

CASE STUDY

Crop Density

DroneMate™
EVERYTHING AERIAL



Problem

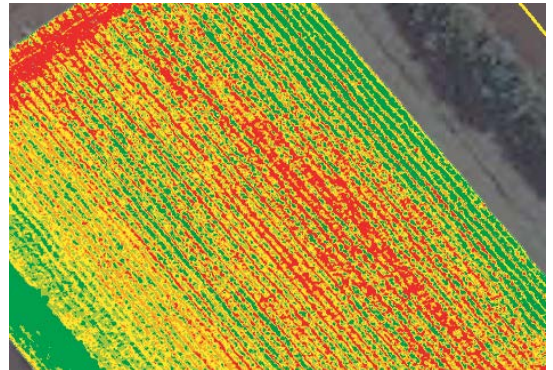
Variable crop density in a field costs big dollars. The costs of looking after gaps in the rows is pretty much the same as looking after the plants themselves.

Optimising plant density has a huge benefit to the bottom line.



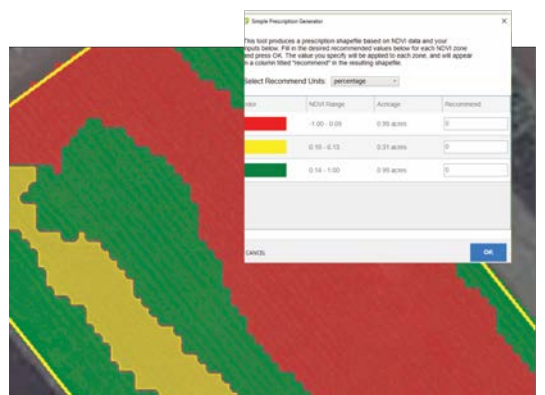
Approach

1. DroneMate conducted an aerial survey of lettuce fields, recording both RGB (above) and Near InfraRed (NIR) data.
2. The data images were uploaded to FieldAgent and processed to create a single RGB map (above) and NDVI [plant health] map (right)
3. These maps were shared with the client. When at the field, the lettuces looked absolutely uniform. The NDVI images shows a very different picture.
4. The NDVI map was modified within FieldAgent to create three “management zones”, each zone being distinct from the others and having a known size.



Solution

Knowing the size and ‘quality’ of each zone enables calculation of plant density and yields per zone, and assessing what to do next for each zone. This could include a SHP file (in FieldAgent) for a variable rate prescription. The maps were stored for resurveying and comparison after treatment.



A 3 hectare lettuce field can be surveyed for RGB and NDVI in under 15 minutes, with analysis and management zones calculated within 24hrs. Resurveying allows comparison of before and after, i.e. the value of actions taken. These maps can be shared with anyone who has a web connection.

Talk to us about how we can help you enhance your farm decision making.

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