# Ayla Besemer and Simon Willig

#### It's YOUR Ocean to Play in...





How many of you like ...

- going to the beach
- playing in the waves
- making sand castles
- watching the sunset



#### It's YOUR Ocean to Explore...





How many of you enjoy...

- looking in tidepools
- playing with hermit crabs
- collecting shells
- watching for otters, dolphins, and other marine life



#### It's YOUR Ocean to Eat...

How many of you like to eat seafood...

- shrimp or lobster
- salmon, cod, tuna
- clams, mussels, scallops
- sushi







#### It's YOUR Ocean that Gives...





...surprise gifts to you:

- medicine
- lotion, toothpaste, shampoo, ice cream
- jewelry
- transportation





#### How Well Do You Know YOUR Ocean?





# What percent of the Earth is covered in water?

- A. 47%
- B. 56%
- *c*. 71%
- D. 84%







# How many species of plants and animals live in the ocean?

- A. 250,000
- B. 500,000
- *c*. 750,000
- D. 1,000,000+



#### D. 1,000,000+



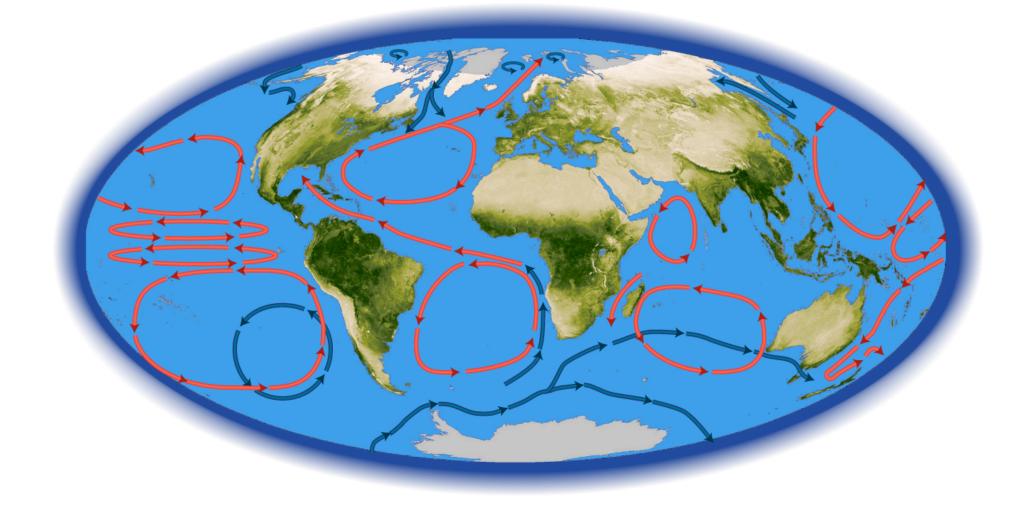


#### The ocean acts as the Earth's:

- A. Weatherman
- B. Police
- c. Garbage collector
- D. Newest rock star



#### A. Weatherman



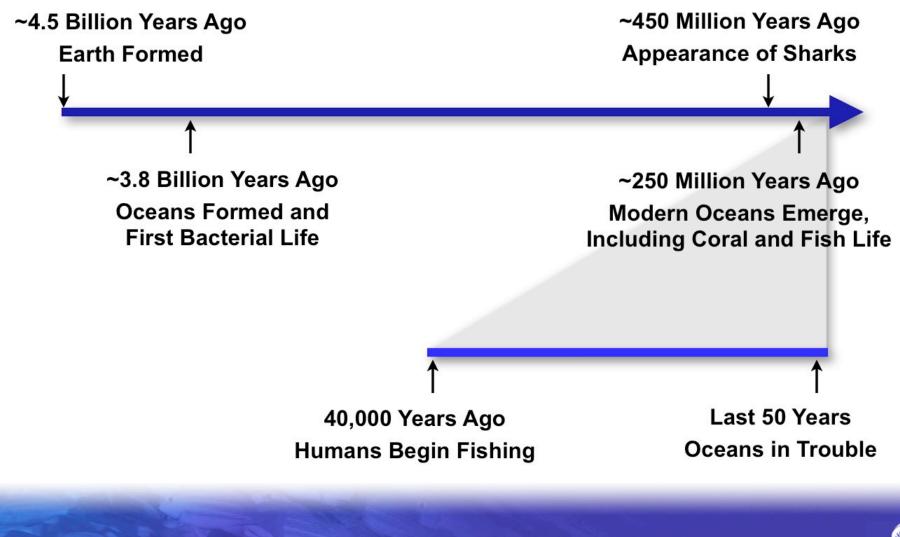


#### How old is your ocean?

- A. 2 thousand years
- B. 200 million years
- c. 3.8 billion years
- D. 6 trillion years



#### C. 3.8 billion years





#### YOUR Ocean is in Trouble

- Global Warming
- Fishing Practices
- Pollution

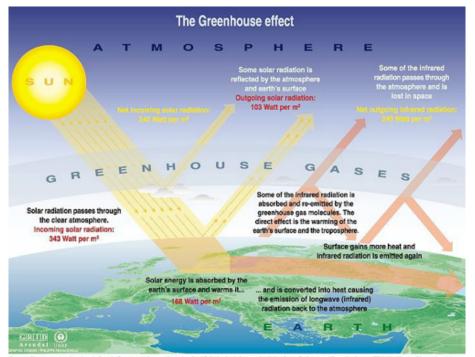
Before







#### **Global Warming**



Source: Okanagan university college in Canada, Department of geography, Linkersity of Oxford, school of geography, Linke States Environmental Protoction Agency (EPA), Washington; Climate change 1996, The acience of climate change, contribution of working group 1 to the second assessment report of the intergovernmental panel on climate change, UNEP and WMO, Cambridge university press, 1996.

- More solar radiation
- Warming water temperatures
- Changing weather
  patterns
- Melting ice shelves
- Food chain problems due to increased heat and radiation



#### Asthma, Coral and African Dust



- Lake Chad in Africa drying up
- Atlantic tradewinds blowing dust to Caribbean
- Sea Fans disease and asthma on the rise

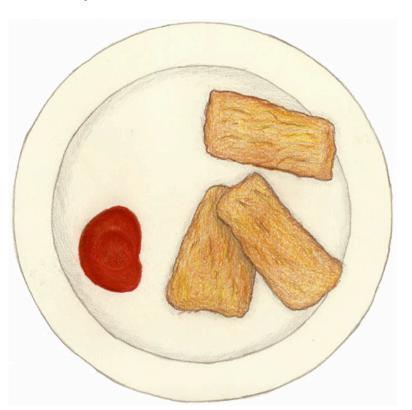


#### A two degree rise in ocean temperature will affect the California tidepools by:

- A. Wiping out an entire crab species
- B. Sea stars will lose their color
- c. Seaweed will grow more rapidly
- D. Doing nothing



#### Fishing Practices: Could your fish stick dinner be destroying the oceans?





#### **Over Fishing**



Too many boats, taking too many fish, too fast !

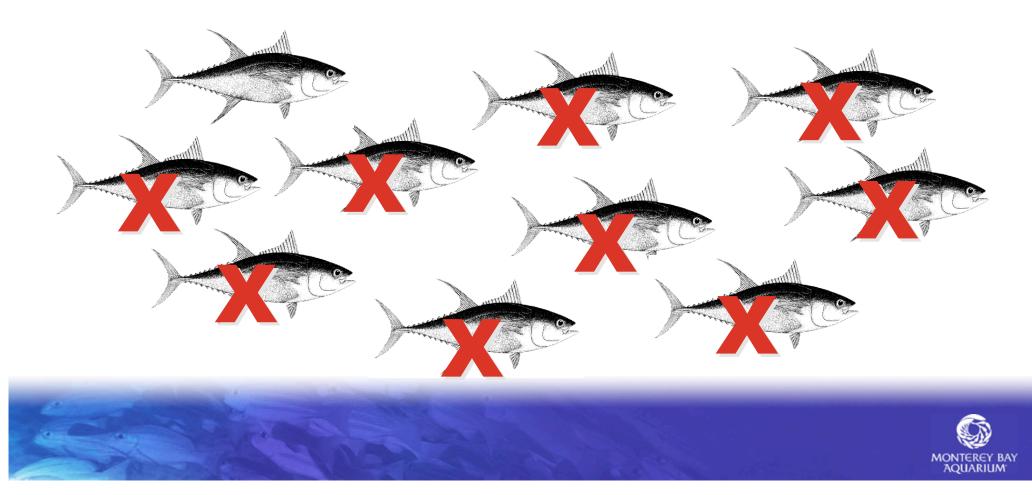


Take a guess at when our oceans will be fished out if we keep going at this rate?



#### Year 2048

- Just 40 years from now
- 90% of the big fish are already gone



#### **Bottom Trawling**

- Dragging nets along the sea floor destroys everything in their path
- wiping out habitats
- killing or injuring ALL animals and plants

Worldwide, trawlers drag their nets over how many square kilometers of the ocean floor each year?









#### 15,000,000 square kilometers!





#### An area 150 times greater than all forest cleared each year



#### Bycatch





• When fishermen catch animals other than what they are fishing for, and discard them (often injured or dead)

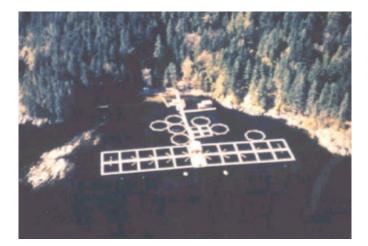


Do you like shrimp? For every 1 pound of shrimp, how much bycatch do you think there is?



#### Fish Farming (Aquaculture)

- Some fish farming is GREAT!
- Other fish farms are an environmental DISASTER!







#### Pollution: Could Fluffy, the fundraiser car wash, your drink choices, or shopping bags be hurting the ocean?





#### Trash = Pollution



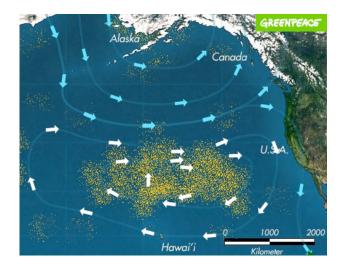
 Trash on the ground will eventually make its way to our water sources and ocean.



There is an almost invisible mass of trash floating in the Pacific Ocean. Guess how big it is?



#### Larger than the United States





- Ocean currents bring trash from ships and land
  - Mostly plastic
- Animals mistake this trash for food



#### Animals Starving Due To Trash

- Plastic bags look like lunch to a sea turtle because their favorite food is jellies
- But when they eat it, their stomachs can't digest it
- They fill up on plastic, and then starve to death







#### Fluffy's Poop

A disease found in kitty poop is killing sea otters off the coast of California







#### Everyday Activities can Poison the Ocean

- Pesticides and fertilizers used to grow beautiful flowers and vegetables are often toxic
- Soap used to wash cars flows into storm drains







#### Oil and Water Don't Mix...





- Exxon Valdez 11 million gal.
- 11 million gallons of oil dumped every 2-1/2 weeks by do-it-yourself oil changers





How many quarts of oil does it take to make 250,000 gallons of water toxic?



#### These are BIG problems, but YOU can help!











## Think...





### Only Eat Sustainable Seafood

Thanks to the Monterey Bay Aquarium and other organizations, it's easy to eat the right seafood by using their *Seafood Watch* pocket guide

BEST CHOICES	GOOD ALTERNATIVES	AVOID	
Barramundi (US farmed) Catrish (US farmed) Clams (Jarmed) Cod: Pacific (Alaska kongline)+ Crat: Dungeness, Stone Halibut: Pacific + Herring: Alamita/Sardines Lobster: Spiny (US) Mussels (Jarmed) Oysters (Jarmed) Oysters (Jarmed) Politock (Alaska wild)+ Satinon (Alaska wild)+ Scalops: Bay (Jarmed) Striged Bass (Jarmed) Striged Bass (Jarmed) Tiapia (US farmed) Tiapia (US farmed) Tinua: Alacove (US+, British Columbia troll/pole) Tuna: Skipjack (troll/pole)	Basa, Swai (farmed) Clams (wild) Cod: Pacific (framled) Crat: timuler, King (US), Snow Crat: imitation/Surimi Piounden, Soles (Pacific) Lobster: American/Maine Mahi mah/Dolphinfish (US) Oysters (wild)* Scallops: Sea (Northeast and Canada) Shrimp (US farmed or wild) Squid Swortfish (US longline)* Tuna: tilopye, Yellowfin (troll/pole) Tuna: tilopye, Yellowfin (troll/pole) Tuna: dianed lipht, canned white/Albacore*	Chilean Seabass/Toothrish Code: Atlantic Crate: King (imported) Flounders, Soles (Atlantic) Groupers* Hallout: Atlantic Lobster: Spiny (Carlobash Monitish Orange Roughy* Rockfish (Pacific) Sathon (farmed, includin Scallops: Sea (Mid Atlant) Sharks* Shring (imported) Sharks* Shring (imported) Tuna: Abacone, Biopyt, (longline)* Tuna: Bluefin*	





- Reduce the amount of trash you produce (zero waste lunches)
- Reuse paper, containers, bags etc...
- Recycle everything you can





### Educate your family and friends





- Talk to your parents, family and friends
- Share this information with local restaurants and stores
- Give presentations to local groups (Scouts, Church groups, schools, etc.)









- Pick up trash whenever you see it
- Get a reusable water bottle
- Eat organic foods
- Buy locally-grown food
- Dispose of Fluffy's poop properly
- Change lightbulbs in your house



#### Now is your chance to make a difference!

#### If each kid in America...

- Picked up 1 piece of trash each day for a year, 15 billion pieces of trash would be picked up
- Used 1 water bottle, that would keep 6.9 billion water bottles out of landfills
- Changed one light bulb in their room, we could save 4.1 billion pounds of CO2 output



#### YOU Are The Future of Our Oceans





#### Thank you to these fantastic people and organizations who support the Save Our Seas vision!

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