

National Wildlife Federation  
National Wildlife Week 1981, "We Care About Oceans"  
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# WE CARE ABOUT OCEANS

## PART I

### NARRATION FOR SLIDES

1. ("We Care About Oceans" - Title slide.)

2. We all love to be at the shore, hear the sound of the surf, breathe the fresh, salty air, feel the touch of the morning sun.

Photo by Tom Myers.

3. It's fun to collect shells or watch the birds and the crabs. The ocean is wonderful . . .

Photo by C. Allan Morgan.

4. . . . and the ocean is huge! The blue that you see all around Africa and the Antarctic icecap is the blue of the oceans. If you circled the earth in a spaceship you'd find that our oceans connect--to make one beautiful World Ocean.

Photo courtesy of NASA.

5. Long ago people sailed from ports that looked much like this one in Europe. For a long time many people believed that the world was flat and the sea was a terrible, monster-filled river that surrounded the land. They were afraid to sail out very far. They thought they'd fall off the edge of the world.

Painting by Canaletto, "VENICE, THE QUAY OF THE PIAZZETTA," courtesy of National Gallery of Art, Washington, gift of Mrs. Barbara Hutton.

6. But daring explorers braved the high seas, battling winds, waves, and currents, seeking new sea paths and unknown lands. Their discoveries linked the people of the world by sea routes.

Painting courtesy of Kendall Whaling Museum, Sharon, MA.

7. In the days when whales--like this sperm whale--were hunted with hand thrown harpoons, the battles between whales and men were long and fierce. Whales were especially prized for their fine oil. Whale oil was once widely used in oil lamps.

Painting courtesy of Kendall Whaling Museum, Sharon, MA.

8. Today we know much more about oceans than our ancestors knew. We have modern boats and fishing gear with which to find and catch fish. Some fishing ships are as big and efficient as factories.

Photo by Earth Scenes/C.C. Lockwood.

9. We're also learning how to raise some kinds of fish and shellfish, just as ranchers raise sheep and cattle. By raising these lobsters, and other sea creatures, on underwater farms, we are increasing our food supply.

Photo by William E. Townsend, Jr./Photo Researchers.

10. Seaweed, too, can be grown as a crop, just as farmers grow wheat. This is a large coastal seaweed farm in Japan. In some countries seaweed is a common part of a meal. It's also used in the making of paints, shampoos, and even ice cream.

Photo by D. Novak/Photri.

11. Tools and machines and new ways to explore underwater have helped us discover the great beauty and wealth of the sea--its wildlife (like this giant starfish), its minerals, its gas and oil. Wouldn't you love to take a trip in a mini-sub, or swim as free as a fish--with an aqualung on your back and flippers on your feet?

Photo by Jack Drafahl.

12. One of the most important things we've learned in our studies of oceans is that all marine life is linked: all the plants and the animals and the water itself. When any part of the sea's natural pattern of life changes or is changed by man, other changes take place. This drawing shows life in a Pacific coast kelp forest, the habitat, or home, of many plants and animals that depend on each other for shelter and food.

Drawing by Kimberly Kerin.

13. As you can see by following the arrows on this chart, the sea otter is one link in a food chain. Spine-covered sea urchins (#4) feed on seaweed, or kelp plants (#2). The sea otter (#1) eats sea urchins and other small animals. In turn, the sea otter might be the prey of a killer whale (#9). This kelp forest food chain is just one part of what we call the food web of the oceans.

Drawing by Kimberly Kerin.

14. Now, if sea otters disappeared from the kelp forest, what would happen? There'd be so many sea urchins eating the kelp that this underwater forest home of hundreds of animals might be destroyed.

Photo by Howard Hall/Tom Stack & Assoc.

15. That very thing almost happened nearly a century ago. Thousands of sea otters were killed for their beautiful and valuable fur. Just in time, laws were made to protect the few sea otters that still lived along the shores between California and Alaska. In the past 70 years, sea otters have made a fine comeback, and they're once again thriving in forests of strong, healthy kelp.

Photo by Tom Myers.

16. The kelp forest provides shelter and plenty of food for this rockfish and these purple and red sea urchins, just two of the many kinds of wildlife found here.

Photo by Robert Evans/Tom Stack & Assoc.

17. When the sea otter eats sea urchins, it floats on its back. Sometimes it wraps kelp strands around its body to keep from drifting away. This sea otter may look relaxed, but it is always on the lookout for enemies. . .

Photo by Jeff Foott.

18. . . . especially if Orca, the killer whale, is lurking nearby. This fierce predator has a strong jaw and a fearsome set of teeth that interlock when it snatches its prey.

Photo by Norman Owen Tomalin/Bruce Coleman, Inc.

19. This diver, deep in a kelp forest, harvests abalone, a good-tasting shellfish that also is valued for the pearly lining of its shell. Sea otters also collect abalone to eat. Some abalone divers and other shell fishermen think sea otters take too many shellfish, and that raises a question: How can a natural balance be kept in this kelp forest, so a fair share of food goes to all creatures--including people?

Photo by Howard Hall.

20. Some sea plants and animals are too small to see except under a microscope. Magnified many times, though, these tiny plants called diatoms look like colorful jewels. Diatoms are part of the ocean's plankton. The plankton are a mixture of many kinds of plants and animals that drift with the currents in most of the sunlit parts of the sea.

Photo by William Patterson/Tom Stack & Assoc.

21. The plankton are a very important part of the food web of the oceans. Small plankton animals, like these magnified spidery creatures, and plankton plants are eaten by other small sea animals, which are eaten by small fish. The small fish are, in turn, eaten by larger fish. And so it goes--up the food chain to the biggest sea creatures . . .

Photo by D. P. Wilson/Eric & David Hosking.

22. . . except that some very large animals feed directly on gobs of souplike plankton. This blue whale filters shrimp-like krill out of the plankton soup it gulps down. A blue whale the largest animal ever to live, can eat as much as three tons of krill in one day. The tiny krill are so plentiful that in the future they may provide lots of food for people as well as for sea creatures.

Photo by Russ Kinne/Photo Researchers.

23. All sea creatures are part of the food web of the oceans. These pictures show the kinds of things that happen in the sea every day: a starfish opens a clam for lunch . . .

Photo by Darrell Ward/Tom Stack & Assoc.

24. . . . and a sea snail reaches its tongue-like foot out for a crown-of-thorns starfish. What animal do you think might snap up this snail?

Photo by J.H. Carmichael/Bruce Coleman, Inc.

25. Of all the special habitats of the sea, the coastal areas called estuaries are some of the most important. An estuary is a place where salt water and fresh water meet at the mouth of a river. So many animals start out their lives in these calm tidal creeks, mudflats, and marshlands, that estuaries are called "nurseries of the sea."

Photo courtesy of Porter B. Reed, Jr./ U.S. Fish & Wildlife Service.

26. Many marshlands have been drained and filled in, so that streets, houses, and factories could be built. When an estuary is destroyed, wildlife--like this handsome Louisiana heron--is threatened.

Photo by Stephen J. Krasemann/Photo Researchers.

27. Another shore habitat is this sandy beach. It's the place where you find the fast-running ghost crab . . .

Photo by Stephen J. Krasemann.

28. . . . and gulls.

Photo by Stephen J. Krasemann.

29. Along a rocky shore, a clear, freshly-filled tidepool looks like a miniature sea.

Photo by Sue Drafahl.

30. You can see algae and many other small plants and animals in a tidepool. The animals crawl and swim and cling to the rocks or hide under them, waiting for the next life giving tide.

Photo by Animals Animals/Anne Wertheim.

31. Here are some colorful creatures. These arm-waving starfish are sort of eyeing each other. They have eyespots on the end of each arm, though they don't "see" as we do; they sense what's around them.

Photo by Jack Drafahl.

32. A coral reef is another special community. This tropical reef was built by millions of small coral animals. Many different plants and animals depend on the reef and each other for shelter and food.

Photo by Animals Animals/Carl Roessler.

33. While many sea animals spend their lives in a special place like a kelp forest, coral reef, sand beach or rocky coast, many others--such as these mackerel--may be found in the vast, open oceans. Ocean fish like mackerel, tuna, and cod help feed the world. We need seafood, but we must be careful not to take too much food from the sea. Overfishing is not wise ocean management.

Photo by Animals Animals/Steve Earley.

34. Far out from shore and way down where the sun never reaches, the waters are eerie and dark. Many animals that call the deep ocean home have shapes and features that help them move about, feed and avoid enemies in the never-ending night of their world. This fish has extra-big eyes and its own pattern of lights. We rarely see such strange creatures, but they're part of the ocean food web, too.

Photo by Animals Animals/Oxford Scientific Films.

35. A long-distance swimmer like this green sea turtle travels hundreds of miles in the ocean, but at nesting time, females find their way ashore to lay their eggs in hollows they dig in sandy beaches.

Photo by David Hughes/Bruce Coleman, Inc.

36. When they've hatched, young sea turtles--those that aren't eaten by birds or other predators--will grow strong in the ocean. Some day the females will come ashore to lay eggs--as long as there are quiet beaches for egg-laying. There will be uncrowded places only if we carefully plan how we use the coast.

Photo by J.H. Carmichael/Bruce Coleman, Inc.

37. Like sea turtles, salmon are great long-distance travelers. They spend much of their lives cruising the sea, but they return to breed in the fresh water where they were born. To get back to their birthplace, salmon battle upstream against strong currents, leaping up waterfalls many feet high. Many salmon are caught by eagles, bears, or fishermen. Sometimes salmon are blocked by a dam.

Photo by Martin W. Grosnick/Bruce Coleman, Inc.

38. But many salmon do reach their breeding, or spawning, grounds. Here, among pebbles and sand, eggs are laid and fertilized. Soon after egg-laying the parents die, but many of their young will one day make the long trip back to the sea.

Photo by Paul Iwanaga/Tom Stack & Assoc.

39. As we have studied our oceans and explored them, we've discovered that the sea's riches are not only in the water but also under its bottom. Today offshore oil rigs drill for gas and oil beneath the sea floor.

Photo by Jack Drafahl.

40. Until we learn to use other sources of energy--like the sun--we will be drilling oil wells and carrying oil in big tankers. But we must take the greatest care--more than we've managed so far. When an oil tanker has an accident like this one, or an oil well leaks, our coastal waters and beaches can be badly hurt . .

Photo courtesy of NOAA.

41. . . . thousands of animals killed. Many months or years may go by before shore life returns to its natural state.

Photo by Tom Myers.

42. Sometimes ocean pollution is accidental. But wastes are often put into the sea on purpose. This wide yellow path is an acid that's being dumped out at sea. People used to think anything could be dumped in the sea because the oceans are so big. That's not true. Acid and other chemical wastes, sewage and litter can harm ocean habitats and kill ocean wildlife. . .

Photo by Brian L. Bardsley, Marshall H. Orr/Woods Hole Oceanographic Institution.

43. Dredging can kill sea life too. Digging out the bottom of a harbor may clear the way for big ships to get in and out, but the work of machines like this dredge can greatly disturb the natural life of a river or estuary, tearing up clam and oyster beds, uprooting plants. When dredging must be done, it should be carefully planned to do as little damage as possible to the fragile underwater environment.

Photo by Tom Myers.

44. Getting rid of the stuff that's dredged up is a problem, too. These muddy dredge wastes, or spoils, must be put somewhere. But where? To stop ocean and shore pollution and to protect marine life, the National Wildlife Federation and others have helped to pass and enforce laws to regulate the discharge of wastes along the coast and the dumping of wastes in the ocean. . .

Photo by Tom Myers.

45. Like this sewage sludge being dumped off the New Jersey coast. Federal law requires ocean dumping of harmful sewage sludge and industrial wastes to be stopped.

Photo courtesy of Hope Alexander/EPA-DOCUMERICA.

46. If we all show how much we care, then we can do something about scenes like this one. We have a choice. Do we want our shores to look like this . . .

Photo by Earth Scenes/Rocky Jordan.

47. Do we want our waterways to look like this . . .

Photo courtesy of NOAA

48. . . . or like this? The sea is still a wonderful place to explore. It gives us much more than cool water and shells and long tails of kelp to play with. Can we make sure to take only as much as we need, leaving what the sea needs for itself?

Photo by Animals Animals/L.L.T. Rhodes.

49. The ocean is still a fine place to play.

Photo by Jack Drafahl, Jr.

50. It's a place where people can find beauty and peace.

Photo by C. Allan Morqan.

51. Can we learn to protect the sea for our children--and theirs? A wonderful day at the shore makes us wonder: How can we best take care of our oceans? How can we help others to see that they too must care?

Photo by Jeff Foott.

52. Our ancestors were sea pioneers. Today we're a new kind of explorer, looking for new paths to take. We've already discovered many ways to care for our oceans while we use their great gifts, but there's more--much more--that responsible people can do, to keep the generous oceans alive, healthy, and wonderful.

Photo by C. Allan Morgan.

53. (Music closes the slide program.)