

EDUCATOR'S GUIDE

A Sea Turtle Story



About the Film

A Sea Turtle Story introduces children in Grades K-6 to the life cycle of a sea turtle, Tao, through beautiful stop-motion animation. It brings them into both the underwater and on-land worlds of a humble and endangered animal. The film identifies ecosystems, environmental issues and challenges, shedding light on how one creature overcomes obstacles to survive against all odds. It begins with a mother turtle swimming to a beach at night to lay eggs in the sand. Later, when the time is right, several baby turtles—among them one called Tao—break out from their shells to face the world, leaving their protected underground world for a diverse ecosystem full of predators. An exciting trip back to the ocean ensues, and in the water Tao plays among the reeds with another turtle and must dodge new predators. The circle of life continues as she eventually re-emerges to lay her own eggs.

About This Guide

This educator's guide will help primary educators use **A Sea Turtle Story** in the classroom by offering complementary resources, information, discussion questions and classroom activities. The discussion questions and activities are designed to challenge, stimulate and inform students. We encourage you to explore the additional NFB resources at the end of the guide to continue investigating broader themes, such as environmental issues, ecology and media literacy.

Recommended Age Group

A Sea Turtle Story is intended for primary school students aged five and over, although viewers of all ages will appreciate the story, beauty and craft of the film. Older students can use it as inspiration for making their own stop-motion films.

Recommended Subject Areas

This film can be integrated into the curriculum in the following subject areas at the primary levels:

- Science
- Geography
- Life Systems
- Ecology
- Environment
- English/Language Arts
- Media Literacy
- Critical Thinking

Before Watching the Film

- Ask your students what they know about turtles.
- Ask if they have ever seen a turtle in the wild, a zoo or an aquarium.
- Explain that sea turtles do exist in Canada, but that they do not nest on our country's beaches—they prefer the warmer climate of the tropics to lay their eggs.
- Ask students if they know what turtles eat. Discuss the differences and similarities between reptiles, mammals, carnivores, omnivores and herbivores.

About Sea Turtles

An Extraordinary Reptile: Sea turtles are one of the most ancient creatures in the animal kingdom, having been on Earth for over 100 million years. Dinosaurs existed 65 million years ago. Sea turtles have an exceptional sense of smell and are thought to be better than dogs at sniffing out food and predators. They can swim very long distances, hold their breath for many hours underwater and can also slow their heartbeat down to make maximum use of the oxygen in their lungs. They can grow up to 5 feet in length and can weigh from 80-2,000 pounds

Unique Birthing Ritual: Sea turtles spend their entire life in the ocean—except once in a lifetime, when the female comes ashore to lay her eggs in a unique birthing ritual. Under the safe cover of night, the mother turtle digs a deep hole in the sand, where she lays 80-100 eggs. The eggs mature for approximately 60 days, until the baby turtles begin to emerge from their shells and make their way back to the ocean using light, shadows and the horizon to guide them. Only 1 percent of all baby turtles survive this dangerous journey back to the ocean and reach adulthood. (Source: conserveturtles.org/seaturtleinformation.php?page=behavior#nest)

Challenges: An increasing number of environmental threats are endangering many land and water animals. Global warming, pollution, erosion of beaches and increased human impact on turtle habitats make the future of the turtle precarious. All seven species of sea turtle are threatened with extinction. (Source: conserveturtles.org/sea-turtle-information.php)

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Greatest threats by species:

- **Leatherbacks:** Incidental capture in commercial fisheries; and swallowing marine debris, such as balloons and plastic bags floating in the water, which may be mistaken for jellyfish.
- **Olive ridley:** Direct harvest of adults and eggs; incidental capture in commercial fisheries; and loss of nesting habitat due to coastal development.
- **Loggerhead:** Loss of nesting habitat; predation of nests; and human disturbances (such as coastal lighting and housing developments) that cause disorientation as the hatchlings emerge.
- **Green turtle:** Commercial harvest for eggs and food; turtle leather industry.
- **Hawksbill:** Harvesting for their prized shell, often referred to as "tortoise shell." In some countries the shell is still used to make hair ornaments, jewellery, and other decorative items.
- **Kemp's ridley:** Human activities, including collection of eggs and killing for meat and other products; incidental take by shrimp trawlers.
- **Flatback:** Capture, harvesting of eggs, destruction of nesting beaches, ocean pollution, oil spills and entanglement in fishing and shrimp nets.

Discussion Questions

Ages 5-7

- What different species of animals do we encounter in the film?
- List 10 differences between reptiles and mammals.
- What are the differences between herbivores, omnivores, and carnivores? Name three animals from each category.
- Do turtles breathe air like humans? What other animals must hold their breath for long periods of time underwater?
- What kinds of challenges do baby and adult turtles have to overcome?
- Identify an animal you encounter on a daily basis. List obstacles it may face in its life. (For example, a bird in an urban environment: the windows of high-rise buildings, overpasses, wires, disturbed nests.)

Ages 8-12

- Can you describe a trip or challenge you had to take that was difficult, but that you succeeded in completing?
- What are the benefits and risks of taking a challenging journey, such as Tao's?
- Describe the steps in the life cycle of a sea turtle. What is meant by the term "cycle"? Research another life cycle—compare and contrast your findings.
- What is the difference between endangered and at-risk species?
- Why should we be concerned with animals that are endangered in other parts of the world?
- What impact does extinction have on our ecosystems and on other animal and plant life? What impact does extinction have on us as human beings?

Classroom Activities

- 1 With paint, markers or crayons, have your students draw a mural to illustrate the life cycle of a sea turtle. Once complete, hang it up on the classroom wall. Ask them to research another animal that can be found in your region and illustrate its life cycle.
- 2 The stop-motion animation technique used in the film is easily recreated by students in the classroom with accessible equipment. Having the opportunity to produce their own multimedia stories helps students develop critical thinking, media literacy and teamwork skills. Use NFB video tutorials on the StopMo playlist: nfb.ca/playlist/stopmostudio.
- 3 Begin by dividing the class into five groups. Ask the groups to brainstorm a story of their own with a beginning, middle and an end. Have them storyboard their animation idea, using a storyboard template. Instruct students to create their own set and animal characters out of Plasticine or paper to animate their own animal's life cycle, using the PixStop App for iPad 2 or another animation computer program, such as Frame Thief, iStopMotion or Dragon Stop Motion.
- 4 Ask students to write dialogue to accompany the film, including voices for every character and a narrator, and present the script as a class.
- 5 Research one environmental group that is helping to protect sea turtles in North America, and discuss what your class can do to help. What animal is similarly threatened in your community? Contact a local environmental group and ask if you can help.
- 6 Host a fundraiser which directly benefits the Sea Turtle Conservation/local animal shelter efforts.



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Related Films from the NFB

Life on Ice

(1986, 28 min)

The Intertidal Zone

(1985, 17 min)

Waterfowl: A Resource in Danger

(1964, 16 min)

The Animal Movie

(1966, 10 min)

Where the Bay Becomes the Sea

(1985, 29 min)

Resources

- conservation.org/great_turtle_race/pages/canadian_sea_turtle_network.aspx
- dfo-mpo.gc.ca/fm-gp/mammals-mammiferes/turtles-tortues-eng.htm
- dfo-mpo.gc.ca/fm-gp/mammals-mammiferes/turtles-tortues-faq-eng.htm
- conserveturtles.org
- seaturtle.org
- conservation.org/learn/biodiversity/species/PROFILES/TURTLES/SEA_TURTLES/Pages/sea_turtles.aspx