Davis

Thank You Everyone!

Through the years of the Tarpon Genetic Recapture Study, one thing becomes clear: Tarpon anglers and enthusiasts are extremely passionate about the resource. They are willing to help gather information about tarpon and share in the responsibility to learn what we can about this magnificent species. This project has been a success story for what we biologists refer to as citizen science. Without the volunteers, our partners, other nongovernmental organizations, fishing clubs, businesses, local bait and tackle shops, and anglers who assisted with public outreach and awareness, there would be no study. We are eternally grateful for the support you have given to the Fish and Wildlife Research Institute and Mote Marine Laboratory through the years. While the data collection is coming to an end for Florida, the study is not finished. We will continue to process the incoming DNA samples as anglers use up their supplies and monitor for recaptured tarpon as the project comes to completion. Anglers will still be notified if the tarpon they caught matches another sample in the database, and as final written products become available we hope to have them posted online.

Ullrich

A Florida Sleigh Ride

James Kasper of Belleair Beach, Florida is one of the study's biggest fans. James told us, "Catching a tarpon out of a kayak is an adventure, as you never know whether a manageable 100-pound fish is going to choose your crab, threadfin, or pinfish and give you an amazing aerial show or if a 190-pound monster is going to gulp your bait and take you for a sleigh ride for hours and miles." Fortunately, fish caught off Indian Rocks Beach using live bait last July turned out to be a manageable one and Kasper was able to return a valuable DNA sample. After a 25-minute fight filled with runs and spectacular aerial leaps, James had the 100-pounder "kayak-side" for a jaw scrape, a photograph by fishing buddy, Jerry Hutcheson, and an easy release. The anglers reported that they watched the fish swim away to fight again another day. The tarpon DNA sample registered James during the 10th and final week of the 80th Suncoast Tarpon Roundup and qualified him to fish on the final day.

Hutcheson

Sweet Alabama, Home of Tarpon

Ernest Ladd of Mobile, Alabama was fishing with his two sons in August 2014, when his eldest son caught a tarpon and the youngest son photographed the catch. The fish weighed approximately 100 pounds and contributed to more than one research project. Ernest wrote, "The best part is we caught this fish in Mobile Bay and fitted it with a PSAT (Pop-up Satellite Archival Tag) and, an acoustical pinging tag and got your DNA. I am proud my son is now officially involved in Tarpon conservation and contributing to research." Information gained from continuous tracking of the Tarpon with the PSAT over 320 days will be assimilated by, Andrea Kroetz, a graduate student with the Dauphin Island Sea Laboratory and will be shared with the Ladd family. The DNA sample they took and submitted to the Florida study will last its lifetime, and who knows where that fish will be caught next. Thank you for such interstate cooperation and support.

Ladd

From the Bayou!

Partners with the Louisiana Wildlife and Fisheries agency have been quite productive this year returning 82 samples by the Halloween deadline and close to 300 samples in total for the study. Busy anglers included 9-year old Hunter Schouest, grandson of Lance "Coon" Schouest, who set the small fry world record on August 1, 2014 with a 158-pound Tarpon.

Spectacular St. Augustine

While Ponce de Leon is credited with naming and claiming Florida for the Spanish crown back in 1513, tarpon claimed its coastal waters as home long before that. St. Augustine in particular, a colonized settlement since 1565, proved to be great fishing for resident angler Matt Garrett in 2014. Matt is a new study participant and proves to be quite the Tarpon fisherman based on his willingness to share some of his summer Tarpon catch logs. In October, Matt wrote that since August 9 he fished more than 30 days, hooking and getting at least one jump from 247 Tarpon, had 120 leader touches, and genetically sampled 76 Tarpon between five and seven feet. He plans to continue fishing until the bite slows. In the mean time, he shared with us one of his failed attempts at obtaining a DNA sample. In this photo taken by Mark Marsh, you can see Matt had the sponge in his left hand ready for sampling, but missed. Can you guess why? As he went to take the sample, the fish jumped up, looked him eye to eye, and spit the hook in typical Tarpon fashion. Matt wrote, "I guess it was still a little too green for DNA sampling or you could say we didn't see eye to eye on taking its DNA."

Thanks go to Bob's Bait and Tackle and Devil's Elbow shops in the St. Augustine area for keeping Matt and other anglers well supplied with Tarpon DNA sampling kits. The biologists are thrilled to have so many samples from the northeast coast of Florida this year.

Marsh

FWC

Panhandle Praise

A giant, two-day, spring tent sale at Bluewater Outriggers in Port St. Joe provided a great venue for public interaction and awareness for the study. Capt. Rick Murphy helped promote DNA sampling during two seminars at the event, as well as local guide, Capt. Jordan Todd. Several news articles resulted from interactions with media, such as Winston Chester of Panhandle Outdoors and Bill Peevy with Coastal Angler Magazine, who were instrumental in getting the word out and greatly contributed toward making this final year of sampling a success in Northwest Florida.

Thanks to the Lanark Village Boat Club for allowing tarpon DNA kits to be distributed all season to anglers at the ramp and for prominently displaying the poster to the public. Kudos for the persistence of dock master Mike Salyer, and to Carson for allowing the kits to be stored inside the County Market.

The Choctawhatchee Basin Alliance of Northwest Florida State College provides opportunities for citizens and educators to promote the health of the Choctawhatchee Basin watershed and we are thankful for their support and promotion of the TGRS in their watershed this year.

Creating the next generation that cares

Hooray for Maret

K. Rizik

Nick Rizik (pictured left) and Danny Rodriguez (pictured right), two high school students from the Maret School in Washington D.C., contacted the FWC's Fish and Wildlife Research Institute about the possibility of volunteering their time to the Tarpon Genetics Recapture Study in May 2014 in an effort to meet the requirements for their independent senior projects. While the two tried to pass off collecting Tarpon DNA samples as their projects' mission, Maret school mentors, teachers and parents quickly decided that perhaps something more than tarpon fishing should go into the senior projects. After a few phone calls and emails the two quickly had themselves an adventure packed May and took charge of outreach and education about the study in Brevard and Indian River Counties. The following list contains a few of the tasks they conquered: intercepted anglers at various boat ramps; distributed 100 study brochures; replaced old posters, visited 16 participating tackle shops; distributed 60+ Tarpon DNA sampling kits; retrieved Tarpon DNA samples from local businesses; and even submitted their own Tarpon DNA sample courtesy of a fish caught in the Sebastian River. Public speaking was also part of their plan and they delivered a fantastic, well-rehearsed 45-minute presentation on the Tarpon Genetic Recapture Study at the Barrier Island Center in Melbourne Beach, FL.

Nick shared his thoughts in a thank you note after he returned to D.C. writing, "Thank you for supervising my project. I'm so fortunate that I was able to incorporate my passion for fishing and the sea into a senior project. Maybe when I'm a Florida retiree I will open up my own tackle shop." Danny's mom wrote too, "I think in many ways your support and encouragement has changed their lives. I am not exaggerating. They have to make some firm choices in the next two years about their careers and they are so elated right now... you have hooked two giant advocates! I send you so many thanks, as a parent, as a parent rep for Maret, and as an environmentalist. What you do, your willingness, your enthusiasm, it counts and changes the future."

Tiny Tarpon Genetic Recaptures

Juvenile tarpon inhabit creeks and back-bay areas within the estuaries that have plenty of mangrove cover, a mixture of depths, tidal influx and low dissolved oxygen. Tarpon have a modified swim bladder which allows them to take oxygen from the air by rolling at the surface, so they benefit from low oxygen environments that can't be inhabited by many other species. To learn more about habitat use, JoEllen K. Wilson studied a population of juvenile tarpon in Placida, FL for her master's research thesis to determine how well the habitat is functioning. She used mark/recapture methods to study growth rates, abundance, survival, movement within the system and emigration over a period of two years. Once the fish were captured using a 600-foot seine, they were either implanted with a Passive Integrated Transponder (PIT) tag (works like a dog's microchip) or fin clipped for genetic analysis at FWRI. Fin clips were taken from the upper tail fin and the genetic material was processed just like the skin cells obtained from jaw scrapes performed with a sponge. Fin clips were necessary for individual identification of Tarpon that were too small to carry a PIT tag (7.5 inches and under).

The FWC researchers' ability to match each juvenile tarpon through its fin clip was invaluable to her research. Only 25 percent of the fish she captured were large enough to be implanted with a tag which left FWC to analyze over 1,000 fin clips to determine matches. Wilson wrote, "I am so grateful for the Tarpon Genetic Recapture Study and the opportunity it has given anglers and biologists to learn more about this majestic species."

Wilson is Bonefish & Tarpon Trust's Juvenile Tarpon Habitat Program Manager and currently enrolled as a Master's Student at University of Florida. She can be reached at jwilson@bonefishTarpontrust.org.

From the Tarpon Themselves

Our updated totals as of Nov. 1, 2014 reveal we have 256 tarpon recaptures from the approximate 24,323 samples in the database, giving us a recapture rate of approximately 1.1%.

Some interesting results:

- We have a statewide fishery.
- Tarpon of all sizes are fished throughout Florida.
- Tarpon can be found in Florida year-round, but the fishery varies seasonally depending on where you are fishing. The best tarpon fishing in Miami is not at the same time of year as the best tarpon fishing in Panacea.
- From recaptures (a tarpon that has been caught and DNA-sampled more than once) we are finding that the same fish may return to the same location or vicinity where it was caught before – perhaps one or two, or even six years later.
- There is an exchange of fish between the Tampa Bay and Charlotte Harbor estuaries; some fish move north to south, others south to north.
- There is an exchange of fish between the Miami area and the Florida Keys.
- Tarpon exhibit some site fidelity, coming back to the same pass during consecutive spawning seasons.
- A few of our tarpon have been caught, sampled and released three times, thus providing examples of a tarpon's ability to withstand multiple catch-and-release events.

Wright

What in the world? A Piebald Tarpon!

In June, George Seibel and Sara Potter from Homer, New York, were visiting Florida and decided to give tarpon fishing a try, so they chartered a trip with Capt. Clark Wright. They wrote, "We both had low expectations leaving the dock as we seem to always get skunked on fishing tours." But a rare and unusual event was about to unfold off Anna Maria Island as the couple hooked and caught a multicolored Tarpon. "What in the world?" This was the general summation of the question and accompanying Tarpon photo received by FWRI biologists from the morning of June 14, 2014. It was not your average shiny, silver Tarpon. It had a mottled orange, black and silver head, exhibiting a genetic condition known as piebaldism. The anglers stated that they have two koi ponds in NY and commented that their first thoughts were 1) this tarpon resembles a giant Koi, 2) based on how excited Clark was, this was a special catch, and 3) George said he was so glad he didn't lose it!

A piebald animal such as a duck, deer or horse, has irregular patches of pigmented and unpigmented skin, feathers, scales, that are typically mottled black and white. This condition is different than the complete absence of pigment as seen in albino animals that appear completely white. In the case of tarpon, the mottling is black and orange. Other anglers who have encountered such a Tarpon also used the term rust or mustard-colored for orange.

Humans can also display piebaldism, though its prevalence is unknown. Those with the inherited genetic disorder have characteristic unpigmented patches of skin, and in most individuals there is also a white patch of hair at the center of the forehead. Piebaldism is often confused with a disease called vitiligo that occurs in 1-2 percent of the general population. (http://www.vitiligocenter.eu/vitiligo.html), but piebaldism is not a disease. It is a benign (not harmful) disorder and the animal is typically born with the condition and it persists through life.

Blouch

Hand with unpigmented patches of skin in individual with vitiligo.

As for Clark, he simply knew they had hooked into something different. At the first jump, Clark placed the fish around 130 pounds and thinks the story unfolded something like, "Did you see that? That Tarpon has orange all over its head!" Deckhand Matt Smithman confirmed that Clark wasn't crazy as he could clearly see it too. After the second and third jumps the focus on board quickly switched to getting the fish landed, photographed and genetically sampled. Clark figured from there the biologists could answer his questions. "Upon releasing her I knew that we had just experienced something special and I was just so thrilled to get to be a part of it."

How rare is this?

Good question. A 1937 article written by E.W. Gudger documents the first occurrence of what was called an albino Tarpon. The fish was caught in Boca Grande Pass on May 20, 1936, by Mrs. Kuser, and because of its novelty the angler had the skin mounted and placed in The American Museum of Natural History in New York City. The fish was described as looking like any 3-foot, 9-inch, 27-pound tarpon - except in color. While few have been documented since this report from the 1930s, there have been sightings of such tarpon from Florida's coastal waters in the last decade.

Here is a history of such fish as documented in FWRI's records:

Early 1990s

In 2008, FWRI received an email from Capt. Bill Miller once on-the-water news started spreading about albino tarpon. He wrote that Debbie Crisp had caught one a few years ago and thought we should give her a call. It turns out Debbie remembers much about that day of fishing, but when asked for a date she narrowed it 1990 to 1992, maybe 1993. She caught the 110-115 pound tarpon during the Suncoast Tarpon Roundup fishing with Jay Mastry off Longboat Key. She remarked that, "It was the coolest fish I ever saw and not one of us had a camera with us." The fish had 5 or 6 brown spots on its back where the dark green would normally be, and "when it rolled it was the prettiest lemon yellow…" Debbie mentioned that back then in discussions about her catch, another person said he too had spotted a similar looking fish.

May 13, 2008

Barry Hoffman saw an approximate 40-pound tarpon with an 'eerie peach and orange back', swimming in a large school of tarpon in the Keys and wrote about it in his blog. About a month later, Hoffman was contacted by Capt. Ed Walker.

June 6, 2008

Capt. Ed Walker emailed that he had witnessed something amazing. While working a school of tarpon north of Boca Grande he noticed something odd below the surface milling around with the tight bunch of fish. He thought maybe it was a shark, but the Tarpon were not spooked. He wrote, "An hour later, after patiently working the school and jumping off several fish, we hooked up again. As all four of us looked on, the most incredible fish I have ever seen jumped out of the water. It was a tarpon but its back and most of its body was orange – bright orange. Scattered on its side were several black or very dark scales that resembled the dots on a redfish except they were full sized Tarpon scales." Completely depressed that the 125-pound Tarpon broke off after one jump, leaving all of them bewildered trying to figure out what they just saw, Walker thought he would ask a biologist if she had 'ever heard of such a creature' and she had. His description matched that found in the 1937 manuscript.

Pask

May 2010

Recreational fly fisherman and photographer, Tim Pask and buddy Joe Roope from Idaho, were on their annual tarpon trip with guide Capt. Carl Ball fishing out of Key Biscayne when they came across a very large school of tarpon. While Tim was casting at the fish, they noticed a 'golden' tarpon gulping air in the middle of the school. Tim hooked a tarpon but unfortunately it wasn't the golden fish they were hoping for. After catching, photographing and releasing Tim's tarpon, the crew decided to find the school so Tim could hop in the water with hopes of getting some good images of the piebald. Capt. Carl dropped Tim in the water several yards ahead of the school that was now in 10-12 feet of water. As they approached, the tarpon went down and split into two groups going around Tim. As they passed by, Tim was able to capture this amazing underwater image seen here of a piebald Tarpon which he was happy to share with us.

May 2013

An online search produced a pictorial and video account of a piebald tarpon caught by Barry Baroudy off Punta Gorda, near Boca Grande Pass, in 2013. One account included a May 24, 2013 catch date and the other a June 2013 date. While Barry may not give up the exact date of capture, he did give us permission to write about his awesome encounter.

August 2014

In a phone conversation with Tom Evans, IGFA tarpon world record holder, he mentioned various sightings of 'Spooner' - a mustard color Tarpon they see every now and again on the flats of Homosassa. Perhaps Tim's fish from 2010 was Spooner out for a swim!

Counter shading, meaning the fish have dark backs and light bellies, is a common camouflage tactic in fish which helps them blend with aquatic environments. Predators looking down into the water from above only see the dark color which blends in with the bottom or water's depth and predators looking up from underneath the fish see a silver or light color that blends in with the light at the surface. As you can see from the images, piebaldism is NOT the coloration to have if trying to hide from predators. Based on the varying color patterns observed in the tarpon images seen here, it is clear there is more than one piebald tarpon out there. Let's hope the fish stay in the center of their schools!

June 2014

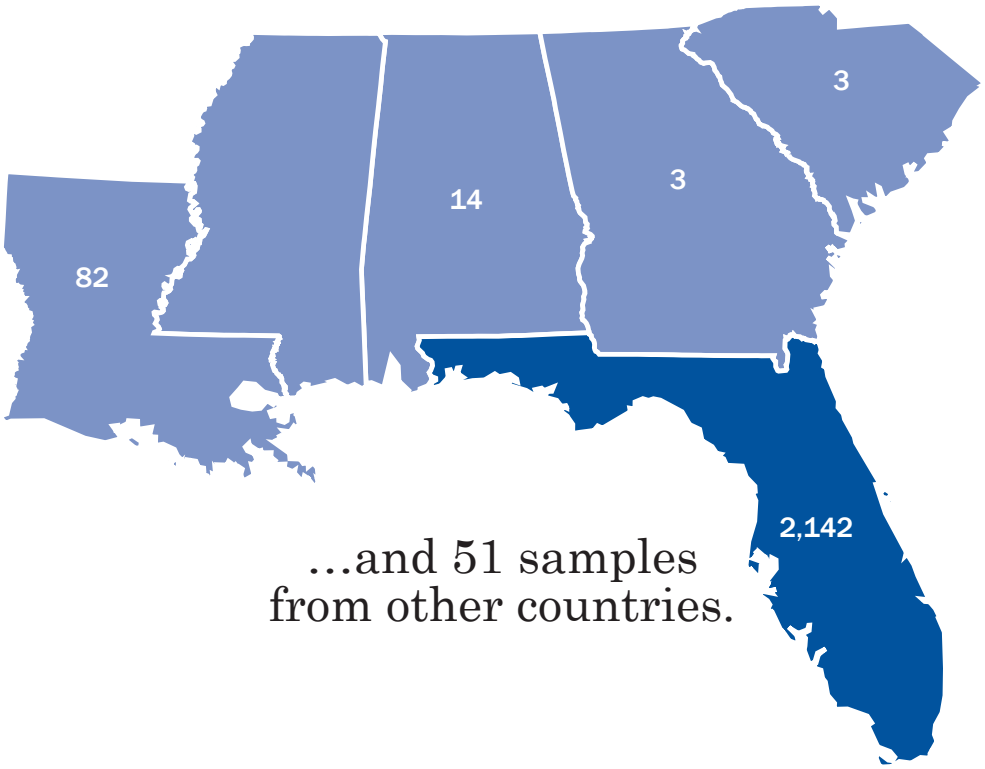
Clark Wright caught and released a 130-pound piebald tarpon off Anna Maria Island.

June 2011

Anecdotal reports from fishing guides in the Boca Grande area seeing an 'albino' tarpon swimming in the vicinity were provided to FWRI staff, but we are not aware of a capture or photographed specimen from this time.

2014 study results

We received 2,244 samples from the United States...



...and 51 samples from other countries.

STUDY STATS

Results from all years of the Tarpon Genetic Recapture Study

5 inches
Smallest tarpon sampled

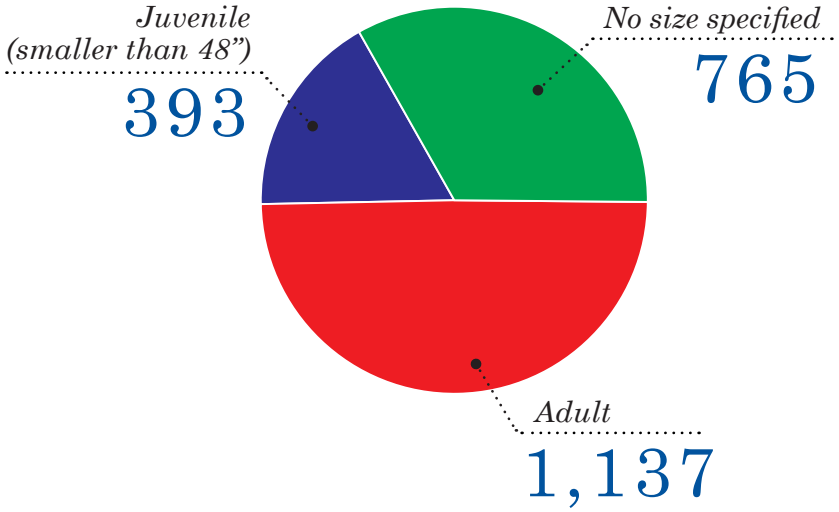
96 inches
Longest tarpon sampled (total length)

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

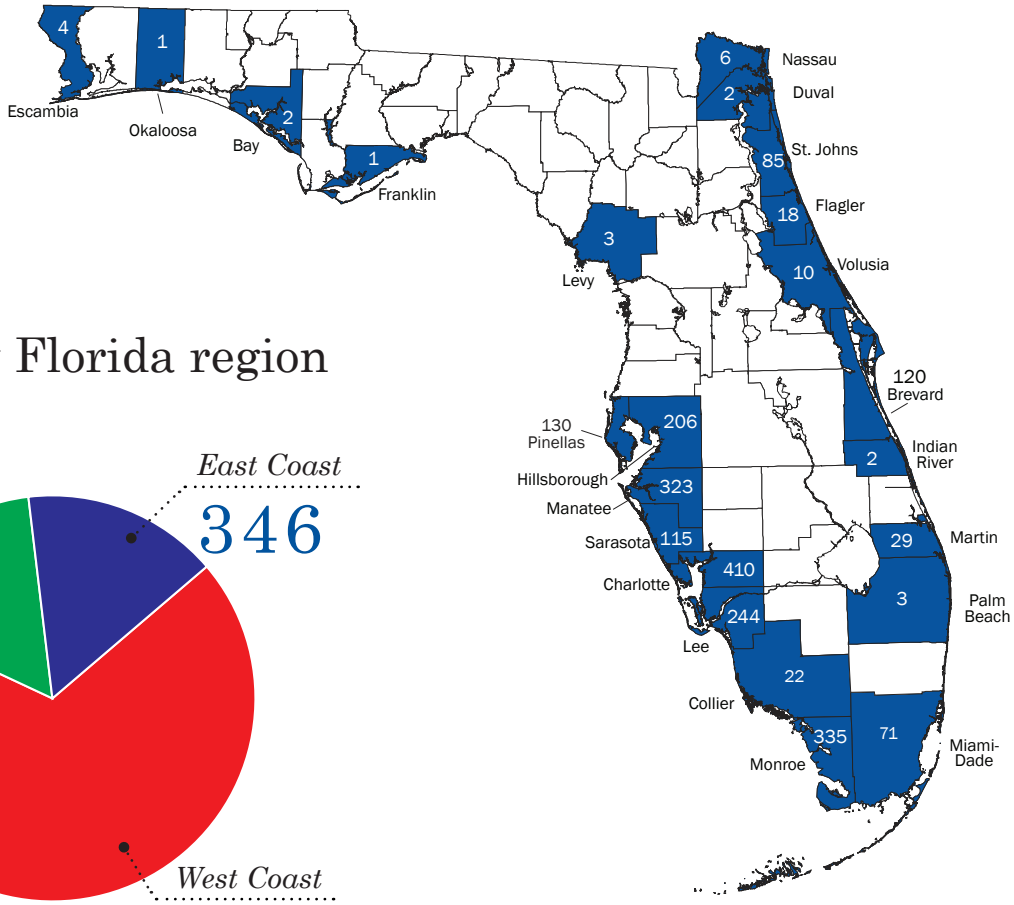
63
Number of tarpon angled for 2 or more hours

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

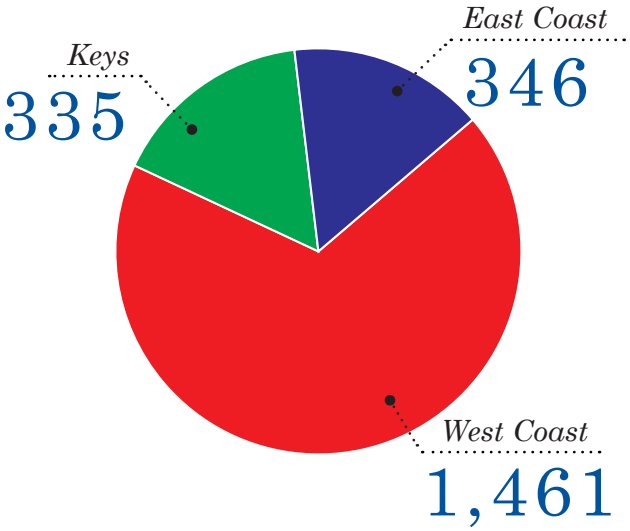
Size of Tarpon Sampled



Florida samples returned by county in 2014

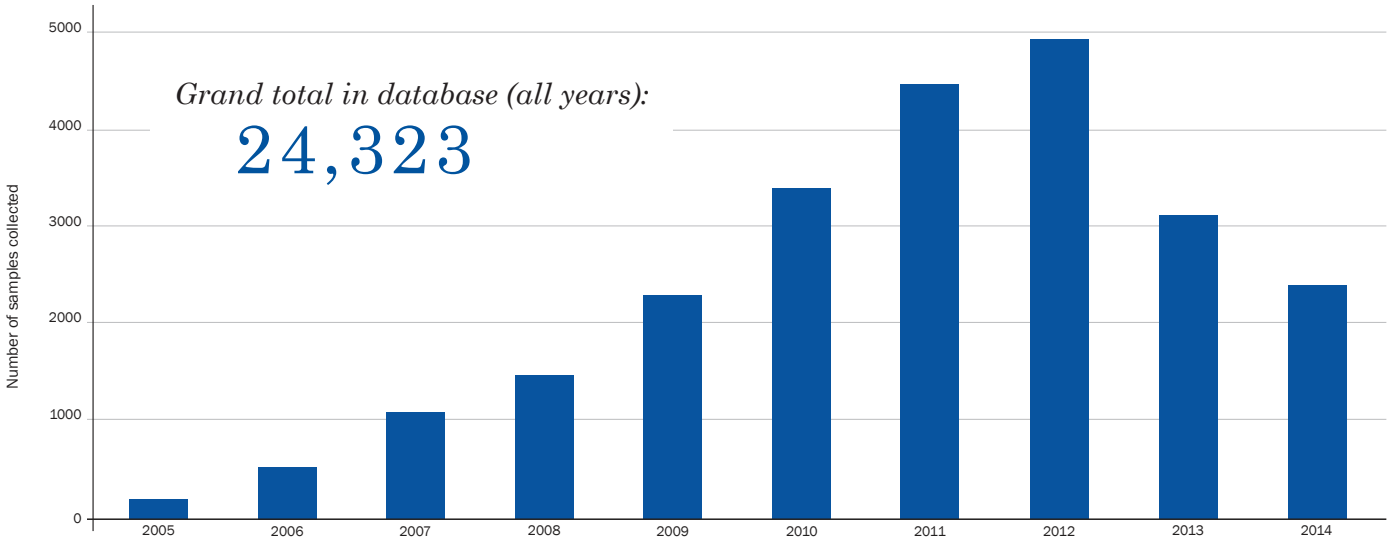


Samples by Florida region



Number of tarpon sampled annually

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



Anglers who contributed five or more samples in 2014


FWC

In 2014, 215 anglers submitted a total of 2,295 samples. Only samples received prior to the October 31 deadline are included in this total, and they omit samples returned by FWC staff during routine sampling.

The top 10 samplers in 2014:

Clark Wright
T.J. Stewart
Robert McCue
Ed Walker
Matt Garrett
Owen Schroeder
Carl Ball
Rob Gorta
William Cousins
Brian Robinson

The following anglers, listed in alphabetical order, each provided at least five samples:

100 +
Matt Garrett
Robert McCue
T.J. Stewart
Ed Walker
Clark Wright

50-99
Carl Ball
William Cousins
Rob Gorta
John Jackson
Brian Robinson
Owen Schroeder

30-49
Nelson Italiano III
Bill Miller
Billy Miller
Lance Schouest

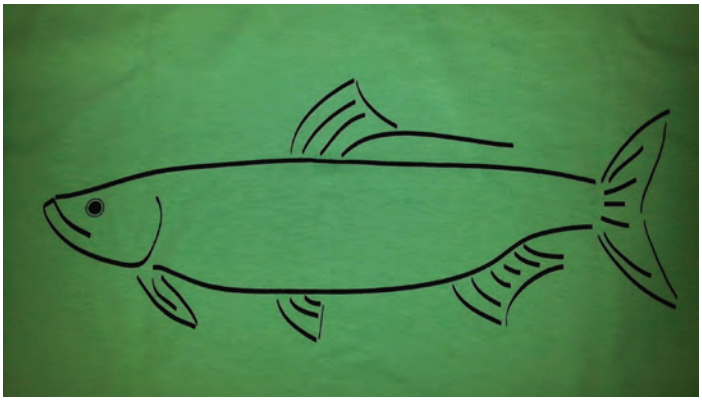
20-29
Kenneth Balseca II
Brandon McGraw
Debbie Miller
Steve Petry

10-19
Nick Angelo
Raymond Baird
Kenneth Balseca
Joel Bickford
Meghan Brunelli
Monty Cabe
Butch Constable
Jeff DeBlieux
Kyle Kelso
Cindy McClure
Gavin McLay
John Mester
Jeff Owens
Larry Rudisill
Troy Sapp
Jerrould Smith
Trisha Tobin
Camp Walker
Bill Whitney

5-9
Jeremiah Acevedo
Mike Badarack
William Burrows
Bryon Chamberlin
Mike Clark
John Crawford
Cayden Crisp
Doug Feinberg
Bob Heagey
Shannon Hoeckel
Tim Humphries
Courtney Jackson
John Jackson III
Jim Johnson
Grady Kerr
Ben Kurth
Ernest Ladd IV
Trent Long
Jim Manus
Cameron Martin
Bob May
Katie McDonnell
Oscar Mohn
Rick Murphy
Clark Nash
Hayden Olds
Jensen Pardue
Devon Peduzzi
Dave Robinson
Christopher Sexton
David Sugar
David Varble
Joshua Whitehead

The Five or More Reward

Thank you to Chris Anderson of FWRI for his generosity in providing the line art used to create the fifth collectible Tarpon Genetic Recapture Study T-shirt. Every angler who returned five or more Tarpon DNA samples in 2013 received a shirt. We had 106 anglers earn this award. Great job Tarpon anglers!!!



FWC

In the Grand Scheme of Things - Study's Overall Top Ten DNA Samplers

1.	Jon Mallory	1,752
2.	Robert McCue	1,138
3.	Ed Walker	783
4.	Paul D'Antoni	533
5.	T.J. Stewart	444
6.	Mike Badarack	441
7.	John Manuel	432
8.	Carl Ball	425
9.	Jeff Malone	366
10.	Skip Nielsen	348

Garrett

When asked why they participated, we decided to include some of their replies:

"I first learned of the Tarpon Genetics Recapture Study from a fellow guide in 2010. I was quick to jump on board and start collecting samples for the study on my charters. I thought this was a great way to learn more about the species that we knew so little about. Through the years I participated it was nice to see tarpon that my customers caught, tagged, released and recaptured at a later date. Some were recaptured within miles of the original capture location and some over 100 miles away. The study proved that many of the same tarpon return to the same location year after year on their migration pattern. It also reinforces the need to practice correct catch and release techniques while handling tarpon to increase survival rate so they can live to fight another day." - Paul D'Antoni

"I first remember hearing about tarpon DNA sampling through the Florida Guides Association newsletter. Dave Market challenged the Florida fishing guides to sample the most tarpon. So I accepted the challenge and began requesting sampling kits. I learned a lot about tarpon from my participation and actually was the Atlantic Coast Champion for most tarpon sampled in 2012. I got great satisfaction knowing that my efforts would help us to better understand where and how tarpon live and give us some insight as to how we can protect and preserve the species for years to come. I really appreciate all the contributions so many people have made to better understand these magnificent fish. Knowing how the fishery has changed over the years due to habitat destruction and water quality issues I realize how important it is for anglers to get involved and support researchers and the organizations that support their work. I want to thank the FWC, FGA and BTT for their support as well as bringing awareness to the conservation of tarpon. Also, thanks to Mote Marine Lab and the entire Tarpon Genetics Team for all of their work in putting the tarpon puzzle together." - Carl Ball

Ullrich

"I would like to personally thank you all, for the time and effort put forth to study one of our states most sought after inshore gamefish! The study of the Tarpon is important to better understand there [their] migratory patterns, spawning locations and to determine if the fish we capture here in the Florida Keys are the same fish caught elsewhere. It has been a lot of fun for my clients and I to participate in the recapture study. I believe that those of us who respect the sea and everything in it owe a little of our time in order to better understand it. These type of studies help to gather information that would otherwise be very difficult or impossible to get, I don't believe one person alone could gather enough information; therefore a little help from a lot of us makes all the difference." - Jeff Malone

"I have been enamored with all aspects of tarpon and tarpon fishing since my dad and I first started pursuing them when I was 9 years old. I've always wanted to learn and understand as much about tarpon as I could, so naturally a few years ago when I heard about the Tarpon Genetic Recapture Study I was excited to participate. Questions I have always wondered, and commonly get asked on my charters about the tarpon migration: where do they come from, where do they go, how old are they etc. can hopefully now be answered with more confidence as a result of the Tarpon Genetic Recapture Study. I feel fortunate to have been able to participate and help provide data for the study of this magnificent sportfish and I look forward to the findings of the study being made public once it is concluded. - Clark Wright

"I felt that this was a pretty much non invasive way and a totally new way to tag and track tarpon movements and age research. I did not tag a lot of my bigger fish as it was hard on the fish and anglers to tire them out enough to get a sample. I would like to see more funding for this project and would like to continue sampling in the coming season." - Skip Nielsen

The FGA/FWC spirit of tarpon DNA sampling challenge

In 2013, the Florida Guides Association (FGA) and the FWC once again 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 and encourages anglers to participate in the study. Last year's winners were awarded their prize packages in March 2014 at the annual FGA meeting in Tampa and recognized at the June FWC meeting in Fort Myers. The winners were: Grand Champion, John Manuel; West Coast Champion, Ed Walker; East Coast Champion,Russ Kleppinger; and Florida Keys Champion: John Jackson.

Anyone is eligible to participate in the FGA/FWC challenge, which is issued to all interested recreational anglers during a calendar year. There is only one simple rule: the angler with the most samples wins. Last year's winner, Mr. Manuel, who moved to Texas in December 2013, is pretty proud if his accomplishments for a 70-something retired guy who fishes by himself. He writes, "My favorite line nowadays is my wife and family are in Dallas...but my boat is in Naples!" Manuel has participated in this study since it started and worked through a minor stroke, a broken arm and fly-casting hand that didn't work for eight months, and finally a broken heel. "None of it kept me from fly fishing for those tarpon. Although many/most of them were small…I caught a decent number of pretty nice ones out of my skiff in the Everglades."

Manuel

John Manuel single handedly catches, jaw scrapes and releases an adult tarpon in southwest Florida.

The prize packages are determined by FGA members, as were the rules and guidelines for this challenge. Rewards last year included several nice fishing accoutrements from FGA sponsors Stick It Anchor Pins (9' anchor), High Roller Lures (custom lure kit), O'Keefe's Reef Custom Shirt (custom embroidered guide shirt), and Guideline Eyegear (polarized fishing glasses). The winner also received a certificate signed by the president of the FGA and Chairman of the FWC. Winners of the 2014 NE and NW Florida Challenges will be announced soon after the New Year.

Congratulations!

2014 End-of-Year Raffle Winners


Timmons

It only takes one to win! Congratulations to the anglers who won the end-of-year random drawings. Remember, even if you catch one tarpon all year, that single DNA sample is extremely important in 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.

Steve Petry from St. Petersburg
Courtney Jackson from Key West
Bruce Bowman from Naples
Rob McCahan from St. Petersburg
Kenneth Balseca II from St. Petersburg
Mason Tush from Sarasota

Bimonthly drawings

The following anglers were randomly selected recipients of the bimonthly drawings throughout the year. All they had to do was return a DNA sample.

January-February
Ryan Young of Bradenton, Florida

March-April
Paul Graffunder of Apple Valley, Minnesota

May-June
David Sugar of Sarasota, Florida

July-August
Hayden Olds of Fairhope, Alabama

September-October
Mike Clark of St. Petersburg, Florida

November-December
Bart Swab of St. Augustine, Florida

The Next Step – A New Study!

Did you know there is a new study? The TGRS anglers and participants did a fantastic job obtaining thousands of samples from Florida, so for the next two years (2015-2016) FWC and Bonefish and Tarpon Trust will be working together on the next step. The new study is essentially picking up where we left off, but expanding the sampling universe to focus outside of Florida. We are now inviting anglers to genetically sample tarpon from geographic locations throughout the species distribution. Think Gulf, Caribbean, Central and South America and Eastern Atlantic! Samples obtained by anglers during the TGRS from other states and countries will be added to the samples being collected under this new project and will be used to do a regional meta-population analysis on tarpon. Basically we will be looking at the stock structure of these spatially-separated tarpon populations to see if there is a single population, regional populations, or multiple sub-populations and results will help in determining effective management regimes. It will truly be the largest study on the species thanks to the anglers themselves. This study will be using scales since they are easy to transport, especially for international travellers. To obtain tarpon scale sample envelopes, please contact info@bonefishTarpontrust.org, or call 321-674-7758. Note: Although we generally do not condone removing scales from tarpon on a regular basis, once a single scale is removed it will grow back again. We feel this is the best method for obtaining this important information from so many remote locations.

Allen

The Future

A long-term objective is to determine if juvenile tarpon in Florida nurseries supply the adult fishery. From this study's collections ending in 2014, we now have juvenile DNA samples in the database. Ideally, the study may be reinstated in the future, maybe in six years or so, when juveniles sampled recently will be mature, spawning adults. If we get adult DNA samples in the future that match the juvenile samples from the current study, we will have evidence that Florida's adult tarpon fishery is supplied with juveniles from Florida's own Tarpon nursery habitats, and that these inshore mangrove, marsh, estuarine habitats are important to our fisheries.

D. Gardinal

Bryant

Ruda

Greg Aragon at www.gregaragon.com

THANK YOU ALL FOR MAKING THIS STUDY A "Mega-SUCCESS"!

To All of Our Supporters

We are grateful to our many supporters who partnered with us to help make this study such a success!

Thank you for the funding from Grant F-59 from the Federal Aid in Sport Fish Restoration Act; the State of Florida's Tarpon tag program; the in-kind contributions of volunteer anglers and guides; the funds acquired by Mote Marine Laboratory (MML) through fundraisers, private and business donations; the foundation grants (Islamorada Fishing and Conservation Trust); and the Wildlife Foundation of Florida awards. This study involved a cooperative effort from the Florida Fish and Wildlife Conservation Commission Fish and Wildlife Research Institute's (FWRI) marine fisheries biology and genetics staff; the MML Directorate of Fisheries and Aquaculture staff; several high school and college interns; and a team of 15 to 25 volunteers who assisted weekly.

We would like to thank the many businesses statewide and outside of Florida who promoted the study, distributed sampling kits, and served as collection sites for samples.

We are also grateful for all of the individuals and businesses that contributed great products for angler drawings, end-of-year prizes and event gift baskets through the years. They were instrumental in instilling sportsmanship and enthusiasm in the Tarpon Genetic Recapture Study.

Please, Don't Waste!

This is it!!! Use up all of your sampling supplies regardless of where you live, and don't throw them away. If you find samples or take the final few to use up your sampling kits, please mail your samples directly to the following address:

FWC Fish and Wildlife Research Institute
Attn: Tarpon Genetics
100 8th Avenue SE
St. Petersburg, FL 33701

Contact us with questions

Hotline: (800) 367-4461 (toll-free in Florida)
E-mail: TarponGenetics@MyFWC.com

Florida Fish and Wildlife Conservation Commission
MyFWC.com

MOTE MARINE LABORATORY

Saltwater Recreational Fishing Licenses