

# SILVER KINGS RECAPTURED!

The Tarpon Genetic Recapture Program has been gathering valuable information since it began in 2005. Scientists from the Florida Fish and Wildlife Conservation Commission's Fish and Wildlife Research Institute (FWRI) have partnered with scientists from Mote Marine Laboratory to use DNA "fingerprints" to track the movements and habits of tarpon in the coastal waters of Florida.

During the first two years of the study, only four DNA samples submitted by anglers were matched to tarpon already in the database. As the program expanded through 2008 and more anglers submitted their DNA samples, biologists documented the recapture of 13 additional tarpon from across the state, including the waters off Miami, the Florida Keys, Ft. Myers, Boca Grande, Sarasota, St. Petersburg, and the Indian River Lagoon. In 2009, the total number of recaptures more than doubled and now stands at 36 tarpon.

Fewer than one third of the recaptured fish were juvenile or sub-adult tarpon. Recaptures usually occurred within a month or two of the initial sampling and most of the fish did not move beyond a few miles. One juvenile tarpon was at-large for 800 days between captures in the Loxahatchee River. Another juvenile reeled in by a vacationing FWRI staff member in Key West was caught again 249 days later by a well-known guide in the same vicinity.

Tarpon spawn in the summer and most of the fishing effort occurs during this time. Eleven adult tarpon were sampled twice within a single spawning season, more or less in the same location. One tarpon caught near Tampa Bay's Skyway Bridge was recaptured six days later approximately 20 miles to the south along a coastal beach. This movement occurred during the new moon in early June 2009. Three fish sampled during spawning season were recaptured later in the fall as they headed back toward their off-season habitats.

So far, six adult tarpon have been recaptured in southwest Florida after extended periods (greater than 300 days) and their movements have been interesting (Figure 1). The recaptured tarpon with the greatest movement was caught along the beaches off Long Boat Key, 88 miles north of its initial location, after 313 days at large. Another tarpon made a similar movement, confirming that some exchange takes place between the Tampa Bay and Charlotte Harbor regions. The adult tarpon at large for the longest time period (722 days) was caught both times in the same place – Boca Grande Pass.

Tarpon anglers (recreational and professional) are the citizen scientists in this study. Without the dedicated assistance of anglers who are helping to teach us about this magnificent species, this program cannot continue. Our goal for 2010 is 3,000 tarpon, including 1,200 fish from the Florida Keys and East Coast. So please, keep the DNA samples coming!

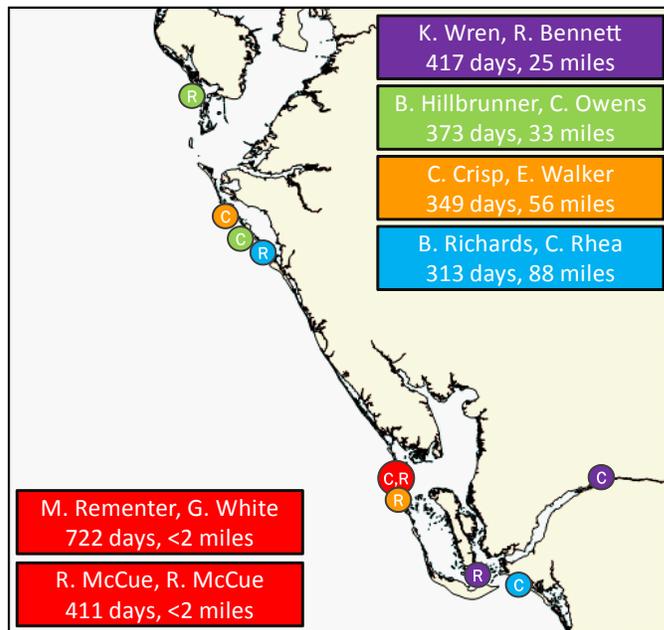


Figure 1. Locations of the capture (C) and recapture (R) for six adult tarpon in central west Florida waters. Boxes are color-coded to match capture and/or recapture locations of each. Boxes contain the names of the sampling anglers, days-at-large for the fish, and distances between sampling events.

# WHAT DO WE LEARN FROM THIS STUDY?

Recaptures provide all of us with useful information on an individual tarpon's movement and use of certain bodies of water within a season and between seasons (site fidelity). As the database builds, we learn about the distribution of the fishery, identify potentially critical habitats for all life stages of tarpon sampled (small and large), and establish recapture rates for tarpon in Florida.

Recaptures also provide biologists and managers with evidence of long term survival and of a tarpon's ability to withstand fishing pressure, recover after release, and to be caught again. This is a positive for the tarpon fishery. Tarpon anglers, especially those volunteering for this study, should carefully handle their tarpon at the side of the boat and resuscitate their fish prior to release. By doing so anglers are able to actively take part in conserving their own fishery. So...

Make it a habit, carry a kit and sample any tarpon, anywhere, any size!

To receive a free DNA sampling kit and kit refills: Call toll free 1-800-367-4461, e-mail [TarponGenetics@MyFWC.com](mailto:TarponGenetics@MyFWC.com), or visit one of the more than 165 participating locations statewide where you can also drop off your samples.

For the list of participating locations, visit [http://research.myfwc.com/features/view\\_article.asp?id=32093](http://research.myfwc.com/features/view_article.asp?id=32093).

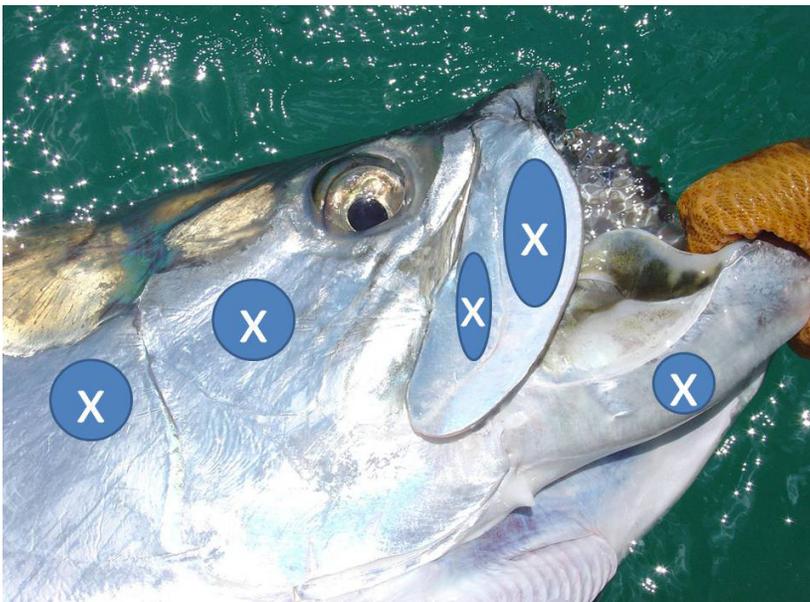


Mallory



Walker

# WHERE SHOULD ONE SCRAPE A TARPON FOR A DNA SAMPLE?



McCue

## "X" marks the spot

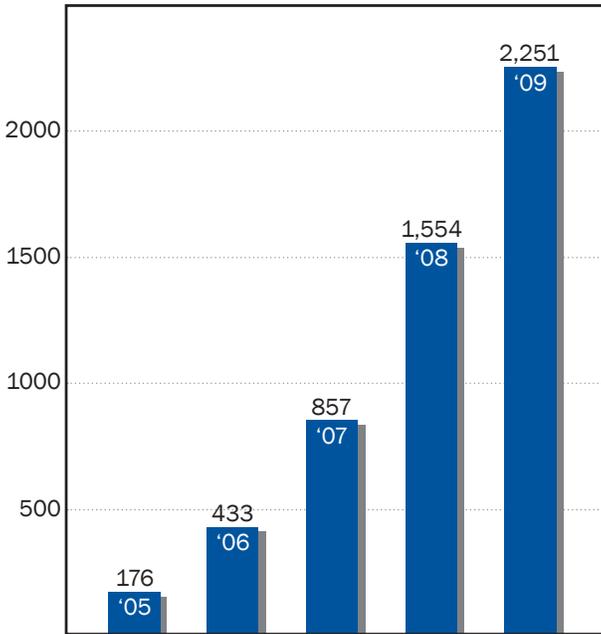
Anywhere there is a hard bony surface on the outside of the tarpon is a good place to scrape some skin cells.

Use a maroon sponge and scrape until you see silver!



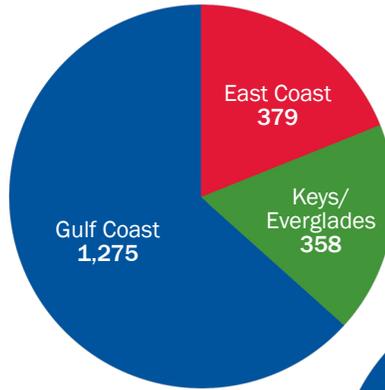
# SIMPLY THE STATS

Samples returned by year  
(2009 totals are as of Oct. 31)

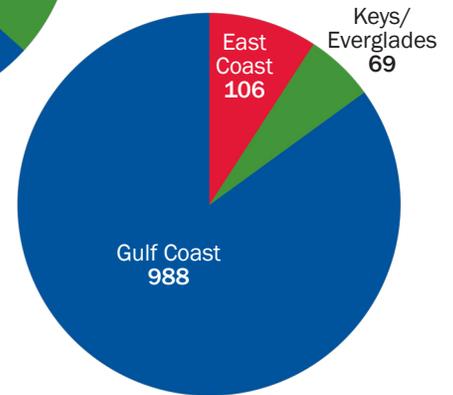


There have been **36** recaptures, which is a recapture rate of **0.8%**.

2009



Samples by coast



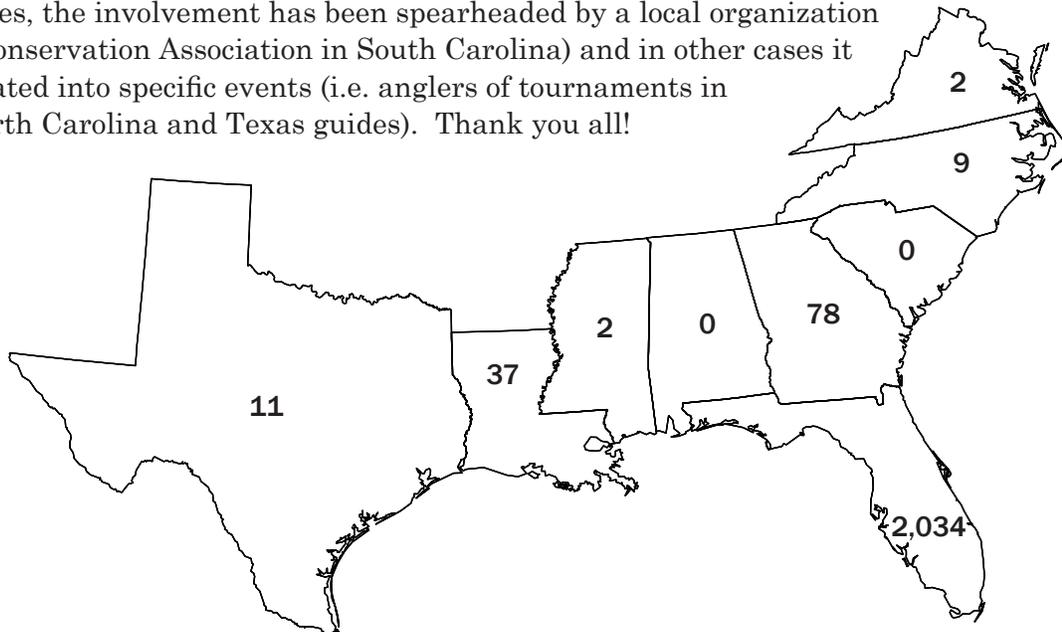
2008

**250** anglers returned a sample in 2009

There are **5,271** samples in the database (including mortalities and non-Florida samples)

## Most Gulf and Southeastern states submitted samples in 2009

Anglers and organizations in other states have also become participants in this research effort. In some cases, the involvement has been spearheaded by a local organization (i.e. the Coastal Conservation Association in South Carolina) and in other cases it has been incorporated into specific events (i.e. anglers of tournaments in Louisiana and North Carolina and Texas guides). Thank you all!



# ANGLERS IN THE SPOTLIGHT

## Markett Makes Good

Capt. Dave Markett of the Florida Guides Association announced, "Ain't No Way any other working guide is gonna' out tag me this May and June." He went on to say, "... I'll beat em' all in May and June - if I don't then I'll deliver a bottle of the winner's favorite spirits to that winner personally. You can quote me on that." We did quote him on that and Capt. Markett personally made a visit to Capt. Mark Bennett of Punta Gorda to make good on his bet. Thank you, Capt. Markett, for your self-initiated challenge that served as an incentive for others to participate in the program. Many new anglers joined forces to help collect tarpon samples, so we can learn about the mysterious species.



## Powers' Print Leaps for Late Season Samplers

Florida artist, Richard Powers, followed suit on the challenge idea and wrote, "By evaluation of this information on recaptured fish, biologists at FWC and partners at Mote Marine Laboratory can assess the success of tarpon stocks. I challenge you as anglers to help preserve our fisheries by participating in this program." He offered a framed and signed print of his "Silver King" to the top sampler for July and August. It was Captains Mark and Jenni Bennett of Punta Gorda who made space on their wall for the print. There were 41 anglers who participated and submitted 421 samples by the deadline. This artwork will be featured on 2010 t-shirts.



## Top Sampler in 2009: Capt. Mark Bennett

Capt. Mark Bennett was the top tarpon sampler for 2009. He turned in 147 vials of DNA. Inspired by the friendly competition among fishing guides after speaking with members of the tarpon genetics team, Capt. Bennett decided to assist with the research effort. He has since encouraged other anglers and guides to do the same. He states that, "This program gives the recreational anglers a chance to see how their numbers stack up against the pros and it gives the pros a chance to put their money where their mouth is. They have already proven they can talk the talk, let's see who can walk the walk." Congratulations to Capt. Bennett and may he continue to encourage others to become involved in this research program.



## Top Sampler Overall: Capt. Robert McCue

Have you heard of a 200-pound club for tarpon? Well, we have a Fab-500 Club with its very first member. Capt. Robert McCue leads the sampling effort after the program's fifth season returning over 500 tarpon DNA samples and having two documented recaptures. When asked why he helps, Capt. McCue commented, "As both a recreational and professional fisherman, my primary purpose is to contribute as a responsible steward of the resource. I got involved with The Tarpon Genetics Recapture Program from day one to help answer several biological questions revolving around the world's greatest inshore species, the silver king. Today, I could not be happier with the success of the program and all that we are learning and preserving." Thank you for this incredible effort and may you scrape just as many of your landed tarpon during the next five seasons.



## Mr. Extra Effort: Capt. Bobby Hilbrunner

Capt. Hilbrunner is a guide by profession who assists in this study, but is personally responsible for handing in more DNA samples for other people rather than himself. Most anglers are sure to put their own name on the data slips if they collect the DNA sample, but Capt. Hilbrunner is a sample obtainer and data recorder for any tarpon angler on the water in the Sarasota area. If you are near this man on the water and have a tarpon boat side, he could approach you to give you a DNA sampling kit or personally take the data for you and then drop off the sample giving you the credit. He also volunteers to promote the program on TV, radio, and at fishing meetings and events. Kudos for the extra effort!



## East Coast Coordinators: Above and Beyond

A project goal for 2009 was to increase samples from the East Coast and Florida Keys. The following captains stepped up to the plate to help meet the challenge.

Capt. Mike Badarack grew up in the small town of Satellite Beach on Florida's Space Coast and has been catching tarpon since age 10. Now a guide, he also serves as an East Coast coordinator and helps with sample collection and kit dissemination from his house and promotes the program through community events and the media. Capt. Badarack says, "The Tarpon Genetics Program is a perfect system that provides accurate data through DNA collection and doesn't harm the fish like previous methods. It's just a phenomenal program that benefits tarpon and lets anglers who are passionate about this great species be involved in ensuring their future."



Capt. Gary Giles grew up in the Miami area and has been fishing the inshore and near shore waters of Florida his entire life. He assists on several tarpon research programs in Florida and most recently started his own. Since 2004, Capt. Giles has tagged and released over 500 tarpon. He started sampling for and promoting this study in 2008 and of the many samples he has provided, one turned out to be one of the few documented recaptures along the East Coast.



## Recreational anglers take the lead!

To every angler that actually catches a tarpon, congratulations. It is no easy feat. And providing your tarpon's DNA sample is invaluable to learning about this species. Recreational anglers on both coasts place among the top samplers in this study, out-sampling many professional guides. Mr. John Manuel and Mr. Jon Mallory, both retired and fishing fanatics, have provided a plethora of samples from tarpon they fish year-round.

Jon Mallory, trout fisherman from Owego, NY, moved to the Merritt Island area after retirement and developed a passion for fly fishing. He is a member of the Florida Fly Fishing Association. He learned of this tarpon study at a club meeting presentation in 2009, when he "realized how important it is to track the travels and development of the species." Since he enjoys fishing for ditch tarpon, he started fishing in earnest to aid with the research. Mr. Mallory is quoted as saying, "I hope that the samples and information I have provided to Mote Marine Laboratory will help with its project and give me some answers to the many new questions I have!"



John Manuel, from Naples, has sampled for the study since 2007. He wrote, "For over a century Tarpon have been a premier quarry of Florida sport fishermen. Whether wily behemoth or feisty juvenile, the take and aerobic fight are thrilling. Yet little is known about this splendid fishery that I, and so many others, love so much, and that is why it is a privilege to work with the dedicated scientists on the Tarpon Genetics Team who use modern techniques to track and better understand this ancient and precious resource."



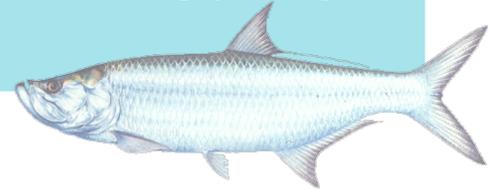
**2009 Sponsors\*:** Bobs Machine Shop, Badcock and More, Bonefish Grill, Cabela's, CB's Saltwater Outfitters, Centaurus DeHookers, FWC-Fish and Wildlife Research Institute, High Roller Lures, Merry Beth Ryan Photography, Mote Marine Laboratory Center for Fisheries Enhancement, PowerPole, SeaSucker, The Art of Richard L. Powers, Mitzi Skiffs.

\*Donations were provided through Mote Marine Laboratory

## TOP 10 2009 SAMPLERS

1. Mark Bennett
2. Jon Mallory
3. Ed Walker
4. Robert McCue
5. John Manuel
6. Raymond Baird
7. Roy Bennett
8. Lee Roberts
9. Jeff Owens
10. Dave Markett

A new Web article will list the top 100 samplers in the program. Check in to see where you rank and see how high you can go!



## ANGLERS WHO CONTRIBUTED IN 2009

### 50 or more samples

Raymond Baird  
Mark Bennett  
Roy Bennett  
Jon Mallory  
John Manuel  
Robert McCue  
Lee Roberts  
Ed Walker  
Kirby Wolfe

### 30 or more samples

Gary Giles  
Dave Markett  
Billy Miller  
Jeff Owens

### 20 or more samples

Mike Badarack  
Carl Ball  
John Gargan  
Jeff Hagaman  
Robin Murphy  
Mike Rementer  
David Rhea  
Tom Stephens Jr.  
Dave Varble  
Tommy Ziesmann

### 10 or more samples

Joel Bickford  
Brandon Burke  
Doug Creek  
Amy Domangue  
Jim Johnson  
Tom Karrow  
David Laggner  
Jack Little  
Larry Lutz  
Fred Milleman  
Bill Miller  
Rick Murphy  
Clark Nash  
Paul Nute  
Francisco Rosario  
Troy Sapp  
Lance Schouest  
Ned Small  
Ashley Templeton

### 5 or more samples

Chris Barron  
George Beckwith  
Dean Boss  
Tad Burke  
Bill Burrows  
Doug Cheney

Jerry Chesnes  
Gary Clark  
Tim Deacon  
Rick DuJardin  
Jeffri Durrance  
Doug Feinburg  
Carla Garreau  
Brent Gaskill  
Keith Goodman  
Brian Hart  
Bob Heagey  
John Jackson III  
Bill Jones  
Mick Kalassa  
John Kipp  
Sharon Masters  
Beckie Moore  
Chris Myers  
Samantha Scribano  
Aaron Sprague  
Dee Su  
Jeff Totten  
John Ullrich  
Jack Vasilaros  
Gene White  
Gerald Winkler  
Jay Withers  
Clark Wright

## 2009 RAFFLE WINNERS

Brandon Burke, Pinellas Park  
Jimmy Burnsed, Captiva  
Doug Creek, Punta Gorda  
Susan Davis, Marathon  
Brent Gaskill, St. Petersburg  
Chuck Kitto, Key Largo  
Dale Sparling, Cocoa Beach  
Steve Updegraff, St. Petersburg  
William Wert, Islamorada  
Gene White, Daytona Beach

### New in 2010:

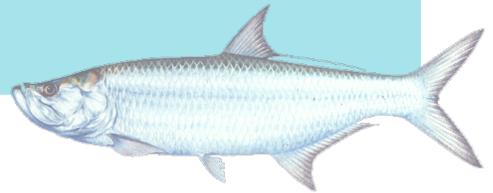
Any angler who returns five or more tarpon DNA samples will receive a Tarpon Genetic Recapture Study T-shirt.

# 2009 TOURNAMENT AND COMMUNITY PARTICIPANTS

*The following Florida tournaments, organizations and community events improved our program via support, education and outreach opportunities, kit distributions, and DNA sample collections.*

Bluewater Outfitters Open House  
Bonefish and Tarpon Trust  
Cape Coral Tarpon Hunters Club  
Coastal Conservation Association  
Don Hawley Invitational Fly Tarpon Tournament  
Ed Alber Tarpon Rodeo  
Everglades National Park  
Faro Blanco Invitational Tarpon Tournament  
Flatsmasters Qualifier  
Florida Flyfishing Association Meeting  
Florida Guides Association  
Florida Keys Fishing Guides Association  
Florida Keys National Marine Sanctuary Advisory Council  
Florida Sea Grant  
Florida Sportsman: Fishing and Boating Shows, Website, Magazine, and Magazine Radio Live  
Florida West Coast Division Inshore Fishing Association Punta Gorda Captain's Meeting  
Fort Myers Beach Tarpon Hunters Club  
Gold Cup Invitational Tarpon Fly Tournament  
Golden Fly Invitational Tarpon Tournament  
Hunting and Fishing Wild Game Dinner and Expo  
Kids Cup Tournament  
King of the Beach Tournaments  
Mangrove Coast Fly Fishers  
Marathon International Tarpon Tournament  
Old Salt Fishing Foundation  
Professional Tarpon Tournament Series  
Punta Gorda Seafood Festival  
Sarasota Sport Fishing Anglers Club Tarpon Tournament  
Slaw Dawg Invitational  
Stinky Joe's Fish On Lures Trout Tournament  
Suncoast Fly Fishers  
Suncoast Tarpon Roundup  
Tampa Tribune Outdoors Expo and Boat Show  
Tampa Yacht and Country Club Tarpon Tournament  
Tarponian Tournament  
The Art of Fly Fishing Festival  
The Fly Fishing Film Tour: Stuart and Orlando  
Venice Sharks Tooth Festival  
William R. Mote Memorial Snook Shindig

FGA Guides can list their contact information on [MyFWC.com/outfitters](http://MyFWC.com/outfitters). A great way to gain a little more exposure for your guide service and it's free!!



Domangue

*If you are a member of a fishing club, guide association or tarpon-targeting event and would like more information on this program or would like your group to participate, please let us know. We will be happy to assist in any way we can.*



TARPON GENETIC  
RECAPTURE PROGRAM

*2009 Review*

Timmons



Florida Fish  
and Wildlife  
Conservation  
Commission

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St. Petersburg, FL  
33701-5020  
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