



NEBRASKAVIEW 2022 - 2023

AmericaViewSM
Empowering Earth Observation Education
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NEBRASKAVIEW 2022 - 2023 ACTIVITIES

The NebraskaView program, in partnership with the Nebraska Environmental Trust (NET) and three communities in Nebraska, completed our multi-year work on Urban Forest Canopy Mapping. This project used publicly available, USDA National Agricultural Imagery Program (NAIP) multispectral imagery to develop urban tree canopy maps for the communities of Lincoln, South Sioux City, and Waverly, Nebraska.

The aim of this project was to develop a practical remote sensing method to create urban forest maps which do not exist for most communities in Nebraska and advance the use of remote sensing for urban forest management.

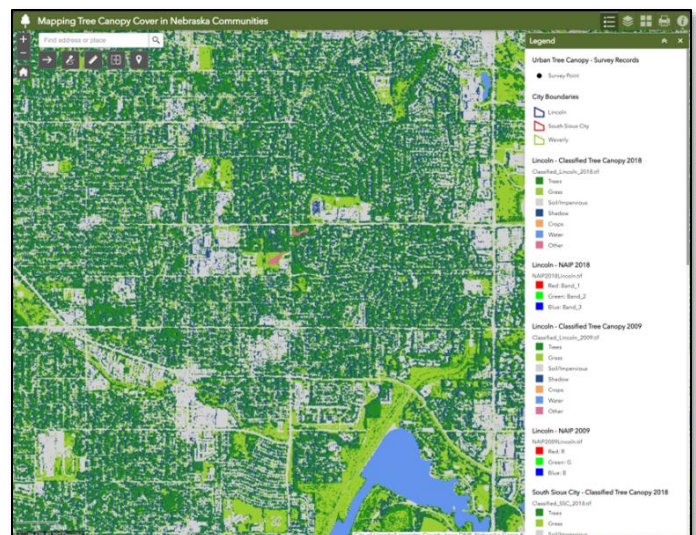
- Completed final classified urban forest canopy maps for the cities of Waverly and South Sioux City, Nebraska.
- Generated classified maps for years 2009 and 2018 for the three communities.
- Created an ArcGIS Online interactive Story Map (<https://arcg.is/1rqaqb>) and an ArcGIS Online interactive Map Viewer (<https://arcg.is/0eDqve>) to promote the urban canopy mapping project within Nebraska.
- Developed educational training guide for use by technical staff in Nebraska communities on how to apply the forest canopy mapping methodology.
- NebraskaView funded a Ph.D. student during the summer to work on the Urban Tree Mapping project as part of his dissertation.



The importance of the urban forests for communities in Nebraska (The Nature Conservancy).



ArcGIS interactive Story Map: Mapping Nebraska's Urban Trees. <https://arcg.is/1rqaqb>.



ArcGIS Online interactive Map Viewer: Mapping Tree Canopy Cover in Nebraska Communities. <https://arcg.is/0eDqve>.

NebraskaView is a member of the AmericaView Consortium, a nationally coordinated network of academic, agency, non-profit, and industry partners and cooperators that share the vision of promoting and supporting the use of remote sensing data and technology within each state. AmericaView is funded by USGS grant agreement G18AP00077.

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BENEFITS TO NEBRASKA

The mission of **NebraskaView** is to ensure *that Nebraskans make full use of satellite and airborne imagery, aerial photography, and other geospatial data products through technologies such as geographic information systems (GIS) and remote sensing.*

Specific benefits of NebraskaView to the State include:

- Provided consultation to University of Nebraska-Lincoln faculty and student on the methods of using Landsat and Sentinel data for the identification of surface water coverage across southeast Kansas to define availability of ecologically-important land covers for mallard populations.
- Advised Ph.D. student at the University of Nebraska-Lincoln on remote sensing data sources to detect grassland disturbance for pheasant habitat evaluation as part of her dissertation research.
- Remote sensing education and training to students, professionals, and the public.



Airborne hyperspectral imagery over the University of Nebraska-Lincoln East Campus and surrounding area acquired August 24th, 2023. This type of imagery can be used for a wide range of urban, agricultural, natural resource, and other applications.

NEBRASKAVIEW CONSORTIUM MEMBERSHIP



City of Lincoln, Nebraska
Parks and Recreation



Nebraska Forest
Service



The Nebraska
Environmental Trust



University of Nebraska-Lincoln
Community and Regional
Forestry Program



CITY OF WAVERLY, NEBRASKA
City of Waverly, Nebraska



City of South Sioux City, Nebraska

Federal consortium members identified above do not receive funding from AmericaView.

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<http://www.nebraskaview.edu>