RISING TIDE

THE MAGAZINE for
YOUNG ANGLERS and
CONSERVATIONISTS.

KAPOW!

Why is this
EXPLOSION
a GOOD thing?

RUNNING of the BULLS!

where, when, why, how?

Meet Mary Lee!
OCEARCH
GLOBAL SHARK TRACKER

PLUS
LOTS MORE!
PHOTOS, ARTICLES & ACTIVITIES
Run Redfish Run
All your bull red questions answered - what exactly is a bull, why do they run, and how to catch one!

Barotrauma!
Learn what it is and how this harmful phenomenon among deep water caught fish can be prevented.

To Sink a Ship...
Fishermen are excited about the new artificial reef made from a World War II Coast Guard ship.

Activity Time
Test your skills with these fun challenges.

Try it or Buy it!
Try and master a new fishing knot or get some cool ideas for holiday gifts!

Shark Tracker
Ocearch uses a global tracking system to follow and study big sharks (including Mary Lee) across the nation.

Kids Fishin’
Kids from all over the US show off their trophies.

ON THE COVER: CCA member and experienced angler, David Garcia, releases a huge bull redfish too big to reel in the boat! Photo by Mike Garcia.
**The Bull Red Run is on!**

**What is a Bull Red?**

Adult redfish or red drum measuring more than 28 inches long are commonly called “bull” reds. They range from Massachusetts to Florida, and are most common along the Gulf Coast.

**What is the Bull Run?**

Every year between August and November, adult bull redfish, some as early as age 3 and above, come together on Gulf beachfront passes to spawn. This time is known as the bull redfish run, bull red run, or bull run.

**Why is this good to know?**

This is a very important stage in the life of a redfish, but at the same time, it gives you the opportunity to catch some big fish! Fishing for these big bull reds is something people along the Gulf Coast look forward to every year. Because of their size, bull redfish are basically a catch-and-release fish, so you get to have fun fishing; but you also get to be a conservationist and let them go.

**How do I catch a Bull Red?**

You catch these fish in many different ways: surf fishing off the beach, at a bridge or jetties, or from a boat. Fishing for big bull reds is actually not very complicated. It basically involves casting a big piece of bait out and waiting for a hook-up. Also there’s no need for any fancy working of the bait to increase your chances of a strike; it’s pretty much a waiting game.

While there are several man-made lures, such as spoons or jigs, that you can use to catch these bull redfish, the best way to hook them is with natural bait. Mullet, shad, shrimp, whiting, sand trout, crabs are among some of the best baits to use for these fish. When fishing, you should check your bait every so often to make sure you haven’t lost it and keep it fresh by changing it about every 30 minutes.

The best hook you can use for this type of catch-and-release fishing is a circle hook because it is safest for the fish. Circle hooks are designed to catch the fish’s lip, and if they grab the bait and turn to run, catching a bull red like this reduces the chance of an injured, deeply hooked fish and makes it easier to unhook and release.

Because bull reds are bottom feeders, you will want to use a heavy enough weight to keep the bait at the bottom. A simple ‘fish-finder’ rig or Carolina style rig works great.

It’s good to remember these large fish grab and run with your bait at a high rate of speed. If you hook one, you’re in for a strong fight. An unsecured rod may easily be pulled into the water. Landing bull redfish on light tackle can be challenging so using heavier line and tackle, especially in dark or deeper water is a good idea. Your reel should have a good drag system and have several hundred yards of line available.

Go to the next page to see the best way to release your catch!
WHAT IS BAROTRAUMA?
Every fish has a gas-filled organ called a swim bladder that allows the fish to gently control how much it floats or sinks. When a fish is caught in very deep water and reeled in quickly, the fish doesn’t have time to regulate its swim bladder and like a balloon being blown up, the swim bladder gets “over-expanded.”

Their swim bladder may swell so much it’s stomach is forced out its mouth. Ouch! The eyes may also bulge out of the sockets and other internal organs can be injured.

If a fish is released in this condition, it may not be able to swim back to the bottom and will float away on the surface, eventually dying.

BAROTRAUMA MYTHS:

Myth: Reeling a fish slowly prevents barotrauma.
Fact: Fish cannot get used to the pressure drop even when reeled in slowly.

Myth: The organ protruding from a “popped” fish’s mouth is the swim bladder.
Fact: It’s the stomach! Never try and vent the stomach or try and force it back inside the mouth.

Myth: You can tell by looking whether a fish will survive or die.
Fact: When properly recompressed, even a fish with severe barotrauma can survive.

In other words, you have to help get the fish down to the original depth from which you caught it so its swim bladder can shrink back to normal size. There are many ways of returning a fish to a depth at which it can recompress.

UPSIDE-DOWN CRATE, WEIGHTED AND ATTACHED TO A ROPE:

Crate is dropped over the fish and then, with the fish inside, lowered to about 60 feet and kept down until it can swim out on its own.

BACKWARDS BARBLESS HOOK WITH WEIGHT:

Hook fish through lower lip from inside to outside, to keep hook from puncturing an extruded stomach and to prevent line cuts to eyes. You can also hook a fish through the membrane on its upper lip from outside to inside, which some say makes for easier release. In both cases, the weight must lead the fish into the water and be heavy enough to sink it to the desired depth. Fish is released with a sharp jerk on the line.

COMMERCIAL FISH DESCENDERS:

“To descend” means to “go down.” So a fish descender is a tool designed to help a fish get back down to where it came from. There are a variety of easy-to-use fish descenders out there for sale. These products are gaining popularity in the fishing world and should be considered a necessity when catching deep-water fish. The best one for you may depend on the size and species you catch. You should check your local fishing stores, or the internet for your options.

VENTING: This is the practice of deflating the fish’s over-filled swim bladder with a sharp needle or hollowed out sharp object. This method was once thought to be a good method of helping the fish get back down but there have been an increasing number of studies showing that venting may do more harm than good. Recently, a study by the Alaska Department of Fish and Game announced in large red letters: “Do NOT vent” as “this practice leads to eventual death.” Even when done properly, venting can damage a fish’s swim bladder. Recompression devices are proving to be a much more effective method of successfully releasing deep-water fish.
The Building Conservation Program funds local, state and national marine fisheries and habitat conservation projects.

The volunteer-based projects achieve one or more of five key goals:

- RESTORE DAMAGED HABITATS
- CREATE NEW HABITATS
- ADVANCE THE SCIENCE OF COASTAL HABITAT AND MARINE FISHERIES
- ENCOURAGE HABITAT PROTECTION
- EDUCATE COASTAL COMMUNITIES OF THE VALUE OF CONSERVATION

The money raised from this program is combined with local CCA chapter efforts to organize conservation projects that inspire local communities to work together for marine conservation.
**CROSSWORD**

**ACROSS**

2. A fish that people eat out of cans.
3. An orange fish that is a pet.
8. A freshwater place where fish live.
10. Fish use these to swim.
11. Fish are covered in these.
12. This is what a fish's swim bladder may swell so much its stomach is forced out its mouth.
14. ____ hooks are best to use when catching bull reds.
15. Redfish have a black spot on it's ____ to fool predators.
18. Recompression devices are used to get fish ____ down!

**DOWN**

1. A very small fish.
4. Great white ____
5. A saltwater place where fish live.
6. A fish with whiskers.
7. Fish need these to breathe.
13. Adult ____ spawn every fall in what is known as the bull run.
16. Every fish has a gas-filled organ called a ____ bladder.
17. The U.S.S. ____ CGC Veterans Memorial Reef is the new home for lots of underwater marine life.
19. A sunken warship that becomes habitat is known as an artificial ____

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**MAZES**

START → FINISH

**MAZES**

START → FINISH
**Tie a Snell Knot on a Circle Hook!**

You learned earlier in this magazine that a circle hook is the best choice when fishing for bull redfish (or any deep water fish) because it is the safest for the fish. A snell knot is a popular way to get your circle hook securely attached to your line. Once you master this knot, it will surely come in handy!

1. Pass one end of the line through the eye of the hook so that it sticks out one or two inches past the eye, towards the barb. Pinch the hook and line end together between your left thumb and index finger right where it exits the eye, make a large loop, then hold the loop down so that enough is sticking out to wrap several times around the line and hook body.

2. Wrap the end tightly around the line and hook body 7 or 8 times, towards the barb. On the final wrap, pass the end back through the looped line, so that it points towards the barb.

3. Grasping the end near the barb and the end on the other side of the eyelet, slowly pull the line until it is almost tight. Slide the loops up against the eye, then grip the short end with pliers and completely tighten the knot. Trim the end hanging towards the barb.

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**Fun Stuff! Check These Out!**

**Fishing Resort**

Game for Wii

Fishing Resort is a fishing game that takes place on a large tropical paradise and uses the Wii Remote to mimic the action of casting and the Nunchuk for reeling. After customizing your avatar, you have many options as to where to begin your fun. Whether it be checking the resort’s bulletin board for daily activities and contests, participating in any of the over 20 fishing-related mini-games, or go trolling the high seas on a charter boat in search of really big game such as giant swordfish.

This paradise offers lakes, streams, and even ice fishing high in the mountains in addition to the deep and shallow sea fishing that’s sure to keep the casual and hardcore fishing fans alike coming back for more as they try to catch the over 200 varieties of fish available.

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**LEGO City Fishing Boat**

It’s a great day for a family fishing trip in the LEGO City Fishing Boat!

- Easy-to-build and durable vessel
- Sailor and fisherman included
- Shark, fish, fishing poles, coffee cup, life vests and binoculars included
Mary Lee was first spotted by Chief Engineer Denny Wagner from atop the Mothership Vessel OCEARCH. "Great White!" he yelled as he kept his eye on the great white who would become known as Mary Lee.

All the crew was in place, baits were in the water but Mary Lee would not bite. She became curious of the circling boat as time wore on and started nudging at the motors at the back of the boat almost in a playful manner for quite awhile. Finally, the call came in to the MV OCEARCH, "We're hooked up!"

Mary Lee did not swim into that shark lift willingly but eventually she made her way onto the platform and her massive size became very apparent! The lift was raised safely out of the water and Mary Lee was ready to be fitted with three different tags: SPOT, acoustic, and accelerometer.

Accelerometers are the motion-sensitive computer chips used in smart phones, iPods and the Nintendo Wii. Attached to sharks, accelerometers can detect each flick of a shark's tail or tilt of its body and give scientists insight into what sharks are doing and when. Accelerometer tags are different in that they record the actual physical movements of a shark's body. So simply, it tells you what the animal is doing - not just where it's going. The accelerometer contains extremely valuable information about Mary Lee's tail beats and body position after being tagged. This is only the second great white shark to ever be tagged in this way.

After all the important scientific recordings and measurements were taken, Mary Lee was lowered back into the ocean. Water hit her gills, she swung and thrashed herself around on the lift and finally pushed off and back into open water.

Chris Fischer reflects on Mary Lee and the crusade to get her in the lift, "The most brutal battle we have ever had. Bret McBride, Jody Whitworth, and Todd Goggins were true warriors in the midst of a modern day battle with an ocean giant in the toughest of environments we had ever had to work."
The morning after Mary Lee swam off the shark lift, the hunt for the accelerometer tag began. The tag was programmed to pop off of Mary Lee around six o’clock in the morning. Once the tag pops off, it floats to the surface to be located by the crew.

The accelerometer tag gives out a radio signal that sounds similar to a sonar ping. Using headphones and an antennae, the radio signal can be heard from ten miles away. The crew searched in very rough seas for several hours, traveling over one hundred miles, but they never heard anything.

Finally the ping directed the crew to a parking lot off Nauset Beach, Massachusetts and then down a path through the trees where finally the team stumbled upon some friends on the front porch of their home. They were holding the accelerometer! The mission was a success!

Mary Lee went into deeper water at around midnight and started doing repetitive bounce dives between the surface and about 130 feet deep. This swimming pattern is common in other species of shark, and likely helps them conserve energy.

Mary Lee moved back into shallower water through the early morning hours and was only about 30 feet deep when her tag detached a couple hours after sunrise.

This question is from Tristan S., 6, Cypress, Texas.

Tristan: Do great white sharks sleep?

Fischer: All sharks need to sleep. Some sharks, like the nurse shark, can rest on the ocean floor, but many like the great white cannot. This is because they must maintain water and oxygen moving over their gills in order to stay alive. They have to keep moving! These sharks that have to remain in motion “rest” by shutting down one side of their brain at a time, putting them into a sort of “sleep-swim.” The awake side of their brain allows them to keep swimming and remain alert for predators or food. It is likely that great whites often have this rest period after they have fed well. It is unknown whether or not the great white has the need like humans to sleep at certain times of the day.

This question is from Nick V., 9, Houston, Texas.

Nick: In the last show of the season in South Africa, it sure looked like a lot of guys were getting hurt trying to get those last few sharks to the lift. Is everyone OK?

Fischer: Towards the end of our great white tagging mission in South Africa, the crew did grow increasingly exhausted and left some with minor injuries. Captain Brett McBride suffered a sprained right wrist, captain Jody Whitworth dislocated a finger, deckhand Todd Goggins badly hurt his thumb, and various other minor injuries were reported throughout the missions. As the saying goes in professional sports, the crew played hurt and they are warriors for understanding they had to work through the pain to get the very important scientific research completed. Now everyone is definitely “OK” and all who were hurt have recovered fully. Their hard work and determination should be an inspiration to us all.

DO YOU HAVE A QUESTION FOR CHRIS FISCHER?

Send in your questions and if chosen, he will answer them in this ongoing Q&A section. PLUS, If your question is selected, you will receive some cool Ocearch gear!

* Send questions to hpeterek@joincca.org.
KIDS FISHIN'

Colten K. & Cloe F., 9, with a pair of redfish caught in East Matagorda Bay, Texas.

Jadyn B. & B. with her 19-inch Speckled Trout she caught in the Sabine Pass near coastal Waterway, Texas.

Caden L. & L. fishing in Sorensen, Texas.

Hunter W. & W., with his first trout in Hockley, Louisiana.

Kade W. & G. with a nice stringer caught in Chocolate Bayou, Galveston, Texas.

Cleason J., 14, caught this redfish at the north jetty in Galveston, Texas.

Valero

Thank you Valero!

CCA & Valero Continue Youth Partnership

Because of the generous support of Valero, the Rising Tide Youth Program will continue to thrive!

"Since the 2007 launch of the Rising Tide Youth Program, more children than ever are participating in community projects, local and statewide tournaments and in the conservation of coastal resources," said Pat Murray, president of CCA. "But, there is still work to do, and Valero's generous sponsorship will allow us to continue focusing on the future of marine conservation through our youth programs."
DO YOU HAVE A GREAT CATCH THAT COULD MAKE OUR KIDS FISHIN’ PAGE?

Send us your favorite photo and stories and you could be featured in the next issue of Rising Tide.

Include your mailing address in the email and you will receive a CCA sticker just for sending it in!

*Email photos and info to photos@joincca.org*
Learn the A-B-Seas of Conservation!

At Valero, we’re proud to be America’s largest refiner, producing everything from gasoline to jet fuel. But we’re also one of the nation’s most environmentally responsible refiners, too. We think the Coastal area is one of the most important regions in the United States, and we want to help keep it that way. That’s why we are proud to sponsor the Rising Tide newsletter. Inside, you’ll find lots of interesting information, and you’ll discover the fascinating world underwater.

We hope that with what you learn, you will grow up just as determined as we are to help protect one of our most valuable natural resources: the Coastal area of our United States.