



## WORKING AGENDA

# Natural Resource Applications of Unmanned Aerial Systems

October 27, 2015 from 8:15am to 4pm, Northland Arboretum, Brainerd MN

**Instructor:** Bill Anderson, Adjunct Professor, UMN Dept. of Forest Resources

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8:00am	Check-in opens
8:15am	<b><i>Welcome, agenda review, and workshop objectives</i></b>
8:30am	<b><i>Overview: Drones for natural resource applications</i></b> -Multicopter vs. fixed-wing drones -Introduction to mapping drones: examples and sensor types -Case study: Sensefly eBee mapping drone
10:15am	Break
10:30am	<b><i>Data processing with Postflight Terra 3D</i></b> -Processing steps, image calibration, mission quality report, dense point cloud generation, and outputs
12:00pm	Lunch break
1:00pm	<b><i>Flight demonstration (weather permitting)</i></b> -Plan local mission, eBee takeoff, flight, and landing, and data processing
2:00pm	<b><i>eBee mission examples and information content</i></b> -Reviewing data from three Arboretum sites
2:30pm	Break
2:45pm	<b><i>Post processing of eBee products in 3rd party software</i></b> -Quick Terrain Reader and QGIS -Global Mapper and Arc Map -Agisoft Photoscan Pro
3:15pm	<b><i>Legal issues: FAA rules and regulations</i></b>
3:30pm	<b><i>Conclusions and discussion</i></b> -Capabilities and limitations: technical and legal -Applications to your work
4:00pm	<b><i>Adjourn</i></b>

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