

# Homestead National Monument

## Beatrice, Nebraska

### Vegetation Mapping Project

National Park Service  
U.S. Department of the Interior



**Homestead National Monument** was created in 1936 to celebrate the significance of the Homestead Act of 1862, which granted 160 acres of free land to claimants. This was one of the most significant and enduring events in the westward expansion of the United States. The site is the first tract homesteaded under the act by Daniel Freeman, and encompasses 184 acres in Gage County, west of Beatrice, Nebraska.

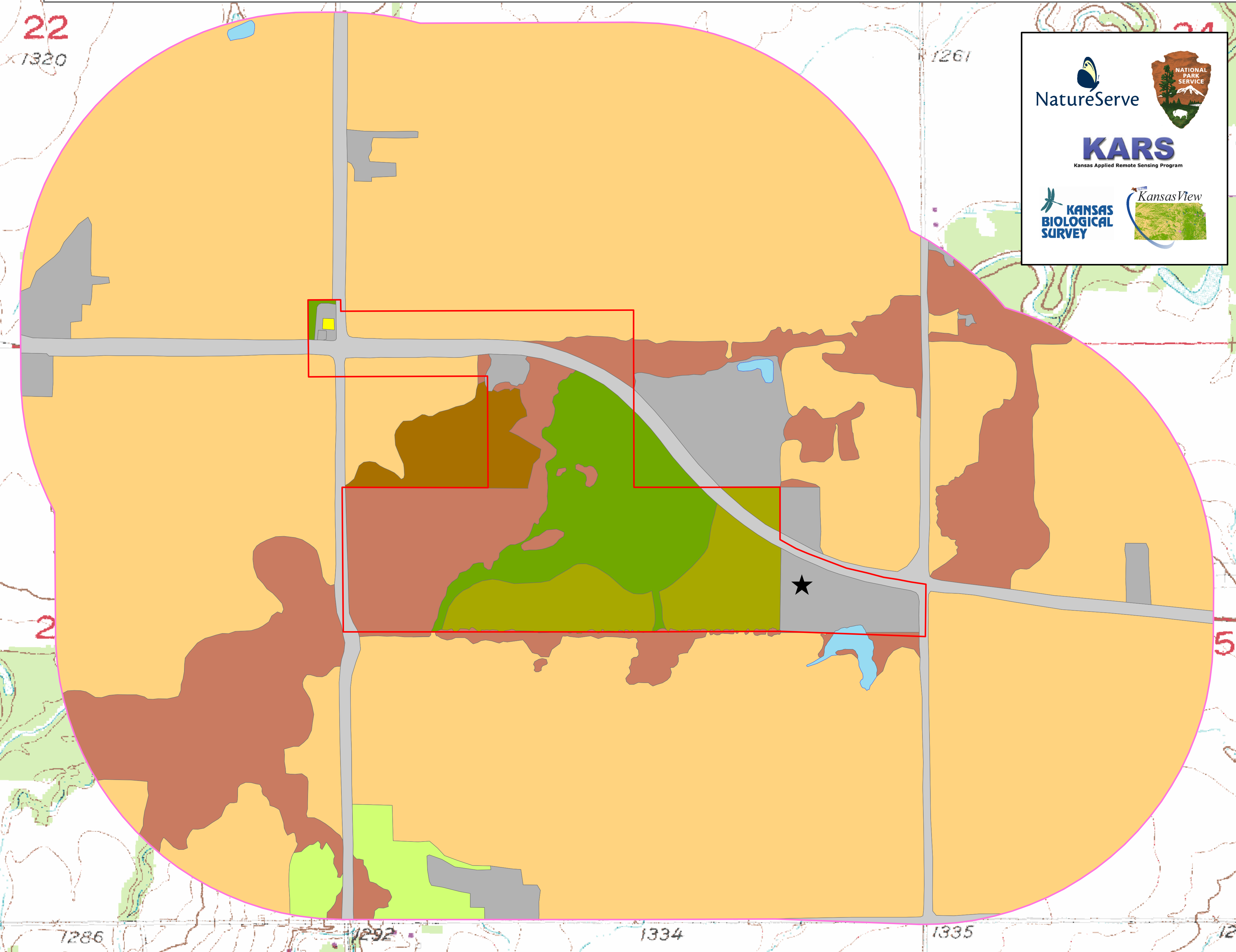
This unique site also hosts the oldest prairie restoration in the National Park system and the second-oldest tallgrass prairie restoration known. This park unit also has a small remnant of native tallgrass prairie and remnants of bur oak woodland. These plant communities and other features are mapped below. The project is part of the Inventory and Monitoring Program of the National Park Service, which provides

park managers with critical information on natural resources. A long-term goal of this program is to provide baseline inventories of the biological and geophysical resources for all natural resource parks. Using GIS software and incorporating aerial photography and satellite data, researchers determined and mapped the 10 vegetation and map classes based on the National Vegetation Classification System. Plot

data were collected to ensure map accuracy. This project was conducted by Kelly Kindscher, Hayley Kilroy, Jennifer Delisle, Quinn Long, Hillary Loring, and Kevin Dobbs of the Kansas Biological Survey, and Jim Drake of NatureServe. A peer-reviewed report that provides details on this mapping project and the plant communities is available at: <http://web.ku.edu/~kindscher/homestead>.

#### Vegetation Classification

- Bur Oak Woodland, *Quercus macrocarpa* (Western Tallgrass Bur Oak Mesic Woodland) Woodland Alliance
  - Successional Forest, *Fraxinus pennsylvanica* - *Ulmus americana* - *Celtis occidentalis* (Central green ash - elm - hackberry forest) Temporarily Flooded Forest Alliance
  - Native Tallgrass Prairie, *Andropogon gerardii* - *Hesperostipa spartea* - *Sporobolus heterolepis* Herbaceous Vegetation
  - Upland Restored Prairie, Planted Semi-Natural Upland Restored Tallgrass Prairie, areas of the upland that were restored to a tallgrass prairie mix of species
  - Lowland Restored Prairie, Planted Semi-Natural Lowland Restored Tallgrass Prairie, areas of the lowland that were restored to a tallgrass prairie mix of species
  - Smooth Brome Grass, *Bromus inermis* Semi-Natural Herbaceous Alliance
  - Ponds/Water Bodies
  - Roadways
  - Cropland
  - Developed Land
  - Visitor Center
  - Monument Boundary (0.5 miles)
  - Mapping Buffer Boundary
- 0 0.125 0.25 Miles



**Mapped Unit Name:** Bur Oak Woodland  
**Common Name:** Western Tallgrass Bur Oak Woodland  
**Scientific Name:** *Quercus macrocarpa*/*Andropogon gerardii* - *Hesperostipa spartea* Woodland  
These areas contain very large oak trees that are part of the original forested area along the creek.



**Mapped Unit Name:** Native Tallgrass Prairie  
**Common Name:** Northern Mesic Tallgrass Prairie  
**Scientific Name:** *Andropogon gerardii* - *Hesperostipa spartea* - *Sporobolus heterolepis* Herbaceous Vegetation  
This tiny area near the schoolhouse is the only remaining piece of the original tallgrass prairie which was originally the dominant vegetation of the area.



**Mapped Unit Name:** Successional Forest  
**Common Name:** Central Green Ash - Elm - Hackberry Forest  
**Scientific Name:** *Fraxinus pennsylvanica* - *Ulmus* spp. - *Celtis occidentalis* Forest  
These are areas of grassland that have been invaded by trees in recent years, usually due to land abandonment and lack of fire.



**Mapped Unit/Common Name:** Upland Restored Prairie  
**Technical Name:** Planted Semi-Natural Upland Restored Tallgrass Prairie  
These areas of former cropland were restored to the tallgrass prairie mix of species - big and little bluestem, Indian grass, switchgrass, and wildflowers of the uplands. Vegetation was transplanted and seeds were planted, starting in the late 1930s.



**Mapped Unit/Common Name:** Lowland Restored Prairie  
**Technical Name:** Planted Semi-Natural Lowland Restored Tallgrass Prairie  
These areas of former cropland were restored to the tallgrass prairie mix of species - big and little bluestem, Indian grass, switchgrass and wildflowers of lowlands. Vegetation was transplanted and seeds were planted, starting in the late 1930s.