been a long time coming*

Based on reported sampling dates, the longest time between DNA-verified captures is 1,029 days (almost three years), but the longest approximated time between sampling events for a single tarpon is more than 2,190 days (six years). The term "approximated" is used because no data slip or catch date was returned with this sample. The following tarpon were caught and sampled in 2012 and each was identified as fish recaptured more than 650 days after initial sampling:

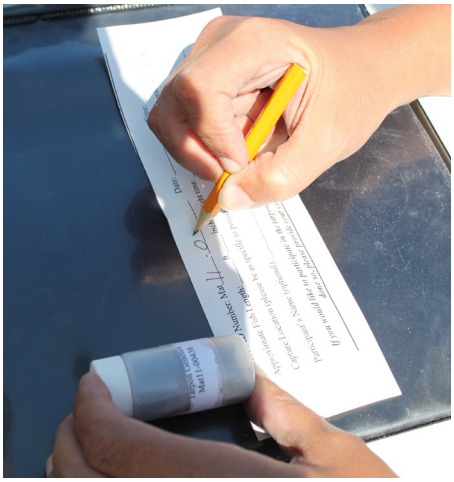
a) Billy Miller caught a tarpon in the southern Tampa Bay area on July 8, 2010 that was recaptured by Troy Sapp **687** days later on May 25, 2012 in Boca Grande Pass.

b) On June 13, 2010, a tarpon caught by Owen Schroeder at Bahia Honda was recaptured 741 days later and approximately 35 miles away by Paul D'Antoni off Key West Harbor on June 23, 2012.

c) Another tarpon first sampled on June 13, 2010 by Tommy Ziesmann off Pinellas County beaches was sampled **850** days later inside Tampa Bay by Robert McCue on Oct. 10, 2012.

d) The greatest confirmed number of days between two capture events is now **1,029** days. Initially, this tarpon was caught by Carl Ball on Aug. 17, 2009 in Miami-Dade County, and it was recaptured on June 11, 2012 by Nestor Alvisa, Jr. approximately 3 miles from its original release site.

e) ***Six years, really?*** Well, all we can say is that data slips are important! In 2006, someone caught and sampled a tarpon along the central-southwest Gulf Coast or near the Florida Keys. That fish was recaptured by Clark Wright six years later on Sept. 30, 2012 inside Charlotte Harbor. Unfortunately, the initial sample did not have a data slip submitted with it. Without that data slip, there is no way of knowing exactly where the first person was fishing and when they caught that fish in 2006. Looks like that will remain between him and the tarpon.



FWC-FWRI

2) *Speedy recoveries*

A 12-inch tarpon caught along the west coast of Charlotte County was caught and sampled again just five days later. Two fish, each approximately 12 to 14 inches long, were caught and sampled three days after initially being caught in Brevard County. Another small tarpon on the east coast was caught and sampled a second time the following day – just 27 hours later. It was released alive back into the canal in which the angler was fishing from shore. A large tarpon that weighed in at 172 pounds during a Professional Tarpon Tournament Series (PTTS) event on June 3, 2012 was caught and sampled again by a different angler the following day. However, this time the tarpon fell victim to a shark upon release and did not survive. Because the angler included this detail on his data sheet, we were able to remove this fish from further recapture rate calculations. Thank you all for being honest when recording your data, as doing so is critical for the scientific integrity of the study.

3) *Fast growing fish*

While fishing in the parks near Merritt Island, Paul McInnis, Jon Mallory and Mike Badarack collected samples that highlight just how fast a juvenile tarpon can grow. One tarpon grew from 9 to 19 inches in **139** days (May 20 to Oct. 6, 2012). A second tarpon grew from 5 to 15 inches in **267** days (Oct. 22, 2011 to July 15, 2012) and was recaptured less than 3 miles from its original catch-and-release site. Both fish grew 10 inches between captures, but the second tarpon took longer because "it was a little under the weather." Growth rates of fishes are typically influenced by temperature. The first fish was able to grow faster during warmer months, while the second fish's growth rate was presumably slowed by cooler temperatures during winter months.

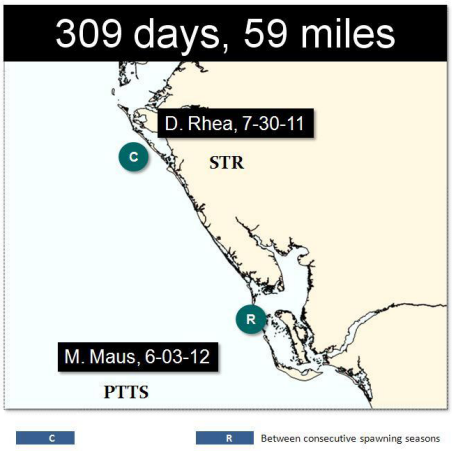
4) *Thank the tournaments*

a) Sarasota Tarpon Tournament angler Tony DeSilvestro caught and sampled a tarpon on May 21, 2012. It was recaptured by charter captain Justin Cauffman just **13** days later on June 3 during a Professional Tarpon

Tournament Series (PTTS) event, approximately 60 miles down the coast.

b) Angler Dave Markett sampled a fish in Boca Grande Pass during May or June 2010 that was later recaptured by a Sarasota Tarpon Tournament participant on May 25, 2012, at least **695** days later. We do not know an exact date because it was not recorded on the original data slip.

c) A Suncoast Tarpon Roundup (STR) fish caught by the late David Rhea on July 30, 2011 was recaptured by Mark Maus **309** days later on June 3, 2012 during a PTTS event.

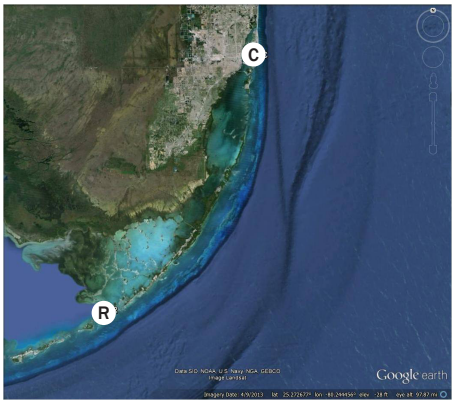


d) Jay Withers caught and released a 4-foot tarpon during a Women's Professional Tarpon Tournament Series (WPTTS) event in Boca Grande Pass on May 21, 2011. Tom Stephens, Jr. caught and sampled the fish a second time **367** days later off Manatee County, approximately 60 miles north.

e) Phil Hartman weighed in a 115-pound tarpon during a WPTTS event on May 21, 2011 that was recaptured **390** days later during the Sarasota Tarpon Tournament by Jeffri Durrance and Earl Smith on June 14, 2012. The two recorded the fish's girth (thickness) at 33 inches.

5) *East coast travelers*

a) A fish caught and sampled by Nestor Alvisa, Jr. on Feb. 8, 2011 in Miami was recaptured by Skip Nielsen on May 30, 2012 near the Channel 2 Bridge in the Keys. The recapture occurred **477** days later and approximately 75 miles away.



b) Carl Ball caught and sampled a tarpon off Key Biscayne in Miami with Client R. Harris on board May 16, 2012. Ted Wilson caught and sampled that same tarpon in Monroe County on July 10, 2012, **55** days later and approximately 75 miles away.

6) *Skyway faithful*

TJ Stewart caught and sampled a tarpon on Aug. 10, 2011 at the Sunshine Skyway Bridge in Tampa Bay. He then caught the same fish again **373** days later on Aug. 17, 2012. Where? It was still in the vicinity of the bridge. No telling where the tarpon went during the days between, but it apparently likes residing near the bridge.

FWC-FWRI

7) *Loxahatchee love*

A tarpon caught in the Loxahatchee River (Palm Beach County side) by Craig Korczynski on May 20, 2011 was recaptured in the river **407** days later by Raymond Baird on June 30, 2012 in Martin County.

8) *Robbie's rovers*

You may recall a recapture we told you about last year that featured a tarpon traveling from Sarasota to Robbie's Marina in Islamorada in a few short weeks. Well, another fish caught and sampled by an angler fishing the Channel 2 Bridge in Islamorada was sampled 409 days later, not a few short weeks later, by FWC staff at the marina on August 14, 2012.

The public gives back more than DNA samples

Brundick

Baker

A moving tribute from Florida's Nature Coast:

Capt. Frederick W. "Will" Brundick, V passed away at his Crystal River home in February at the age of 32. He was an avid outdoorsman and professional fishing guide who chased the giant tarpon with his fly rod "Grits" and a DNA sampling kit. His family requested that donations be made in his memory to the Tarpon Genetic Recapture Study in lieu of flowers. The study team is grateful for Brundick's contributions to science.

Generous Southwest Florida anglers:

Thank you, Cape Coral Tarpon Hunters Club, for the generous gift contributed to the study this year. Southwest Florida has produced the most tarpon DNA samples to date, and we owe anglers such as those in your club our gratitude for this accomplishment. One sample was provided by captain and club member Roy Bennett, who is pictured tagging a tarpon for U.S. Army Sgt. Gaston Garcia on April 10, 2013. This charter was a donation for Operation Open Arms, a charity and outreach program for active duty military members.

FWC-FWRI

TGRS trophy:

It was unprecedented, unheard of, unexpected and uplifting. The Tarpon Genetic Recapture Study team comprised of staff and volunteers from the FWC's Fish and Wildlife Research Institute (FWRI) and Mote Marine Laboratory received a hand-written thank-you note and a trophy in the mail. The package was sent by a recreational angler in the Bradenton area. When the box arrived at FWRI headquarters in St. Petersburg, we suspected DNA samples were inside. Boy, were we wrong. We cannot thank you enough, Martin Gutfreund, for your support. It was a wonderful surprise.

Chiefland takes charge:

The enthusiastic owners of Mangrove Creek Outfitters along Florida's Nature Coast decided to educate anglers in their area about what this study is all about to boost participation in 2014. After a personal shop visit by study team members back in August, co-owner Robert decided he would organize a tarpon outreach event in Chiefland. The talk will be held at The Gathering Table restaurant and the date is yet to be announced. There will be lots of good information and door prizes, and there might even be a fishing story or two. If you live along or near the Nature Coast, you won't want to miss it. Thank you so much to all of the shops and businesses around the state that support the study.

The Islamorada Fishing and Conservation Trust (IFACT) provides support:

The study has been fortunate to receive funding from IFACT, through Mote Marine Laboratory, that will help scientists obtain additional capture data. The group's support continues to be extremely valuable in establishing a presence in the Keys and other areas of Florida.

East coast mullet run brings big fish

This year's Florida's International Space Coast Surf Fishing Tournament was held Oct. 4 to 19 along the shores of Brevard County, where shore and paddle anglers, alike, fished to benefit the Anglers for Conservation's "Hook Kids on Fishing" programs. These programs introduce thousands of children and parents to recreational fishing. This year, a Tarpon DNA Sample Contest was held within the tournament. There were high hopes for an angler to return a DNA sample from a tarpon caught along the beach, but no tarpon were sampled. Looks like the 8-foot Stick It Anchor Pin and prize package will have to wait to go to a new home.

Stover

Going above and beyond

Paul MacInnis definitely went above and beyond in 2013 to obtain DNA samples from tarpon. While kayak fishing for subadults along the east coast one spring day, MacInnis was pulled from his kayak by an alligator. The alligator clamped onto his foot, likely mistaking it for the tarpon he had just released. Paul managed to collect a tarpon DNA sample, even though the alligator took a DNA sample from Paul. Fortunately, after months of recovery, Paul's foot is intact. And to think most anglers are worried about sharks… Guess who won't be dangling his feet over the side of kayaks into murky waters anymore and has decided to use a rubber-mesh, knotless landing net for fishing along the Space Coast? But seriously, thank you, Paul. Your commitment to the study is commendable.

Announcement:

2014 will be the final year of sampling for the study

Through the eyes of a tarpon

Davis

Remember the fairy tale with a big bad wolf saying something like, “The bigger my eyes, the better to see you, my dear?” Well, the same applies to tarpon. A tarpon’s eyes increase in diameter as it grows. This increased eye diameter gives tarpon better sharpness and clarity of vision. Within the retina of a tarpon eye, as in humans, there are two types of photoreceptor cells called rods and cones. The rods are most sensitive to changes in light and dark, shape and movement. Cones work in bright light and send signals to the brain, which translates the signals into perceiving color.

Tarpon larvae, subadults and adults all have a rod-dominated visual system. In adult tarpon, the eyes are large and the rod cells more densely packed, creating a visual system excellent for nighttime viewing, especially when looking up toward a starry or moon-lit surface. Tarpon eyes are suited to low light conditions and play an important role when the fish are navigating at great depths or at night. It should also come as no surprise that subadult and adult tarpon can successfully feed at night and avoid predators lurking in the darkness.

As tarpon grow from subadults into mature adults, they may not have as many cones as they have rods, but they develop

an increasingly diverse array of cone structures within the retina. So what does this mean, as seen through the eyes of a tarpon? It means tarpon have great daytime vision and can see color. Relative to other species in the animal kingdom, tarpon have some impressive visual capabilities. But just how amazing are a tarpon's eyes?

Let's start by looking at a tarpon angler (human), who has three types of cone structures in their eyes. Humans are limited to seeing visual light. Remember Mr. Roy G. Biv, who some of you may have learned about in first grade? Well, humans see light waves in the visible spectrum, or colors of the rainbow: red, orange, yellow, green, blue, indigo and violet (Roy G Biv). We see the light that is NOT absorbed by an object. For example, a red flower appears red because the flower absorbs all of the colors of the visible spectrum except the red wavelengths. The electromagnetic radiation wave frequencies in the visible spectrum range from the longest red wave lengths (700 nanometers) to the shorter blue-violet wave lengths (400 nanometers). That's a pretty colorful world, but…

Scientists have discovered that certain species of birds and insects contain four types of cone structures in their eyes. This allows them to also see ultraviolet light, the next shortest wavelengths. In the

© Dr. Klaus Schmitt, Weinheim, Germany (www.uvir.eu)

picture above, humans see the top image of a yellow flower, but a bird or insect, such as a butterfly or bee, might see the lower image.

Now get ready…

Atlantic tarpon have *five* types of cones structures in their eyes. That is correct. There is no telling what the underwater or above surface world looks like to a tarpon. Their cone cells can detect wavelengths into the ultraviolet light spectrum, and some measurements in adult tarpon revealed they could see wavelengths as low as 364 nanometers. This cutting-edge research is being done by students at the Florida Institute of Technology and is showing the world that tarpon have some of the most diverse visual cone systems of all known animals. Understanding how a tarpon's vision relates to its survival – feeding, avoiding predators, whether or not it strikes a lure, etc. – during different life stages could reveal information that managers could use to sustain the tarpon fishery. So the next time you are out fishing the back country, flats, beaches or passes on a clear-water day and think the color of your hook, line, lure or fly doesn't matter, think again!

The FGA/FWC spirit of tarpon DNA sampling challenge

In 2012, the Florida Guides Association (FGA) and the FWC joined ranks to promote The FGA/FWC Spirit of Tarpon DNA Sampling Challenge. The award recognizes the spirit of tarpon in the fight and the spirit of volunteers willing to help improve science, encouraging anglers to participate in the study. Last year's winners were as follows: Grand Champion, Jon Mallory; West Coast Champion, Capt. Robert McCue; East Coast Champion, Capt. Carl Ball; and Florida Keys Champion, Capt. Paul D'Antoni.

Presley

All licensed recreational anglers are eligible to participate in the FGA/FWC challenge, which is issued each calendar year. There is only one simple rule: most samples wins. Previous winners are not eligible for this award.

The 2013 prize packages will be determined by FGA members, per the rules and guidelines of this challenge. Rewards last year included several nice fishing accessories from the following FGA sponsors: Castalia Outdoors, Daiichi Hooks, DOA Lures, StickIt Anchor Pins, Flying Fisherman EyeGear, High Roller Lures and TackleWebs Tackle Storage Bags. The winner also received a certificate signed by the president of the FGA and Chairman of the FWC. Winners of the 2013 challenge will be announced soon after the New Year. Rumor has it the reward includes a trip for two, with overnight accommodations in Everglades City and a full day of fishing.

Hook 'em and scrape 'em!

A tarpon DNA sampling incentive was again offered in 2013, courtesy of the Florida Guides Association, TJ Stallings and Daiichi® hooks. Starting April 1, the first 300 anglers who returned a DNA sample received a packet of tournament-winning circle hooks. Winners have already received their packets of hooks in the mail.

Congratulations!

It only takes one to win! Congratulations to the anglers who won the end-of-year random drawings. Remember, even if you only catch one tarpon all year, that single DNA sample is extremely important to helping advance our understanding of tarpon distribution, movement, habitat preferences and survival. Without samples, there are no recaptures. Without recaptures, we gain no new information. Every sample is as important as the next.

Tom Stephens	Donnie King
Steve McGucken	Randy Avenett
Dennis Cleveland	David Koschara
Eric Hernandez	Steve Friedman
Paul Wedeking	Judy Ozuna

FWC-FWRI

Bimonthly drawings

Each randomly selected recipient of the bimonthly drawings was awarded a $250 gift certificate donated by SeaSucker through Mote Marine Laboratory.

January-February
Bouncer Smith, Miami Beach, FL

March-April
Steve Steen, Ruskin, FL

May-June
RE Durso, Sarasota, FL

July-August
Kris Howell, Land O Lakes, FL

September-October
David Johnston, Jacksonville, FL

November-December
Tracy Goldbach, Sebastian, FL

Anglers who contributed five or more samples in 2013

In 2013, 396 anglers submitted DNA samples.

The top 10 samplers in 2013:

1. Jon Mallory
2. John Manuel
3. Paul D'Antoni
4. Gary Maconi
5. Robert McCue
6. Ed Walker
7. Pete Rapps
8. Skip Nielsen
9. John Jackson
10. Jeff Malone

Nielsen

The following anglers, listed in alphabetical order, each provided at least five samples by Oct. 31.

100 +
Paul D'Antoni
Gary Maconi
Jon Mallory
John Manuel

50-99
John Jackson
Jeff Malone
Robert McCue
Skip Nielsen
Pete Rapps
Owen Schroeder
Ed Walker

30-49
Carl Ball
Andrew Bostich
Nelson Italiano III
Ken Knudsen
Oscar Mohn
Jeff Owens
Brian Robinson
Lance Schouest
Bouncer Smith
Tom Stephens Jr
T.J. Stewart

20-29
Mike Badarack
Raymond Baird
Jamie Connell
Rob Gorta
Russell Kleppinger
Dave Kostyo
Trent Long
Paul MacInnis
Bob May
Debbie Miller
Trisha Tobin

10-19
Kenneth Balseca
Marty Benson
Vinnie Biondoletti
Bruce Bowman
Jimmy Burnsed
Bill Corrigan
John Crawford
Jeffri Durrance
Saltiva Fishing Team
Shannon Hoeckel
Rob Hollander
Chrissie Jackson
John Jackson III
Ben Kurth
Frederick Lieb
Larry Lutz
Paul Messick
Vince Parkinson
Tom Pierce
Dale Sparling
David Sugar
Billy Whitney
Ted Wilson
Jay Withers

5-9
Jeremiah Acevedo
Andrew Allen
Ryan Allen
Kenny Balseca II
Chris Barron
TR Baxter
Roy Bennett
Joel Bickford
Patrick Blake
Meghan Brunelli
Jerry Chesnes
Mike Clark

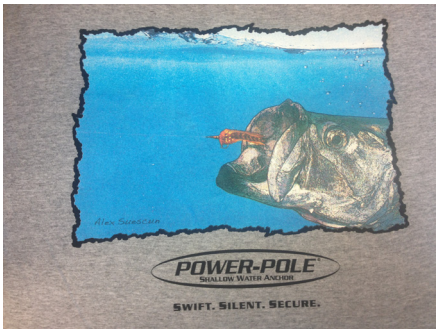
(continued on next page)

5-9 (continued)

Butch Constable
Dan Curran
Morgan Domingue
James M. Dunbar
Alex Fajet
Mike Gilbert
Keith Goodman
Tom Goshorn
Pete Gulbrandsen
Jacob Haddad
Dylan Hollon
Ed Hurst
David Johnston
Bill Jones
Jared Kaufman
Buddy Kerr
Kris Kerr
Matt Kersting
Lynn Lessley
Dave Markett
Mark Maus
Cindy McClure
Brandon McGraw
Brandon Mench
Heather Messick
Bill Miller
Ashley Miller
Clark Nash
Philip O'Bannon
Hayden Olds
Judy Ozuna
Steve Petry
Dana Ramsden
Lee Roberts
Dave Robinson
James Roehm
Charlene Ruhge
Perry Scuderi
Aaron Snell
Robert Taylor
Mason Tush
David Varble
Camp Walker
Bryan Wright

The 5 or more reward

Thank you to JL Marine Systems, Inc. / Power Pole and artist Alex Suescun of Miami for his *Tarpon Take* painting/print. Their generosity provided the funds and artwork needed to create the fourth collectible Tarpon Genetic Recapture Study t-shirt. Every angler who returned five or more tarpon DNA samples in 2012 received a shirt. We had 148 anglers earn this award. Great job tarpon anglers!!!



FWC-FWRI

This year, we created a new hat to give to anglers who returned two to four DNA samples in 2012. Hats were also included in several incentive baskets for community events and tournaments.

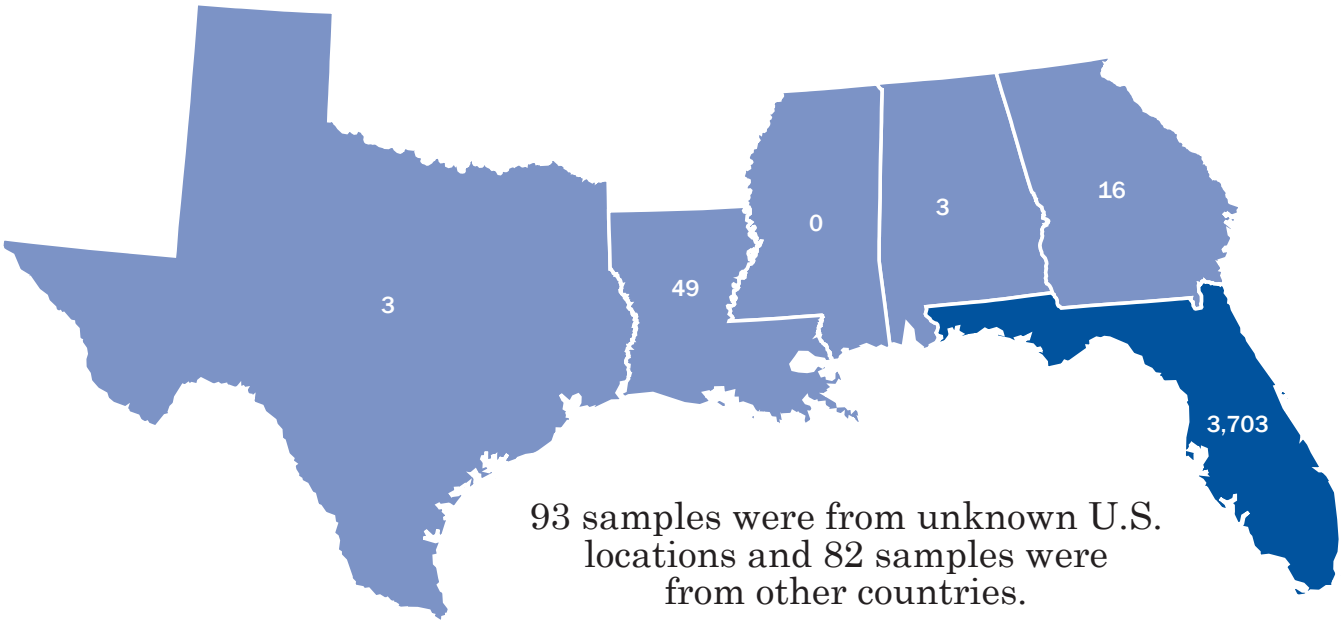
Shipshape shops

FWC-FWRI

In 2013, more than 220 shops helped advertise the study, distribute sampling kits and collect angler-submitted DNA samples. Another 190 businesses, public and private boat ramps, parks and marinas were contacted by project volunteers and staff to display a laminated project poster. Subsequently, 115 posters were mailed based on the feedback. Thank you all for your generosity and assistance with our study. Visit the following Web page to locate a shop near you and get involved: http://myfwc.com/research/saltwater/tarpon/genetics/sample-distribution-collection/.

2013 study results

We received 3,867 samples from the United States...



93 samples were from unknown U.S. locations and 82 samples were from other countries.

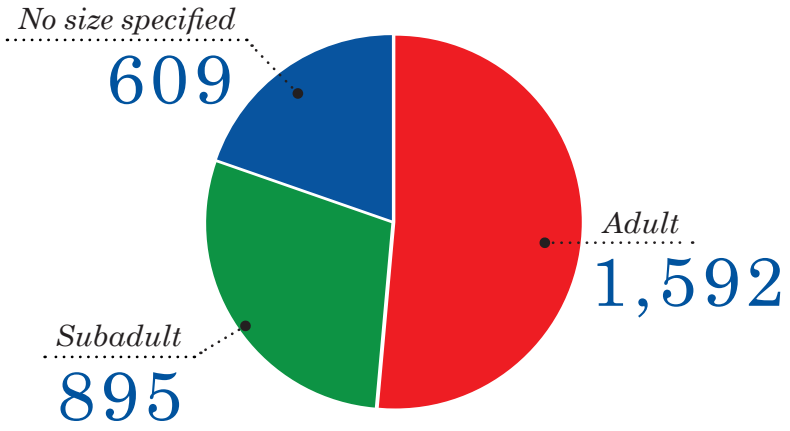
5 inches
Smallest tarpon sampled

96 inches
Longest tarpon sampled (total length)

236.5 pounds
Heaviest tarpon sampled (78" fork length, 49.25" girth)

2013
Size of tarpon sampled:

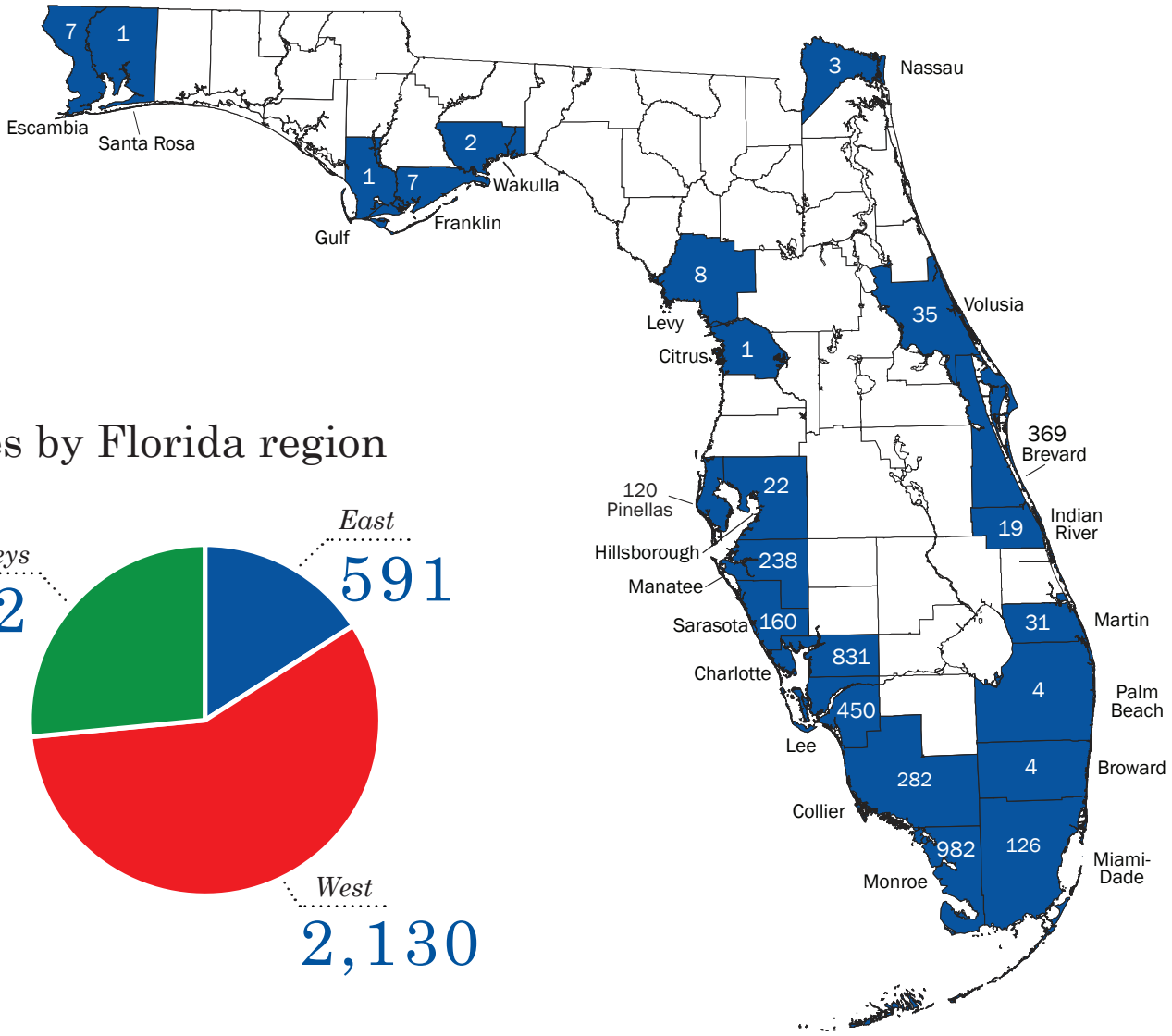
Year with the most samples: 2012
4,927



Longest time between capture events (approximated)
6 years – 1,030 days

63
Number of tarpon angled for 2 or more hours

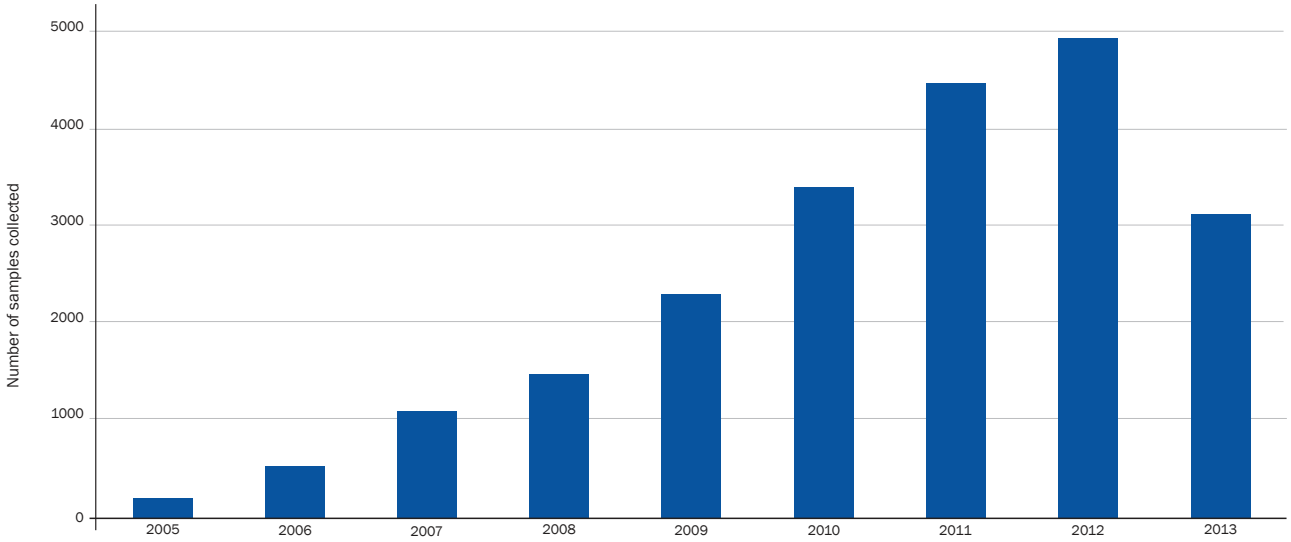
Samples returned by county in Florida



Samples by Florida region

Number of tarpon sampled annually

Note: The year a sample was taken may be different than the year the angler returned the sample.



Participating 2013 tournaments

These tournaments allowed presentations about the study at their events, distributed sampling kits to anglers, offered incentives or otherwise encouraged anglers to collect DNA samples from the fish they entered in competition. We are so grateful for the support of these events through the years!

19th Outback Golden Fly Invitational Tarpon Tournament
2013 HaHa's Working Man's Tarpon Tournament
23rd Annual Ladies Day Tarpon Tournament
27th Annual Faro Blanco Invitational Tarpon Tournament
37th Annual Don Hawley Invitational Tarpon Tournament
50th Annual Gold Cup Tarpon Tournament
83rd Sarasota Tarpon Tournament
Battle For Bella Fishing Tournament
Chalice Invitational Tarpon Tournament
Ding Darling and Doc Ford's Tarpon Tournament
Ed Alber Tarpon Rodeo
Grand Isle Tarpon Rodeo
Key West Fishing Tournament Kickoff
Orange & Blue Tarpon Tournament
Oriental Rotary Club Annual Tarpon Tournament
Poor Boys Tarpon Fly Tournament
Professional Tarpon Tournament Series
Redbone Celebrity Tournament Series
Raymond James Boca Grande Classic
Sarasota Tarpon Tournament "Fish Off Weekend"
Sebastian River Tarpon Tournament 2013 Circuit Series
Space Coast International Surf Fishing Tournament
Suncoast Tarpon Roundup
Sunset Tarpon Tournament
Tarponian Invitational
White Buffalo Saloon 1st Annual Tarpon Tournament
World's Richest Tarpon Tournament 2013

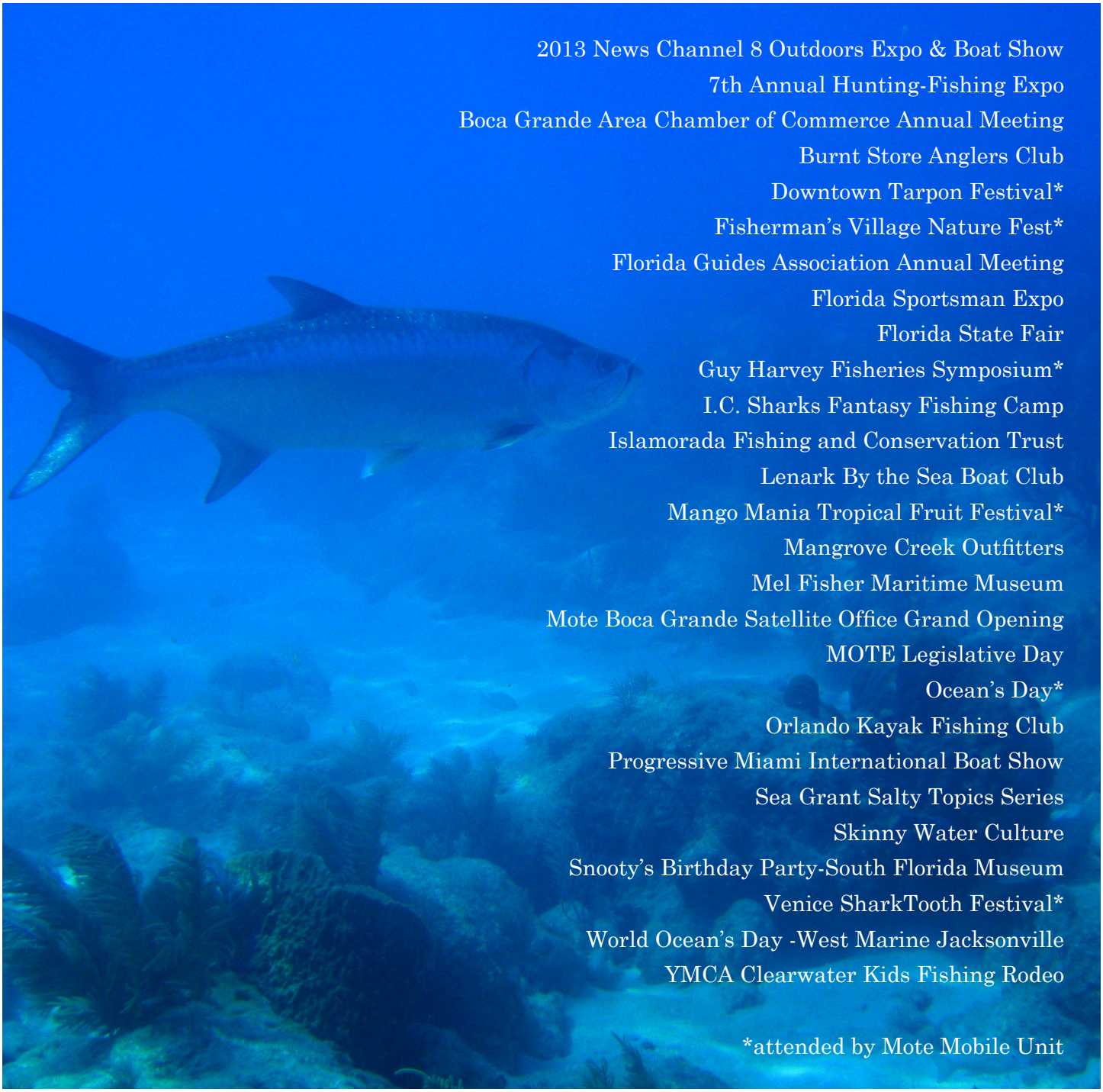
FWC-FWRI

Announcement:

In 2014 the study will have no tarpon tournament participation

Community outreach

The following organizations and community event sponsors provided education and outreach opportunities to promote awareness of the study.



2013 News Channel 8 Outdoors Expo & Boat Show
7th Annual Hunting-Fishing Expo
Boca Grande Area Chamber of Commerce Annual Meeting
Burnt Store Anglers Club
Downtown Tarpon Festival*
Fisherman's Village Nature Fest*
Florida Guides Association Annual Meeting
Florida Sportsman Expo
Florida State Fair
Guy Harvey Fisheries Symposium*
I.C. Sharks Fantasy Fishing Camp
Islamorada Fishing and Conservation Trust
Lenark By the Sea Boat Club
Mango Mania Tropical Fruit Festival*
Mangrove Creek Outfitters
Mel Fisher Maritime Museum
Mote Boca Grande Satellite Office Grand Opening
MOTE Legislative Day
Ocean's Day*
Orlando Kayak Fishing Club
Progressive Miami International Boat Show
Sea Grant Salty Topics Series
Skinny Water Culture
Snooty's Birthday Party-South Florida Museum
Venice SharkTooth Festival*
World Ocean's Day -West Marine Jacksonville
YMCA Clearwater Kids Fishing Rodeo

*attended by Mote Mobile Unit

FWC-FWRI

Behind the scenes - What you didn't see:

This study relies on volunteers. But the citizen scientists who take the DNA samples aren't the only helpful volunteers, as a small army of 15 to 25 people also work behind the scenes to make it all possible. Each week at Mote Marine Laboratory, volunteers (seasonal and resident) work with FWRI staff to promote, develop and expand the Tarpon Genetic Recapture Study. This includes informing anglers of the importance of this project and recruiting them to collect DNA samples and record capture information from tarpon. Volunteers' responsibilities include the following:

- Assembling DNA sampling kits
- Providing study business cards, post cards and brochures
- Providing DNA sampling kits to participating shops and FWRI for distribution
- Printing and laminating posters
- Identifying locations to display posters to promote the study
- Calling participating shops
- Maintaining a spreadsheet of participating poster and shop locations
- Delivering presentations at community events
- Collecting DNA samples and fish-capture data directly from anglers, when possible
- Compiling study coverage from media sources
- Soliciting in-kind donation items that can be provided to anglers as bimonthly and year-end rewards for participation
- Soliciting sponsors to donate funds for promotional items and for use as angler awards
- Creating reward baskets for anglers and tournaments
- Assisting with soliciting artists and businesses to issue angler challenges to encourage additional participation in the study
- Assisting with newsletter, year-end certificates of appreciation and thank-you letter mailings to each sponsor and participating shop

Do you need a kit? Call this toll free number: 800-367-4461. But who answers that phone? Kay Frantz does

FWC-FWRI

… and others at the FWC's Stock Enhancement Research Facility in Port Manatee.

2013 Mote volunteers: John Arbuckle, Fran Bays, Diane Glaesel, Dick Helvig, Captain Bobby Hilbrunner, Marcia Kagan, Stanley Rodak, Joan Tozzo, Cindy McClure, John McClure, Roger Mitchell, Bob Steskal, Mynarose Van Sleet, Ray Walborn and Janice Wojcik.

Wojcik

***Top left**: Ray Walborn presenting the TGRS. **Top right**: Janice Wojcik preparing a mailing to an angler. **Middle left**: John Arbuckle dispensing ethanol into sample vials with our auto dispensing unit. **Middle right**: Bobby Hilbrunner assembling sampling kits. **Bottom left**: Stanley Rodak and Tom King verifying data. **Bottom right**: Fran Bays and Joan Tozzo go over the facts before making gift baskets as angler incentives.*

Creating the future generation that cares

The Tarpon Genetic Recapture Study is more than just a DNA collection device. The study is recognized by the public as an educational tool that helps create future scientists. Danielle DeSilvestro, a high school student from the Tampa Bay area, learned about the study from the Sarasota Angler's Club Tarpon Tournament, in which she and her family participate as anglers.

In 2012, Danielle took the initiative to contact FWRI biologists and inquire about volunteer opportunities with the Tarpon Genetic Recapture Study. She explained she would use any volunteer opportunity as work toward her senior year proficiency requirements for the National FFA Organization.

Her hours were spent doing everything from collecting DNA samples from Atlantic tarpon in the wild to going through the steps of processing samples in the laboratory. Danielle's responsibilities included organizing angler-returned DNA samples and entering and verifying the tarpon data. She also spent a few days in the molecular genetics laboratory where she performed DNA extractions, polymerase chain reactions and sequencing using the DNA Analyzer.

By summer 2013, Danielle had graduated from high school, won a local and state FFA Proficiency Award with a project based on her tarpon volunteer hours, and taken second place in the ladies' division of the Sarasota Tarpon Tournament. After winning state, she was one of four finalists selected to compete for a national FFA Proficiency Award in the Wildlife Production and Management category, which she also won. Danielle just started her freshman year at the University of South Florida where she is pursuing a degree in science.

FWC-FWRI

Other student interns in 2013: Betsy Baldwin, University of Alabama (FWRI) Alicia Vollmer, Florida State University and Chadwick Vollmer, Lakewood Ranch High School (Mote Marine Laboratory).

This is it- The grande finale

As of October 31, 2013, approximately 396 tarpon anglers and organizations submitted 3,949 of the total 21,784 samples inventoried in the Tarpon Genetic Recapture Study database. THANK YOU! Remember, these numbers are not absolute and change every day as we process more samples.

Yes, you read the title correctly–

2014 will be the final year of sampling for the study.

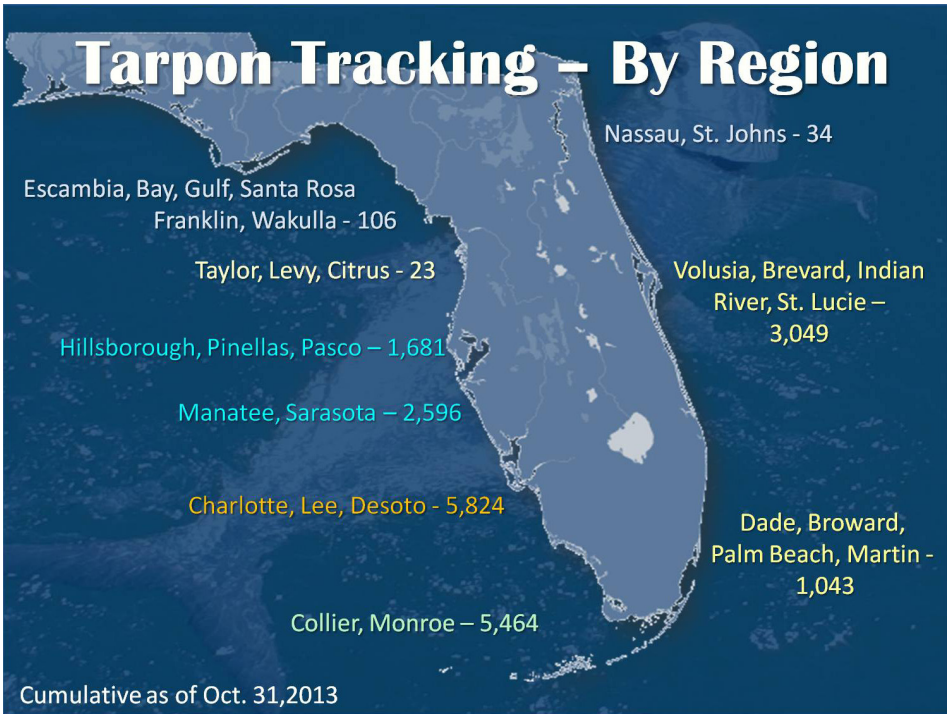
However, do not be upset that the study is ending. It was never a monitoring program, but a research study that has a start and a finish. Who knows, the study may even be repeated in the future to see if the juvenile tarpon sampled this time around grow up and stay in Florida's fishery, and to determine if the adult fish sampled this time are still in the area.

So in its final year, we ask that you do not let your unused sampling materials go to waste. If you still have kits in your store, please distribute them! If you still have kits on your boat and in your garage, please use them! All tarpon DNA samples will still be accepted, even if you find some that were taken two years ago. The information is very important. However, there is a caveat for anglers during this final year.

The emphasis should be placed on collecting samples from tarpon heavier than 25 pounds or longer than 36 inches.

Finally, ***we need everyone's support in obtaining samples from northeast and northwest Florida*** in 2014. Data summaries show that we have thousands of samples from southwest Florida and the Florida Keys, but very few samples have been returned from the Nature Coast, the northern Gulf of Mexico and the east coast. We really need samples from these areas to connect the dots for movement patterns throughout the state. Please consider helping to obtain samples and to recruit anglers from these areas.

We do anticipate writing and sending one final newsletter in 2014 and perhaps hosting a centrally located final seminar to share the results of your fine work. Thank you so much for your valuable contributions through the previous eight years.



2013 sponsors

Thank you to all the individuals and businesses that contributed valuable time and great products for angler drawings, end-of-year prizes and event gift baskets. We are grateful for your support in helping instill sportsmanship and enthusiasm in the Tarpon Genetic Recapture Study.

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Donations were provided by these entities through Mote Marine Laboratory.

View past issues of the TGRS newsletter and learn more about results from previous years on our website, at MyFWC.com/Research.

Contact us

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TARPON GENETIC RECAPTURE STUDY

Florida Fish and Wildlife Conservation Commission
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