



Dolphin Lifesavers, Part 1

Training for a Mission



San Diego, CA (SPAWAR - Navy) -- The military cares for dolphins as they are trained to find and mark underwater mines for removal by Navy personnel. Humans and animals communicate and work together for decades. Dolphins have found more than 100 mines and saved numerous lives since the beginning of the Iraq War.

"Dolphins are really good at finding things in water." Mike Rothe, Biosciences Division manager

Framework

Middle School

Standards

- NSES - C.iii.3 ➤ Behavior is a response to environmental stimulus.
- NSES - F.iv.1 ➤ Risk analysis considers options for reducing risks.
- STL - 3.F ➤ Knowledge from other fields (such as animal behavior) has an effect on the development of technology.
- STL - 4.D ➤ Technology affects safety and comfort.

Content Illustrated

- Transporting a dolphin to an open sea area where it finds and places a marker by a mine.



Content



Life Science

- ▶ Dolphins can be trained to find underwater mines. They can find the mines in various places—buried in the sand, lying on the surface, or in the water column.
- ▶ Training dolphins includes keeping them happy and healthy and forming strong bonds. They learn to be handled so they can be examined by veterinarians.
- ▶ During training, the dolphins receive rewards for finding targets placed in a large pool.
- ▶ Dolphins (such as Ten, a 25-year-old dolphin) are trained to beach (jump out of the water onto a carrier). This is difficult to do, since it is not normal dolphin behavior.

Technology

- ▶ Trainers created a harness with a transmitter for the dolphins to wear so that they can be located. The dolphins also place a signal marker near mines.
- ▶ The trainers use a special carrier for safely transporting dolphins.

Engineering

- ▶ Mines are designed to explode on impact from ships, not dolphins.

Guiding Questions

To think about as you watch:

- ▶ Have you ever trained an animal? What does it take to train an animal?
- ▶ Why are animals, rather than humans, used for some jobs?

Suggested Activities

- ▶ Research the history of animals used in the military.
- ▶ Find out about organizations devoted to disarming mines that have been left after battles.

Keywords

beaching
dolphin
harness
husbandry
mammal
mines
transmitter

▶ *Dolphin Lifesavers* can be found online at www.ndep.us/Dolphin-Lifesavers-pt-1. Visit www.ndep.us/LabTV for a list of process skills modeled in webisodes.