KBS LTER Aerial Photos Online

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The KBS LTER has **a large number of aerial photographs**. This is a treasure trove of information that has yet to be mined!

In order to make these air photos readily available for research, we received an LTER supplement from the NSF to work with MSU RS&GIS to scan and orthorectify them and make them available online for downloading and viewing.

Orthorectification is the process of geometrically correcting an air photo so that it can be analyzed in a GIS (Geographic Information System) and compared with other photos and geospatial data.

GIS users will be able to get the files as a WMS (Web Mapping Service) or direct download. A WMS makes the entire collection of orthorectified air photos available directly via a server so users can access them from their GIS without downloading them.

KML files will also be available so users can instantly open an air photo in Google Earth or Google Maps.

Users can also download air photos as scans for use in presentations, etc.

Some applications of air photos:

- Design sampling and experiments
- Visualize and quantify:
    - Present and past land cover/use
    - Spatial variability and relationships
    - Biomass variability
    - Soil moisture variability

Air photo inventory includes:

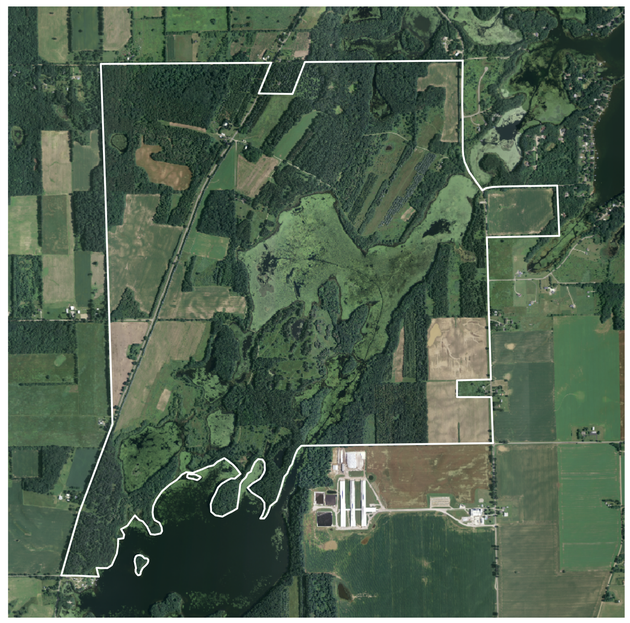
Dates: 1993-present (every year)

Photo type: Color infrared, true color and black and white

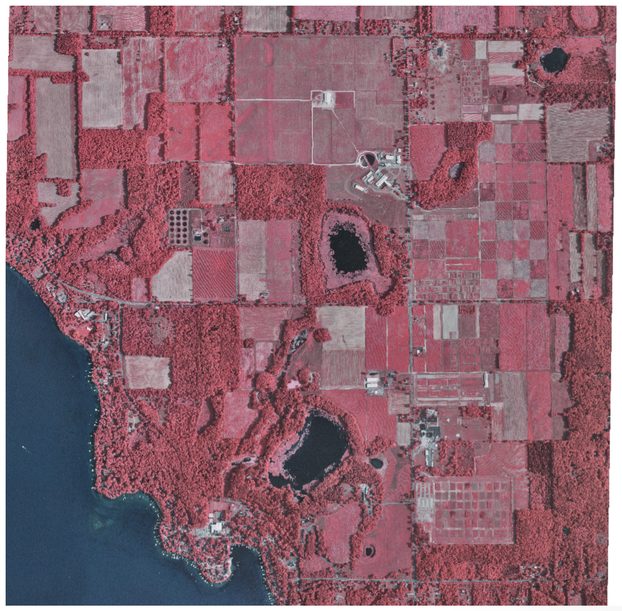
Locations:

- KBS LTER Main Site and Scale-up Sites
- Kellogg Biological Station and surroundings
- Lux Arbor Reserve and surroundings
- Kellogg Forest
- Marshall Farm
- GLBRC Intensive Site

KBS LTER mainsite– 12 August 2011 – True color image



Lux Arbor Reserve - 25 June 2010
True color image
(white line shows LAR property border)



Kellogg Biological Station – 1 August 2009
Color Infrared image