Lesson 3

Field Trip to Norman Bird Sanctuary

Subject area: geology of Aquidneck Island
environment
outdoor education

Grade/group: k-2

Time frame: 2 (45 minute classes) and one morning for field trip

Objectives: Many of the events in our Earth’s History helped to create Aquidneck Island as we know it today. On a Field Trip to the Norman Bird Sanctuary in Middletown students will see first hand evidence of these events. They will learn to recognize and explain some of the geological phenomena found in our local environment.

Standards
- II-d
- III-a, III-b, III-i
- IV-b

Learner factors:
- outdoor education / experiential learning (kinesthetic)
- hiking alone or in partners (intrapersonal)
- expedition behavior in a group (interpersonal)
- drawing activity to describe field trip, maps (spatial)
- journal writing to describe field trip (linguistic)
- time line (logical-mathematical)
- singing songs on hike (musical)

Materials
- Map of Aquidneck Island
- Description of Norman Bird Sanctuary from brochure
- Discovery of the Americas by Betsy and Giulio Maestro
- article: ‘Millions of Years in the Making”
- article “From Pre-History to 1700”
- Rocks and Arrowheads by Laura Evert

Motivational Activity:
- Announce Field Trip
Lesson Development

- Read aloud and discuss Rocks and Arrowheads
- Choose age appropriate activities to do in the classroom before students go on the field trip.
- At the Norman Bird Sanctuary students will be seeing evidence of some of the geology they have studied.
- They will participate in the program “Geology and the Changing Landscape.”
- Contact information and program description are enclosed.
- Expectations for behavior outside the classroom should be made clear - safety, following directions, staying in group, respecting leader, etc.

Closure:

- After the Field Trip students will draw pictures from memory of what they saw or write in journals about the field trip. These activities can be guided according to skill levels of class or done independently.
- Put completed work into student portfolios.

Link up:

- Read aloud and discuss Discovery of the Americas by Betsy and Guilio Maestro
- Introduce concept that when continents were all attached animals and people migrated in search of food and hospitable places to live.
- Specifically, Native Americans came across the Bering Straits about 10,000 to 12,000 years ago.

“Around 15,000 years ago the glacial ice sheet began to melt and retreat to the north, so that gradually the cold open spruce woodland environment changed to a relatively warm deciduous woodland. The release of glacial meltwater caused sea levels to rise so that land that had been fed by freshwater streams and lakes became a saltwater environment. Eventually about 3500 years ago the modern estuarine environment surrounding Narragansett Bay was fully formed. This estuarine environment provided a plentiful mixture of freshwater and saltwater plants and animals, and gave the Indians rich resources to live on.

Indian peoples head lived in this area for at least 12,000 years before the
Europeans arrived. For many, many centuries, perhaps 10,000 years they were hunter gatherers; they maintained themselves on riverine and estuarine resources, by hunting, fishing, and gathering wild plants. Some time between 2,700 and 800 years ago ancestors of the Narragansett Indians began to grow the corn and beans and squash that Williams and others depended on for survival during the first years of settlement.”
(from the introduction to “What Cheer, Nepot”)

**Extensions:**

- Discuss with students the map enclosed of where different Native American tribes settled. Describe the particular environments they lived in and how their houses, clothing, artifacts and cultures differ as a result. A map of Native American Tribes is enclosed in each kit depicting where all the tribes settled and still live. The idea that Native Americans still live in this area can be introduced. This can be incorporated in a lesson on all the words and place names in this area that come from Native American languages.
- Maintain writing response journals

**Student Assessment:**

- Work in journals describes field trip
- Student can identify Hanging Rock and explain in developmentally appropriate language how it came to be
- Simple expressive drawings can be created to describe their favorite part of the field trip, displayed in classroom and then put into student portfolios

Self Assessment: Teacher reflection journal