

Remote Sensing & GIS

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Why: Cost Efficiency, Accurate Assessment, Species Delineation

What: Detectable Target Species

Where: Known Area Of Infestation

Challenges

- **Detection probability:** remote sensing does not replace field surveys as not all species are detectable from the air.
- **Image acquisition:** rough terrain, clouds and other obstacles make it difficult to get good imagery
- **Processing:** converting the images into usable data requires training and practice

Benefits

- **Cost:** fewer resources are necessary to survey areas from acquired imagery (vs field operations)
- **Systematic:** equal detection of targets from given dataset, computer based (not weather dependent)
- **Utility:** images are useful for species ID, scoping, understanding terrain, monitoring (time-series) and outreach (engaging land owners)

Imagery

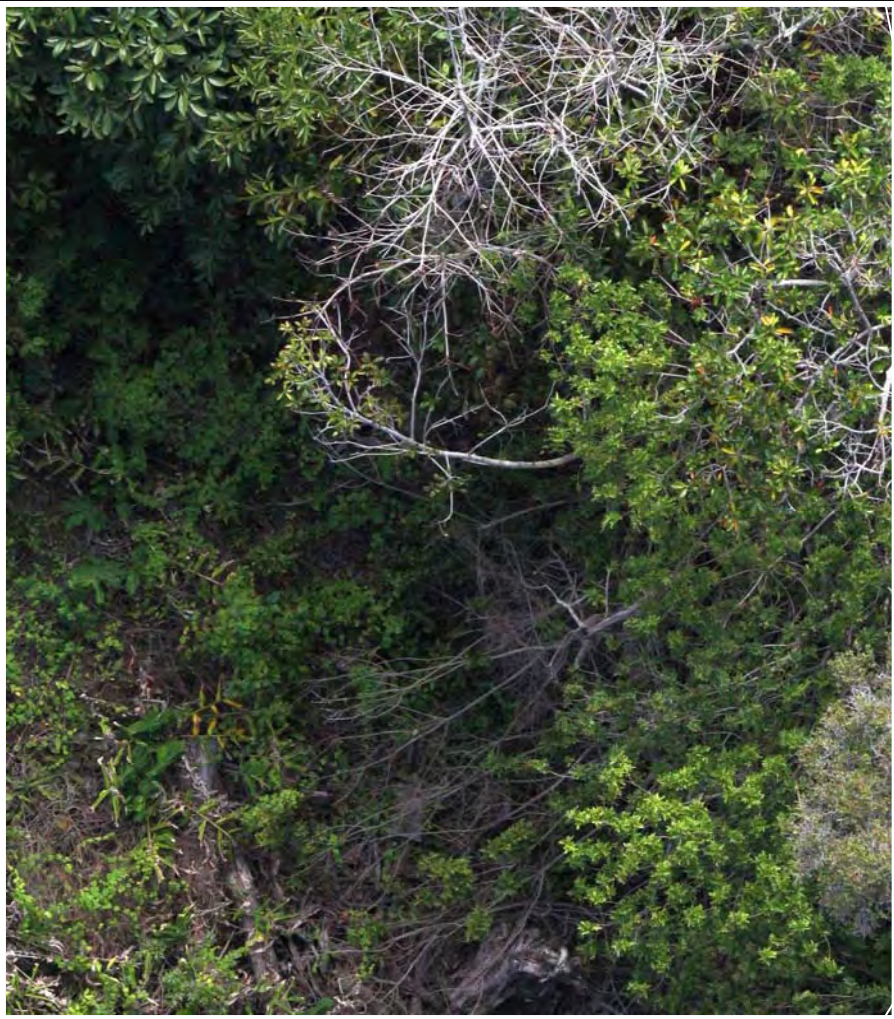


QUICKBIRD 0.61M RESOLUTION



Resource Mapping Hawaii ULTRA HIGH RESOLUTION 1-2 CM

Example: using aerial view to see what's out of view from the roads (Resource Mapping Hawai i)





Epipremnum pinnatum

Aleurites moluccana

Schinus terebinthifolius

Aleurites moluccana

Psidium guajava

Macaranga mappia

Scheffiera actinophylla

Example of species inventory (Resource Mapping Hawai i)

Data Management

Whats New?

- Data Sharing via FTP Server-BIISC Partners → FileZilla Client

<http://filezilla-project.org/download.php>

- Remote Backups on Kauai - VPN