

Trumpeter Swans and How They Live

Synopsis

Once, the trumpeter swan ranged from as far south as the Texas coast and as far east as Chesapeake Bay. But hunters prized trumpeters for their down and plumage and by 1900 they were almost extinct. This film traces the history, near-extinction and reemergence of America's trumpeter swans. It examines their current decline and discusses measures that wildlife specialists are taking to ensure the trumpeter's survival. Vivid photography documents the swan's way of life; their habitats, behaviors, feeding and nesting activities, and rearing of their young.

Questions to Ask Before Viewing

- In poem and legend, swans are often associated with royalty and nobility. Why do you think swans have that image?
- By the beginning of the 20th century, trumpeter swans were almost extinct. Can you guess why?
- What reasons would humans have to hunt swans?

Questions to Ask After Viewing

1. By the beginning of the 20th century, trumpeter swans were almost extinct. What had happened to them? (They were hunted for their down and plumage. Because the swans are large and low-flying, they were easy targets for hunters.)
2. What enabled trumpeter swans to survive in the continental United States? (A non-migratory flock had found a year-round refuge in the greater Yellowstone Park area. Geothermal springs, which kept the water ice-free in winter, enable them to find the aquatic plants they fed on. A Canadian flock with a tradition of wintering in Yellowstone was also able to survive.)
3. How many trumpeters now nest in the Yellowstone area? (In 1986, there were about 330 adult birds. They are known as the "Rocky Mountain population" and are found within a small radius that includes the Yellowstone and Grand Teton national parks in Wyoming, the Red Rock Lakes National Wildlife Refuge in Montana, and Harriman State Park in Idaho.)
4. What other trumpeter populations can be found in North America? Where do they nest and migrate during the winter? (Several flocks nest in Canada -- in Grande Prairie, Alberta; in northeastern British Columbia; in the Northwest Territories, and in the Yukon. Most migrate to the Yellowstone area for the winter. There is

a separate trumpeter population in Alaska, which migrates down the Pacific Coast as far south as Washington and Oregon.)

5. Why are trumpeters seldom attacked by predators? (Because of their large size and general alertness. If a swan becomes injured or ill, however, it may fall victim to an otter, eagle, or coyote.)
6. The trumpeter's nesting sites are very carefully chosen. What is the reason for this? (Because of the trumpeter's large size, a long time is needed for the cygnets, or young swans, to develop into flying swans. If the first nest fails, there isn't enough time to re-nest during the season. Each pair of swans has a lifetime nesting territory. In Grande Prairie, Alberta, that territory averages 346 acres; in Yellowstone, each nesting pair has its own lake.)
7. Trumpeters are extremely protective of their nesting territory. How are intruders treated? (They are driven away by the male trumpeter, or cob. Usually, the male issues a vocal threat or lifts its wings in a "threat display." Occasionally, physical force is used against both swans and other animal intruders. Trumpeters frequently build their nests on muskrat homes; returning muskrats are attacked or even killed to protect the nest. One researcher reports that a male trumpeter rose to attack a low-flying airplane which the swan thought was invading its nest.)
8. Why are otters a danger to young swans? (Because cygnets can't fly, they are

extremely vulnerable to anything attacking them from underneath the water.)

9. What has happened in recent years to the population level of greater Yellowstone's trumpeter swans? (It is at its lowest level in 30 years. Fewer swans are nesting there each year and they aren't producing enough young to replace themselves.)
10. What reasons do biologists give for the decline? (There are many contributing factors. While the wildlife refuges have provided sanctuary for the trumpeters, the area's winter climate is extremely harsh. Sources of food in winter are insufficient, even in the best of times, for both the Rocky Mountain flock and the wintering flocks from Canada. Trumpeters need as much as 20 pounds of water plant vegetation a day; if the water level is low as it often is, many water plants are either killed or made inaccessible by ice. Undernourished trumpeters find it difficult to breed and survive.)
11. What efforts are being made to solve the problem? (Negotiations are taking place so that more water is allocated during winter for the swans and other wildlife; currently, most water in the area is reserved for irrigation purposes and for hydropower.)

Background for the Discussion Leader

- The trumpeter swan is one of two swans indigenous to North America. The other is the tundra swan, which numbers

200,000 and is not endangered. A third species, the mute swan, was introduced to North America from Europe at the turn of the century to adorn ponds in parks and private estates.

- The trumpeter is the largest waterfowl species in the world. In wingspan measures 7 to 8 feet, and it can weigh up to 30 pounds. Adult trumpeters of both sexes are white; young swans, or cygnets, are gray-brown in color. An extra loop in the swan's trachea accounts for its distinctive trumpet-like call. The trumpeter is distinguished from the similar looking tundra swan by its larger bill and red "lip."
- Trumpeters live for about 25 years, and mate for life. Females are known as "pens"; males are called "cobs."
- Until the last quarter of the 18th century, the trumpeter swan was common throughout the United States. Its winter range extended as far south as the Gulf of Mexico. But when the Hudson's Bay Company began hunting the bird, it disappeared successively from the eastern half of the country, the Mississippi Valley and, finally, from the prairie wetlands. By 1900, it was close to extinction.
- Hunters greatly valued the trumpeter for its down, its fashionable plumage, and its quills, which were used for pens. From 1820 to 1880, the Hudson's Bay Company traded more than 100,000 swanskins, most of them from trumpeters.

- Eventually, biologists believe the trumpeters must be introduced to new, less harsh, wintering sites farther south. The swans have very strong traditional instincts, and that is part of the problem; they will starve to death in a familiar location rather than look for a new one. Scientists have instituted relocation programs to introduce both the local and migrating flocks to new winter homes. In 1991, wildlife agencies transported 354 trumpeters from the Yellowstone area to new locations further down same river system.
- Twenty years ago, cygnets from Canada and Alaska were introduced into Minnesota's Hennepin County, the South Dakota Badlands, and the Nebraska sandhills. These flocks have recently begun to migrate south for the winter.
- In the 1920s, scientists discovered the only trumpeter swans surviving in the continental United States -- a small, non-migratory flock that had found sanctuary in the area around Yellowstone.
- Efforts made by government scientists to re-establish the population were considered a success; by the 1960s, the trumpeters' numbers had grown to almost 600. But, by the 1970s, the Yellowstone swans were again in danger, their numbers falling dramatically and mysteriously.

Related Titles in the AIMS collection

- 8461 Yellowstone: Renewal After the Fire
- 8468 Coyotes and How They Live
- 8457 Elk and How They Live

Length

- 17 minutes

Subject Area

- Life Science, Biology

Audience Levels

- Intermediate-Adult

Catalog Number

- 8479

Annotation

At the beginning of the century, trumpeter swans were almost extinct, but they made a comeback in the region around Yellowstone. Now the trumpeter is again on the decline. This program examines the trumpeter swan's way of life and explains the problems surrounding its continued survival in the contiguous United States. Produced by Trailwood Films and Bob Landis Wildlife Films.

AIMS Multimedia
9710 De Soto Avenue
Chatsworth, CA 91311
(818) 773-4300
www.aimsmultimedia.com

Discussion Guide

Trumpeter Swans and How They Live

Objectives

- To discuss the history and decline of the trumpeter swan in the continental United States.
- To examine the behaviors of the trumpeter swans that nest in the area around Yellowstone Park.
- To discuss the measures scientists are taking to ensure the survival of America's trumpeter swans.

