

# Progress report on a revised land cover map for the state of Oklahoma.

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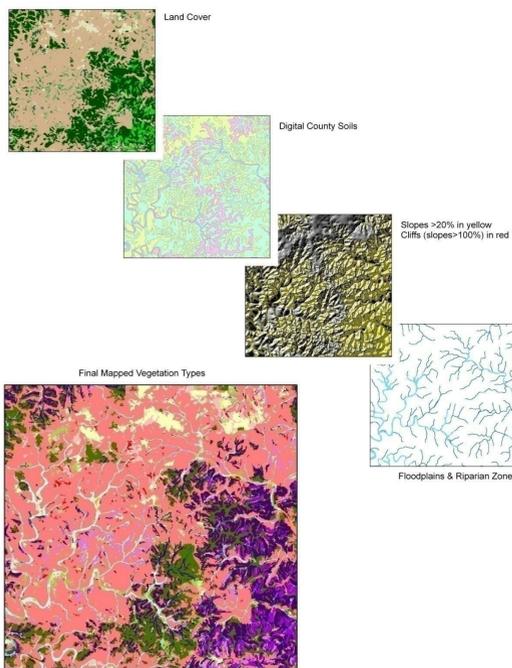
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## Overview

The Oklahoma Biological Survey (OBS), in conjunction with the Oklahoma Department of Wildlife Conservation (ODWC), Landscape Conservation Cooperative (LCC) of the U.S. Fish and Wildlife Service (USFWS), and the Missouri Resource Assessment Partnership (MoRAP) are in the process of creating a revised land cover dataset for the state of Oklahoma. Improvements in both thematic (number of types mapped) and spatial resolution of the revised land cover dataset will enhance efforts to identify and conserve species, communities, and landscapes.

Ideally, such land cover datasets should be continuous both spatially and thematically across state boundaries. In order to ensure continuity and uniformity between neighboring states, project partners are building on methods and results of the Texas Parks and Wildlife Department.

## Modeling "Mapped Vegetation Types"



Define land cover from Landsat using both photo-interpreted and ground-collected data

Interpret current vegetation types using NRCS soils and Ecological Site Types

Add slope & cliff classes from 10 m DEM

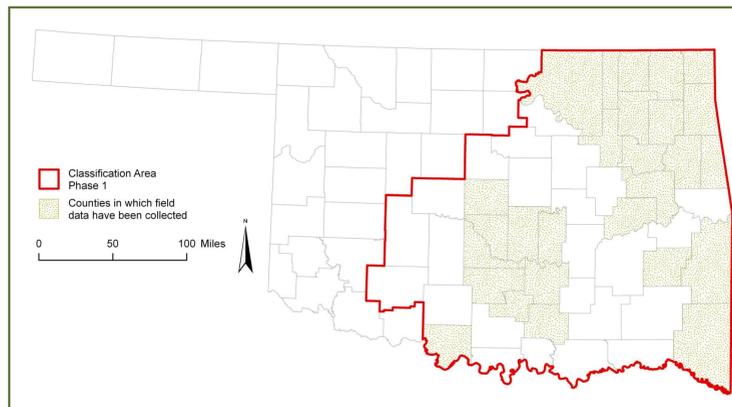
Model riparian classes from hi-res NHD

## Improvements Over Existing Maps

- Increased thematic resolution (about 20x more mapped types than National Land Cover Database (NLCD))
- Increased spatial resolution (30 m to 10 m resolution)
- More use of ground-based data (2,000 points estimated for Oklahoma)
- Nationally-recognized classification system
- Seamless coverage across state boundaries

## Field Data Collection

In order to aid in the land cover classification, a field ecologist is conducting ground-based vegetation sampling throughout the state. The survey involves identifying different vegetation types to the ecological systems level, GPS data collection and mapping, and photographing of the various vegetation types encountered. These field-based data will be used as training points in the decision-tree classifier. The project consists of two phases. Currently, the field ecologist has collected data in 27 counties of the 51 counties of the first phase.

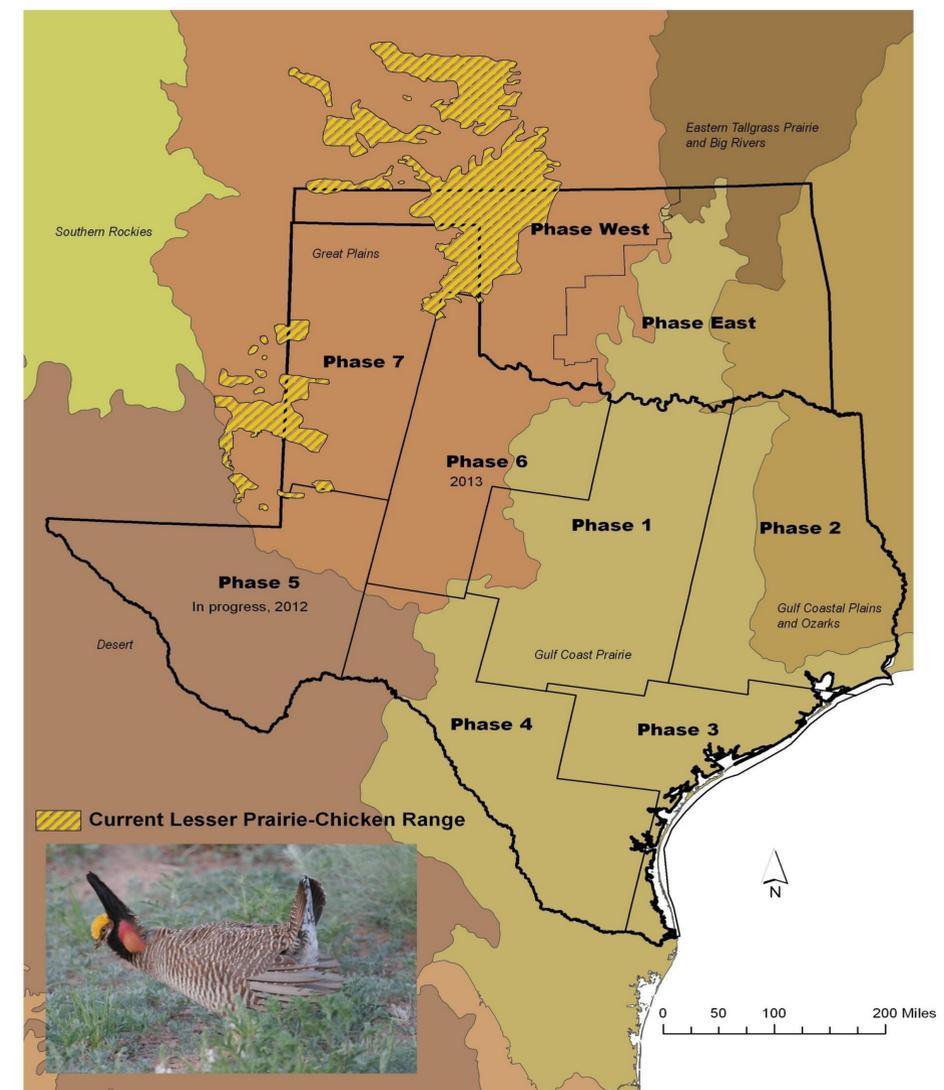


## Oklahoma's Varied Vegetation



## Primary Project Goals

The primary objective of this project is to develop a uniform, fine-resolution, current land cover dataset for the state of Oklahoma. This dataset will be seamless across both state and LCC boundaries (see below) and will aid in the conservation of trans-boundary species of concern, such as the lesser prairie-chicken (*Tympanuchus pallidicinctus*). The final datasets will be publically available and will serve additional purposes for a variety of stakeholders, from water resource and land managers, energy consultants, researchers, conservationist, and many others.



## Project Contact and Additional Information

For additional information about this project, contact Dr. Bruce Hoagland at [bhoagland@ou.edu](mailto:bhoagland@ou.edu). A project website is forthcoming

