

CHAPTER 2—THE NORTHERN MOUNTAIN PRAIRIE

A River Bottom Biome



In 1936 this area was established as the Fort Peck Game Range. The game range was converted to the **Charles M. Russell National Wildlife Refuge** in 1976, being named after one of this country's most popular cowboy artists. Located in northeastern Montana, this refuge is one of the largest in the United States covering more than 1 million acres. The refuge includes a portion of the Missouri River and the Fort Peck Reservoir. The refuge also includes forested coulees, native prairie, and badland and river bottom ecosystems. Over 240 species of birds, including rare loons, grebes and cormorants, either nest or spend time in the refuge during yearly migrations.



Black Footed Ferret (*Mustela nigripes*) Once abundantly found along the grasslands of the Great Plains, these musk producing animals are now listed as the most endangered mammal species in North America. Native American tribes like the Pawnees once revered the Black Footed Ferret, conveying special powers to the mammal in legends and stories. The Navajo and the Crow used its skins, fur, and other body parts for medicinal purposes or in ceremonies. These animals are so elusive they were not mentioned in the journals of any explorer or pioneer before the late 1850s.



White Pelican (*Elecanus erythrorhynchos*) These great birds live during their breeding cycle among the shallow marshes, rivers and lake edges of the Northern Prairie, while spending time during the cooler months along the California and gulf state coasts. Though they surface dip-feed on fish of little commercial importance, the White Pelican faced controversy from fisherman that claimed they were destructive. They have a wingspan of up to 10 feet.



Pallid Sturgeon (*Scaphirhynchus albus*) The strange snout, bony plates and lizard-like tail give this fish a dinosaur-like appearance. In fact, they are believed to have evolved from fish present in the Mississippi and Missouri River systems 70 million years ago when dinosaurs did roam the earth. The Pallid Sturgeon is one of the largest freshwater species in the world weighing up to 100 pounds.



Ponderosa Pine (*Pinus ponderosa*) Also called Western Yellow Pine, Ponderosa are really three varieties of pine that are found primarily in the Western United States. Cones from this species grow as long as 10 inches and have sharp prickles that can easily injure the hand. Ponderosa Pine grow extremely slow, reaching maturity after 350 years. Wood from the Ponderosa is very important economically as it is used for construction, railroad ties and mining timber.

The Living River: The health of a river system is often measured by the type and number of tiny critters (macroinvertebrates) that you find in it and along its shore. Adopt a river or stream near your school and begin collecting data about the types and number of macroinvertebrates found there. Invite a stream biologist from a university or public agency to take part in the collection and identification of these macroinvertebrates. Have your students input the data in a computer spreadsheet allowing them to summarize their work with graphs and tables. Student should then present their findings in a community setting. The following links will provide information about conducting a macroinvertebrate study.

**[http://www.people.virginia.edu/~sos-iwla/Stream-Study/
StreamStudyHomePage/StreamStudy.HTML](http://www.people.virginia.edu/~sos-iwla/Stream-Study/StreamStudyHomePage/StreamStudy.HTML)**

**[http://www.amrclearinghouse.org/Sub/WATERmonitoring/
ZZBiologicalMonitoring.htm](http://www.amrclearinghouse.org/Sub/WATERmonitoring/ZZBiologicalMonitoring.htm)**

**[http://www.people.virginia.edu/~sos-iwla/Stream-Study
StreamStudyHomePage/Glossary.HTML](http://www.people.virginia.edu/~sos-iwla/Stream-Study/StreamStudyHomePage/Glossary.HTML)**