



Davida Nitka	Crocodiles: Why are they endangered?
Nixon Elementary School	
Landing, NJ	Science, Language Arts, Art, Computers
2004	Grade 2
Mexican Mangroves and Wildlife	One 40 min. lesson (extensions for assessments and future projects)
Academic Standards Addressed	New Jersey Core Curriculum Standards for Science STANDARD 5.10 (ENVIRONMENTAL STUDIES) ALL STUDENTS WILL DEVELOP AN UNDERSTANDING OF THE ENVIRONMENT AS A SYSTEM OF INTERDEPENDENT COMPONENTS AFFECTED BY HUMAN ACTIVITY AND NATURAL PHENOMENA
Abstract	Creating an awareness of the need to protect, conserve, and preserve natural resources is a goal of science education. This standard calls for students to develop knowledge of environmental issues, including management of natural resources, production and use of energy, waste management, and the interdependence of ecosystems.
Goal	The learner will understand why the crocodile is endangered in Mexico and what we can do to help.
Performance Indicators (objectives & measurement)	By the end of Grade 2, students will: A. Natural Systems and Interactions 1. Associate organisms' basic needs with how they meet those needs within their surroundings. B. Human Interactions and Impact 1. Identify various needs of humans that are supplied by the natural or constructed environment.
Background Information	The students will need to have prior knowledge in: 1. Use of the internet. 2. Use of Word Processing
Materials	Computer with internet capability, Word and Publisher installed; Second Grade Science Text (if available); Art Materials; crocodilian distribution map
Technology	Internet, Word Processing Program, Publisher

Instructional Procedure	<p>Opening: Ask students if they have ever seen alligators or crocodiles, either in the wild or in the zoo. How big were the animals? What were their habitats like?</p> <p>Have students look at some pictures of crocodiles and alligators. Can they tell the difference between crocodiles and alligators? Explain that one of the most noticeable differences is that alligators have broader snouts than crocodiles. By looking at the pictures, can students figure out how crocodiles and alligators breathe, move from place to place, or the types of food they most likely eat?</p> <p>Have students look at a crocodilian distribution map. Discuss the locations of today's crocodiles and alligators. Students should notice that these species live primarily in tropical and subtropical regions.</p> <p>Development:</p> <ol style="list-style-type: none"> 1. Show the PowerPoint on trip to La Manzanilla with all the crocodile pictures. 2. Show pictures of the surrounding areas to show the increased building. 3. Discuss how the increased building could impact on the declining numbers of crocodiles. 4. Discuss how we can correct the various problems.
Assessment (include rubrics)	<p>3 pts. Letters/advertisements to organizations are well constructed with little or no errors. Posters have originality.</p> <p>2 pts. Letters/advertisements to organizations are constructed 50% well with a few errors. Posters have some originality.</p> <p>1 pt. Letters/advertisements to organizations are poorly constructed with many errors. Posters have no originality.</p>
Connection to Other Content Areas	There is already a connection to areas such as Language Arts, Art and Computers
Extensions	Though humans have not yet caused the extinction of any crocodilian species, many of them are (or have been) endangered due to human activities. As a class, contact the education department of a local zoo or animal conservation organization to learn what activities are most harmful to crocodiles, both within the United States and around the world. What actions are being taken to help preserve and restore crocodile populations? Have the children create, as a class, a public service campaign designed to increase awareness about these endangered species. Their campaigns might include posters, advertisements, letters to organizations, etc.
Acknowledgements	New Jersey Core Curriculum Standards for Science DiscoverySchool.com

	Earthwatch.org
Contact Information (email, tel. number, URL)	dnitka@roxbury.org http://teacherweb.com/nj/nixonelementaryschool/nitka/