

DRONES

BENEFITS

- Effective monitoring and high-resolution data collected regularly over large areas
- May reduce labor costs and minimize equipment needed
- Improved decision making based on vegetation mapping, erosion and soil analysis, and observed water resource management
- Visual demonstrations and engagement can enhance education and outreach
- Safely access remote areas and respond to disasters

CHALLENGES

- Airspace regulations, restricted zones, and privacy concerns
- Data management and processing to handle large volumes of data, specialized software, and data interpretation
- High initial investment, plus maintenance and reports and costs to train staff needed to operate drones
- Relatively high learning curve for efficient operation
- Operational issues such as difficult weather conditions and connectivity issues
- Community perception related to surveillance or misuse



Applications of Drones

Drones are equipped with cameras and other specialized that can:

Map forage quality and quantity as well as map vegetation and soil health.

Monitor wildlife movement and habitat use without disturbing them.

Remotely observe water levels in livestock tanks.

Help livestock move through a rotational grazing system.



Visit the Drone Lab
at University of Idaho