ssue 25

Facts for BILLFISH **ANGLERS**

BIOLOGY

First of all, what is a billfish? Billfish, such as marlin, sailfish, and swordfish are open ocean predators that have a bill or sword above their mouth used for catching prey. They are some of the largest, fastest, and most unique fish in the world and are some of fishermen's favorite fish to catch. Billfish can be found throughout the Pacific, Atlantic, and Indian Oceans.

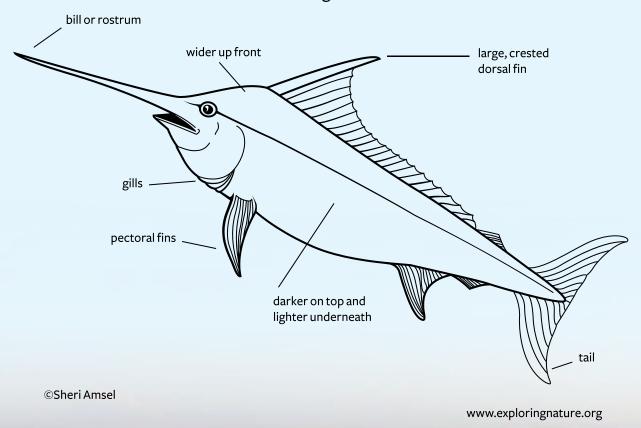
SIZE AND LIFESPAN

After a female releases her eggs in the surface waters of the open ocean, billfish hatch as small larvae like the one pictured at right. Once fully grown, the average billfish can weigh anywhere between 75 and 300 pounds - depending on the species. Blue marlin are the largest species of all billfish and grow to over 14 feet and weigh up to 2,000 pounds. That's as heavy as a car! The average lifespan for most billfish is around 25 years.



Atlantic Blue Marlin

Makaira nigricans



PHYSICAL FEATURES

Take a look at the diagram above detailing some of the main physical features of billfish, in this case a marlin. The large bill is used to stun or kill prey. Billfish are so strong and accurate with their bill that they can cut their prey clean in half! The large pectoral fins on their bellies help the fish steer, turn, and rotate quickly. The dorsal fin on their back provides stability when travelling at high speeds. And their large tail is used to propel the fish forward at upwards to 60 miles per hour- that's as fast as a car!





Billfish are one of the most exciting fish in the world to catch due to their speed, incredible leaps out of the water, and impressive strength and power. To help conserve billfish and make sure

they can be caught for years to come, it's important they are properly released back into the wild. Here are some techniques you should follow if you catch one:

- Do NOT take them out of the water. It removes their protective coating and damages their fragile bones and organs. Not to mention taking them out of the water is <u>illegal!</u>
- Use circle hooks to avoid hooking the billfish deep in the throat or stomach.
- Remove the hook using a de-hooker.
- Make sure to revive the fish by holding on to the bill close to the head & idling the boat slowly forward.





HOW YOU CAN HELP KEEP OCEANS CLEAN FOR FISH, SEA TURTLES AND SEA BIRDS

If our community is dirty and full of germs, we humans can get sick. If the oceans are polluted then fish, sea turtles and birds can get sick. It is important to know what you can do to help keep the communities where fish live clean.

I. DO NOT THROW TRASH OFF A BOAT OR FROM A PIER INTO THE OCEAN OR WATER.

A lot of trash floats and can be swallowed by fish, sea turtles and birds, which can kill or make the animals sick. Plastic is one of the worst things for the ocean, since it doesn't dissolve and easily go away. It lasts for hundreds of years - sometimes in tiny, tiny pieces. Did you know there is an area in the Pacific Ocean called, the Great Pacific Garbage Patch where lots and lots of plastic and other items thrown into the ocean float and are pushed together by ocean currents? This floating garbage patch is the size of Texas! Do not throw old fishing line, plastic bottles or anything else from a boat in the water, because it can pollute and cause harm to sea animals.

2. DO NOT THROW TRASH ONTO BEACHES.

Most of us like to go to beaches to play, picnic and swim. If our beach communities are dirty, those of us who visit the beache could cut our feet while walking in the sand, get germs on us from rotting food, or be eaten by animals, which kills them. Often trash that is thrown into or floats on our oceans return to the beaches when waves wash it up on the shore. Each year many groups in towns along the ocean shores have "clean up days" where the community gets together to clean up the waterways. Perhaps you can join the next one, and bring along your classmates or scout troop to help.







3. REMEMBER, STORM WATER THAT DRAINS ON THE SIDE OF YOUR STREET LEADS TO THE

OCEAN, so anything poured or dropped into those drains eventually ends up in the oceans. Did you know one gallon of oil poured down a storm water drain can cause an oil slick? Pouring paints, oil and many other products down a drain can cause harm to the oceans and all the animals that live in the waters

Why is it important to keep our oceans clean? Most of the planet earth we live on is covered by ocean waters, which produces oxygen we breathe, seafood we eat and absorbs polluting carbon exhaust (fumes from cars and other engines.) It also makes plants used in peanut butter and many other food products we eat, as well as sources for medicines when we are sick. The ocean also produces a lot of jobs including fishing boat captains, boat mechanics, fisherman who catch seafood sold to restaurants, scientists, sailors, teachers, explorers, coast guard members, and many more. For more information on ocean related jobs when you grow up go to http://oceanexplorer.noaa.gov/edu/oceanage/welcome.html.





TBF TRACKING MAPS

Tagging billfish helps scientists and organizations like The Billfish Foundation learn more about these fish; where they travel to, where they go, when they are found in certain areas and how big they can get!



This white marlin was originally tagged off of Montauk, NY by Captain Ron Barnish and Mike Kessler on 8/19/16. After 186 days, the fish was recaptured way down off Venezuela, a straight line distance of 1,962 miles!





Become a fan of The Billfish Foundation so you can be the first to know the latest TBF news! #everytagtellsastory & #tagurit!

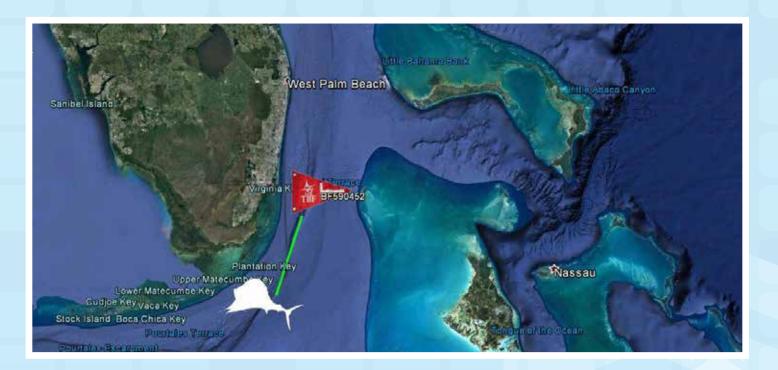


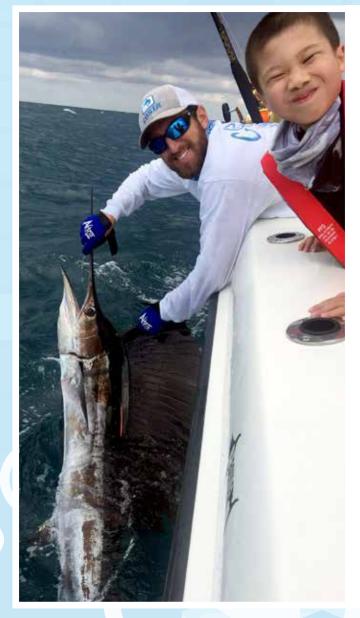




#TheBillfishFoundation







This past fall, we highlighted a junior angler named Albern Ho from Australia. Eight-year-old Albern is a member of the EGFC - Exmouth Game Fishing Club in Western Australia and a GFAA award winner. Last January, Albern along with his parents came to Florida to check out the sailfish scene (and Disney of course) with Captain Bouncer Smith and Abie Raymond aboard Bouncer's Dusky 33. They went out twice, and managed to get Albern his first sailfish which they tagged on January 21. They estimated the fish to be 82 inches and 30 lbs before releasing it in good condition.

47 days later, we were notified by Michelle Beltran that she along with Mate Rudy Espinosa and Capt. JC Cleary aboard HellReyZer recaptured the same fish while they were practice fishing for the Jimmy Johnson Billfish Tournament off Alligator Reef in Islamorada. This was approximately 70 miles from where Albern tagged it off Miami. They estimated the fish to be 35 lbs and released it in good condition.

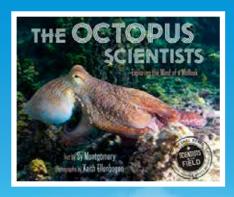
We had the pleasure of meeting Albern and his parents in the TBF office and can attest to what a fine young man he is, we couldn't be more pleased that he now has his first recaptured fish. Looking forward to hearing more about his fishing journeys in the future!

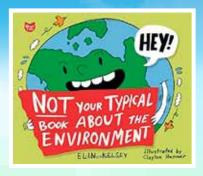
SUMMER READING



ONE PLASTIC BAG by Miranda Paul & Elizabeth Zunon
Plastic bags are cheap and easy to use. But what happens when a
bag breaks or is no longer needed? In Njau, Gambia, people simply
dropped the bags and went on their way. One plastic bag became
two. Then ten. Then a hundred. This inspirational true story shows
how one person's actions really can make a difference in our world.

THE OCTOPUS SCIENTISTS by Sy Montgomery & Keith Ellenbogen With three hearts and blue blood, the octopus seems to be an alien, an inhabitant of another world. The octopus also has the powers of a superhero: it can shape-shift, change color, squirt ink, pour itself through the tiniest of openings, or jet away through the sea faster than a swimmer can follow.





NOT YOUR TYPICAL BOOK ABOUT THE ENVIRONMENT

by Elin Kelsey & Clayton Hanmer
We live in a time of heightened environmental awareness, and young readers learn
about the remarkable time they live in:
smart technologies, innovative ideas, and a
growing commitment to alternative lifestyles
are exploding around the world. Each
chapter begins by taking familiar objects—
T-shirts, video games, bikes, and uses
these as launching pads to delve into
related environmental issues.



PENGUIN PROBLEMS
by Jory John & Lane Smith
Being a penguin is no day at
the park. This bumbling,
bleary-eyed penguin has a
hard time on land, and the
ocean depths are even worse:
"Oh, great. A leopard seal.
Oh, great. A shark.... It's an
admirable and important
validation of personal
feelings, grumbles and all.