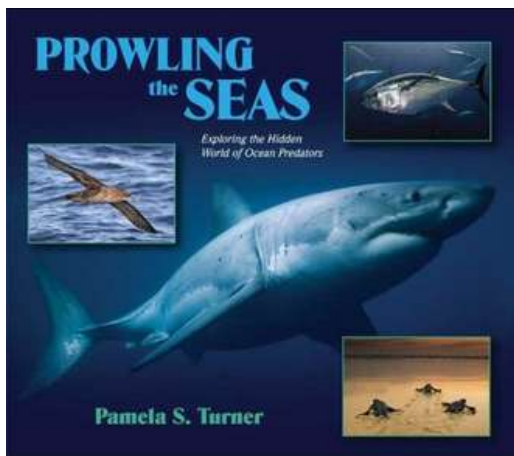


## A Teacher's Guide for...

# PROWLING the SEAS: *Exploring the Hidden World of Ocean Predators*



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Ages 8-12

### About the Author:

Pamela Turner has written for kids and young adults, mostly about science and nature. She also has a strong interest in multicultural literature because she's lived in and worked in Kenya, South Africa, Japan, the Philippines, and the Marshall Islands.

### About the Book:

Most of the world's great predators don't live on the plains of Africa or in the jungles of India. Their home is the vast blue ocean. For many years scientists have longed to know more about ocean predators. Where do they go? How do they find food?

The dedicated scientists of the Tagging of Pacific Predators (TOPP) project use high-tech tags to follow ocean wildlife swimming down in the deep or flying high over the waves, revealing the secrets of these fascinating animals and their remarkable hidden world.

### Pre-reading Activities:

1. Ask students to discuss, or journal about, animals that come to mind when they hear the word *predator*. Do any animals that live in the ocean make their list?
2. Play the episode(s) "Ocean Deep" or "Shallow Seas" from the *Planet Earth* DVD series (Directed by Alastair Fothergill. Glasgow: BBC Video, 2007). Ask students to take notes while watching, then ask questions about the episode as part of a class discussion.
3. Show your students a map of the world's oceans, or hand out copies of a map for each student to write on. Ask your students how far they think animals such as the bluefin tuna, white shark, leatherback turtle, and sooty shearwater travel in their lifetimes. Ask your students to brainstorm reasons these animals might travel great distances.
4. Ask students to think about ways scientists learn about ocean predators. How do they think scientists might learn about these animal's feeding habits and migratory patterns? What obstacles might scientists have to work around when trying to learn more about ocean predators?



### Discussion Questions

1. Ask your students to discuss the TOPP (Tagging of Pacific Predators) Project. What are the project's goals? What questions are the TOPP scientists trying to answer? [CCSS.ELA-Literacy.RST.6-8.9](#) / [CCSS.ELA-Literacy.6-8.2](#)
2. Ask students to discuss the challenges that face the TOPP scientists as they work to answer the above questions. What additional challenges, not discussed in the book, might also face these scientists in their search for answers? [CCSS.ELA-Literacy.RST.6-8.9](#)
3. Ask students whether or not the TOPP scientist's predictions or hypotheses about ocean predator's behavior always matched up with their findings. Have students consider the importance of the TOPP Project for gaining new insight into the migratory patterns of ocean predators. Ask: Is it bad that the scientist's findings weren't always what they expected? What does this say about the importance of research? [CCSS.ELA-Literacy.W.6.9](#)
4. *Prowling the Seas* describes the population decline in ocean predators such as the bluefin tuna and white shark. Ask your students to discuss reasons for this decline. Encourage them to cite evidence provided in *Prowling the Seas* to support their claims. Then, have your students brainstorm actions that they, or others, could take to help protect these ocean predators. [CCSS.ELA-Literacy.6-8.2](#)
5. Ask your students to discuss how overfishing has impacted the bluefin tuna population. Do they think that new fishing regulations, or areas with fishing bans, could help protect the bluefin tuna population? Have them explain why or why not and encourage them to provide evidence from outside sources, such as *Prowling the Seas*. [CCSS.ELA-Literacy.6-8.2](#) / [CCSS.ELA-Literacy.RST.6-8.9](#)

## Writing Activities

1. Have students write a story from the perspective of one of the animals in *Prowling the Seas*, such as the sooty shearwater or leatherback sea turtle. Encourage them to use information provided from the text, such as feeding habits, to make their stories more realistic. [CCSS.ELA-Literacy.W.3.3](#)
2. Ask your students to pretend that they could ‘transform into’ one of the animals in *Prowling the Seas*. Have them choose the animal they would want to be and have them write about their choice. Why did they pick their animal? What challenges would they face if they were this animal? [CCSS.ELA-Literacy.W.3.3](#) / [CCSS.ELA-Literacy.W.6.9](#) / [CCSS.ELA-Literacy.W.6.10](#) [CCSS.ELA-Literacy.W.4.1-5.1](#)
3. Plan a visit to the library or computer lab and have students research their animal of choice: the leatherback sea turtle, the bluefin tuna, the white shark, or the sooty shearwater. Have them take notes, and then type a paper on their topic with proper citations from their research. [CCSS.ELA-Literacy.W.6.1-8.1](#) / [CCSS.ELA-Literacy.RI.4.9-5.9](#) / [CCSS.ELA-Literacy.W.3.6](#)
4. In *Prowling the Seas*, TOPP scientist Andre Boustany says, “I’ve seen enough incredible behavior and migrations from these animals that a fish would have to travel on land to really amaze me.” Ask students to journal about what she means by this statement. What incredible behavior is she referring to? [CCSS.ELA-Literacy.W.6.1](#)
5. Have students brainstorm unanswered questions they have about the animals in *Prowling the Seas*. Then, take a trip to the library or computer lab and have them research the answers to their questions. After they complete their research, have your students type or print their answers and share them as part of a small group discussion. [CCSS.ELA-Literacy.RI.4.9-5.9](#)
6. Take a field trip to a nearby ocean, pond, river, or lake. Before leaving, have students brainstorm things they think might find or see on their trip. Have students bring clip boards, paper, and pencils along so that they can write about what they see. After, have them reflect: did they see everything they thought they would? Was anything surprising? Was there anything they expected to see, but did not? If so, why do they think this was the case? [CCSS.ELA-Literacy.W.6.10](#) / [CCSS.ELA-Literacy.RST.6-8.9](#)

## Interdisciplinary Activities

1. Split students to small groups and assign each group an ocean predator from *Prowling the Seas*. Give them access to measuring tools (such as measuring tapes, rulers, or yard sticks) and butcher block paper. Task them with creating a true-to-size cut-out of their assigned animal. Then, have them write interesting facts about their animal on the cut-out. When complete, decorate the walls with their creations.
2. Have students to write a script about the endangered populations in *Prowling the Seas*. Then, help students record their messages into their own class movie.
3. Bring in clay and have students create their own sculptures of the ocean predators in *Prowling the Seas*.
4. Take the class outside and play a game of ‘sharks and minnows.’ Consider playing variations of this classic game, such as bluefin tuna and anchovies.

## Further Reading and Learning:

**Books:** *Interrupted Journey: Saving Endangered Sea Turtles* by Kathryn Lasky; *Outside and Inside Sharks* by Sandra Markle; *Shark in the Sea* by Joanne Ryder; *Looking for Seabirds*; *Journal from an Alaskan Voyage*.

**Movies:** Universal Studio’s *Ocean Predators* (2013), directed by Benjamin Eicher and Timo Joh. Mayer; BBC Video’s *The Blue Planet* (2002), directed by Alastair Fothergill; BBC Video’s “Ocean Deep” and “Shallow Seas” from *Planet Earth* (2007), directed by Alastair Fothergill.

**Internet:** Tagging of Pacific Predators: <http://www.topp.org>; The Great Turtle Race: <http://www.greatturtlerace.com>; Ocean-focused lesson plans and resources from National Geographic: <http://www.nationalgeographic.com/seas>

**About the Author:** <http://www.pamelasturner.com>

**Ideas for Taking Action:** <http://ocean.si.edu>

## Common Core State Standards:

[CCSS.ELA-Literacy.RST.6-8.9](#): Come to discussions prepared, having read or studied required material; explicitly draw on that preparation by referring to evidence on the topic, text, or issue to probe and reflect on ideas under discussion.

[CCSS.ELA-Literacy.6-8.2](#): Determine the central ideas or conclusions of a text; provide an accurate summary of the text distinct from prior knowledge or opinions

[CCSS.ELA-Literacy.W.6.9](#): Draw evidence from literary or informational texts to support analysis, reflection, and research

[CCSS.ELA-Literacy.W.3.3](#): Write narratives to develop real or imagined experiences or events using effective technique, descriptive details, and clear event sequences

[CCSS.ELA-Literacy.W.6.10](#): Write arguments to support claims with clear reasons and relevant evidence

[CCSS.ELA-Literacy.W.4.1-5.1](#): Write opinion pieces on topics or texts, supporting a point of view with reasons and information

[CCSS.ELA-Literacy.W.6.1-8.1](#): Write arguments to support claims with clear reasons and relevant evidence

[CCSS.ELA-Literacy.RI.4.9-5.9](#): Integrate information from two texts on the same topic in order to write or speak about the subject knowledgeably

[CCSS.ELA-Literacy.W.3.6](#): With guidance and support from adults, use technology to produce and publish writing as well as to interact and collaborate with others

[CCSS.ELA-Literacy.W.6.1](#): Write arguments to support claims with clear reasons and relevant evidence