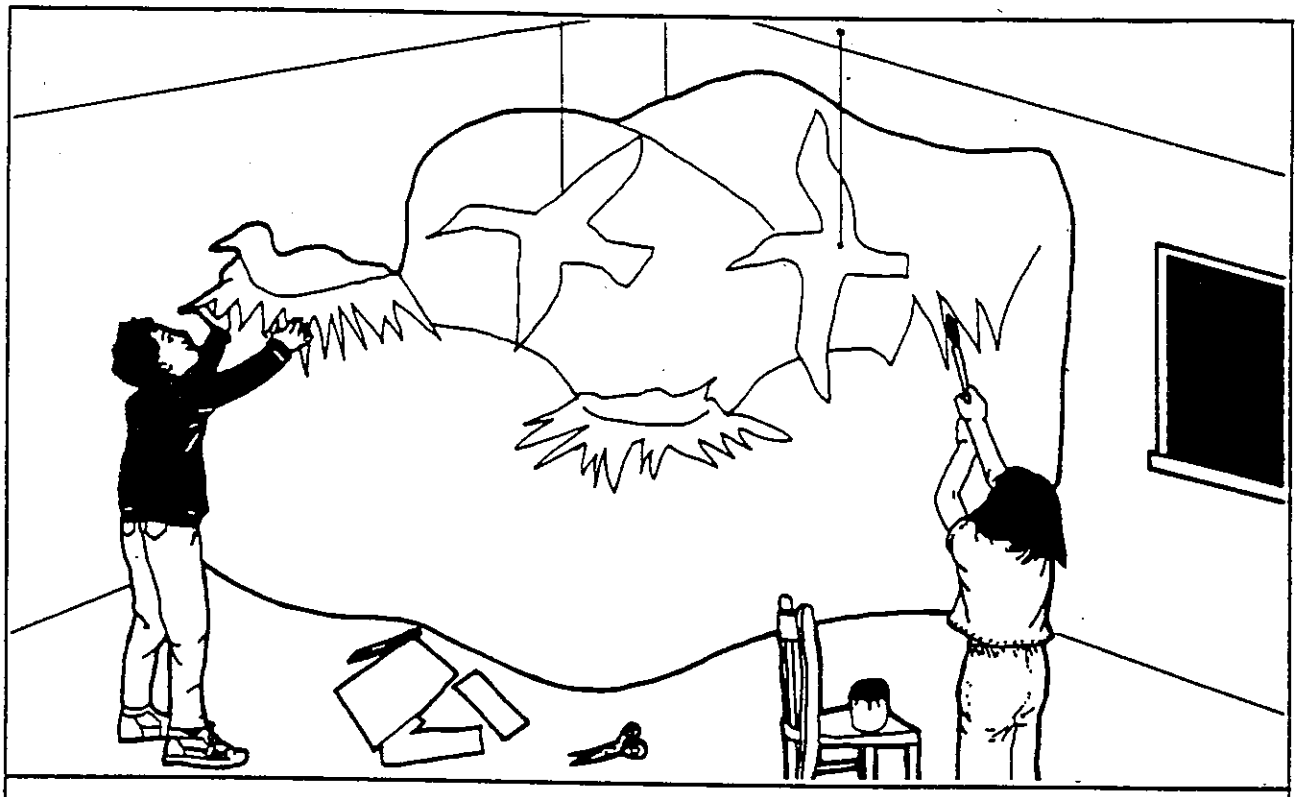
CREATE A CLIFF



OBJECTIVE:
Students will apply knowledge of seabirds and their nesting habitats to create a model of a seabird colony.

BACKGROUND:
Think like a seabird. Where would you choose to lay your egg? This art activity turns the concept of a seabird colony into a tactile learning experience by actually building one in the classroom. This indoor activity can be conducted over several days. Some students may only know seabird cliffs from photographs. Many coastal Alaskan students, however, may have seabird communities for neighbors. Building a cliff takes both kinds of students into the close up living arrangements that allow a dozen different kinds of seabirds to live together in this premium space.

Seabird colonies are complex and dynamic. Each species occupies a specific **niche** in the community. Where a bird nests in the colony helps to identify it and tells important facts about its life. A diagram of a typical seabird community with all its "neighborhoods" can be found in the Teacher's Background Story and the red booklet, *A Guide to Alaskan Seabirds*. The accompanying poster also illustrates colony arrangements.

Some seabirds make a **nest** to keep their eggs safe and warm. Kittiwakes and cormorants build a nest of sticks, grass, and mud. But some seabirds, such as gulls and murres, lay their eggs right on the **bare ground**. Others go inside the cliff to lay their eggs in the soil of **burrows** (tufted puffins) or in rock **crevices** (guillemots, horned puffins, auklets). When building your model colony, pay special attention to creating distinct **niches** for each species represented.

Some seabirds can raise a family of several chicks each year. Gulls and cormorants often lay three eggs. But many seabirds can lay just one egg each year — murres, puffins, and auklets, for example. (Sometimes

a murre can lay another egg if a person or predator takes the first egg right after it is laid.) The small size of seabird families means that it is very important to do all we can to help the birds raise most of their young each year. See the activity "Can Do!" for ideas.

MATERIALS:

- bulletin board paper
- paints
- markers
- glue
- string
- paper mache
- reference material such as *A Guide to Alaskan Seabirds*, U.S. Fish and Wildlife Service, *Zoobooks - Seabirds*, and others listed in the Teacher's Background Story.

PROCEDURE:

1. As a group look at pictures of seabird colonies. Examine the individual features of the colonies. Where do each of the bird species nest? What is that section of the colony like?

2. Assign groups of children to research and build models of individual species of birds, such as puffins, murres and kittiwakes. Create a plan with your students for how to build the cliff structure. Possible materials to be used include fishing net, chicken wire, chairs, desks, bulletin board paper, paper mache, etc. Encourage plans which have the cliff possess three dimensions. Some assistance may be needed to provide the infrastructure to support the cliff. Allow children to build models or paper cut-outs of birds. Encourage the production of enough birds to mimic an actual bird colony.

EXTENSIONS:

1. Visit an actual bird colony and talk about features of the colony not present in your model. These will undoubtedly include smell, noise, and guano. Which of these features could reasonably be included in the classroom model? Are you able to record the sounds of the bird colony on your visit? Note the differences between nesting habits of different species. Who nests where and why?

2. Several special seabirds found in Alaska won't be found on a cliff. Research which ones, and learn about their special nesting habitats.

3. Watch the video *Chain of Life*, available on loan from Alaska Maritime National Wildlife Refuge, 2355 Kachemak Bay Drive, Homer AK 99603, (907)235-6961.