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## The Ecological Effects of Overfishing in Japan

Katrina Chicojay Moore  
*Colby College*

Emily Walker  
*Colby College*

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# The Ecological Effects of Overfishing in Japan

Katie Chicojay and Emily Walker

Environmental Studies Program, Colby College, Waterville, ME 04901

## Objective

An exploration of the ecological issues that have resulted from Japan's rapid industrial expansion, with a focus on overfishing practices, specifically of marine mammals.

## Japan and WWII

- During WWII (1937-1945), Japan experienced rapid economic development
- The loss of the war resulted in an overall feeling of defeat and demoralization
- After losing the war, Japan saw an increased sense of nationalism, fueling their drive to economically and industrially rival the United States

## Fossil Fuel Emissions and Nuclear Energy

- As a result of Japan's industrial expansion, they relied heavily on imported oil
- The 1973 oil crisis forced Japan to reevaluate this reliance on oil
- At this time, Japan already had 5 nuclear reactors and a growing nuclear industry
- With the Kyoto Protocol in 2002, Japan decided to cut their fossil fuel emissions and increased their nuclear use
- The Fukushima catastrophe in 2011 forced Japan to divert their energy source and their emissions have begun to increase again

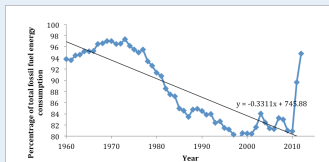


Figure 2. The percentage of total fossil fuel energy consumption over time.

## Population Growth

- From 1947-1949, Japan experienced rapid population growth as a result of WWII
- The population continues to increase, but at a slower rate than the immediate post-war

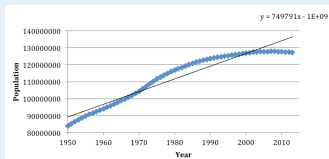


Figure 3. Post World War II population growth in Japan.

## Fishing Industry

- Japan currently serves as one of the top fishing industries worldwide
- Japan's economy is heavily dependent on fishing and international fish trade
- Overfishing practices have depleted fish populations in surrounding oceans
- Due to overfishing and the depletion of populations, Japan's fishing practices are negatively portrayed in the media
- Impacts of the Fukushima disaster continue to threaten Japan's fishing industry
  - Fishermen are unable to fish in the "disaster zone"
  - The public has become more aware of potential health effects from consumption of affected fish

## Whaling

- Since the 1970s, environmentalists have been striving to end whaling practices in Japan
- In 1982, the International Whaling Commission (IWC) placed a moratorium on all commercial whaling practices, still in place today
- However, individual countries can be issued special permits to continue whaling of certain species for "scientific purposes"
- Despite claiming whaling for "scientific purposes," there is still extensive debate over whether Japan's whaling is scientific or not
  - Scientists have continued to find samples of illegally caught whale meat in fish markets around Japan
- In a study on the welfare of whales caught, it was found that the average visible time to death was 10 minutes due to inaccurate harpoon shots
- Media portrayal has shed light on possible illegal whaling in Japan
  - Animal Planet's "Whale Wars" shows illegal Japanese whaling ships in the Southern Ocean



©Jeremy Sutton-Hilbert/Greenpeace 2006.



Courtesy of Moral Low Ground

## Government Response

- In 2010, Australia brought a court case against Japan claiming that "scientific whaling" was a cover-up for Japan's illegal whaling
- On March 31, 2014, the courts ruled in favor of Australia, forcing Japan to either outright end their whaling or redesign its program to make its whaling an actual scientific endeavor
  - For the 2014 year, Japan decided to outright end their whaling practices
  - They plan to submit a redesigned program in the fall of 2014 to begin hunting again in 2015

## Dolphin Drive Hunting

- Since the release of the film "The Cove," the general public have become more concerned with dolphin-fishing practices in Japan
- Japanese fishermen practice "drive-hunting" in which they drive all of the dolphins into one area and slaughter them en masse
- These dolphins are either killed for meat or removed to be sold into captivity
- Dolphins are extremely receptive, emotional, and intelligent beings, making the slaughter and separation from their families inhumane acts



Courtesy of OccupyForAnimals.com



Courtesy of Moral Low Ground

## Health Concerns

- Due to biological magnification, Mercury (Hg) levels in whale and dolphin meat often exceed the legal consumption limit
- In a study of nine small cetacean species sold for consumption, the Hg levels in all cases exceeded the provisional limits
- In 1956, Minamata disease (methyl-mercury poisoning) was found in humans who had eaten fish and shellfish with high concentrations of methyl-Hg
  - Minamata disease caused severe health defects such as sensory disturbances and extensive lesions of the brain
  - The Hg levels also affected the fetuses of pregnant women and led to birth defects for years after the outbreak

## Government Response

- Recently, dolphin meat was banned from being sold in school lunches due to health concerns
- In response to the dolphin controversy, Japan's prime minister stated:  
The dolphin fishing that takes place in Taiji town is an ancient fishing practice deeply rooted in their culture and their practices and supports their livelihoods. We hope you will understand this. In every country and region, there are practices and ways of living and culture that have been handed down from ancestors. Naturally, I feel that these should be respected. At the same time, I am aware that there are various criticisms. I have also heard they are making major improvement in their fishing methods. Both the fishing and fishing methods are strictly regulated.

## Ways You Can Help

- Sign this petition against dolphin drive hunting:  
<http://www.takepart.com/cove/takeaction>
- Sign this petition against sea food fraud:  
<http://act.oceana.org/letter/seafood-fraud?source=act>
- Spread the word about these issues!