

# Chapter 8 –Natural & Cultural Resources

## Natural Resources

The Pierre area is rich in natural resources including a wide variety of game and fish, and wide variety of natural features. The area is characterized by:

- Scattered hardwood forests, including cottonwood and elm, located primarily in ravines and river valleys.
- Oahe and Sharpe Lakes provide 2200 miles of shoreline for ample boating, fishing, and swimming opportunities. More than three dozen boats ramps provide access to the two lakes.
- Abundant wild animals including fox, raccoon, coyote, white-tail deer, and mule deer.
- Wide variety of birds including golden eagles, bald eagles, pheasant, grouse, dove, seven varieties of ducks, Canadian geese, and over a dozen species of songbirds.
- Twenty species of fish including walleye, northern pike, bass, salmon, trout, catfish, and pan fish.

There are no state or federally listed endangered plant or animal species found in the City of Pierre or its immediate surrounding area. Bald eagles have nested on LaFromboisie Island in the past but presently tend to nest closer to the Oahe Dam.

There are two invasive plants which currently infest the surrounding Missouri River reservoirs. Eurasian water-milfoil was first spotted in the Lake Sharpe in 1999, the larger and more significant problem is curly pondweed which first spotted in Lake Sharpe in 2000 and is also present in Lake Oahe.

Eurasian water-milfoil consists of long underwater stems that branch and produce many whorled, finely divided leaves upon nearing the surface (Jacono and Richerson 2003). Eurasian water-milfoil competes aggressively to displace and reduce the diversity of native aquatic plants and quickly grows to the surface, forming dense canopies that overtop and shade the surrounding vegetation (Madsen *et al.* 1991). To date, this plant has not become a major nuisance issue for the surrounding Pierre area.

Curlyleaf pondweed forms a dense mat at the water surface, shading out native vegetation and creating problems for boaters and other recreational activity (South Dakota Department of Game, Fish & Parks 2007). The plants unique lifecycle allows the species to be the first plant to appear in the spring and generally dies back in mid-summer (Crowell n.d.). This plant has become a localized nuisance on Lake Sharpe for boaters, typically in bays and marinas where aquatic herbicides have been utilized for localized control.

The following summarizes the inventory of the geological resources in Hughes County:

- No evidence to suggest presence of commercially viable deposits of petroleum (Downey 1984)
- Natural gas was utilized in Pierre at the turn of the century, however no formations are currently thought to contain economical quantities).
- Water is the most important and abundant resource in Hughes County
- Surficial sand and gravel resources are available as outwash deposits
- Limited amounts of rip rap
- Manganese-enriched deposits of Pierre Shale occur along the Missouri River
- Coal and uranium may exist in the county, but not large enough quantities to be economically important (Duchossois 1993)

## Cultural Resources

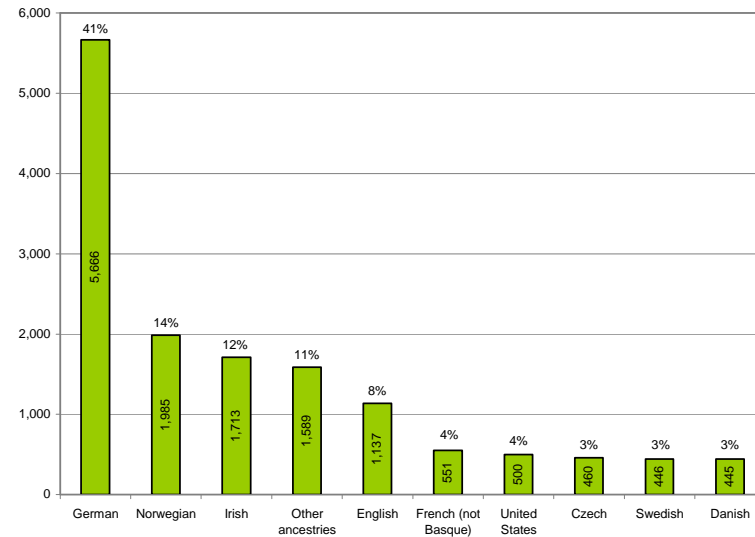
*Ancestry.* The Germans in South Dakota became the most widespread of all the ethnic groups. A majority of the German immigrants in South Dakota are Germans from Russia, a group that had migrated from Russia to America in the 1860s. They brought a variety of winter wheat seeds with them, helping South Dakota become a major wheat producer (Stupnik 1996). Currently, most of Pierre's residents are of German ancestry, (Figure 8.1).

South Dakota's Scandinavian immigrants were mostly Norwegian, but also included Swedes, Danes, and Finns. Most migrated to South Dakota to become land owners. The Norwegians initially settled in Minnehaha, Clay, and Union Counties and now be found throughout the state (Johansen 1937). Norwegians currently account for Pierre's second largest ethnic group (Figure 8.1).

The first Danes came to Dakota Territory shortly after the American Civil War, settling in the Yankton area and then settled throughout the state (Olson 1940). The Swedes began arriving in Clay County in 1868 and settled north of Vermillion. The Swedes are credited with first growing sugar beets in South Dakota, and were some of the first to grow alfalfa in the area (Peterson 1947).

English-speaking immigrants who came to South Dakota include the Irish, Welsh, Cornish, Scottish, and British. The British settled mostly in urban areas where they worked as shopkeepers, craftsmen, and various laborers (Lambert 2005). The Irish, Cornish, and Scottish in South Dakota did not generally settle in large groups like the Germans and Norwegians. They usually came as single families or individuals, striking out on their own (Davies 1980).

**Figure 8.1.** Pierre's ancestry by total and percent in 2000 (US Census Bureau)



*Historic Sites and Museums.* Historic places and buildings by their nature differentiate a community from other destinations and provide a unique identity for a city. They are also irreplaceable, nonrenewable resources. Pierre has two historic districts and more than 30 individual sites listed on the National Register of Historic Places. The Pierre Hill Residential Historic District and the Hyde Block are two districts on the National Register.

The Pierre Historic Preservation Commission works to preserve, promote, and develop the historical resources of the City of Pierre. The two districts are located near the center of downtown as shown in Figure 8.2. The historic districts and individual historic sites represent the heritage of the City and helps create community identity.

The following list outlines some of the more prominent historical sites, museums, and interpretive centers in the Pierre area:

- State Capitol: completed in 1910, visitors can tour the stunning mural, stained glass, elaborate tile work, and art and sculpture collections.

- South Dakota Cultural Heritage Center: contains an extensive historical and cultural legacy of the state's Sioux inhabitants and first wave of European settlers.
- Lewis & Clark Family Center: hands on and interactive displays relating to the historic expedition
- South Dakota Discovery Center and Aquarium: interactive learning with more than 60 hands-on exhibits and an aquarium with native species.
- Oahe Dam and Visitor Center: includes a history and exhibit of Lake Oahe, Missouri River, Oahe Dam, and power plant.
- South Dakota National Guard Museum: the state's repository for relics, memorabilia, and historical documents relating to the Guard's activities between 1862 and recent missions.
- Oahe Chapel: the chapel was constructed in 1877 as both a church and school for Oahe Mission and Sioux Indians.
- Fort Pierre Chouteau: largest trading post on the upper Missouri River in the mid-1800s. Not much remains of the historic structure, but the site is a National Historic Landmark.
- Verendrye Museum: named after the first European explorers in the area and houses pioneer relics.
- Verendrye Site: marks the site where in March 1743, the Verendryes, the first Europeans to explore the northern plains region of the present United States, secreted a lead plate beneath a pile of stones. Sixty-one years before Lewis and Clark first arrived in this area, these French explorers, in search of a Northwest Passage to the Pacific, laid the basis for French sovereignty on the Upper Missouri.
- Arzberger Site: The northernmost outpost of the Central Plains tradition (c. 1500 AD), this is the site of an extraordinarily large fortified village atop a low mesa overlooking the Missouri River. The site covers some 70 acres with 24 bastions. Forty-four circular house rings have been noted. The village likely represents the Arikara Indians at the time they were differentiating from the Pawnee.

*Native Americans.* Five Native American Reservations are located in the region: Cheyenne River, Crow Creek, Lower Brule, Pine Ridge, and Rosebud Reservations (Figure 8.3).

The Cheyenne River Reservation is home to four bands of Lakota Sioux; Minnecoujou, Two Kettle (Oohenunpa), Sans Arc (Itazipco) and Blackfoot (Si Sapa). It is located in the north central part of the state comprising the counties of Dewey and Ziebach. Hunting opportunities on the Cheyenne River Reservation include elk, whitetail deer, mule deer, pronghorn antelope, sharptail grouse, duck, goose, turkey, rabbit and prairie dog. Anglers can catch trout, walleye, salmon, sauger, large and smallmouth bass, white bass, northern pike, catfish and various panfish (Travel SD 2007).

The Missouri River bluffs flank the western edge of the Crow Creek Indian Reservation in central South Dakota. Located one mile south of tribal headquarters at Fort Thompson is Lake Sharpe, one of South Dakota's Great Lakes. Water recreation abounds on the 80-mile reservoir created by the Big Bend Dam. The tribe's wildlife department maintains a buffalo herd that often grazes north of Fort Thompson (Travel SD 2007).

Nestled alongside the Missouri River, the Lower Brule Reservation boasts a variety of wildlife and recreation facilities. The tribe maintains a wildlife reserve where its herds of buffalo and elk roam. Lake Sharpe, a Missouri River reservoir, offers some of the finest fishing in the state. The reservation also boasts world-class hunting. The tribe also runs a successful farming operation. In fact, Lower Brule is one of the nation's leading popcorn producers. In addition to popcorn, the farm produces kidney beans, navy beans, pinto beans, field corn and other crops (Travel SD 2007).

The "Sicangu Lakota Oyate" or "Friendly Burnt Thigh People" traditionally roamed and hunted the Great Plains for centuries. Today, they reside on the beautiful Rosebud Reservation, located in south-central South Dakota. Breathtaking canyons, rolling hills, timberland and colorful community celebrations are all found on the Rosebud Reservation (Travel SD 2007).

Home of the Oglala Sioux Tribe, the Pine Ridge Indian Reservation is the second-largest reservation in the United States. Approximately 120,000 acres of reservation are in the Badlands, which adjoins Badlands National Park. Visitors to the reservation will find ancient legends, colorful history and heritage as old and wondrous as the Badlands that surround it (Travel SD 2007).

## **Natural and Cultural Resource Recommendations**

- Protect known historic or archeological sites from destruction
- Protect old growth forests from destruction
- Develop an inventory of historic structures which are of local, state or national significance
- Consider developing an historic overlay district to protect the visual character of key historic structures and neighborhoods
- Continue to work with State and Federal officials to abate the invasive species issues on the Missouri River

## **Natural and Cultural Resource Goal**

The City of Pierre will preserve its natural and cultural heritage in order to enhance the quality of life of its citizens and its visitors, and to enhance the image of Pierre as a great place to live, work and play.

### Objectives:

1. Encourage preservation/restoration of historic sites, buildings, and historic architectural resources.
2. Preserve old growth trees.
3. Investigate methods to reduce or eliminate, and/or prevent invasive plant and animal species
4. Continue to support eco-tourism and other outdoor recreational activities.
5. Continue to support the City's role as a center for statewide cultural events.

