Alaska's Heritage CHAPTER 1-3: NATURAL RESOURCES

Much of the land is forested

Cold weather, dry climate, and poor soil drainage prohibit tree growth in arctic Alaska. This same is true for mountains at higher elevations. Western Alaska and the Aleutian Islands are also treeless. In contrast, the moist marine west-coast climate of Southeast Alaska promotes lush western hemlock and Sitka spruce forests that cover 73 per cent of the area. This forest is an extension of the Pacific Northwest rain forest. The forest covers the land from tidewater to elevations of about 2,500 feet. It extends northward into Southcentral Alaska and diminishes along the Alaska Peninsula. Interior Alaska is a mixture of tundra, or treeless areas, and forests consisting of white spruce and birch. The forests are generally concentrated along the river systems of central Alaska. Dwarfed black spruce form dense thickets on boggy flats and muskeg.

Above treeline the land is covered by low bushes, herbs, grasses, mosses, lichens, and wildflowers, except for the high, cold reaches that are barren rock deserts. Lowland areas too moist for tree growth are covered with mosses, lichens, and low willows.

Many mammals, birds, and fish are found in Alaska

From archaeological and fossil studies, scientists know that many animals no longer found in Alaska were common when the land bridge connected Asia and North America during the Pleistocene ice age. Among them were the large-horned bison, woolly mammoth, and caribou. Present at some times, but less common, were the mastodon, camel, saiga antelope, and musk ox. A number of large mammals, such as caribou, wolves, and grizzly bear are still found in Alaska today.

Sea mammals that are at least seasonally in Alaskan coastal waters include sea otter, seals, porpoise, sea lions, walrus, and whales. Sea otters are found only along the north Pacific coast from California, across Alaska and Siberia, and south to Japan. They move in groups of up to 100 animals. Sea otter fur is in prime condition all year, unlike that of most other fur-bearing animals. This characteristic almost caused their extinction from over-hunting by the end of the 1800s.

Species of seal found in Alaska include fur, ringed, harbor, and bearded seals.

The ringed seal is a relatively small seal, weighing about 100 pounds. The harbor or spotted seal is larger. It is more common in the North Pacific Ocean than in the Arctic Ocean. The bearded seal is found along the entire ice-bound western coast of Alaska in spring. It averages 12 feet in length and 600 pounds in weight. Its hide is thicker and tougher than that of the ringed seal, and is more flexible than walrus hide.

The bowhead whale, a member of the baleen whale family, is a huge mammal. Some bowhead whales are 60 feet long and weigh 60 tons. Other large whales, such as the finback, are found in Alaska waters. Smaller whales in Alaska waters include the beluga and right whales. Although not nearly as large as a bowhead whale, a walrus can weigh up to one-and-a-half tons. Large walrus herds are found on the shores of the Seward Peninsula and Kotzebue Sound.

In Alaska nearly four dozen species of large wild animals are found. More than 40 species of smaller animals and rodents trapped for their fur also can be found.

Sitka black-tail deer are concentrated on islands in Southeast Alaska and in the Gulf of Alaska. During the twentieth century they were introduced on Kodiak and Afognak islands.

The caribou is the most widely distributed of the large animals. Caribou generally live and migrate in herds that sometimes number in the thousands. These animals thrive in highlands and spruce forests where they can find lichens and mosses for winter food. Caribou are members of the deer family. Adult male caribou weigh over 400 pounds.

Moose, the largest member of the deer family, inhabit the woodland areas of inland Alaska and the Kenai Peninsula. Unlike caribou, they are generally found alone or in very small groups.

Mountain sheep and goats inhabit the high reaches of the Alaska, Brooks, and Coast ranges.

Brown bears range throughout Alaska. The Kodiak brown bear is the world's largest meat-eating land animal. Black bears are typically found south of the Brooks Range especially on the Kenai Peninsula, in the Susitna River valley, and

in Southeast Alaska. Polar bears inhabit Alaska's arctic regions.

Among the smaller fur-bearing animals in Alaska are beaver, muskrat, mink, marten, land otter, fox, lynx, ermine, hare, and squirrel. Timber wolves and wolverine also inhabit parts of Alaska.

Migratory birds reach their Alaska nesting grounds along all four of the major North American flyways and from the Pacific Ocean route, the Asiatic route, and the Arctic route. Some 414 species and subspecies of birds have been identified in Alaska. Of this total, 177 species of birds remain year-round. Of the 50 species of waterfowl, 40 winter in Alaska.

The state bird, the ptarmigan, lives chiefly in the lower alpine zone of Interior Alaska and in Southwest Alaska. In the fall of the year ptarmigan assume their white plumage and gather in large flocks.

Fresh and salt water fish are abundant. The better-known varieties include salmon, halibut, cod, herring, Dolly Varden, arctic char, grayling, whitefish, and blackfish. All five species of salmon--pink, chum, coho, sockeye, and king--are found in Alaska waters. Salmon stop feeding soon after they enter freshwater on their way to the cold, clear headwaters to spawn. By the time salmon reach their spawning areas they are still edible but have lost much of their fat.

Shellfish, among them shrimp and king and dungeness crab, are plentiful. Sea urchins, mussels, and clams are also common.

Alaska has major mineral deposits

Alaska's mineral resources attracted many people to the north. They continue to attract people today although oil has replaced gold as the most sought-after resource. Other economically important mineral deposits in Alaska include copper, silver, mercury, platinum, tin, coal, iron ore, borax, chromite, antimony, tungsten, nickel, molybdenum, sand, gravel, and limestone.

Metallic minerals are found in hard rock or as placer deposits in gravel or

sand. Placer deposits are where the mineral has eroded from mountain veins. Minerals found as veins in bedrock are lode, or hard rock deposits.

Gold deposits have been found in many localities around Alaska. In Southeast Alaska gold has been mined near today's Juneau, and in many other areas. Deposits in Southcentral Alaska are on the Kenai Peninsula, in the Talkeetna Mountains, and in the Willow Creek area near Wasilla. In Interior Alaska gold has been found in the Fortymile River drainage, near Fairbanks, Iditarod, Livengood, and Nabesna. In Northwest Alaska gold has been found around Nome and at other sites on the Seward Peninsula.

Oil and gas fields include those beneath and around Cook Inlet and at Katalla on the Gulf of Alaska. Arctic Alaska has major oil fields at Prudhoe Bay.

The Wrangell Mountains held rich copper deposits. Other copper deposits have been found on LaTouche Island in Prince William Sound and in the upper Kobuk River area.

It is estimated that Alaska has 120 billion tons of coal. Coal is found throughout much of Alaska with major deposits in the Matanuska, Nenana, and Bering River coal fields in Interior and Southcentral Alaska. The Brooks Range contains large deposits of coal as well.

Alaska's mercury deposits are predominantly located in the central Kuskokwim River basin. To the northwest, tin is found on the Seward Peninsula. To the southwest, in Goodnews Bay, are placer platinum deposits.

Chapter 1-1: Geological and Glacial History

Chapter 1-2: Geographic Position and Physiographic Features

Chapter 1-3: Natural Resources

Chapter 1-4: Climate

Chapter 1-5: People and the Land

Unit 1: Suggested Reading

Chapter 2-1: Alaska's Prehistoric and Protohistoric Past

Chapter 2-2: Tlingits And Haidas

Chapter 2-3: Athabaskans

Chapter 2-4: Eskimos

Chapter 2-5: Aleuts

Chapter 2-6 Cultures Meet and Mix

Unit 2: Suggested Readings

Chapter 3-1: Russians Come To Alaska

Chapter 3-2: Settlement And Population Patterns

Chapter 3-3: Food, Shelter, Clothing and Technology

Chapter 3-4: Exploration

Chapter 3-5: The Fur Trade

Chapter 3-6: Other Economic Activity

Chapter 3-7: Political and Social Organization

Chapter 3-8: Art, Culture, Education, Recreation and Religion

Chapter 3-9: Spanish, French, and British Contacts with Russian America

Chapter 3-10: American Contact with Russian America

Unit 3: Suggested Readings

Chapter 4-1: Americans Come to Alaska

Chapter 4-2: Overland Exploration

Chapter 4-3: Population And Settlements

Chapter 4-4: Food, Clothing, and Shelter

Chapter 4-5: Alaskans and the United States

Chapter 4-6: Alaskans and Each Other

Chapter 4-7: Alaskans and the World

Chapter 4-8: Ocean Transportation

Chapter 4-9: River Transportation

Chapter 4-10: Road Transportation

Chapter 4-11: Railroad Transportation

Chapter 4-12: Air Transportation

Chapter 4-13: Communications

Chapter 4-14: Trading and Trapping

Chapter 4-15: Mining

Chapter 4-16: Fishing and Sea Hunting

Chapter 4-17: Farming, Herding, and Lumbering

Chapter 4-18: Tourism

Chapter 4-19: Art, Literature, Science, Cultural Institutions, and Recreation

Chapter 4-20: Education

Chapter 4-21: Health and Medicine

Unit 4: Suggested Readings