EAGLE COUNTRY
Teaching Guidelines

Subject: Mathematics

Topics: Fractions, Decimals, Percents, Ratios

Grades: 5 - 6

Knowledge and Skills:

- Can perform binary operations with decimal numbers.

Subject: Science

Topics: Biology (Wildlife)

Grades: 5 - 6

Concepts:

- Territory

Materials: None

Procedure: This project should be done by students individually or in teams of two.

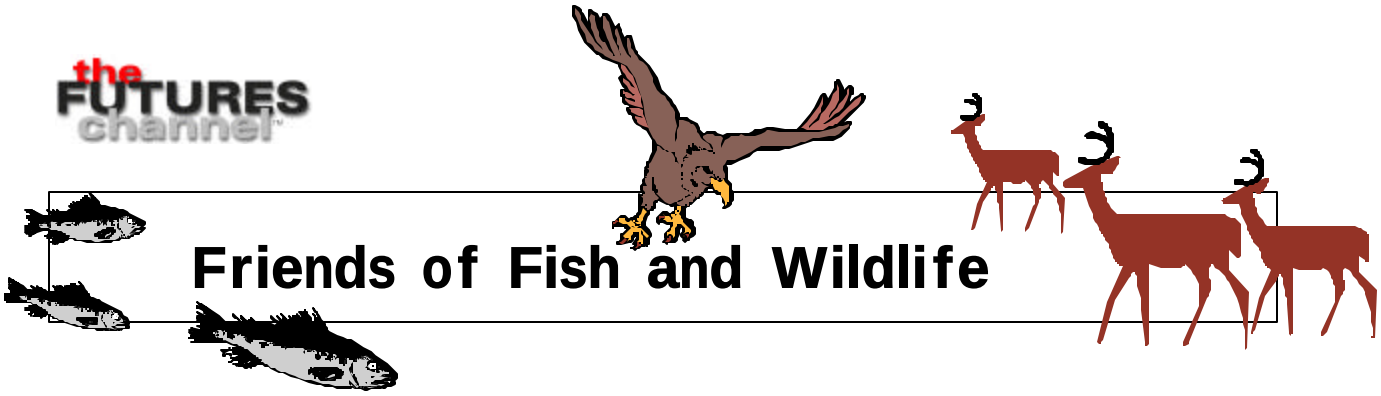
Students will need copies of maps of the areas for which they are to find the number of possible bald eagle territories. These maps will need to show all bodies of water. You may choose to have students look at maps of relatively small regions of a state or area being studied or of larger regions of the U.S.

Students will have to estimate the total length of rivers and total circumference of bodies of water based on the map scale. Or you may tell them to find these numbers through research.

Distribute the handout and discuss it.

Ensure that students understand the idea of territories and what their assignment is.

Give students a schedule for working on the assignment and a due date.



Friends of Fish and Wildlife

Dear Teddy,

I just got word from the folks at the Fish and Wildlife Service that they are doing a study of bald eagle populations in various parts of the country.

They want to determine the maximum number of bald eagles that could have lived in a certain area back in the days before people moved in, and compare that to the number there are today.

I imagine you know the key facts: an average pair of nesting bald eagles requires a territory that is roughly rectangular, about 3.9 kilometers by 1.2 kilometers, with a river running through it. They can also nest on the edges of large lakes and require roughly 2.5 kilometers of shoreline per nesting pair.

Fish and Wildlife would like some help on this and I was thinking it might be an ideal project for your "Rough Riders for the Environment" volunteers.

Do you think you can have those folks figure out the maximum number of nesting bald eagle pairs for some of these areas?

Keep in mind that we can't include any area within 25 kilometers of a major population center or within 10 kilometers of a small town.

It would be best if we could somehow see the data directly on some maps: how many nesting pairs of eagles could live along each river or around each lake.

Your help is certainly appreciated—by me, the Fish and Wildlife folks, and the eagles.

Best,

John