

FRUITION



GreenAtlas

GREEN ATLAS APPLE SCANNING SERVICES

Helping achieve optimum crop load sooner, easier and cheaper



**KNOW
EVERY
TREE**

Your crop and canopy accurately mapped across your orchard at every stage

www.fruitionhort.com

INTRODUCTION

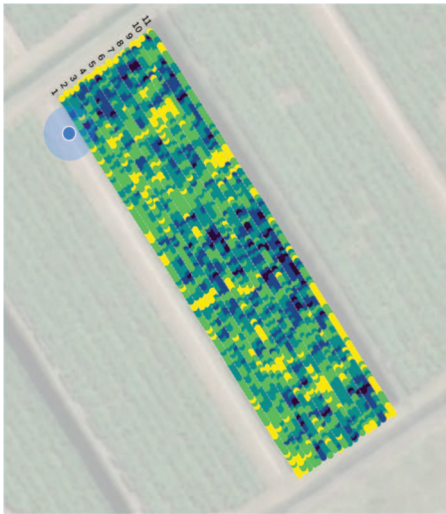
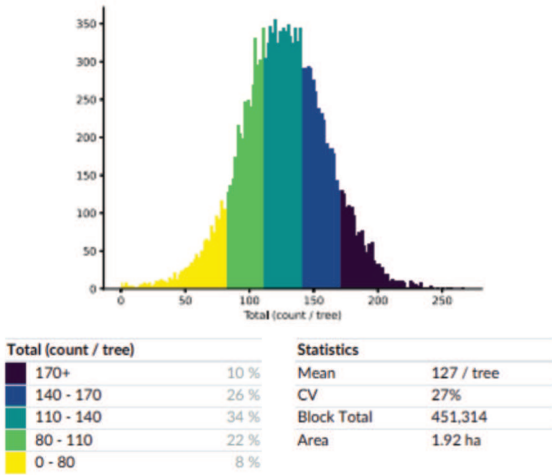
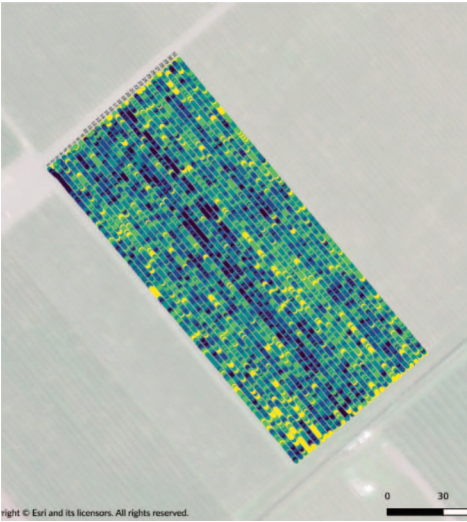
Fruition’s services, powered by Green Atlas's cutting-edge hardware and software, deliver fast, accurate and cost effective mapping of buds, bloom, fruitlets, fruit and canopy across all varieties. Results are routinely turned around within 36 hours of scan completion.

Opening the gateway to data-driven, precision crop management

Heatmaps at a tree level instantly reveal high and low spots across your block, providing clear insight into relative performance within and between blocks.

Clear, easy-to-read stats highlight key performance indicators for each block - including mean, coefficient of variation (CV) and crop load distribution - giving you valuable insights at a glance.

Georeferenced reports bring your data to life in the field - making it easy to navigate directly to key areas of interest within your block.



SERVICES OFFERED



Dormant Buds
(July-Sep)

- ◆ Assessment of pruning quality
- ◆ Early identification of variability
- ◆ Indication of cropping potential



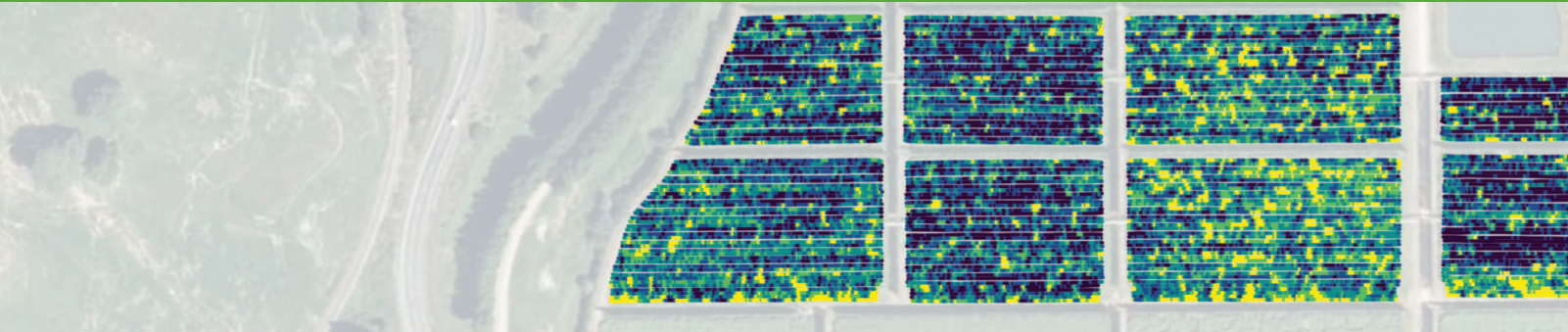
Bloom
(Oct-Nov)

- ◆ Inform chemical thinning strategies
- ◆ Identify floral variability
- ◆ First true indicator of crop load



Fruitlets
(Nov-Dec)

- ◆ Inform or assess fruitlet thinning strategies
- ◆ Identify and address variable areas
- ◆ Early crop estimate



OUR STORY

Fruition Horticulture Hawke's Bay has been supporting NZ Horticulture businesses for over 20 years. Built on a foundation of expertise and innovation, our mission has always been to improve orchard outcomes through smarter solutions.

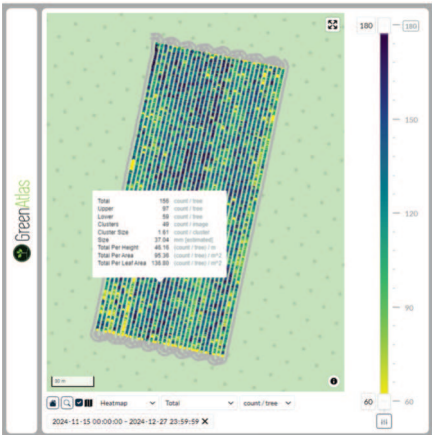
In 2020, this vision led us to partner with **Green Atlas**, a leader in orchard scanning technology. Backed by over a decade of world-class university research, Green Atlas combines **artificial intelligence, machine learning and machine vision** to deliver the **Cartographer**, a proven tool for accurate, repeatable results that help growers make better decisions, faster.

INTERACTIVE RESULTS VIA THE GREEN ATLAS VIEWER

Scan results are now delivered through the **Green Atlas Viewer** on the **Fruition Portal**, giving you a whole new level of insight and interactivity.

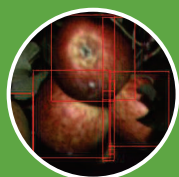
Key features include:

- ◆ **Adjustable scales** to highlight low and high cropping areas with precision
- ◆ **Customisable colour schemes** to match your visual preference
- ◆ **Full-orchard overview** with all blocks in a single, easy to compare view
- ◆ **Zoom functionality** to focus on specific areas of interest
- ◆ **Hover over to reveal data** for each individual image and data point collected



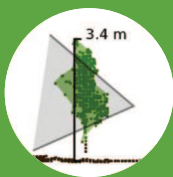
CALIBRATION FOR GREATER ACCURACY

Calibration allows us to account for occluded fruit and convert scan data into per tree units, giving you meaningful, actionable results. Factors such as **variety, tree age and tree and row spacing** influence the calibration. **Fruition recommends four hand-counted bays** for calibration across similar blocks within an orchard (regardless of block size). If hand counts are not possible, a **self-calibration factor** can be applied. While this method still delivers a reliable assessment of **variation within a block**, it offers slightly less absolute accuracy than the full calibrated approach.



Fruit (Jan-Harvest)

- ◆ Inform cosmetic thinning or confirm final loading
- ◆ Crop estimate count
- ◆ Help plan harvest logistics



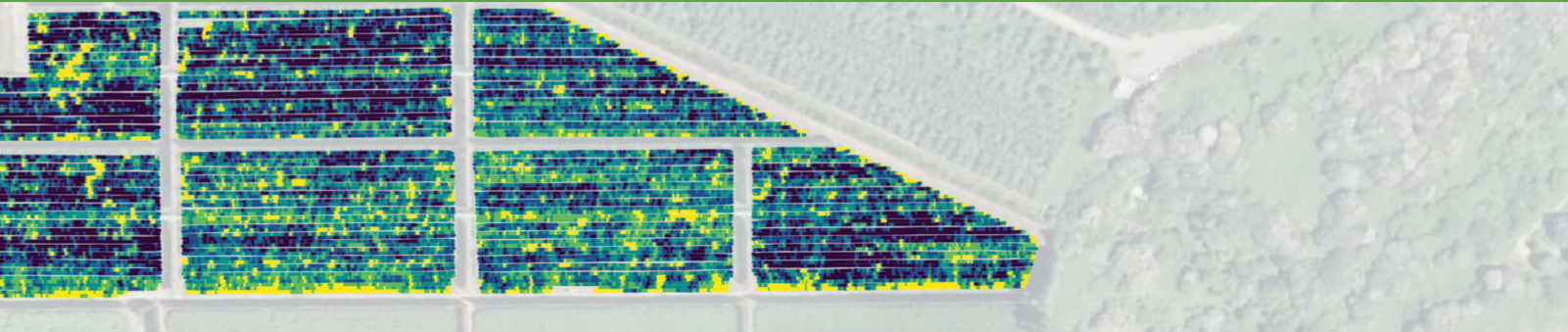
Canopy Geometry (Oct-Harvest)

- ◆ Canopy density and leaf area measurements
- ◆ Collected during all scans
- ◆ Further understand block variability
- ◆ Quantify productive canopy
- ◆ Inform summer pruning needs



Fruit Size (Nov Harvest)

- ◆ Provide diameter in mm
- ◆ Available from fruitlet size
- ◆ Project fruit size at harvest
- ◆ Understand size uniformity





Tagga bridges the gap between digital scan results and efficient labour management. Scans measure crop variation in the orchard but the challenge is how to make that data more practically useful. Tagga does that.

Using your selected threshold, Tagga marks your orchard per tree or per bay, showing exactly where attention is needed.

Instructions to staff are simple: **Act where there's a mark. Walk past where there isn't.**

This precision approach helps reduce over-thinning, improve crop consistency and save on labour by focusing only on the areas that matter.



Tagga: Smart, simple and effective orchard management

How it works:

Scan - We scan your orchard using the **Green Atlas Cartographer**

Report - Within 36 hours, you receive a comprehensive **report and heatmap**

Decide - You determine your **threshold for marking**

Spray - We return to your orchard and **spray the way**

2024 trials demonstrated impressive cost benefits. The biggest gains came from avoiding thinning in areas already close to target, which saved both valuable crop and labour cost. Results of 2024 trials available on request or via Fruition website.

For more information contact:

Alex Hoek

021 223 4218

alex@fruition.net.nz

Adam Fisher

021 918 036

adam.f@fruition.net.nz