

2008 Redfish Tracking Underway

With the April 19th Kids Cup Tournament completed, the 2008 redfish tracking project is now underway. As a sign of the times, some of these young redfish caught and released at the Kids Cup are actually rigged with hi-tech acoustic transmitters sending unique sound codes to underwater receivers in the area. Other redfish, only equipped with old fashioned-but reliable dart tags and phone numbers begin to tell the story...

In the meantime, a lot goes into the planning and implementation of this project. We actually began planning for 2008 in May of 2007. Remember, this project seeks to determine the fate of tournament caught and released redfish...Do they survive? Where do they go?...ect., ect. As mentioned, our project hinges on two important tagging methods. The first uses anchored dart tags coupled with angler recapture information; the second uses more sophisticated acoustic transmitters and tracking equipment. Tied to this are two additional studies, a control group study and a genetics study. More on these next month.

Anglers weighed in 68 redfish. Not all of them met the slot limit, but all of them received the anchored dart tags. Anchored dart tags were applied after the weight and length were taken by Capt. Ralph Allen, the Tournament Weigh Master. Our dart tags came from the Florida Fish and Wildlife Conservation Commission (FWC). Both sets of tags (yellow – left from last year and orange – received for this year) were originally purchased for snook research, but were generously donated for our project. Since researchers are generally expected to provide their own tags for individual projects, we are grateful for FWCs continued support of our project. Anglers, if you happen to catch a tagged fish, please write down the tag number, length of the fish and capture location, and call that information into the redfish hotline. The phone number can be found on the tag. We ask that you please release the fish with its tag intact so that it can continue to provide important information about redfish survival, travel patterns and growth rates as it is recaptured.

Twenty fish also received acoustic transmitters. These transmitters (sometimes referred to as sonic tags or acoustic tags, about the size of your pinkie) are surgically implanted into the abdominal cavity of the fish. The transmitters are powered by an internal battery allowing them to transmit a signal that can be received by our equipment if the fish is located nearby. Last year our transmitters were much smaller with smaller batteries, and signal ranges. A fish had to come within 150 feet of our equipment to be detected. The larger transmitters used this year can be heard about 450 feet away from a receiver, a huge improvement. This years transmitters can also chirp away for 820 days compared to 150 days from last year.

Selecting an appropriate transmitter for the project, included considerations of the weight of the fish in relation to the weight of the tag. A great deal of research has been done by the vendor (VEMCO) and other researchers to determine the maximum size transmitter that can be used safely with minimal complications to the fish. On another front, our surgeons Carole Neidig from Mote Marine Laboratory and Cindy Armstrong from Progress Energy, and University of Florida veterinarian Roy Yanong ran tank trails testing anesthesia concentrations appropriate for redfish. This step was necessary because the anesthesia we used last year was not available for use this year. Instead we used carbon dioxide (CO₂), a USDA accepted and commonly used

anesthesia. These trials examined the influence of CO2 concentrations on differently sized redbfish, under different water chemistry conditions. Applying this knowledge at the Kids Cup, Carole and Cindy surgically implanted transmitters into 20 pre-selected redbfish, based on their health and size at weigh-in. After surgery, redbfish were placed in oxygenated recovery tanks, revived by dedicated volunteers, then released. We thank Southern Oxygen in Punta Gorda and Keith Benner for providing our oxygen, CO2 and regulators for the event. I should also mention that we had to obtain a special activity permit from FWC for all of our research activities, from the time the fish were handed over to us until their release back in the water.

A pod of waiting dolphins near tournament dock made releases more difficult this year. We decided to transport all of the fish away from the dock and release them in an area where they would have a better chance of survival. To do this, we moved them in livewells, around the corner and released them by the rock wall of the marina. Once released, Fishin' Frank and Terry were at hand in a University of Florida boat listening for the coded signals of the acoustic tags with portable tracking gear. Frank, Terry and I heard 19 of the 20 transmitters this way. As a bonus, we also heard from a transmitter unknown to us, which I have yet to identify. Roger and I picked up the 20th transmitter on Monday morning.

Over the next year you may see Roger and I out in the field tracking or servicing our equipment. We need to download and service the underwater receivers on a monthly basis to prevent flooding caused by barnacles and oysters growing on the seals. Beginning this weekend (April 25th) we also will have volunteer anglers helping us by taking receiver gear with them when they go fishing. Remember, as we download equipment and receive angler recapture information, it will be posted on the redbfish [tracking website](#), which should be operational for this year's tournament by the end of May. Regular updates will also be available in Water LIFE Magazine, so stay tuned for another exciting year of following the Kids Cup redbfish. Anglers, if you caught a fish in the Kids Cup Tournament, I'll be sending you a letter with your fish tracking information. If you do not receive your letter by the end of May, call me and I will get that information to you.

Special thanks go out to you anglers, the team of volunteers, tag sponsors and the captains and anglers who contributed financially towards our redbfish tracking project. We think this is a very important project and are pleased so many of you do too!