

SC Aquarium Public Program Worksheet

(Adapted from NAI, Certified Interpretive Guide Training workbook)

Your name: Kate Brown (adapted from many other wonderful educators)

Program Title: Fish-N-Chips

Theme: The GOT is a diverse exhibit with cool animals and fun facts for all to learn.

Audience: Families of all ages

Goals: (Why are we doing this program?): Teach the Aquarium's visitors about the animals of the Great Ocean Tank in a fun and interactive way by getting them involved and playing a game.

Objectives: (Remember to include a conservation objective):

- Audience will remember at least 3 facts about the GOT or the animals of the GOT
- 60% of the guests will stay for the entire program
- At least 2-3 questions asked by the audience at the end of the program
- Audience will remember one of the Aquarium's conservation messages within the show (SSI, sea turtle hatching, shark conservation, etc.)

How will you measure the objectives?

- Count how many guests are there at the start and end of the program
- When SSI conservation message is used, at least 5 visitors will take an SSI brochure.
- See if anyone inquires about a sea turtle hospital tour or asks for more information about helping sea turtles if category was used.
- By the audience's reaction: do they smile, laugh, answer questions asked, etc.?

Materials Needed:

Fish-N-Chips board

Fish-N-Chips chips

5 Category cards

Dive show bin with props (educators choice)

PROGRAM OUTLINE

Introduction: Welcome the audience, introduce yourself and get to know the audience (ask where they are from). Explain that we are going to play a game called Fish-N-Chips, the Aquarium's version of PLINKO, in order to learn about the Great Ocean Tank and the animals in it. Introduce the diver as the expert in the tank, our "fact checker." Maybe ask the diver a question about what they do as a diver in the GOT in order to encourage a flow between you, the diver and the audience.

Next, go over the rules of Fish-N-Chips (contestant/s will be needed to drop chips into board, the chips will land in a certain category, a question pertaining to the category will be asked, the

contestant/s and audience will be able to guess the answer and then the diver will give the answer as well as explain it). Also introduce the 5 categories on the Fish-N-Chips board:

- 1) **Eew Gross** – gross facts about the GOT and its animals
- 2) **That's Cool** – cool facts about the GOT and its animals
- 3) **Relationships** – the animals of the GOT do interact and some of them in very strange ways
- 4) **GOT Myths** – the things that most people think are true
- 5) **Leave No Trace** – Ask what “leave no trace” means and that this is the most important category; it's how we can we help our oceans and its animals

Body (subthemes): Bring up 4-5 different contestants one at a time and have each drop one chip. As the contestants come up to the front, ask them their name/s and where they are from. The subthemes of this show will be ever changing depending on which category the contestant lands on (see categories and questions in detail below). The main thing to remember is to explain the answer after each question. This is a great opportunity to get the diver more involved. The diver can give the answer and explain it while you supplement the answer where it's needed. For example:

Educator – “You landed on the category, Relationships. Here is your question. True or False: The Porkfish cleans the other fish and the turtle. Would you say that is true or is it false? (Volunteer gives his/her guess) How about you guys? How many of you thing that is a true statement (audience raise hands)? And how many of you think it's false (audience raise hands)? Well, (insert divers name), you are our expert, I bet you know the answer...”

Diver – “That is a true! The porkfish is known as a cleaner fish. They eat dead skin and parasites from other fish and turtles and that helps them stay clean and healthy.”

Educator – “That's right! This little, yellow fish helps keep the animals in the GOT nice and clean.”

Keep repeating the chip dropping and question asking until enough volunteers have taken about 15 minutes total. After each volunteer's turn, let them give the diver a “High-5”. Ask the audience if they have any questions for the diver. (Allow for only 5 minutes for questions for a total of 20 minutes for the entire show.) Have the audience give the diver a huge round of applause for teaching everyone about the Great Ocean Tank.

Conclusion: Thank the diver and inform the audience of the next upcoming show and where it will be held. Let the guests know that you will be staying for questions after the show and thank them for supporting the SC Aquarium!

Fish-N-Chips Answers and Explanations:

Eew Gross:

True or False - The fish and sea turtle in the GOT all together produce enough waste (poop) to fill 7 milk gallon jugs every day.

True – The fish and sea turtle of the GOT get fed about 60 lbs. of food each day. What goes in...must come out, pretty much anyway, equaling ~55 lbs. of waste each day. When you convert that into gallons it comes out to be **7 gallon milk jugs every day!!** (Great opportunity to use the gallon of milk container to visualize the amount)

True or False - Eels have more than one set of jaws to help them catch their prey.

True – Moray eels have two sets of jaws. One is in their mouths, but the second set is farther down their throats. When they catch a fish or another prey item, the second set of jaws comes up into their mouths to help them hold on to the prey (check out the x-ray) and their teeth also face backwards in their mouth to avoid escaping prey.

True or False - Sand tiger sharks give birth to 10 babies in one litter.

False – Sand tiger sharks usually only have 2 pups per litter. After one pup hatches from a egg at 4 inches long, it will eat the other 7-23 eggs that haven't hatched yet. Ew! This is called intrauterine cannibalism; survival of the fittest. The pups are born at 3 feet!

True or False - Coral from the ocean is sometimes used to help human bones heal.

True – Scientists have found ways to use the hard calcium carbonate coral skeleton to help bones heal. The coral is cut into the desired shape and implanted in the human body. Over time, bone tissue will attach to the coral and take it over.

That's Cool!

True or False - The GOT is the deepest tank in North America.

True – We don't have the largest tank, but we do have the deepest tank in North America at 42 feet deep. Due to the depth, we are able to show three different habitats and viewing windows, including shallow water, reef and open ocean.

True or False - We have one bottlenose dolphin in the GOT.

False – It used to be illegal in South Carolina to have all marine mammals in captivity, including sea otters, manatees, sea lions, dolphins, etc., but has been amended to only cetaceans, which are dolphins, whales and porpoises. Even though we don't have them in the aquarium, we have 85 bottlenose dolphins that live year-round right outside our building in the Charleston Harbor and 2,000-3,000 dolphins that visit in the summer. If you are patient enough, you might see one surface!

True or False - The divers are not paid to be here while they care for 750 animals in the GOT!

True – All of our 85 divers are volunteers and spend at least 8 hours each time they work. Have diver describe what it would be like to spend a day in his/her flippers.

True or False - The water in the GOT stays the same temperature year-round.

False – We change the temperature of the water just a few degrees from summer to winter to give the animals the sense of having seasons (generally 76° in the winter and 79° in the summer).

Relationships

True or False - If Caretta could steal all of the sharks' food, she would.

True – Anytime food is thrown into the tank, Caretta is not far behind. She will eat anything she can get her beak on. We used to feed her at the same time as we fed the sharks, but she would actually steal the sharks' food. Now we separate them to make sure everyone gets the appropriate amount of food.

True or False - The Porkfish cleans the other fish and the turtle.

True – The porkfish is known as a cleaner fish. It eats dead skin and parasites from other fish and turtles and that helps those animals stay clean and healthy. Point out a porkfish in the tank. Is it following another fish or even Caretta?

True or False - We have so many baby fish born in the GOT every year that we have to constantly take them out.

False – Most the fish of the GOT are external fertilizers, but even the ones that lay eggs, like the sergeant major, won't see their eggs hatch. Other animals will eat the eggs or they will be cleaned up by the filter or vacuum that the divers use. The GOT has a wonderful filtration system that filters the whole tank every 70 minutes. This is a great way for us to be able to control the population in the tank.

True or False - We make all of our salt water here on site.

False – We really don't have to make saltwater because of our great location. It doesn't happen often, but if we ever need more water we can pump it into the building at high tide from the Charleston Harbor. If the water is not salty enough, we will add salt before it is put into exhibits.

GOT Myths

True or False - The animals constantly eat their “tankmates”.

False – If we did not offer enough food for the animals in the tank, many of them would try to eat their tank-mates. In our attempts at giving guests an idea of what the reefs look like just off the coast, we have to have larger predatory fish in with smaller prey fish. By offering more food than is necessary, we can make sure that they do not eat their “tankmates”.

True or False - Sharks attack the divers.

False – Divers don’t have to worry about shark attacks because sharks are not nearly as dangerous as you may think. In addition, our sharks are well fed so they tend to leave their tank-mates alone as well.

True or False - We have a tuna in the tank.

False – Although some of those large fish look like tuna, they are a large species of Jacks. Our tank is not large enough for a tuna to live in. They need lots of room to swim fast for long distances. Our tank is only 50 feet wide at its widest point.

True or False - All sharks must always swim so that they can breathe.

False – Although this is true of many shark species, it is not true of ALL species. A good example of a shark that will rest at the bottom of the ocean is a nurse shark. Nurse sharks are easily distinguished between the other sharks in our tank because they have barbels on their chin.

Leave No Trace

True or False - Sea turtles are great problem solvers. They can tell the difference between a plastic bag and a jellyfish.

False – Sea turtles are not good at problem solving. Loggerhead sea turtles have a brain about the size of a walnut. If they see a plastic bag floating in the water, they will think it is a jellyfish and eat it. The plastic will cause digestion problems and could be fatal to the sea turtle. Please remember to pick up after yourself. Keep trash out of the ocean!

True or False - Over 100 million sharks are killed by people every year.

True – Scientists estimate that over 100 million sharks are killed by people every year. Only around 10 people in the world per year are killed by sharks and this is usually due to mistaken identity; they do not view people as food. Sharks play an important role in keeping the animals in the ocean in balance as apex consumers.

True or False - There are certain fish in the ocean that we should not eat.

True – The SC Aquarium has a really important program called the Sustainable Seafood Initiative. We want to make sure there are enough fish for the future. There are over 60 restaurants in Charleston and over 90 total in South Carolina that have all promised to serve only local or sustainable seafood. (Have SSI brochures available for guests after the show.)

True or False - 80% of the trash found in the ocean started out on land.

True – Everything will eventually make its way out to the ocean if we don't pick up trash and either throw away or recycle. When you're at the beach, make sure you don't leave a trace that you were there, but this is an important thing to do no matter where you are!

True or False: Taking home live animals such as crabs, sand dollars, or turtles is okay as long as you take good care of them.

Make sure we never take animals out of the wild. Most of the animals in the Aquarium, other than the fish, have reasons and stories as to why they are here. Caretta was taken off the beach when she was a hatchling and someone tried to raise her at home. She can never be released into the wild because she has been fed by people her whole life and is now completely imprinted on humans.