Lesson 3: History of U.S. Rangelands

How Were U.S. Rangelands Managed in the Past?

When the first people came to what would become the United States, large grazers or megafauna existed on the western rangelands. These grazers included woolly mammoths and giant bison, and other herbivores. Native Americans hunted the large ungulates and used fire to drive animals as one of their hunting techniques. After megafauna became extinct, other grazing animals – bison, elk and pronghorn - filled the herbivore niche.

In 1540, Francisco Vasquez de Coronado brought the first domestic livestock to what is now the southwestern United States. This included 5,000 sheep, 500 cattle and 1,000 horses. When missions and outposts were established in the 1700’s across the areas that are now Texas, New Mexico, Arizona and California, 50,000 sheep and 20,000 cattle were brought north from Mexico.

The 1862 Homestead Act, which opened the western U.S. to settlement, offered settlers up to 160 acres of public land after they lived on and cultivated it for five years. In 1909, the enlarged Homestead Act increased the maximum size of a homestead to 320 acres. The Stockraiser’s Act of 1916 allowed 640 acres to anyone with at least 50 head of cattle. By 1934, ownership of more than 270 million acres of public land was transferred to over 1.6 million homesteaders.

Another important act that further divided public lands was the Morrill Act of 1962. This Act granted land in every state to fund colleges that would promote agricultural and mechanical arts. The purpose of the Morrill Act was to make higher education available to more people. Colleges established under this process are known as land grant universities. The University of Nebraska-Lincoln is one of these land grant universities.

Through the years, animals had escaped from the missions, ranches and outposts and multiplied rapidly due to the mild climatic conditions and abundant forage in the Southwest. By 1860, the number of cattle in California reached an estimated 3.5 million head and 4 million head in Texas.

In the early 1800’s, Texas ranchers began to drive cattle to New Orleans and Missouri. After the Civil War, larger markets for these cattle developed and large trail drives headed from Texas to northern railheads.

The peak period for cattle drives began in 1866 when an estimated 260,000 cattle were driven out of Texas and north across the Red River. The largest year for cattle drives was in 1871 when 700,000 Texas cattle were driven to Kansas alone. The average cowherd numbered 2-3,000 head. Cattle on the trail traveled 15 miles a day to allow them time to graze. At this pace, the cattle still gained weight due to the abundant forage available along the way. The average time for a herd to make the trip was two months from ranch to railhead.

A series of cow towns sprang up along the railroads. As land was settled by farmers, the cattle trails moved further west. Settlers, concerned about tick fever and crop damage, installed barbed wire fences to block passage of the herds through their land. The Texas Trail (also known as the Western Trail) went through Dodge City, Kansas through southwest Nebraska and ended in Ogallala. The cattle drive era lasted about 20 years, until railroads made their way to west Texas making the drives unnecessary.

The cattle industry expanded rapidly in the Northern and Central Great Plains and cattle numbers peaked in the mid-1880’s. Severe blizzards caused heavy cattle losses throughout the plains in the 1880’s. Between 1865 and 1900 the sheep industry also expanded.
rapidly, and conflict developed between cattlemen and sheepmen. The conflict became so intense that government intervention was needed to bring the hostilities to an end.

Between 1880 and 1910 the rangeland resource was greatly reduced due to overgrazing and conversion of rangeland to cropland. In 1915, Frederick Clements, a famous Nebraska plant ecologist, suggested solutions to the problem. Clements recommended that rest, controlling season of use, reducing livestock numbers, controlling noxious plants and reseeding be used to stop range deterioration and begin range improvement.

In 1934, the Taylor Grazing Act was passed by the U.S Congress. This Act was passed in response to the rangeland deterioration and ended free range and closed rangeland to homesteading in the Dakotas and western states.

In 1933, the Soil Erosion Service was established and in 1935 it was transferred to the Department of Agriculture and renamed the Soil Conservation Service (SCS). SCS provided technical advice to private landowners about how to improve their land’s productivity.

Who Owns and Manages US Rangelands Today?

More than half of the nation’s rangelands are privately owned, 43 percent are owned by the federal government and the rest are owned by state and local governments.

Management of Federally Owned Rangeland: The Bureau of Land Management (BLM), which was created in 1946, manages 245 million acres of federal land (and 700 million acres of subsurface mineral rights) which is more than any other government agency. BLM manages the land for multiple uses (energy, grazing, mining, timber and recreation) and for conserving natural, historic and cultural resources (wildness, wild horses, wildlife habitat, artifacts and fossils).

The US Forest Service manages 191 million acres of public land which not only includes National Forests, but also 20 National Grasslands. The National Grasslands were formed in 1960 to reclaim areas that were eroded during the dust bowl. The largest National Grassland is in North Dakota and covers 1,028,051 acres and the smallest is in Texas with 1,449 acres. The Oglala National Grassland, an area of 94,000 acres in the Nebraska Panhandle, has a diverse landscape that includes badlands and toadstool formations.

Other agencies that own and manage Federal rangeland include the US Fish and Wildlife Service, the National Park Service, and the Department of Defense. Several other Federal Agencies own and manage much smaller amounts of rangeland.

Nebraska ranks 48th in the amount of land owned by Federal, State and Local governments. In Nebraska, Federal lands make up just under 547,000 acres which is 1.1% of the land area. Federal lands in Nebraska include Nebraska National Forest (Halsey and Pine Ridge), Samuel R McKelvie National Forest, Oglala National Grasslands, several National Wildlife Refuges, and several National Monuments. For locations of Federal Land in Nebraska see: https://nationalmap.gov/small_scale/printable/images/pdf/fedlands/NE.pdf

Iowa is the state with the smallest percentage of Federal land at 0.3% or 122,076 acres. Nevada has largest percentage of land owned by the Federal government at 84.9% and Alaska has the most acres.
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owned by the federal government at approximately 223.8 million acres (61.2%)

Management of State and Locally Owned Rangeland:
When Nebraska was admitted into the Union as a State, the enabling legislation granted to the State of Nebraska 2,797,520 acres of land to support the common schools. This was nearly one-eighteenth of the land in Nebraska and was an area larger than Delaware and Rhode Island combined. The original grant represented Sections 16 and 36 in each Township, unless those had already been settled. In that case, other lands were granted “in lieu thereof”. Over time, a portion of these lands were sold, but the Nebraska State School Trust Lands still include approximately 80% of the original holdings. Much of this land, especially in the Western part of the State is rangeland.

Other State-owned land includes State Wildlife Management Areas and State Parks.

Management of Privately Owned Rangeland:
Nation-wide, approximately 65% of all rangelands are privately owned and in the Great Plains states most rangeland is owned by individuals rather than government agencies. In Nebraska, 98.9% of all land is privately owned.

Example Questions
True or False: Before cattle were brought to North America, there were no large grazing animals on the land.

The law that opened the Western part of the United State to settlement was called the ____________ Act. a). Settlement of the West Act, b). Taylor Grazing Act, c). Homestead Act, d). Morrill Act.

True or False: Most of the Federally owned land is located east of the Mississippi River.

The destination of the ____________ Trail was Ogallala Nebraska. a). Texas, b) Chisholm, c). Oregon, d). Santa Fe.

Activities
See which states have the most federal land and identify which Federal Agency manages that land:


https://ballotpedia.org/Federal_land_ownership_by_state

Learn how Federal Lands are managed in Nebraska:
https://www.fs.fed.us/rangeland-management/index.shtml