

FRISING TIDE

Rising Tide is Coastal Conservation Association's youth outreach and education program, which education among young anglers. The program endeavors to capture the enthusiasm of young anglers and provide opportunities for them to understand and appreciate the coastal environment. CCA encourages young anglers to get involved with community habitat projects, participate in local and statewide tournaments, and promote marine science and conservation at their school. The Rising Tide program is committed to engaging the imaginations of young people and inspiring them to become the conservation leaders of tomorrow.

Editor and Designer Heather Peterek
Consulting Editors Patrick Murray
Ted Venker

This publication is sponsored by Phillips 66



PROVIDING ENERGY, IMPROVING LIVES.



What's Inside:

All Hail The King

The king mackerel, or kingfish, is an important and popular species among recreational fisherman of all ages!

Salinity Now

Check out some of our favorite fishing and outdoor things handpicked for CCA kids like you!

Make Shark Bark

Try making some homemade candy treats with a shark bite twist, perfect for sharing with friends.

All W Friend

All Washed Up

Friend of CCA, Jace Tunnell doesn't go to the beach to swim or fish – he hunts for whatever the tide washes up.

Cajun Crabbing

Our friends from Louisiana share tips for catching blue crabs on the bayou...it's easy, summer fun.

Whatch Catchin'?

CCA kids share their photos. Can you guess all the species?

Finn Aukeman (6) and Carleigh Gorski (12) spent the day fishing in Jensen Beach, Florida. They were targeting one of the most fun offshore species

to catch...king mackerel, or kingfish! On this fishing trip they trolled live cigar minnow over an artificial reef. This method is a popular technique for luring in big kings. It was a good day on the water for Finn and Carleigh, and they say if you ever get the opportunity to

go fishing for king mackereL..take it! They're a fun fight for all ages!

	NERS F		PAGE 9:	ANSWERS F
1. D 2. A 3. J 4. M 5. C	6. K 7. E 8. L 9. T 10. G	11. O 12. P 13. H 14. N 15. Q	16. F 17. I 18. R 19. S 20. B	1. Red drum or 2. Snook 3. Gag groupe 4. Speckled tr 5. Southern fit 6. Red drum, o 7. Red drum, o

VERS FROM PAGE 11: Irum or redfish k grouper kled trout

PHOTO BY JASON ARNOLD

Speckled trout Speckled trout Southern flounder Red drum, or redfish Red drum, or redfish

Ever Thought Of Becoming A Scientist? SABELLE CUMMINGS USABELLE CUMMINGS Winner Is A Young Marine Biologist At Work

Isabelle Cummings was one of CCA's first scholarship recipients! CCA's Science of Conservation Scholarship Program was created in 2018 to fund scholarships for students committed to advancing their education in marine fisheries science. Isabelle Cummings was selected to receive this scholarship in 2022 as a student at Texas A&M University in Corpus Christi and is now making a big difference in the marine fisheries science world with her southern flounder research.

and grew up with five other siblings. She was homeschooled most of her life but found numerous volunteering opportunities in aquariums and nonprofit organizations in the area. From these experiences, she developed a love for the ocean that later inspired her to attend Texas A&M University-Corpus Christi,

After earning a bachelor's degree of marine biology in 2021, she remains at Texas A&M University-Corpus Christi to attend graduate school and work with Harte Research Institute's Sportfish Center for Science and Conservation under Dr. Greg Stunz in the Fisheries and Ocean Health Laboratory. Greg Stunz is a longtime friend of CCA and often contributes his valuable knowledge to our conservation work.

Isabelie is currently working with other members of the Stunz Lab to study southern flounder populations and how to prevent their continuous population decline. She conducts this flounder research by talking to anglers and observing how often people harvested/caught the species. conducting boat surveys to determine their migration timing and using the ear bones known as otoliths to determine their ages.

She strives to continue her studies of fisheries and ocean health throughout her education as well as obtain the knowledge and skills needed to excel in her future career.





The ling malant

The king mackerel (Scomberomorus cavalla) or kingfish, is a migratory species of mackerel of the western Atlantic Ocean and Gulf of Mexico. It is an important and popular species among recreational fisherman of all ages!

Kings and kids are a perfect match. King mackerel with their long body shape, represent a chance for young anglers like you to catch your first 'big fish.' Sometimes, the fish are even taller than you, which always makes for a great photo opportunity.

They can be caught near-shore, offshore, while bottom fishing or while trolling (dragging your baits behind the boat while driving at a low speed). On of the most popular fishing methods is to use a cigar minnow as bait and use a thin wire leader while trolling. When that bite occurs, it leads to chaos on the boat, the fun kind of chaos. The rod starts bending and whoever grabs it out of the rod holder first, better hold on and "reel, reel, reel!" That has to be the most yelled, threeword phrase in all of fishing! Kings also stay pretty close to the surface which makes for an easier fight for young kids as opposed to trying to reel in a red snapper up from a depth of one hundred feet

of water. Plus, when a king strips off one or two hundred yards of your line, it is a more intense type of fishing action than most kids have ever experienced.

If you get a chance to go fishing for Kings. take it! It will be a fun time on the water for you and even the adults onboard!



King mackerel are fierce, fast, and fun to catch!

Angler Carleigh Gorski (12) shows off a kingfish caught in Jensen Beach, FL. She used a live cigar minnow for bait and fought the fish for almost 10 minutes. Nice one!!

• Back is iridescent bluish-green with silver sides. The first dorsal fin has light, uniform pigment and 14 - 16 spines. They have a distinct lateral line with a drastic downward curve at the second dorsal fin. Small king mackerel sometimes have spots like Spanish mackerel.

BIOLOGY

- Grow fast, up to 5.5 feet and 100 pounds.
- Can live more than 20 years.
- •Able to reproduce when they reach 2 years of age.
- •There are two distinct populations, one in the Gulf of Mexico and one in the Atlantic.
- Females grow much larger than males, an evolutionary strategy that maximizes the amount of eggs that a female can produce.
- Females can produce 50,000 to several million eggs.
- Feed on fish, squid, and shrimp. They're voracious feeders and have been observed leaping out of the water in pursuit of prey.

• Juvenile and larger pelagic fish like marlins feed on smaller king mackerel. Bottlenose dolphins and large fish, such as sharks and tunas, feed on adult king mackerel.

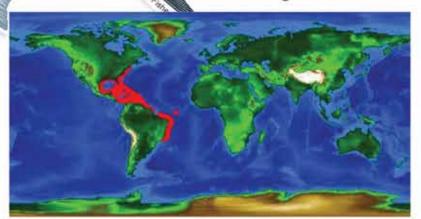
Where They Live

• Found in the Atlantic Ocean from Massachusetts to Brazil, including the Caribbean and Gulf of Mexico.

- Coastal pelagic species, meaning they live in the open waters near the coast.
- Live in water 115 to almost 600 feet deep.
- \bullet Prefer warm waters and seldom enter waters below $68^\circ \text{F}_{\text{-}}$
- Migrate with seasonal changes in water temperature and with changes in food availability.
- Both the South Atlantic and Gulf of Mexico stocks congregate in a winter mixing zone in an area of Monroe County, Florida, south of the Florida Keys, between November and March.

World distribution map for the king mackerel

The king mackerel is found along the western coast of the Atlantic Ocean from Massachesetts to Rio de Janeiro, Brazil and the Gulf of Mexico. The Atlantic Ocean and Gulf of Mexico stocks mix in south Florida waters.



HEY GROWN-UPS! You can find all these items on Amazon.com!

WHAT'S GOT CCA KIDS FEELIN' SALTY?

The eye-catching **PROFISHIENCY NEXT GEN KRAZY ROD & REEL COMBO BY ANYTHING POSSIBLE BRANDS** is specially crafted and appropriately sized for the up-and-coming angler who's ready to advance to casting gear. The reel is built with a smaller profile and a shallow spool, to better fit the hand and minimize troubles (i.e., major backlashes). The attached rod is light enough to handle and short enough to control, so it is smaller...yet mighty! Together, the Krazy Series rod and reel make the perfect next-step solution for the anglers of

tomorrow (you!)!

The **AFTCO TACKLE BAG** was built for fishermen of all ages. It has shelving to store 4 tackle tray boxes in the main compartment, big side pockets large enough to hold an additional tackle tray and a few smaller pockets for anything else! Just what you need to keep all your own gear organized and ready for any fishing adventure.



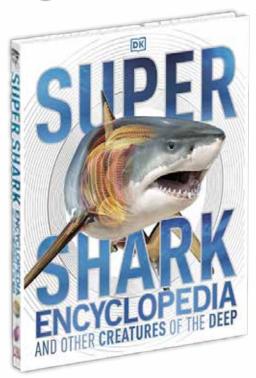
Show your love of country and angling in this **COLUMBIA® PFG FISH FLAG SNAPBACK CAP FOR KIDS**. With mesh rear panels, it has great airflow for hot days, and the side patch and triangle back PFG patch give extra style points. This is a perfect fishing trip hat to keep you in the shade The Award winning SURFER DUDE CLASSIC WAVE POWERED MINI-SURFER AND SURFORM

BEACH TOY is so much fun! It's the Worlds first (and only) surf boomerang! Patented self righting design means they catch a wave every time and come back to you again and again. NO batteries or wind-up required - uses the energy of the surf. whether you play with them solo, or race against friends, these are a must-have for your next beach trip!



Even if you aren't absorbent and yellow and porous, you will love these **NICKELODEON GUMMY KRABBY PATTIES CANDY**.

Each individual pack comes with a bun, pickle and of course, a krabby patty! You can stack all the pieces to make a whole krabby patty, or eat each piece one at a time...either way, they're tastier than any pineapple under the sea!



The SUPER SHARK ENCYCLOPEDIA: AND OTHER CREATURES OF THE DEEP

book is so much more than just a book about sharks. From Barrel Shrimp to Blue Sharks, Starfish to Bat Fish, and Hammerhead Sharks to deep-sea monsters,

rays, and eels, this book is packed with facts about animal behavior and anatomy. New x-ray artworks use crosssections to strip layers away and show anatomical features in great detail. Dive in and become an expert of the deep blue! This is just one of the DK Super series of books for kids; also check out Super Human, Super Space, Super Bug or Super Earth.

Try This! HARK BARK

DIRECTIONS:

In a microwave safe bowl, heat the wafers according to the directions on the package until melted and smooth.

On a piece of parchment paper, spoon scoops of the melted wafers to create a square. Alternate colors so that both will be evenly swirled in your square.

Take a chopstick or toothpick and swirl the two colors together until you like the pattern you have created.

Then, while still melted, add the shark gummies evenly over top, pressing down gently so they stick. Finish by sprinkling the red sanding sugar around each shark.

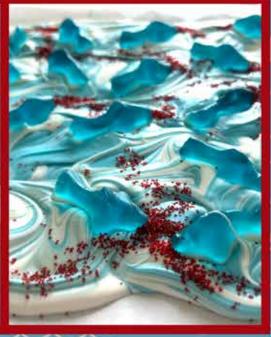
Let the bark cool completely, then cut into individual servings for sharing!

INGREDIENTS:

1 cup blue melting wafers 1 cup white melting wafers 1 bag shark gummies Red sanding sugar or sprinkles







MR. JACE TUNNELL

Father, Scientist, Conservationist, and Beach Combing Enthusiast

THIS GUY GOES TO THE BEACH. A LOT.

But many times he's not there to swim, build sandcastles, or fish – he's hunting for whatever the tide washes up.

Jace Tunnell has a Master's degree in Marine Biology from Texas A&M University-Corpus Christi in 2001 and now works for our friends at Harte Research Institute for Gulf of Mexico Studies at Texas A&M University-Corpus Christi. Mr. Tunnell is in charge of getting the community involved and informed when it comes to all things marine conservation, water quality and environmental science. He is the founder of a citizen science project called Nurdle Patrol that tracks plastic pellet concentrations internationally. Nurdle Patrol was created to raise awareness of plastics in the ocean and develop new laws based on their findings to protect our ocean from further plastic pollution. He also directs and produces a video series called "Beachcombing" documenting the unique (and sometimes crazy) items he finds washed up along the Gulf of Mexico beaches. Mr. Tunnell doesn't just produce this show to find fun beach treasures, his adventures also help track what creatures are in the ocean at certain times and how we can find ways to make sure they stay healthy.

When Tunnell is off duty and not patrolling for nurdles, he can still be found on the beach engaging in one of his favorite past times: being a dad. He instills his love for the beach in his daughter Parker and his son Jack. Tunnell encourages his children to explore the beach environment. They attend turtle releases, learn about sea creatures, and of course, hunt for nurdles and beach treasures!

Tunnell continues to see every day as a new opportunity to teach his followers, supporters, and the public something new. He believes in a future of stronger regulations to protect against nurdle spills and a change in human behavior that includes using less plastic in dayto-day life, especially single-use plastics.

These tiny pellets, called nurdles, are the building blocks of nearly everything plastic. They are melted down and molded into desirable plastic goods, including singleuse plastics, such as water bottles, grocery bags, utensils, and straws. Despite the fact that nurdles have been reported on beaches and in the stomachs of wildlife since the early 1970s, nurdles have escaped public attention as a contributing factor to the plastic pollution crisis, until now. Tunnell is bringing nurdles into the spotlight, and he has a sea of supporters. MATCH THE ITEM NAME BELOW WITH THE CORRECT CRAZY FIND OR COOL CREATURE FROM THE NEXT PAGE! (Answers on page 2)

- A. Safety light from a life ring
- B. Black drum fish skull
- C. Deep water buoy
- D. Cow tooth
- E. Atlantic cockle
- F. Lotus seed pod
- G. Vintage glass float
- H. Female deer skull
- I. Mermaid statue
- J. Banded sea star
- K. Long lost baby doll
- L. Dolphin vertebrae
- M. Sea heart sea bean
- N. Prosthetic leg
- O. Brainfruit or monkey's brain
 - P. Skeleton of a "by the wind sailor"
 - Q. Cow fish
 - R. A safe
 - S. American eel
 - T. Sixteen messages in a bottle

From marine life, to man-made, and everything in between...Mr. Tunnell finds it all washed up on the beach. Here are just a few of what he's found lately...can you guess the names of all these wild treasures?









Cool Creatures































Catching blue crabs down in the Louisiana bayou is easy summer, fun!

WHERE TO FIND | Nearly every road running north-south on Louisiana's coast was built through a tidal marsh. During construction, ditches were dug along both sides of these roads so the the rising and falling tidal marsh waters have a place to go. These ditches are usually loaded with crabs when the water warms up in the hotter months.

Public beaches and public piers also have great summertime blue crab runs when the females head to the sand to spawn.

SIMPLE GEAR, SIMPLE BAIT | Gearing up for crabbing is simple and can be much less expensive than prepping for a day in the boat. Some days, all that's needed is a ball of twine, a pack of chicken necks, long-handled landing net and a bucket.

Crabbing at the beach is as simple as stringing a 20- to 50-foot line between two wooden stakes in thigh-deep water and attaching a piece of bait every three or four feet. Check your line every 15 minutes and if you have some crabs on, just hold a net held beneath the baits and shake the crabs into it.

Bait is a matter of personal preference, but many people tend to go with chicken leg quarters or chicken necks.

Other options include fish heads, cast-netted mullet or if a pinch, roadkill could work as long as the buzzards haven't claimed all the good parts.

WHEN TO FIND | It's best to start early in the morning because as the sun comes up and the water warms, the crabs move deeper and get shy. They see shadows and movement easier when it's sunny, so a good strategy is to get baits in the water very early when it's still pretty dark and wrap up your crabbing before 9 a.m.

CATCH & COOK | South Louisianans are very proud of their seafood and prefer to cook their crabs by boiling them for about 10 minutes with lots of cayenne pepper, salt, lemon juice and garlic and then let them sit in that concoction for about 20 minutes after the fire is turned off. Then they're ready to crack and enjoy!.

Next time you get an itch to go "fishing," consider leaving the boat and the expensive rods and reels at home. Steal the string off your kite, grab a pack of chicken not fit for frying and invite some friends to go crabbing!

story and photos by CHRIS MACALUSO



PROVIDING ENERGY, IMPROVING LIVES.

Because of the generous support of Phillips 66 the Rising Tide Youth Program will continue to thrive!

NON PROFIT U.S. POSTAGE PAID HOUSTON, TEXAS PERMIT 2532



CONSERVATION & PROTECTION OF MARINE LIFE 6919 Portwest Drive, Suite 100 Houston, Texas 77024

YOU are an important part of a conservation organization of more than 100,000 people who love and care about fishing and the health of marine life and habitat. That makes YOU...a pretty cool kid.



Thank You Phillips 66 For Your Support of This Program!