

Lesson Five — Strangers of Land and Sea (Non-primate Mammals)

Objective: Students will explore the world of some of our fellow mammals with whom very few of us have an opportunity to interact.

Materials required:

Copies of all background information and true accounts to hand out to students

DVD: A film about dolphins or other mammals who are not primates and not part of the students' community

Background Information

Just as it is easier to relate to people who are like us, it is easier for us to relate to nonhuman animals who are most like us. Within our mammal family, it is usually easier to relate to those who live on land, as we do. Within **that** group, it is easier for us to relate to those who look a little bit like us or who live in our region, community, or home. This lesson offers a look at a few of the mammals we humans rarely get to know personally. As foreign as their worlds are to us, we can still recognize what is common to their world and ours. We share many physical, mental, emotional, and lifestyle traits with them.

Background About Bottlenose Dolphins

Bottlenose dolphins are mammals who nurse their calves with milk, just like humans. Although they can swim 260 meters below the ocean's surface, they usually stay near the surface because they can only go without breathing air for about 15 minutes.

It can be difficult to see in water, and especially to see far ahead, so dolphins use echolocation to find food, to navigate, and to explore their environment. Sound travels four-and-one-half times faster in water than in air.

Dolphins send out clicking sounds through the water. They can focus the sounds into a single beam and direct it to any object. When the echo of the sounds returns to them, they listen to it using an organ on their head called a melon. The echoes tell them many things about the object, such as its size, shape, speed, direction, distance, and even its internal structure. Echolocation works just like sonar developed by humans, but dolphin sonar is more sensitive and more complex. Dolphins can echolocate on close and faraway objects at the same time, and they can distinguish between objects that are nearly identical.

Dolphins are very intelligent, very social animals who share strong family bonds and who communicate in a language of sounds and gestures that humans do not yet fully understand. Each dolphin has his or her own signature whistle that is recognizable to everyone in their pod or group. Like sheep, donkeys, cows, humans, and other mammals, adult dolphins recognize the sound of their own baby, even in a crowd. Dolphins love to swim long distances at high speeds, to play in the wake of a boat, to blow bubble rings, and they laugh.

People hunt and kill dolphins for food. They also capture them for entertainment or research aquariums. Dolphins are often killed as bycatch in the fishing industry. Bycatch is non-target prey that is accidentally caught in nets. Dolphins suffocate and die when they are caught this way, and they are thrown back in the sea.

True Account About A Dolphin

A dolphin named Kelly at the Institute for Marine Mammal Studies in Mississippi was taught by scientists to exchange any litter accidentally dropped in her pool for fish, as a way to keep the pool clean. Kelly cleverly thought to hide paper under a rock at the bottom of the pool and tear off one small piece at a time to exchange for a fish. In this way, she obtained many fish for a single piece of paper. This behavior shows that Kelly has a sense of the future and can delay satisfying her wants to get a bigger reward in the future.

One day, when a seagull flew into Kelly's pool, she grabbed the bird, waited for the trainers, and gave them the unharmed bird. The trainers gave her lots of fish in exchange for the gull. The next time Kelly was fed, instead of eating the last fish, she took the fish to the bottom of the pool and hid it under the rock where she had been hiding the paper. When no trainers were present, she brought the fish to the surface and used the fish to lure gulls, who she caught to exchange for more fish. She had trained the humans to give her fish in exchange for catching seagulls. After mastering this lucrative strategy, she taught it to her calf, who taught other calves.

Background About Cows

Female cows used in the dairy industry are kept pregnant so they will continue to produce milk. Their calves are taken away from them so their milk can be packaged and sold for humans to drink. The calves, if female, are used as dairy cows, and if male, are killed for meat.

Cows are smart and easily solve problems. Just like humans, they need and want social interaction with others of their kind. Just like us, they prefer to be with friends they were raised with or friends close to their own age. Studies have shown that they learn more quickly and are not as frightened by new situations when they are with their friends. They also relax more when calm music is played. When they are separated from each other, they cry out until they are reunited. They can learn to recognize different signs indicating different gates on a farm, and they understand which gates the farmer wants them to walk through.

The normal lifespan for a female cow is approximately 20 years, but in the dairy industry, they are killed for meat when they start producing less milk, at about four-to-five years old.

True Accounts of Cows

One

At a sanctuary for farmed animals, a cow named Phoebe met an aging male sheep named David. Phoebe immediately adopted David and treated him as she would her

own sick child. She stayed with him all day and slept next to him at night, licking and comforting him for hours. David was taken to a separate area for medical treatment, and Phoebe became very upset. When he returned a few hours later, their joyful reunion made it seem they had not seen each other for years. When David died, Phoebe bellowed for hours and searched for him in a panic. She was never the same and died a year later.

Two

At another farmed animal sanctuary, a rescued cow named Debbie became ill and fell down. The other cows formed a circle around her and called out until a staff person came. She was too sick to save and was euthanized. The sanctuary staff dug a grave for her and placed her body next to the grave. Again, the cows gathered around her and bellowed in distress. After the sanctuary workers buried Debbie, the other cows all lay down on her grave. Then they went off into the forest and did not return, even at feeding time, for two days.

Three

In the U.K., a mother cow named Blackie and her calf were sold at auction to separate farms 11 kilometers apart. At the farm Blackie was sold to, she was bedded down with water and hay, but soon broke out of the farm yard, jumped over a hedge, and walked down a country lane to escape. The next morning, she was found nursing her calf, at the farm 11 kilometers away. The farmer who had bought her calf was able to identify the mother from the auction labels still stuck on her and her calf's rumps.

Activity One

Hand out copies of the true accounts and all background information above to students and ask them to read the stories and background information in class, either aloud or silently to themselves. Then ask them to look carefully through the stories again to find all the ways that dolphins and cows are like humans. Examples: wanting more of something they like and working out a way to get it, learning from their parents who learned from their parents, wanting to be with their friends, mourning the loss of their friends, delaying gratification to get something better in the future, and so on.

Discuss students' findings in class.

Many captive dolphins live alone in tanks. Many cows are taken away from their friends and family or live alone in pens.

Ask students: Based on what you know about dolphins and cows from the background information and stories above, do you think keeping animals in this way does or does not meet their physical and emotional needs?

Discuss their answers in class.

Ask students: Did anything in the stories surprise you? How did your ideas about dolphins and cows change after reading the stories and background information?

Activity Two

To the teacher: Hide something in the class that will not be easy for students to find and draw a map to the hidden item.

Then divide the class into two groups and explain that each group must find the hidden item using the map. The teacher may wish to award some sort of prize to the winning group.

In the story of the mother finding her baby, the mother did not have a map and traveled over unknown territory to find her baby at another farm.

Ask students: How do you think she did this? Does knowing how hard she tried to find her baby make you think differently about products from cows that we eat? Why or why not?

Discuss their answers in class.

Resources

True Account About A Dolphin:

"Animal intelligence: Startling new evidence emerges." *The Independent: Science*. 18 April 2007.

<http://www.independent.co.uk/news/science/animal-intelligence-startling-new-evidence-emerges-445207.html>

<http://tinyurl.com/3sfzvcr>

True Accounts of Cows, One:

Baur, Gene. *Farm Sanctuary: Changing Hearts and Minds About Animals and Food*. New York: Touchstone/Simon & Schuster, 2008

True Accounts of Cows, Two:

Hatkoff, Amy. *The Inner World of Farm Animals: Their Amazing Social, Emotional, and Intellectual Capacities*. New York: Stewart, Tabori & Chang – Abrams Books, 2009.

True Accounts of Cows, Three:

Robbins, John. *The Food Revolution: How Your Diet Can Help Save Your Life and Our World*. San Francisco: Conari Press, 2001 and 2011. (Quoted from *World Farming Newsletter*, produced by CIWF: Compassion in World Farming)