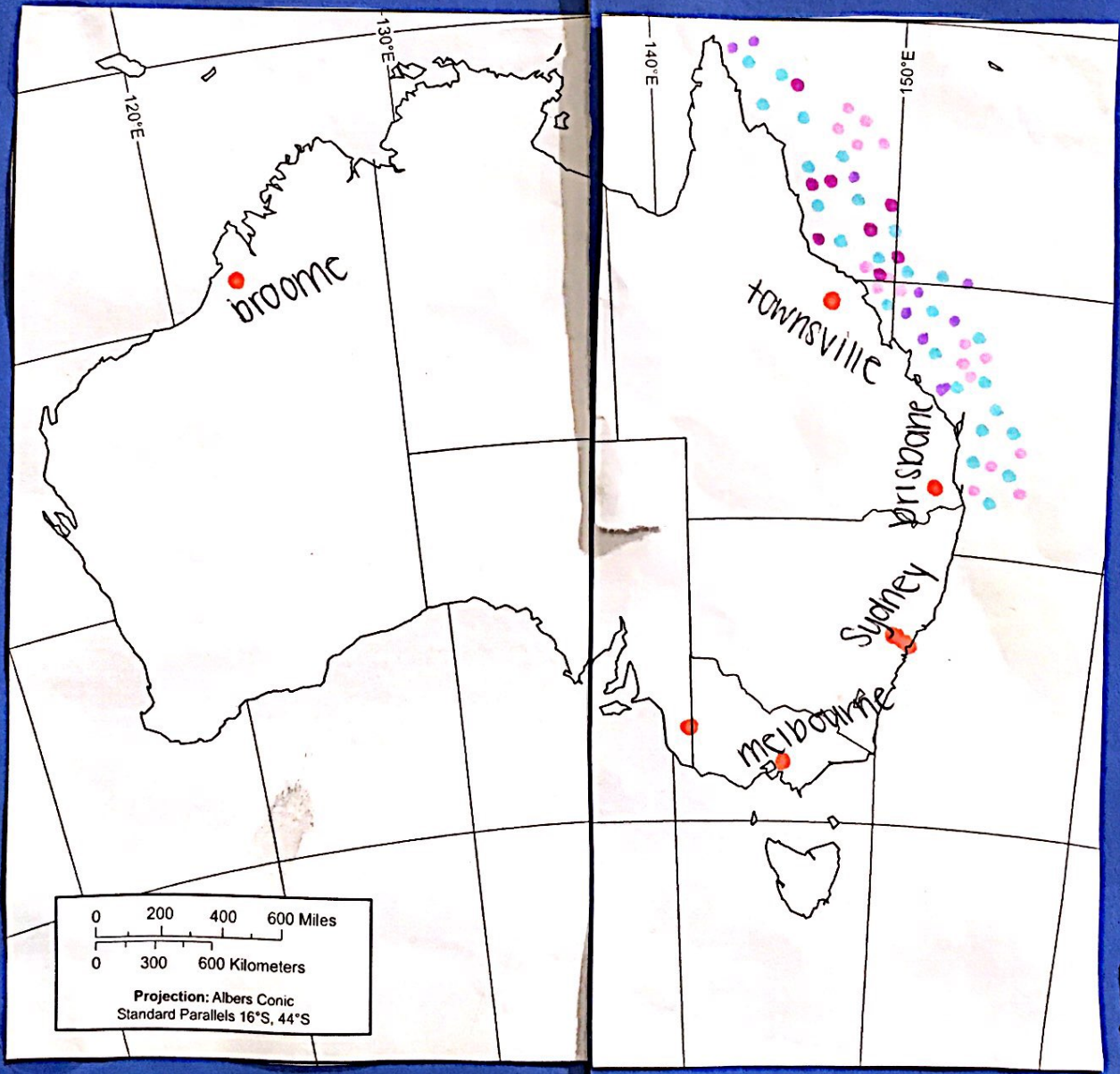


How can humans help the Great Barrier Reef?

KEY

- the reef
- little marine life
- major cities
- lots of pollution
- lots of marine life



By:
Emmo
DIXON

GBR FACTS

- located in Queensland, Australia
- It is the world's largest reef system
- home to diverse marine life
- one of the world's seven natural wonders
- over 344,400 km² long
- with the fishing industry, the reef brings in \$6 billion annually

MY ANSWER

To help with pollution, grocery stores should eliminate using plastic bags put lots of trash cans around cities and also stop putting plastic rings around drinks in



Stores finally, someone should invent gloves to wear while diving so you can touch

the coral without polluting it

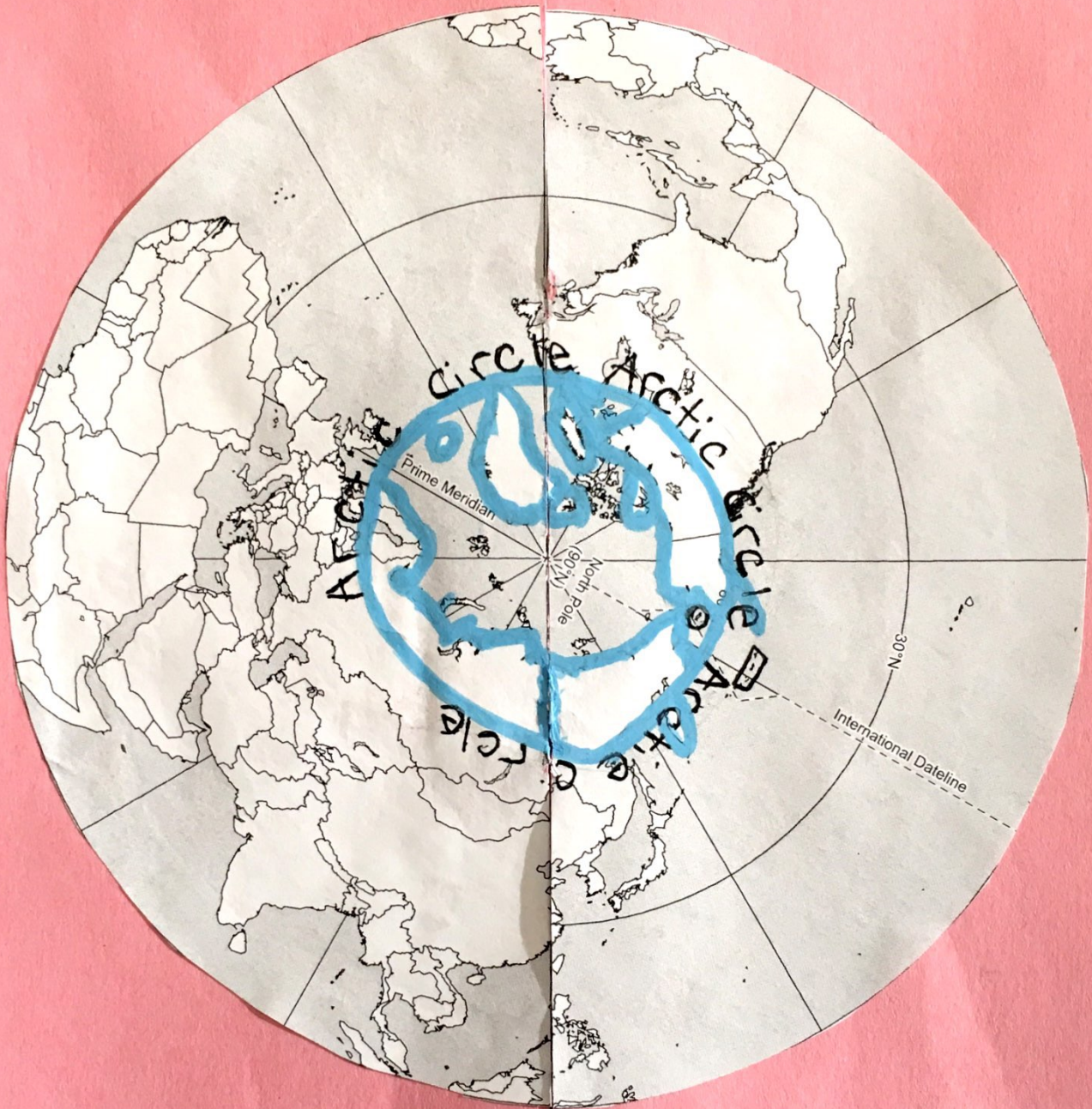
HOW CAN WE HELP?

- burning fossil fuels leads to ocean warming. walk or ride a bike places!
- use reusable bags- plastic/paper bags can get into the ocean
- eat less meat- you don't have to cut it out completely!
- plant trees- it prevents runoff into the oceans
- use less water
- DON'T LITTER!!
- use reef/ocean-friendly sunscreen
- volunteer in reef clean ups
- if you go diving, try not to touch the coral
- educate yourself on the reef
- practice safe boating
- leave coral on the reef
- smart seafood choices
- plant coral

POLLUTION FACTS

- many reef/marine areas have become a dump land
- people assume that since oceans are so big, pollution isn't a big deal.
- pollution is threatening a ton of our most fragile habitats
- entire ecosystems + habitats can and will be destroyed from harmful chemicals entering the ocean by rivers
- oceans are getting very acidic
- bleaching gets worse as oceans get warm
- climate change is the root of the problem

How does climate change
effect the Arctic?



- Arctic circle
- - Atmauluaq
- - Shishmaref

by: MAZIE ROO

Oceans

The Arctic Ocean is acidifying twice as fast as any other place in the world. The sea ice is melting causing increased carbon dioxide levels making the world warmer. Canada's ice is melting twice as fast too. Too much acidic levels in the ocean cause fish to die or leave the area, causing the whole food chain to fall apart.

Culture

Arctic people say today kids cannot connect to nature as much as they should because of climate change. Kids can't find a way to fit in and adapt to the changes everyday. People in the Arctic teach culture and traditions in school to help kids defend themselves against globalization.

Action

The rapid retreat of Arctic ice in recent years is due to global warming. We can't get the ice back but we can stop it from melting more. These actions are simple but effective.

- Reduce, Reuse, Recycle - reduce garbage by recycling.
 - Plant trees - plants absorb CO₂ to make oxygen which balances CO₂ levels.
 - Eat locally grown food - transportation is a BIG cause of warming.
- The World Wildlife Fund has been active in the Arctic for years, they help animals that can't adapt to rapidly changing environments. Joining this or telling others helps create a solution.

Towns + people

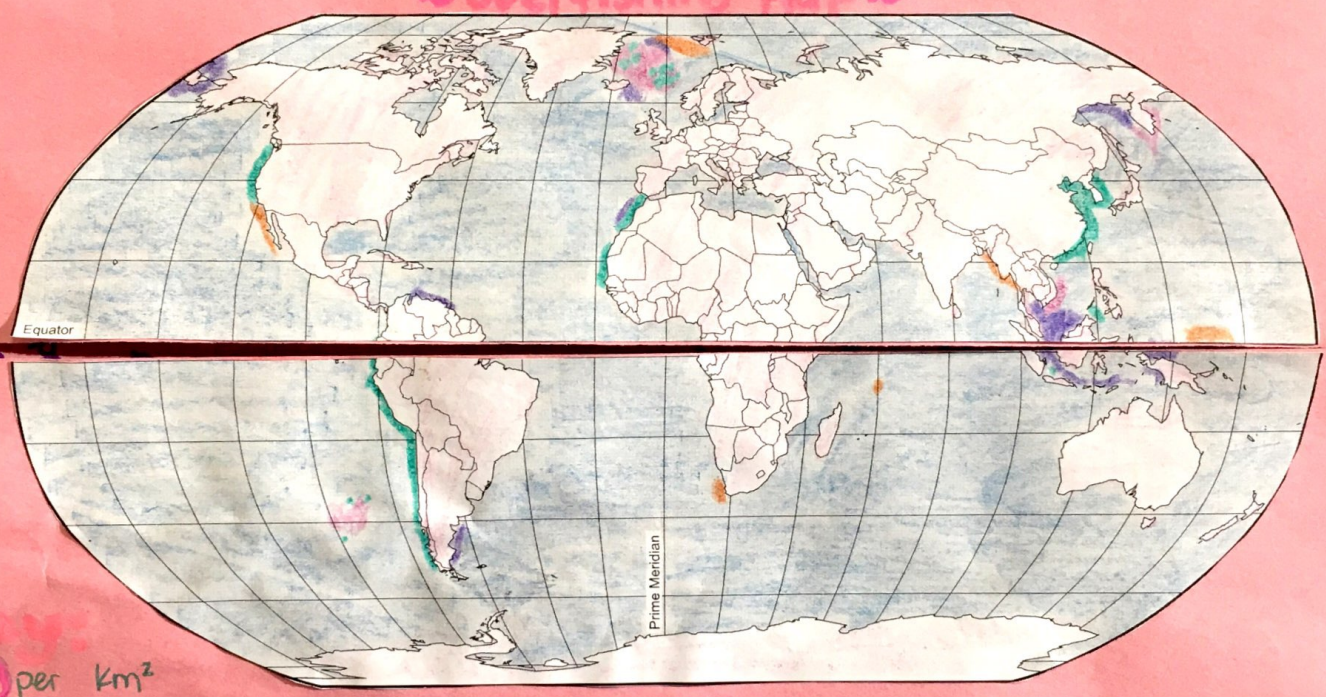
Companies are legally allowed to dump radioactive waste in the Arctic ocean. This poisons fish and other organisms in the ocean. The Sami (group of people in the Arctic) fish in this part of the ocean, the fish are dying or being caught to eat which is bad. People in the Arctic care more about their culture than climate change but Atmaukvak is a town being moved to keep from falling in the ice. Shishmaref is a town already swallowed by water, they can't fix it.

Effects

The Arctic melting does not just affect the Arctic. Sea levels are rising and experts say sea levels will be up by 20 feet in 2000. Once the ice melts the WHOLE world will get warmer, the ice reflects the sunlight so the ocean doesn't absorb sun. If the ice is gone the ocean attracts the heat. Organisms will die out, plants will be affected, acid levels will rise if we don't do something to stop the melting.

? How is Overfishing affecting Marine Life? ?

~ Overfishing Map ~



Kg
Tonnes per km²

- 5 or more
- 3-5
- 1-3
- 0.5-1

(equal to 1,000 kilograms)

The Facts The Stats

Scientists have reported **90%** of large fish have been removed from the ocean through fishing

A world wild-life fund indicates a **50%** decline in marine life populations between 1970-2012!

The tuna & mackerel population have declined **75%**. The Bluefin Tuna in the Pacific are on the brink of extinction. All of these problems are due to the global issue of over-fishing!!

Many of the species that are dying out or being removed from the ocean are food sources around the world. Poorer countries rely on fish for food, impacting the population greatly. *

BIG Worry

ALL of the world's oceans are at risk...

but the Pacific has become a Main concern!

There are fewer fishing regulations in Asia. Their common practice of "shark finning" has affected shark population.

My Opinion

The marine life in our oceans are constantly being overfished and there must be a solution to this viral issue. The amount of fish being taken out of the ocean must be limited and taken seriously.



Possible Alternatives?

Less than 2% of our oceans are protected in parks and even less are protected from fishing!

~ "NO-CATCH" zones being established to protect the fish populations and ecosystems will help recover them for future generations to come.

~ Creating shares will limit the amount of fish that can be caught and the species. In case you're wondering a catch share is a system of fishing management that allows fish stocks to replenish.

WHAT CAN WE DO?

1. Some people are unaware of the harm we're causing to fish population. But there's a way to spread the word! Educating your friends, family, and community will make a bigger difference than you would think!

2. Joining a campaign or possibly creating your own would go a long way also.

A free fish is a happy fish!



My Answer

THE PRACTICE OF OVERFISHING DESTROYS THE PHYSICAL ENVIRONMENTS OF MARINE LIFE & DAMAGES THE ENTIRE FOOD CHAIN IN OUR OCEANS.

PLASTIC OCEANS

by Mary Martha Blackwood



Key:

- △ - contributing rivers
- - locations in the clean
- - areas with 1,000 tons of garbage per year
- - less garbage

Pacific Garbage Patch:
~ mostly tiny pieces
~ 1 million square miles

The majority of plastic comes from:

Southern Asia

9 million tons of plastic in the ocean EVERY YEAR!

Major contributors in THE WORLD

- Imo, Nigeria
- Cross, Cameroon
- The Amazon River

20 of the most polluted rivers in the world make up 2/3 of ocean pollution

HOW TO HELP

- ★ Recycle plastic. Norway recycles 97% of their plastic bottles.
- ★ Use less plastic. Don't buy products that have a plastic wrapper.
- ★ Use a toothbrush with a reusable head
- ★ Buy food in bees wax wrappers
- ★ Don't use straws. If you do, use metal straws
- ★ Instead of the plastic drink rings, use a compostable one
- ★ Don't use plastic bags. The "working life" of a plastic bag is generally fifteen minutes



Henderson Island:

- ~ 14 tons of trash
- ~ highest concentration of trash IN THE WORLD
- ~ 37 million pieces
- ~ 672 pieces per square meter
- ~ for every piece above sand, there are two buried

How does it get into the ocean?

- o rain water
- o direct dumping
- o polluted rivers

Major Contributors in ASIA:

- Brantas, Indonesia
- Yangtze River
- Huangpi, China
- Yi, China
- Pasig, the Philippines
- Ganges, Indonesia