



### “A TALE OF TWO RISSO’S”

#### BACKGROUND INFORMATION:

“A Tale of Two Risso’s” is a story about Risso’s dolphins. Most people are unfamiliar with the unique Risso’s dolphin. Basic information about Risso’s dolphins and comparisons to the more familiar Bottlenose dolphin is given. The importance of family and the strength of the mother/calf bond is highlighted. The film compares the way Risso’s dolphins are treated on opposite sides of the Pacific ocean. On one side lies Taiji, a small fishing village that hunts dolphins six months out of the year. Dolphins are driven into a small cove where they are either slaughtered for their meat or captured for captivity. It is the money made from selling live dolphins that keeps these hunts profitable. On the opposite side lies Monterey, where visitors come from around the world to go whale/dolphin watching. Whale watching is a large part of the economy of Monterey.

#### Answers to Study Guide Questions:

#### PRE-VIDEO QUESTIONS:

1. Discuss what most people think of when they hear the word “dolphin”. Many will picture the Bottlenose dolphin which is the most commonly seen dolphin in aquariums and marine parks. The bottle shaped rostrum or snout, the stream-lined body and gray coloration are commonly mentioned characteristics.
2. Human interactions include: going to a dolphin show, participating in a “swim with the dolphin” program, dolphin-assisted therapy, watching wild dolphins in the ocean from a boat or on shore, hunting dolphins for human consumption, catching and chopping up dolphins to be used as shark bait, capturing dolphins to be used for human entertainment or research.
3. Discuss student answers.
4. Dolphins are mammals because they:  
Breath air - voluntary breathers who must consciously open blow hole while at surface and close it before going back underwater, unlike humans who are involuntary breathers and don’t need to think about breathing  
Give birth to live young - born tail first and must be helped to the surface for first breath  
Feed their young milk

Students might think that dolphins are hairless and adults are but when they are born, dolphins have a small amount of hair on their rostrum which falls off after a few weeks. Dolphins have lost the body hair that other mammals have because they need to be efficient swimmers, hair produces drag. You can point out how Olympic swimmers often shave their body hair before a race.

5. Dolphins are similar to humans in that we are both mammals and have similar physiology. However, focus on the behavioral similarities between humans and dolphins. Dolphins live in family groups. Some will stay together for life. In orca families, the males stay with their mother for life while females may leave and start their own pod when they are sexually mature. Some species stay in stratified groups, for example, young males will stay together, older males stay together... Dolphins will form nursery pods where females work together to take care of the young, Females that don't have calves will act as "aunts" and "babysit" the young calves. Some species, like pilot whales will include elders in the nursery pods, "grandparents". Dolphins have names, known as a signature whistle. They greet each other by these names and remember each other. Dolphins play and socialize with each other. Dolphin mothers teach their calves how to be a dolphin. Different groups of dolphins have different cultures which are passed down from generation to generation. Dolphins have language with different dialects. Some scientists believe that whales and dolphins are trilingual, speaking their own dialect, their species language and a general cetacean language. Dolphin pods are very tightly bonded. They take care of each other. Family is very important to dolphins, especially the mother/calf bond. Dolphins grieve their losses. Grief has been documented many times as mothers are seen carrying deceased calves with them for days or weeks. Dolphins are intelligent. It is difficult for scientists to measure animal intelligence but dolphins have been documented using tools and pass the mirror test. The mirror test means that they are self-aware and recognize themselves in a mirror.

#### VIDEO QUESTIONS:

1. Pylorus Jack was a Risso's dolphin who guided ships through the treacherous waters of Cook's Strait in New Zealand, between the North and South Island. Celebrities such as Mark Twain came to get the chance to see him. He was the first marine mammal to be protected by law after someone on one of the ships shot at him. He is a folk legend in New Zealand.
2. Risso's dolphins heads are the most obvious difference from Bottlenose dolphins. Risso's have a bulbous, rounded head while Bottlenose have the longer, tapered rostrum. Risso's have very few teeth compared to Bottlenose and only on the lower jaw. The head shape and number/placement of teeth is thought to be an advantage for the Risso's when they are feeding as they will slurp up their favorite food, squid while bottlenose must grab fish with their teeth while hunting.

Another big difference can be seen in body shape, Risso's are rounder and more robust than the stream-lined Bottlenose.

There are differences in coloration as the Risso's dolphins are born a dark gray but over time, will appear lighter in color. Older Risso's dolphins will appear to be almost white while Bottlenose will remain gray their entire lives.

3. There are two reasons for this change in coloration. One being that Risso's will have skirmishes with each other which will cause scratches that leave white scars. Another source of these scars is from battles with squids, their favorite prey. Squid have a very hard and sharp beak which can also scratch up a Risso's dolphin. Once scratched, the Risso's dolphin skin does not produce melanin so the marks remain as scars. They form very unusual and distinctive patterns throughout a Risso's dolphin's lifetime.
4. Living in stratified groups means that Risso's dolphins tend to congregate in family groups of the same age and sex. Young males will hang out together. The elders hang out together. Females tend to stay together. These groups will come together and intermix at times. A special pod type is known as a nursery group. This is a group of females who have split off from their main pod to give birth and raise their young calves. There are often other females without calves in a nursery pod. They are thought to act as "aunts" and help look after the young calves while the mothers feed.
5. A special pod type is known as a pod. This is a group of females who have split off from their main pod to give birth and raise their young calves. There are often other females without calves in a nursery pod. They are thought to act as "aunts" and help look after the young calves while the mothers feed.
6. Dolphins are acoustically sensitive and the hunters use this to their advantage. When a pod is located, the boats will line up behind the dolphins and place their "banger poles" into the water. A banger pole is a long pole that extends from the hunter's boat into the water. The hunter then uses a hammer to bang on the pole which creates a wall of sound. As the dolphins try to swim away from the loud noise, the hunters work together to herd them into the cove.
7. Risso's calves have small bodies. The hunters have a quota, the number of Risso's dolphins that they are allowed to kill or capture each season. The body of a young Risso's calf simply isn't profitable. It will not yield a lot of meat so the hunters will release them back into the ocean so they can save that number for future adults that may be driven in. The calves' chances of survival aren't good because they are dependent on their mothers for up to a year and a half. Without their mothers' milk and guidance, they will, most likely not survive. The only hope is that they will be adopted by another pod but the chances of that are very low.
8. Hamata is a captive dolphin and Casper is a wild and free dolphin. Their lives are very different. Hamata is contained in a small sea pen in the Taiji whale museum. He has no

freedom. He must eat what he is fed, when he is fed. He is in this sea pen with other dolphins who are not members of his family. He has lost his freedom and his family. Casper is living freely in the ocean, with his family. He is free to go where he wants, when he wants, to eat what he wants, when he wants. He is able to socialize and play with other dolphins, to hunt and find his own food.

9. Spindle neurons are special nerve cells that are not found in all animals. They are responsible for emotion. They allow for feelings of love, grief, empathy and social intelligence. Spindle neurons are found in humans, the great apes and several cetacean species. They may explain the tight social bonds found in dolphin species such as Risso's.
  
10. Dolphin captivity is a business and like any other business, it is based on supply and demand. Aquariums and marine parks make millions of dollars by displaying dolphins and offering "swim with the dolphin" programs. It is a very profitable business. The demand comes from us, the consumers, people buying tickets to marine parks and "swimming with the dolphin" programs. This demand leads to the capture of dolphins. While, in the United States, many dolphins are captive bred, in many other countries there is still a demand for wild caught dolphins. To end this industry, we must remove the demand, we must not buy tickets.

#### POST-VIDEO QUESTIONS

Answers will vary. Here are some arguments for and against the captivity of dolphins.

#### PRO-CAPTIVITY

The dolphins are well taken care of, they have food and veterinary care.

The dolphins are safe from predators.

People are inspired by seeing dolphins and will want to protect them.

The dolphins don't mind being in captivity.

We are learning more about dolphins by studying captive dolphins.

Animals are here for humans to use as we see fit.

#### Rebuttals

Imagine being locked up in your house. You are fed and a doctor checks on you and takes care of you. You are safe, no one will bother you. But, you can NEVER leave your house. You can't see your family or friends. You can't choose what to eat or when to eat. You will live your entire life in your house.

It is more inspiring to see dolphins in their natural habitat, doing their natural behaviors. Most aquariums are located in areas where dolphin watching tours are available.

Many captive dolphins exhibit repetitive behaviors caused by stress and boredom. Commonly seen behaviors include chewing paint off the inside walls of their tanks, chewing on metal bars in their tanks, self harm - such as ramming into the sides of their tanks or rubbing their bodies on something in their tanks until they are injured, logging - floating at the surface for long periods of time

While there are some research facilities that are doing quality research, the best research is being done in the ocean, on wild dolphin populations. While physiological research may be done in captivity, behavioral research must be done in the wild. The behavior of a dolphin changes dramatically when it lives in captivity. Studying captive dolphins for insight into their behavior is similar to studying prisoners for insights into human behavior.

This is a matter of personal opinion, however, many believe that animals are not here for our benefit but are here to live their lives as they see fit. That they are deserving of our respect and protection, or at the very least, should be left alone.