

THEODORE ROOSEVELT NATIONAL MEMORIAL PARK  
NORTH UNIT  
WATFORD CITY, NORTH DAKOTA

MANAGEMENT PLAN FOR LONGHORN CATTLE

*Henry A. Schoch*

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North Unit District Ranger

October 12, 1970

MANAGEMENT PLAN FOR LONGHORN CATTLE  
(*Bos taurus*)

PURPOSE:

It is the purpose of this report to document the range habits and requirements of the North Unit herd of Longhorns, and to offer recommendations regarding their management as a park resource.

ORIGINS OF THE HERD:

According to the Fish and Wildlife Service, Longhorns are not considered a distinct breed in the classical sense. Rather, it is believed that their unique characteristics were acquired as a result of environmental stress upon established bloodlines introduced into the New World by early European explorers. Probable ancestry is traced to Andalusian stock which accompanied Spanish expeditions throughout Old Mexico and the southwestern United States. Although the Spanish armies undoubtedly used the cattle for beasts of burden, some found their way into the stew kettles of the troops. Others were left with newly established mission settlements to provide the nuclei of budding herds.

As the missions prospered, so too did the herds of cattle which they tended. Over the years, the herds multiplied and extended their range into the Nueces Valley of southern Texas. When their masters were called to fight in the Wars of Mexican Liberation and Texas' Independence, and later for the American Civil War, large numbers of animals gained their freedom and reverted to the feral state. Following the war between the states, millions of cattle roamed freely over the Texas plains. Captured and managed once more, they formed the foundation of the range cattle industry which flourished briefly in the late 1800's.

Through the process of natural selection, those cattle best suited to meeting the privations of sparse range conditions and often severe winters enjoyed the highest rates of survival, thereby more successfully transmitting their desirable characteristics to succeeding generations. In time, the lanky, athletic animal we recognize as the Longhorn evolved to meet these hardships. Due to their relatively large numbers and availability, and their tolerance for the rigors of their environment, Longhorns emerged as a dominant beef producer on the plains until more efficient shorthorn breeds were developed to replace them.

In the late 1920's, when it became apparent that the Longhorn's future existence as a unique part of the American scene was imperiled, the U.S. Forest Service conducted a search to locate animals which best typified the strain. The twenty-seven head of cattle located by the search were transferred to what is now the Wichita Mountains National Wildlife Refuge in southwestern Oklahoma. Through carefully controlled selective breeding, a herd which exhibited desirable Longhorn characteristics

WILDLIFE SERVICE PLAN FOR WILDLIFE CATTLE  
(For reference)

PURPOSE:

It is the purpose of this report to document the range habits and movements of the North Unit herd of Longhorns, and to offer recommendations for their management as a range resource.

CHARACTERISTICS OF THE HERD:

According to the Fish and Wildlife Service, Longhorns are not considered a distinct breed in the classical sense. Rather, it is believed that their unique characteristics were acquired as a result of environmental stress upon established bloodlines introduced into the New World by early European explorers. Probable ancestry is traced to Andalusian stock which accompanied Spanish expeditions throughout the Americas and the southwestern United States. Although the Spanish are undoubtedly used the cattle for beasts of burden, some found their way into the states of the tropics. Others were left with newly established western settlements to provide the nuclei of breeding herds.

As the western prospered, so too did the herds of cattle which they tended. Over the years, the herds multiplied and extended their range into the Mesas Valley of southern Texas. When their numbers were called to fight in the wars of Mexican liberation and Texas independence, and later for the American Civil War, large numbers of animals gained their freedom and reverted to the forest state. Following the war between the states, millions of cattle roamed freely over the Texas plains. Pastured and stayed once more, they formed the foundation of the range cattle industry which flourished briefly in the late 1800's.

Through the process of natural selection, those cattle best suited to meeting the privations of sparse range conditions and other severe winters enjoyed the highest rates of survival, thereby more successfully transmitting their desirable characteristics to succeeding generations. In time, the bulky, stolid animal we recognize as the modern cow evolved to meet these hardships. Due to their relatively large numbers and ability, and their tolerance for the rigors of their environment, Longhorns emerged as a dominant beef producer on the plains until more efficient shorthorn breeds were developed to replace them.

In the late 1920's, when it became apparent that the Longhorn's future existence as a unique part of the American scene was imperiled, the Forest Service conducted a search to locate animals which best typified the strain. The twenty-seven head of cattle located by the search were transferred to what is now the Wichita Mountains National Wildlife Refuge in southwestern Oklahoma. Through carefully controlled selective breeding, a herd which exhibited desirable Longhorn characteristics

increased, and surplus animals were moved to other refuges.

The North Unit herd was obtained, in two separate shipments, from the Fort Niobrara National Wildlife Refuge in Valentine, Nebraska. The first shipment of six steers was received on April 13, 1967, followed by a second shipment of six steers on October 25, 1969. At the time of delivery to the park, the animals varied in age from one to five years.

#### CONDITION OF THE HERD:

When first received in the park, the steers were thin and light in weight, varying from an estimated weight of 475 pounds for the yearlings to perhaps 1300 pounds for the oldest animals. During their first summer in the North Unit, it was estimated that each of the older steers gained approximately 200 pounds.

Due to a lack of adequate chute and scale facilities, progressive weight and horn growth measurements have not been made. It is judged, however, that weights now vary from 1300 to 1700 pounds. With abundant range at their disposal, the Longhorns appear sleek and fat, and undeserving of the classic descriptive statement which refers to them as being long on horn and short on beef.

#### LOCATION AND DESCRIPTION OF HABITAT:

The North Unit of Theodore Roosevelt National Memorial Park is situated in McKenzie County, North Dakota. Encompassing an area of approximately 23,000 acres, the park is bisected by the Little Missouri River, whose erosion of the soft local sediments has formed a badlands of varied and rugged topography. The surrounding uplands are a gently undulating grassland.

The bottom lands along the river's course support a variety of vegetative types, including cottonwood, willow, and ash groves, and numerous species of grasses, forbs, and shrubs.

Although the Longhorns are not prevented from roaming at will throughout the confines of the park, they restrict most of their activities to a flat, sage-brush dotted pasture of about 750 acres immediately north and east of the bison corral. This area is bounded on three sides by the river, and on the fourth side by the primary park road. Here, they have sufficient feed, water and shade to meet their habitat requirements, though they frequently migrate westward toward the campground in the evenings to an undeveloped spring near the road.

#### SUMMER MANAGEMENT RECOMMENDATIONS:

The Longhorns require a minimum of management during the warm months.

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The North Unit herd was obtained, in two separate shipments, from the Fort Victoria National Wildlife Refuge in Valdez, Alaska. The first shipment of six steers was received on April 13, 1957, followed by a second shipment of six steers on October 22, 1957. At the time of delivery to the park, the animals varied in age from one to five years.

CONDITION OF THE HERD:

When first received in the park, the steers were thin and light in weight, varying from an estimated weight of 150 pounds for the yearlings to perhaps 1300 pounds for the oldest animals. During their first summer in the North Unit, it was estimated that each of the older steers gained approximately 200 pounds.

Due to a lack of adequate crute and scale facilities, progressive weight and body growth measurements have not been made. It is judged, however, that weights now vary from 1200 to 1700 pounds, with abundant range at their disposal, the forage is good and fat, and underscoring of the classic descriptive statement which refers to them as being long in horn and short on feet.

LOCATION AND DESCRIPTION OF HABITAT:

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The bottom lands along the river's course support a variety of vegetative types, including cottonwood, willow, and aspen groves, and numerous species of grasses, forbs, and sedges.

Although the forage is not revealed from rousing at will throughout the course of the year, they restrict most of their activities to a flat, area-rough dotted pasture of about 750 acres immediately north and east of the main corral. This area is bounded on three sides by the river, and on the fourth side by the primary park road. Here, they have sufficient feed, water and shade to meet their habitat requirements, though they frequently migrate westward toward the campground in the evenings to an undeveloped spring near the road.

WINTER MANAGEMENT PROGRAM:

The forage requires a minimum of management during the winter months.

Mineralized salt blocks, however, should be placed at strategic locations along the primary park road north of the Longhorn's chosen pasture (map) both to provide the animals with a necessary dietary supplement and to encourage their use of areas within view of park visitors. The needs of the animals for salt depend to a degree upon the prevailing temperature and quality of feed. Blocks, therefore, should be monitored and replaced in response to the demand of the steers.

#### WINTER MANAGEMENT RECOMMENDATIONS:

Under normal circumstances, the Longhorns are able to fend for themselves during the colder months of the year. During periods of extended cold, however, it is necessary to haul water for their consumption, as natural sources freeze solid. A small stock tank equipped with a butane fired heater is situated in the corral complex for this use. Development of a low yield well to supply the animals' needs in the winter should hold a high priority.

In severe weather, when the snow cover prevents the animals from foraging for their natural foods, they must be supplied with adequate amounts of hay and feed supplements to ensure their continued health. At the present time, high quality alfalfa hay is being procured from the Fort Union site, although the use of this source will probably be terminated as development of the Fort as a visitor use area progresses. Additional hay must be purchased locally at prevailing rates when the Fort Union source is inadequate to meet the needs of the animals. In addition, range cubes are required to supplement diet during protracted cold spells.

It is recommended that the following quantities of these expendables be procured annually at the approach of colder weather:

Hay - sufficient to provide the herd of twelve animals with three bales daily for an estimated two to three months, or 180 to 270 bales annually.

Range Cubes - sufficient to provide each animal with 1.5 pounds daily for an estimated 60 days, or approximately 1000 pounds.

#### HERD EXPANSION RECOMMENDATIONS:

Dobie (1941) recognizes perhaps two dozen distinct color variations of the Longhorn type. Further herd expansion, therefore, should be directed toward the acquisition of additional color types.

At the present time, all twelve of the Longhorns in the North Unit herd are steers. No steps, however, should be taken to obtain breeding bulls or cows, as they do not develop characteristic long horns; and because selective breeding for color is unpredictable at best, and would result in the production of undesirable surplus animals.

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The precise carrying capacity of the Longhorn pasture is not known. In the event, however, that further herd expansion is justified, animals should be obtained with the desired characteristics from the source herd at the Fort Niobrara National Wildlife Refuge.

#### FENCING RECOMMENDATIONS:

The Longhorns seldom, if ever, stray more than a mile and a half from their home pasture, have never exhibited any tendency to breach the boundary fence, and have never crossed the river to the south bank. The fencing of an enclosure where park visitors could approach the animals closely enough to take photographs probably wouldn't have the desired effect, as the Longhorns would retreat to those portions of the enclosure where trees would be left standing for shade. The removal of droppings from a confined enclosure to ensure adequate sanitation for the animals would be a continuing and expensive undertaking. In reality, the casual visitor stands a very good chance of seeing the animals, regardless of the time of day, if he can be content to view them from a distance. In the evenings, the Longhorns usually can be found quite close to the road, cropping grass as they slowly migrate westward in search of water.

In the belief that any attempt to unnaturally confine the Longhorns would impair the setting usually associated with range cattle, it is recommended that no effort be made to fence the Longhorn pasture or any other area which they might choose to frequent.

#### INTERPRETIVE RECOMMENDATIONS:

At the present time, there are no interpretive devices in the park which relate directly to the presence of the Longhorns. As the North Unit is situated historically near the northern limits of the cattle industry's former open range, and an existing interpretive marker deals with the significance of the nearby Long\*~~X~~ Trail, it would be appropriate to provide the visitor with some background devoted to the animals, themselves.

It is recommended that several steps be taken to acquaint the visitor with the North Unit herd:

Erect an appropriate marker along the primary park road adjacent to the Longhorn pasture.

Construct a parking space for a limited number of cars in the same vicinity.

Encourage the publication of, and make available for sale to the public through the Theodore Roosevelt Nature and History Association, items such as booklets, pamphlets, postcards, and slides devoted to the Longhorns.



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**SAFETY RECOMMENDATIONS:**

There is no history of Longhorn related visitor injury in the North Unit. The animals, however, are managed only minimally, and must be considered as being undomesticated and wild. While the steers which make up the park's herd are more predictable than bulls, the possibility always exists that a wild animal of their size may be aggravated into an attack, particularly if visitors treat them with the same degree of respect which they accord the barnyard varieties at home.

If necessary, warning signs such as those currently posted regarding the bison should be prepared. At the present time, however, this is considered a low priority need.

A greater danger exists that one of the animals will be struck by a motor vehicle while moving along the road toward the spring. There are no signs posted in the North Unit which warn of this hazard, and personal or property damage could lead to a tort claim against the government. The section of road used by the Longhorns contains numerous blind curves, and the risk of collision is high. For this reason, signing should be given a high priority.

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Activities that occur with the same degree of respect which are indicated in the Longhorn are not to be regarded as an activity. The animals are more predictable than bulls, the boardwalk always as being uncontrolled and wild. While the signs which make up the the animals, however, are managed only minimally, and may be considered there is no history of Longhorn related fatalities in the north unit.

STATIONER DONALD YETMAN

29

R 99 W

27

Residences

Camp-ground

32

Spring

33

34

T 148 N

T 147 N

Longhorn Range  
(summer)  
Primary Road  
Service "  
Salt Blocks  
Boundary



0 1000 2000 3000 FEET

4

LITTLE

MISSOURI

RIVER

3

