



Marine Education Poster Contest 2020

Sponsored by Blue Lagoon Island & Dolphin Encounters

EXTENDED Contest Deadline: June 1st, 2020

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The Pirates of the Caribbean:

Invasive Species in The Bahamas



There is a silent war going on in The Bahamas, one that leaves countless animals and plant dead and others homeless. This war has been waging for decades and now new invaders are joining the fight to take over our beautiful Bahamaland, looking to steal precious land, water and resources from us.

These fearsome pirate-like invaders -- called **Invasive Species** -- quickly establish themselves as the dominant species and can destroy our native ecosystems, human health, and ultimately all native life within The Bahamas. If we are not pro-active, these environmental buccaneers could steal more than just a few acres of land or sea!

BLUE LAGOON ISLAND
BAHAMAS
HOME OF DOLPHIN ENCOUNTERS

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The First Culprit: The Casuarina Tree

The first of the Fearsome Four is the **Casuarina tree**. Thought by many to be native to The Bahamas, it was imported into this country in the 1920s to be used as a hedge tree.



Casuarina Tree

Casuarinas are extremely dangerous because they release **toxins** into the soil which stop any other tree species from growing next to them. As they spread, native plants and trees are lost and animals and birds that normally depend on native plants and trees for food and shelter will be in trouble!



Beach Erosion under a Casuarina tree

Casuarinas are also bad for our environment. Because they have very shallow root systems, Casuarinas are the first trees to topple in hurricane force winds, causing serious damage to power lines, homes and roads. In coastal areas, the shallow roots of these trees fail to trap the sand on the beach, increasing beach erosion and habitat loss.

One only needs to visit any local beach to see how the Casuarina that line it have eroded a beautiful area. How can this land pirate be stopped? If this beach were planted with native coastal species such as Seagrass, Cocoplum and Sea Oats, the beach would be stabilized and sand would not be constantly blown into the road.

The Sea Brigand: The Lionfish

The next sneaky brigand to invade our country is the **Lionfish**. This marine newcomer established itself quickly and is now so dominant that it threatens our most productive marine ecosystems.



Poisonous Lionfish!

Wearing a clever disguise of elegant camouflaged fins, this animal pretends to be beautiful and non-threatening while taking over reefs, shorelines and even blue hole environments, killing and eating any animal that can fit into its mouth.



The Lionfish was first introduced to the Atlantic in 1992, a likely result of the aquarium trade, and are presently spreading quickly throughout The Bahamas.

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Like pirates, invasive species can strip the land and sea of their native treasures, leading to habitat destruction!



The Lionfish Continued...

The Lionfish's venomous dorsal and pelvic spines are fatal to potential predators and hazardous to divers, snorkelers, fishermen and beachgoers. Evidence found in their stomach contents has revealed that Lionfish are feeding on small fish and crustaceans, including baby lobster, crabs and snapper.



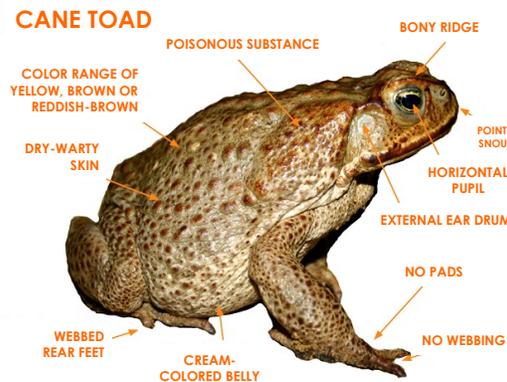
With no natural predators, lionfish are spreading rapidly in The Bahamas.

By consuming many of the young animals of the local food chain before they have a chance to mature AND by competing with the Nassau Grouper, the Lionfish packs a double punch on destroying the delicate balance within our reef community.

Without any natural predators or any system of control, the lionfish are now so numerous on reefs and wrecks surrounding The Bahamas that there is a serious danger of them becoming the most dominant fish in The Bahamas!

The Bush Bandit: The Cuban Cane Toad

The Cuban Cane Toad is a bulky brandisher of venomous weaponry, even when it's dead! A stealthy pirate, these voracious eaters will consume dog food to other frogs and toads. They don't mind at all if the environment impacted is human or natural.



The cane toad is an invader to our land with no natural predators and a huge appetite range including native frogs. Frogs may not excite many people, but they are an important part of our natural heritage. Frogs provide food for Bahamian snakes and many birds, and are important themselves as they consume thousands of insects each and every year.

This bush bandit can hide anywhere: boxes, crates building material even camping equipment or on your boat. These toads are slow hoppers, lacking sudden high jumps making them easy to catch.

Many suspected toads turn out to be harmless native frogs, so it is important to correctly identify them. Cane toads will not be found on walls, windows, and do not climb trees; they like to be around homes and near the water during breeding times.

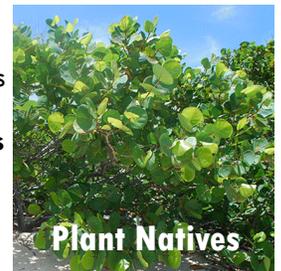
Cane toads are heavyweights, getting up to 4-6inches in length. When there are not any other toads around, a single cane toad can grow up to 10 inches and just over 2 pounds!

What can you do to stop these pirate pests?



Prevention is the best cause of action! By becoming aware of what the species look like and how they spread, we can make better choices in the types of plants and animals growing in our country.

The government of The Bahamas has asked all Bahamians to **plant and register native trees** on their property. Ask your local nurseries for only native plants.



Another step is to **eradicate** whenever possible. When we **uproot and destroy** these thieves we can limit their how fast they continue to spread and hopefully save some native organisms.

When it comes to the lionfish, this animal should be **netted or speared** whenever seen in the water. Once the dorsal and pelvic spines are removed they are quite edible and yummy! By encouraging Bahamians to learn how to prepare this fish, we can start to decrease their numbers in our oceans.



Deter toads by turning off outdoor lights and removing pooled water. Be a Toad Buster: check your yard regularly. If you see a frog be sure its identity – take a photo to confirm! Call the Dept. of Agriculture if you need to report a citing or need assistance. The most humane way for an adult to collect and kill these toads is to pick up the toad with a plastic bag and put it in freezer for at least 4 days. Children should **NEVER** approach or attempt to catch a cane toad.

