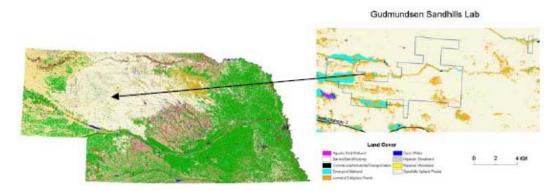
## Gudmundsen Sandhills Laboratory (GSL): Northern Plains Domain

**Contact Person:** David Wedin. Email: dwedin1@unl.edu. Voice: 402-472-9608. Web Page: http://westcentral.unl.edu/GSL/ and http://snr.unl.edu/wedin/nefieldsites/

## **Location within Nebraska:**



**History:** The 12,800 acre ranch near Whitman, Nebraska was donated to the University of Nebraska-Lincoln in 1981. As the landcover map shows, the ranch is in the heart of the Sandhills and is surrounded by native Sandhills grassland. University research includes grazing management, animal science, climate, wildlife ecology, hydrology, and dune geomorphology / paleoecology.

**Key Characteristics:** Upland sandhills grasslands are dominated by warm season grasses with a significant cool season component. Sandhills grasslands are floristically more similar to tallgrass prairie, but structurally more similar to mixed grass prairie. The upland grasslands are grazed by cattle. Extensive wet meadows are dominated by cool season grasses and used as hay fields. A small stream (a fork of the Loup River) runs east from an extensive wet meadow through the property.

**Existing Infrastructure and Facilities:** As well as working ranch facilities (including permanent staff), there is a dorm/lab building with housing for 12, and a new education/outreach building that can seat up to 300 people. The headquarters has a T1-level internet connection. The site has a NOAA Climate Reference Network weather station, state network weather and soil moisture monitoring stations, 3 bowen ratio towers and an eddy covariance tower associated with the NSF-funded Sandhills Biocomplexity project. The headquarters are approximately 15 minutes from the nearest paved road. Although not officially closed to the public, the site is quite secure because of its size and remoteness.