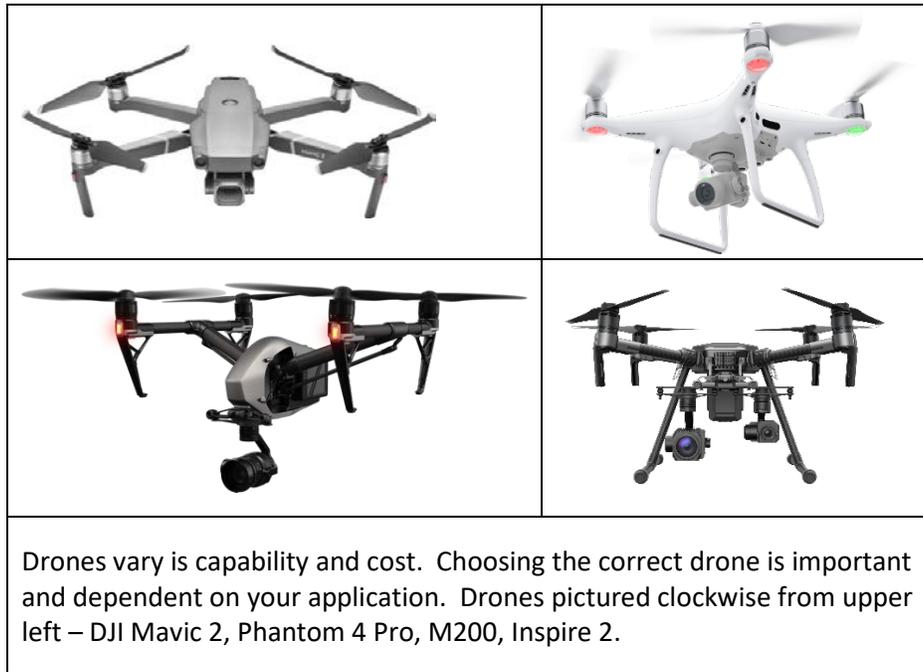


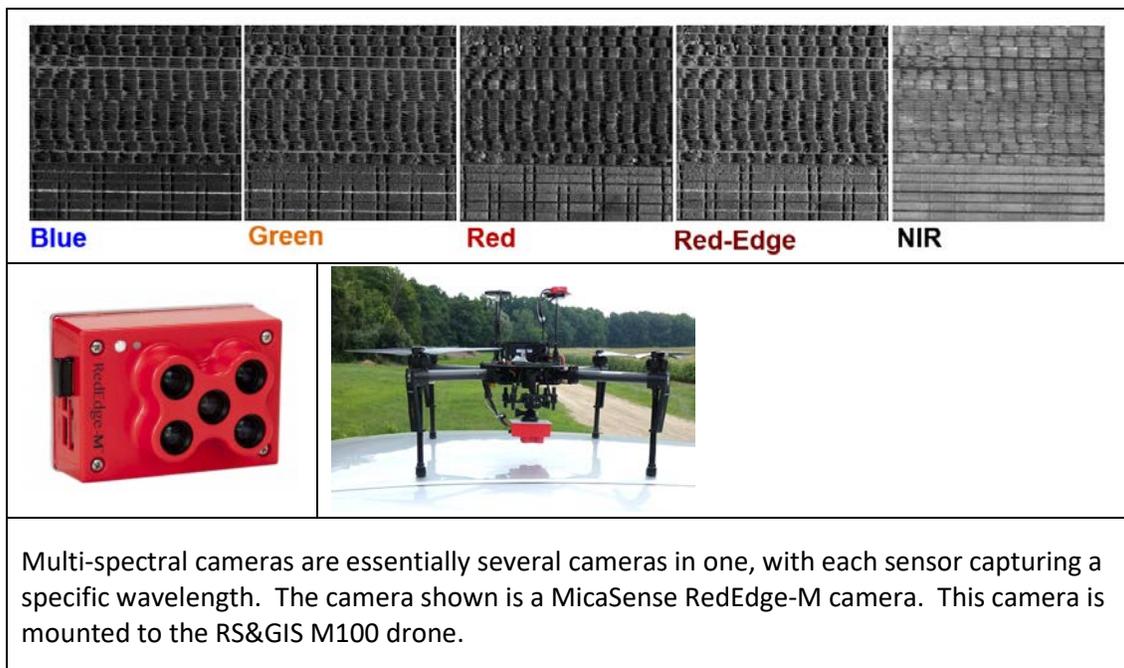
Using Drones in the Landscape and Nursery Industry

Presenter: Nick Weil, GISP – RS&GIS, Michigan State University
weilnich@msu.edu

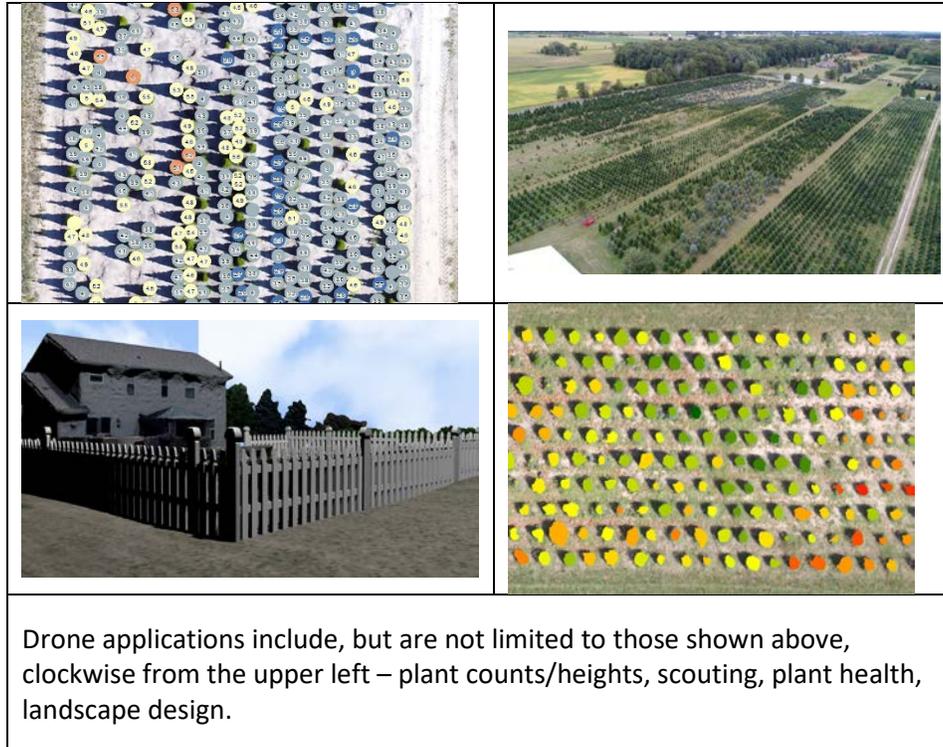
Think of drones as just another tool in the toolbox. We can use them to improve efficiency, build new business opportunities or even lower costs. It is important to know, however, the type of drone you need to use as well as related hardware and software.



Drone sensors are varied, but the most useful for landscape and nursery activities are natural color and multi-spectral cameras. Multi-spectral cameras, with their ability to capture information related to plant condition, are useful for quantifying vegetative health and disease.



A variety of applications are possible using drones, including plant counts, plant health analysis, landscape design and more.



RS&GIS is working closely with MNLA to offer two drone training workshops beginning Spring 2019. The first will focus on regulations and drone operation and will be offered as an in-person class (1 day). The second workshop is an online class that will focus on drone data processing, visualization and analysis. Both workshops are \$300 or \$500 for both.

- Getting Started Using Drones (in-person)
 - Overview of Drones
 - Equipment needs and costs
 - FAA Regulations, UAS Registration and Pilot Certification
 - Mission planning and UAS Operation
 - Image Processing
 - Application Examples
- Advancing with Drones (online)
 - Aeronautical Exam Primer
 - Equipment needs and costs
 - Drone Operation
 - Data Processing
 - Data Visualization
 - 3D Design

For more information about our upcoming training or assistance incorporating drones into your business, please contact our UAS Manager, **Robert Goodwin** (517.432.0879; goodwinr@msu.edu).