

Essential Question: Who speaks for Nature?

Activity 2 – Was the Nile Perch really a Miracle Fish?

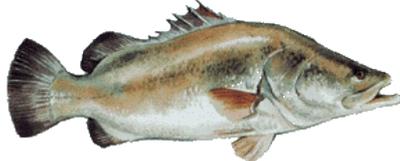
Purpose: To identify the trade-offs of introducing an invasive species in an environment.

Instructions: Read Act 72 and the Rest of the Story. Next answer the following questions in complete, quality, and correct sentences using facts, reasons, evidence and details. Use extra paper as needed.

The reading in Activity 72 is over 18 years old. Here is the rest of the story, updated to April 2013

- Initially the Nile Perch's introduction to Lake Victoria allowed the creation of large fishing companies which offered good jobs.
- The big fishing operations displaced many local people from their traditional fishing jobs, forcing them to find other, lower paying jobs if they can find these.
- Since most of the Nile Perch are shipped out of the country, many people are leaving the area because they have no food or money.
- In 1989 the catch per vessel peaked, yet landings stayed high for a long period because more fishing boats were added and more gill nets were used per boat
- The numbers of fish factories decreased by 25%. All factories are now operating below capacity.

Here's the data for the fish stocks since the article was written

Nile Perch stocks in Lake Victoria		Nile Perch	Chiclid
Year	Stock of Nile Perch in tons		
1999	1.9 million		
2001	1.2 million		
2005	544 000		
2008	227 000		
2011	165,439		

There were also ecological impacts. The Nile perch's diet consisted of native [cichlids](#). As the bigger cichlids dwindled, the perch mainly eat small shrimp and minnows, completely changing the Lake's ecological balance.

- The Nile Perch caused the extinction or near-[extinction](#) of over 200 native species.
- Since Nile perch stocks are decreasing, some of the native fish are making a comeback.
- The declines in Nile Perch stocks are caused by overfishing, the harvest of immature fish, habitat degradation and pollution of Lake Victoria.
- Lake Victoria is "dying" because of over fertilization and poor sewage treatment. The lake is now rich in dissolved nutrients from fertilizer or sewage. These extra nutrients caused an explosion of algae and water plant growth in certain areas. When the nutrients become used up, the algae die. The decaying algae use up the lake's oxygen, suffocating the native fish.
- There are effects ashore too. Native cichlids are normally sun-dried. Nile perch need to be smoked to avoid spoiling due to their higher fat content. The increased demand for firewood is causing more [deforestation](#), [soil erosion](#) and [desertification](#) in the country.

Analysis Questions Please answer in complete sentences reflecting each question.

1. Based upon the reading, how did the amount of fish caught in Lake Victoria change from:

a. 1960's to 1989 (use data from the reading)?

b. What did the large catches of Nile Perch allow the countries surrounding the lake to do?

'Invasive Species' means an alien species whose introduction does or is likely to cause economic or environmental harm or harm to human health."

