

## Geoimage can assist in Pest Impact and Management Applications

Geoimage, provider of satellite imagery and geospatial services, recognises the value of maintaining an accurate record of land condition, particularly in those areas threatened by animal or vegetation pests. We can offer solutions that integrate with land management and field data collection systems to provide an integrated spatially-referenced framework.

### Monitoring for Management

Geoimage is an independent provider of satellite imagery. We can advise on the provision of broad scale imagery that will suit the assessment of regional impact from pests and also very high resolution imagery that will identify local scale impacts on production health and erosion creation at a paddock level. At Geoimage we can analyse the imagery to provide summary statistics, report impacts, and when using time-series imagery, can report on changes over time to assess the success or otherwise of mitigation measures.



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Source: www.math.hmc.edu 2007

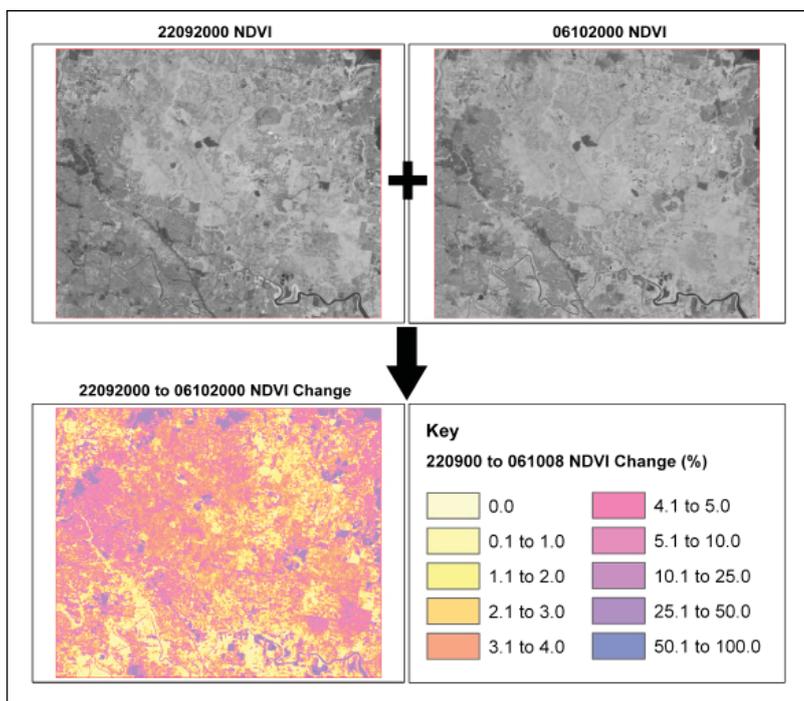
### Environmental Impact

Satellite imagery is ideally suited to reporting environmental impact at a landscape scale. The team at Geoimage has provided broad-scale imagery and subsequent assessments to report on land cover changes over time, to identify the location, extent and spatial distribution of pest and weed impacts and to assist in projecting impacts for targeting future management of these problems. The imagery provides the context, but the analysis extends this to look for patterns which can aid management decisions.



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- Identification of impact extents
- Area calculation of impacted land
- Sighting of mitigation measures



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### Production Impacts

At Geoimage we recognise that land managers invest significant resources into primary production. By adopting a spatially-referenced system to map and monitor the management of the land, coupled with time series imagery to identify change, actual and potential impacts on production may be quantified. Geoimage has experience working with land managers to map crop health through the use of NDVI imagery and can work with you to assess the magnitude of impacts, area of damage and the potential for pests to impact elsewhere.

- Identification of impact on production
- Image assessment of crops
- Area calculation of impacted crops
- Proximity analysis; Patch analysis



## Urban and Peri-urban Pest Management

Proximity of pests to the urban and peri-urban environment can be accurately mapped when combining sightings with other spatial datasets such as dwellings. At Geoimage, we offer services that can include mapping the urban and peri-urban extents, connectivity and corridor assessment between sighting locations and communities, demonstrating spatial patterns that may not be apparent when considering the raw data. We have the resources and technical knowledge to help you manage these regions.

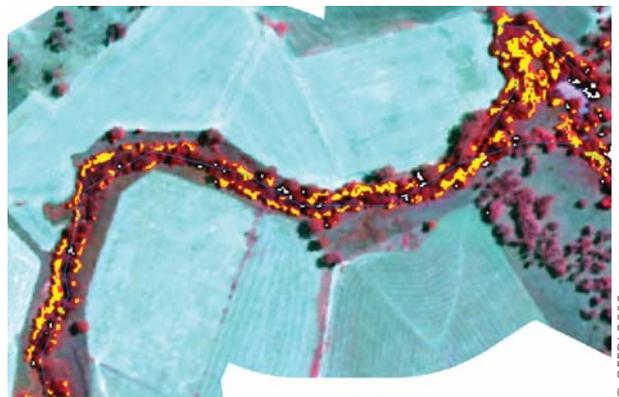
- ☑ Spatially-referenced sightings database
- ☑ Analysis of dwelling locations and urban/peri-urban extents
- ☑ Proximity analysis; patch analysis; corridor/connectivity assessment



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## Community Engagement

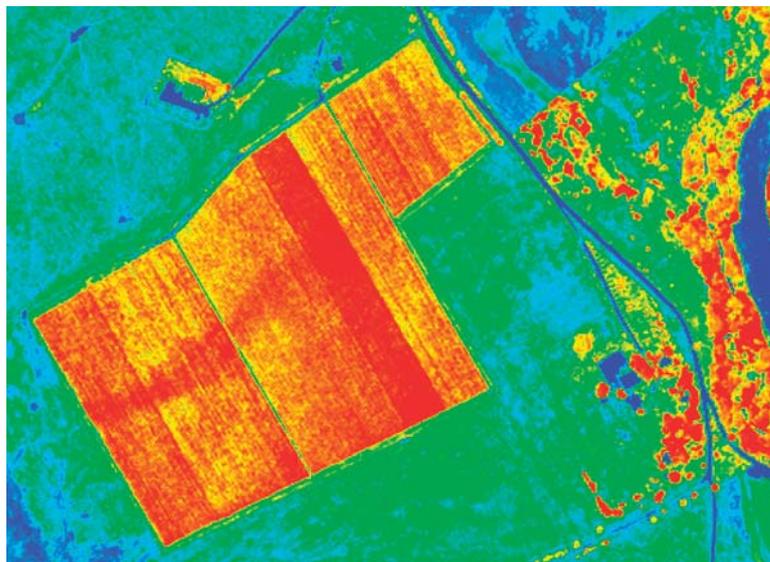
A picture paints a thousand words – when engaging the community in activities around pest management, using an up to date very high resolution image over the region of interest can assist in highlighting the extent of the problem, but also explaining the strategies to reduce impact, threat or spread of that pest.



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## New and updated techniques, technologies and opportunities

An essential part of effective management is the dissemination of information to relevant parties. Geoimage has worked with clients to reduce the complexity of information exchange, through the adoption of technologies such as WebGIS, where the physical location of project teams, including researchers, landholders and government does not limit collaboration, sharing of ideas and information.



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### How can Geoimage help?

We can take the hard work out of collating information relating to pest threats, monitoring and management. We can provide the framework for the distribution of information to stakeholders and the analysis and imagery to support both the monitoring of current and past impacts together with the potential threats in the future. Satellite imagery and spatial analysis can help justify and communicate decisions to those closest to the problem.

- ☑ Identification and mapping of impact
- ☑ Calculations of impacted land
- ☑ Sighting of pests and mitigation measures
- ☑ WebGIS to distribute information to stakeholders

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