

Islands of Life (Oil Platform Habitats)

Grade Level: 3-6

Objective: The student will identify the marine life surrounding an Offshore Production Platform.

Materials:

1. "Islands of Life" poster
2. Offshore Platform Habitat Worksheet
3. Crayons
4. Maze, Fish Find, etc (4)

Background Information:

1. What is an offshore platform? Drills, pumps, and pipes that pull natural gas and oil from the seafloor. Platforms are set in place by steel support legs. Offshore production platforms may remain in place for 20 years or more!

2. Offshore platforms not only provide energy, but they form an artificial island and reef system (habitat). These islands or reefs provide a home for a variety of marine life. They attract, harbor, and sustain a wide variety of fish and wildlife below and above the water surface. They provide a "steel" island as a refuge for those animals that may get caught in the currents and may otherwise perish.

3. How? The jacket (steel legs) acts as a reef providing hard surfaces for organisms such as barnacles, sponges, and corals. This creates a new marine eco system for fish, sharks, sea turtles, spiny lobsters, and sea urchins.

4. The following are a list of some of the sea life found on and around production platforms:

Fish	Crustaceans
Barnacles	Crabs
Plants; Algae, Macro algae	Tunicates
Hydroids	Turtles
Bryozoans	Dolphins
Mollusks	Butterflies
Sponges	Birds
Corals	Sharks
Sea urchins	Seals
Oysters	

5. Offshore platforms have become popular recreational fishing areas because of the large marine population surrounding them.

6. SCUBA diving is also extremely popular near production platforms.

7. Federal law and regulation requires that offshore oil platforms are removed and the seafloor returned to its original condition within one year after the platform is no longer recovering oil or gas. Platforms are refurbished for reuse or salvaged as scrap steel. This is a costly operation and also removed the marine habitat.

8. In 1984 Congress passed the National Fishing Enhancement Act which allowed the use of offshore oil and gas platforms for permanent artificial reefs. Birth of the Rigs-to-Reef program.

Procedure:

1. "Imagine you have a pet fish. Your fish has a fish tank full of water, rocks, sea plants, and food. Imagine your little brother broke your fish tank, leaving your fish without a home. Would your fish be able to survive?"

"The fish tank was your fish's habitat, or home. Your fish 'lives off' of everything in the tank to survive."

"Oil Platforms are similar habitats or homes for different marine life including plants, fish, and birds."

2. Explain what an oil platform is and how it provides an "Island of Life" for marine life. (display "Islands of Life" poster)

3. Explain the variety of sea life that is supported by an offshore platform. (use poster)

4. Explain how people use the platforms for recreational reasons.

5. Explain the Rigs-to Reef program.

6. Have students complete the Offshore Platform Habitat Worksheet. The student will draw the variety of marine life found on and around a platform.

7. If time, students may complete the maze, fish find, and other activity worksheets.

Resources: 1. <http://www.mms.gov>

2. "Islands of Life" A Teacher's Companion! published by Minerals Management Service

Use the graphics in the JPEG folder "Linda Machado."

Answers to Exercises:

How many fish are swimming around the platform pictured below? 132 Sea Animals

A=7

B=1

C=2

D=9

E=5

F=6

G=4

H=3

I=8

J=10

In each group, find the one that is different.

1-H

2=E

3=C

4=G