TAMPA BAY WATCH

Kids' pages

News for the kids of Tampa Bay!

Are you ready to learn about the bay?

Summer 2014

TAMPA BAY WATCH
Restoring the Bay Every Day

In This Issue:

Help Protect Tampa Bay's Sustainable Species!

COASTAL CLEANUP SEPTEMBER 27, 2014

Do you want to do something special for Florida's sustainable species? Have your family come out and participate in a beach cleanup on National Estuaries Day September 27.

The debris you remove from our shorelines and waterways could help protect some of our sustainable species like the Red Grouper and Florida Stone Crab (see page 2).

Got a Question? Ask a Scientist!

Q What is Sustainable Seafood?

—*Gemma Crawford*

A Everything that we need to survive and be healthy depends—either directly or indirectly—on our natural environment. Sustainability refers to creating and maintaining conditions where humans and nature can exist in harmony to ensure that future generations can enjoy our natural environment. A resource like seafood is considered sustainable when it is caught in ways that do not cause harm to the environment. When it comes to all the wonderful seafood in the Gulf of Mexico, sustainability means taking care to never harvest more than our ecosystem can replace.

A sustainable fishery ensures the livelihoods of those who depend on the Gulf's resources by safeguarding everything needed for creatures in the sea to survive and thrive. While there are 1,631 miles of U.S. coastline along the Gulf of Mexico, its complicated web of bays, bayous, inlets, tidal rivers, and islands provide 17,141 miles of total shoreline! The coastal habitats and warm waters of the Gulf are responsible for some of the world's most highly productive fisheries. Florida ranks among the top 12 states in fresh seafood production. 100% of spiny lobsters and 97% of stone crabs are harvested in Florida, and there are over 200,000 jobs that rely on the seafood industry! So here in the Gulf, we understand that to continue to benefit from these resources we must protect them and the environment that nurtures them.

So how do you know if the seafood you are eating is sustainable? There are many resources you can use to ensure you are making environmentally friendly eating choices. Most seafood caught or harvested in the U.S. is typically an excellent choice because we have strict rules and regulations that help monitor and measure the sustainability of our seafood industry. Other good options are making purchases locally in your area and simply staying informed. By doing your own research and using reputable sources, you can use science as your guide to help protect the ocean's resources!

Article sources:
http://www.fishwatch.gov/buying_seafood/choosing_sustainable.htm;
www.freshfromflorida.com;
http://audubongulf.org/what-is-sustainability/;
www.gulffishinfo.org;
http://www.epa.gov/sustainability/basicinfo.htm

Meet Some New Species!

Meet a Couple of Our Sustainable Species

RED GROUPER

Genus/species: Epinephelus morio

There are as many as 85 grouper species worldwide, and this particular grouper species is considered to be fairly sustainable. Red Grouper is sustainable mainly due to its availability within the Gulf of Mexico off the coast of the U.S. This means the fish does not have to travel far once it is caught. It is also a large fish that lives a relatively long life with high numbers, making its populations more sustainable than others. Fishing regulations for Red Grouper help stabilize populations by allowing only a certain percent of the total population to be harvested. This sets a limit on the amount of Red Grouper that can be caught every year, ensuring this species remains a sustainable choice!

Source: http://www.fishwatch.gov/seafood_profiles/species/grouper/species_pages/red_grouper.htm. Photo credit: NOAA Undersea Research Center, UNC Wilmington.

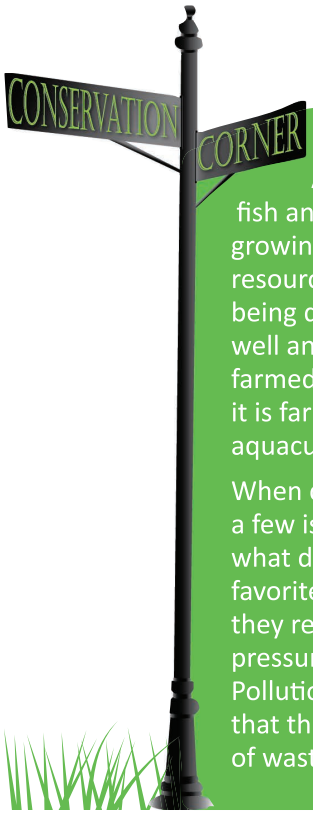
FLORIDA STONE CRAB

Genus/species: Menippe mercenaria

Known for its meaty claws and rock-hard exoskeleton, the stone crab is found and harvested in the state waters of Florida. This particular crab has very unique harvesting and population control methods, making it a very sustainable species. If the crab is of legal size, one of the large front claws is harvested and then the animal is returned safely to the ocean. If the joint between the claw and the body is left intact, the claw will completely regenerate after about three years. The state of Florida manages and monitors the stone crab fishery because Florida produces 97% of harvested stone crabs. Florida has actively managed sustainable harvesting of the stone crab since 1929!

Source: http://www.fishwatch.gov/seafood_profiles/species/crab/species_pages/stone_crab.htm

Our education programs get kids into the bay!



Aquaculture: Fish of the Future?!

Aquaculture—the process of farming fish and shellfish—could be the solution to the growing pressure placed on our ocean's natural resources. Many new aquaculture methods are being developed to determine which methods work well and which ones do not. The sustainability of farmed fish depends greatly on the species, where it is farmed, and the methods used to farm. Not all aquaculture methods are the same!

When considering aquacultured seafood, there are a few issues you want to keep in mind. For example, what does it take to feed the fish? Some of our favorite fish are fish eaters themselves; therefore, they require wild-caught fish to survive. This puts pressure on the ocean's resources once again. Pollution and fish disease are currently large issues that threaten the aquaculture world; the amount of waste and pollution that goes with fish farming can sometimes be quite harmful to the environment.

Image credit: NOAA

The aquaculture industry is growing at a rapid rate with better methods and practices in constant development. More than half of United States seafood is being farmed and scientists are working hard to ensure that these solutions don't cause harm to the environment.

Learn more about different aquaculture methods by doing some of your own research at home!

Fun Facts

About Sustainable Seafood!

BLUE CRAB
Callinectes sapidus

- The Gulf region produces two-thirds of the nation's domestic shrimp and oysters while also being a leading producer of domestic blue crabs.
- Gulf of Mexico fisheries harvest over 1 billion pounds of seafood annually—more than one-third of all U.S. seafood!
- Gulf fishermen catch more than 84% of the nation's supply of grouper, pompano, mullet, pink shrimp, and Spanish mackerel.

Source: gulffishinfo.org

Did You Know...

Florida stone crabs can regenerate their front claw after about three years!

Do This at Home!

Make your own sustainability guide

To make sure you stay up-to-date on how to eat sustainably caught seafood, make your own Pocket Sustainable Seafood Guide. Cut out and fold the guide below and visit *fishwatch.gov* and *seafoodwatch.org* to learn more!

Monterey Bay Aquarium® Seafood Watch® | The Monterey Bay Aquarium Seafood Watch program creates science-based recommendations that help consumers and businesses make ocean-friendly seafood choices. Carry this pocket guide with you and share it with others to help spread the word.

BEST CHOICES

Abalone
Arctic Char (farmed)
Bass: Striped (US hook & line, farmed)
Catfish (US)
Clams, Mussels, Oysters
Cod: Pacific (US hook & line, longline & trap)
Crab: Dungeness & Stone (US)
Crawfish/Crayfish (US farmed)
Halibut (US Pacific)
Mahi Mahi (US Atlantic troll, pole)
Mullet: Striped (US wild)
Salmon (AK)
Sardines: Pacific (Canada & US)
Scallops (farmed)
Tilapia (Ecuador & US)
Trout: Rainbow (US farmed)
Tuna: Albacore/White canned (Canada & US troll, pole)
Tuna: Skipjack/Light canned (FAD-free, US troll, pole)
Tuna: Yellowfin (US troll, pole)
Wreckfish (US)

GOOD ALTERNATIVES

Crab: Blue & King (US)
Flounders, Soles (US)
Grouper: Red (US Gulf of Mexico)
Lobster (Bahamas & US)
Mahi Mahi (Ecuador & US)
Monkfish (US)
Pompano (US wild)
Porgy: Red (US)
Salmon (CA, OR & WA wild)
Scallops (wild)
Shrimp (Canada & US wild)
Snapper: Red (US)
Squid (US)
Swordfish (US)
Tilapia (China & Taiwan)
Tuna: Albacore/White canned (US longline)
Tuna: Skipjack/Light canned (imported troll, pole and US longline)
Tuna: Yellowfin (imported troll, pole and US longline)
Wahoo (US)
Yellowtail: California

AVOID

Abalone (China & Japan)
Conch (wild)
Crab: Red King (Russia)
Crawfish/Crayfish (China farmed)
Lobster: Spiny (Belize, Brazil, Honduras & Nicaragua)
Mahi Mahi (imported)
Orange Roughy
Salmon: Atlantic (farmed)
Sharks
Shrimp (imported farmed)
Shrimp (LA & Mexico wild)
Squid (imported)
Swordfish (imported)
Tuna: Albacore/White canned (except Canada & US troll, pole and US longline)
Tuna: Bluefin
Tuna: Skipjack/Light canned (imported longline and purse seine)
Tuna: Yellowfin (except troll, pole and US longline)

This guide has a limited number of seafood items due to its size. For a full list of our recommendations please visit us online or download the app.

Check every column, your favorite seafood could be in more than one.

Best Choices
Well managed, caught or farmed in environmentally responsible ways.

Good Alternatives
Some concerns with how they are caught or farmed.

Avoid
Overfished, or strong concerns with how they are caught or farmed.

To use your pocket guide: 1. Cut along outer black line 2. Fold on grey lines

Your Choices Matter

Worldwide, the demand for seafood is increasing; yet many of the fish we enjoy are in trouble due to overfishing or destructive fishing and farming practices.

Purchase fish caught or farmed using environmentally responsible practices to support healthy, abundant oceans.

Take Action

Support ocean-friendly seafood in three easy steps:

1. ASK: "Do you sell sustainable seafood?" Let businesses know this is important to you.

2. BUY: From our Best Choices list. If not available, choose from the Good Alternatives list.

3. LOOK: For the Marine Stewardship Council blue eco-label in stores and restaurants.

Stay Connected

- Visit seafoodwatch.org
- Download our free app
- Join us on Facebook and Twitter

Monterey Bay Aquarium

Seafood WATCH

Stone Crab

Southeast Consumer Guide

January – July 2014

Monterey Bay Aquarium

Seafood WATCH

TAMPA BAY WATCH
Restoring the Bay Every Day

Kids' Pages is a quarterly newsletter supplement to the Tampa Bay Watch Log. Please get your kids involved and sign them up to be a member today! eMail jlandl@tampabaywatch.org, or visit TAMPABAYWATCH.ORG.

Cover masthead artwork drawn by Sarah Kelly, one of Tampa Bay's talented youth artists.

Estuary EDventures
Education through Restoration

TAMPA BAY WATCH

Kids' pages Investigations

Topic: Sustainable Seafood

Spring 2014 edition

Instructions: Read through the appropriate *Kids' Pages* edition and answer the questions below. Once all the questions have been completed, refer to the Answer Key to check your work.

Multiple Choice (choose one):

1. How many miles of total shoreline are along the Gulf of Mexico?

- ○ a. 1,631
- ○ b. 5,005
- ○ c. 17,141
- ○ d. 18,500

2. How many jobs rely on the seafood industry?

- ○ a. 200,000
- ○ b. 100,000
- ○ c. 50,000
- ○ d. 10,000

3. Which of the following animals is a mentioned sustainable seafood source?

- ○ a. Bluefin Tuna
- ○ b. Orange Roughy
- ○ c. Imported Mahi Mahi
- ○ d. Red Grouper

4. Since what year has Florida stone crab harvesting been sustainable?

- ○ a. 1905
- ○ b. 1939
- ○ c. 1885
- ○ d. 1929

5. Gulf of Mexico fisheries harvest how many pounds of seafood a year?

- ○ a. 1 million
- ○ b. 1 billion
- ○ c. 100 million
- ○ d. 10 billion

Fill in the Blank:

6. Sustainability refers to maintaining conditions where humans and nature can exist in _____ to benefit future generations.

7. When it comes to seafood in the Gulf of Mexico, sustainability means never harvesting more seafood than the ecosystem can _____.

8. Typically, one way to check and make sure your seafood is sustainably sourced is to make sure it was caught or harvested in the _____ (two words).

9. During stone crab harvest season, fishermen can only remove _____ claw at a time.

Short Response:

10. Based upon the information in the Conservation Corner of *Kids' Pages,* what are the similarities between aquaculture and traditional agriculture and why is aquaculture important? What are some of the issues that aquaculturists are facing? What do you predict may happen to our coastline as aquaculture becomes a more common practice?

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ANSWER KEY

Multiple Choice

1. C. The bays, bayous, and inlets stretch the 1,631 mi. of coastline into a lot more shoreline for plants and animals to live and grow!

2. A. Fisheries are a large and important industry in the Gulf of Mexico.

3. D. The other mentioned species should be avoided when purchasing seafood.

4. D. A stone crab can regrow its claw after about three years.

5. B. That is about one-third of all United States' annual seafood.

Fill in the Blank:

6. Sustainability refers to maintaining conditions where humans and nature can exist in **harmony** to benefit future generations.

7. When it comes to seafood in the Gulf of Mexico, sustainability means never harvesting more seafood than the ecosystem can **replace**.

8. Typically, one way to check and make sure your seafood is sustainably sourced is to make sure it was caught or harvested in the **United States** (two words).

9. During stone crab harvest season, fishermen can only remove **one** claw at a time.

Short Response:

10. Answers will vary. *Example answer: Aquaculture and agriculture are very similar because they are both a type of farming, only aquaculture is the practice of farming in the water! Aquaculture is very helpful to relieve stress on popularly caught seafood species, however disease and available food sources for the farmed species are becoming an issue that needs addressing. In the future, if aquaculture becomes more common, space will need to become available along our coastlines. If aquaculturists are using chemicals to treat disease, that may be an issue for coastal animals and habitats. Also, more space for aquaculture means less space for recreation and tourism.!*