

# Remote Sensing with a UAV

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## UAV – Unmanned Aerial Vehicles

The CropCam is a UAV that flies unassisted to pre-defined areas within a field and uses a high resolution camera to take photos of those areas from the air.



### CropCam Specifications:

- Glider with Eight foot wingspan and four feet long
- Cruising speed 35 mph – Top speed of 60 mph
- Up to 60 minutes of flight time – enough for 640 acres at high resolution
- Typical altitude between 300-2000 feet (license needed over 400 feet)
- Range of up to 1 mile line of sight
- Cost -- \$9,000 – 13,000 with software and plane

### Applications:

- Agriculture – Ranching
- Forestry – Natural Resources
- Real Estate – City Planning
- Emergency Services -- Insurance



Aerial image of the Blue Creek Experiment Station taken on July 7, 2008 using the CropCam at 2.5 cm resolution



Small Grain trial at Utah State University Blue Creek Experiment Station. Photo taken July 7, 2008 using the CropCam at 2.5 cm resolution. Individual plots can easily be seen in this image.

Bare soil imagery easily shows residue. Several images can be combined (mosaic) to show residue of entire field

