

BUFFALO

An Environmental Success Story



Wichita Mountains Wildlife Refuge, Oklahoma



On a bright October day in 1907, a mob of cowboys, ranchers, and Indians lined a railroad siding. Excitement stirred in the crowd as they waited for a special train, a train that was returning buffalo to pastures where no buffalo had grazed for 30 years. The train pulled in amid the cheers of the crowd, which swarmed around trying to get a look at the new arrivals. Veteran Indian tribesmen could be seen regaling their sons with tales of wild free days when the Indian and the buffalo still ruled the land. Fifteen buffalo had arrived at Wichita Mountains, the nation's first buffalo refuge.

Buffalo had lived in North America for thousands of years, migrating from Asia across an ancient land bridge. These immigrants evidently adapted well to the environment, for, by the time Columbus discovered America, an estimated 60 million buffalo roamed the Great Plains. One early plains explorer wrote, "There is such a quantity of them I do not know what to compare them with, except fish in the sea." And to the early settlers, the buffalo must have seemed numberless, for they roamed in herds sometimes numbering in the millions and, literally, covering the plains.

The majestic buffalo established the special character of the American grasslands. The largest mammal in the New World, a buffalo bull weighs half a ton more than his closest rivals, the moose and the brown bear. Buffalo are dangerous because of their very size. Though usually placid, occasional unpredictable behavior makes them even more dangerous, and those who know buffalo best tend to trust them least! In spite of their size, they move

Buffalo

swiftly, and the best rule of thumb is to keep your distance.

Buffalo depend on their senses. Their vision, the least developed of their senses, is still good enough to spot motion up to a mile away. However, buffalo often don't see motionless objects, even when they are quite close. Smell is the main means of detecting danger and buffalo can sometimes scent an enemy 2 to 3 miles away. And the sense of smell works hand in hand with the sense of taste, as they sniff out their favorite grasses. When it comes to water, though, you might wonder if the buffalo have any taste, for they drink water that no other animal would touch. Their hearing is well-developed and can pick up extremely weak and distant sounds.

The last of senses — touch — is used in a favorite activity, "body massage." Buffalo never tire of rubbing their heads, necks, and sides on stumps, large trees, and cedar trees (or even an occasional picnic table). The rubbing serves to remove their itchy fur as they shed their winter coats. Rubbing can sometimes be a destructive force. Early telegraph poles were often rubbed down, and one settler reported that a herd of several hundred buffalo rubbed down his log cabin, "Taking delight in turning the logs over with their horns." For further evidence, just look at what remains of a cedar tree after a group uses it for a rubbing post. Wallowing in the dirt or mud is another form of body massage, providing the herd with a dust bath and relief from insects. Early wallows, used by the entire herd, were often deep enough to form water holes after a prairie rain.

Plains buffalo are social animals, massing together and remaining in groups wherever they go. It is usually possible to pick out two basic kinds of buffalo groups — "cow groups" and "bull groups."

Cow groups, which may include several bulls, are larger, averaging around 20 head. The cows tend to stick close together, moving as a compact unit. They are timid and watchful, bolting soon after danger is sensed.

Bull groups, on the other hand are smaller, usually composed of 5 to 15 members, with no cows in the group. They scatter over a large area with the first bull ranging far ahead of the last. They don't frighten easily, and, if challenged, often

obstinately hold their ground.

A buffalo group usually does things together. A normal day begins at dawn with a period of grazing followed by a period of loafing and chewing the cud. These periods alternate until the group settles down for the night. This pattern continues throughout the seasons — even winter, when they have to root through the snow with their muzzles. It is broken only when the herd trails single file to a new pasture or when a period of rubbing or wallowing slips into the day.

Seasonally, springtime brings the newborn calves. Summer finds the bulls restless and dangerous as the breeding season approaches, and head-butting fights between bulls occur frequently. Winter storms cause the herd to stop and stand or lie facing into the wind, waiting for the storm to pass. And, in any season, danger brings a headlong stampede with the buffalo rushing together in a tight bunch, blindly following their leader.

So what happened to the numberless herds of buffalo which once roamed the plains? Most people have already heard the story of the incredible slaughter of the herds. And, in truth, the reduction of the

buffalo herds was inevitable. Only nomadic man can live in close association with giant herds, and a developing country and growing population needed space. However, the complete annihilation of huge herds of buffalo is difficult to defend. By 1900, only 20 wild buffalo roaming the backcountry of Yellowstone, remained in the entire United States.

Finally realizing that the buffalo were dangerously close to extinction, the government acquired stock from a few small captive herds owned by private individuals. And on protected ranges, buffalo herds began to rebuild. The 15 buffalo which were returned to the Wichita Mountains in 1907 have grown into a herd numbering 600 head, the limit of their range. Each autumn, the refuge staff rounds up the buffalo and the excess, above 600, are held for action in November. This insures the remainder of the herd adequate food and cover for another year. Today, the buffalo in North America number between 30,000 and 35,000 — a small number compared to their former strength, but large enough to insure the preservation of the species.



Bull wallowing.