# Orthomosaic

True colour from the multispectral drone's 20 MP camera. The grey crowns are visible before any analysis.




Not to scale in this sample (sheets are issued at 1:1,000 to 1:4,000)

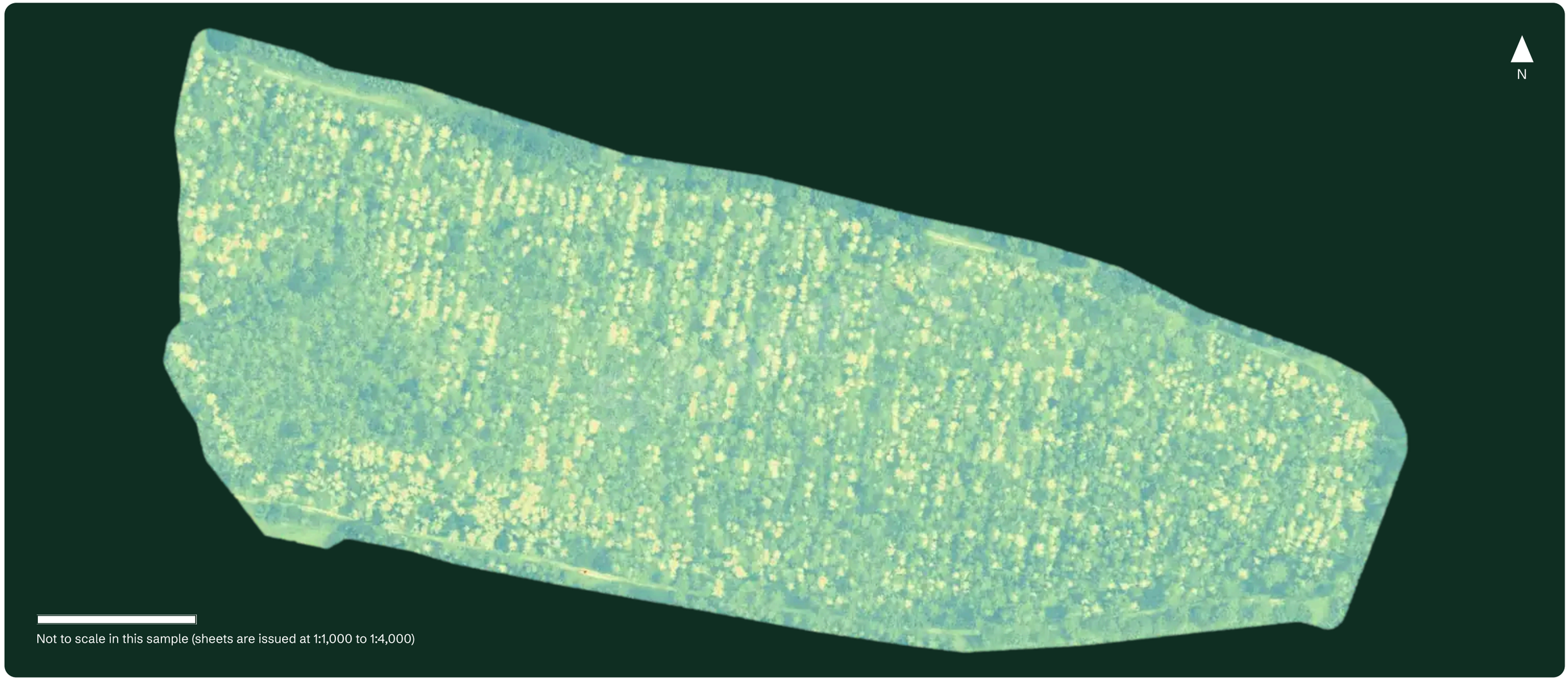
**Survey**
DJI Mavic 3 Enterprise Multispectral RTK · 20 MP RGB and four-band multispectral · RTK-positioned · flown June–July 2026 · processed in DJI Terra and QGIS by FMI

**Coordinate system**
Irish Transverse Mercator (ITM, EPSG:2157) · property boundary from the owner's records · compartment codes removed for this sample

**Forest Measurement Ireland Ltd**
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# GNDVI

Green Normalised Difference Vegetation Index — a measure of chlorophyll rather than colour, from the four-band multispectral sensor.




**GNDVI**

Index value classes as issued on the full-size sheet (legend omitted from this reduced sample)

**Survey**
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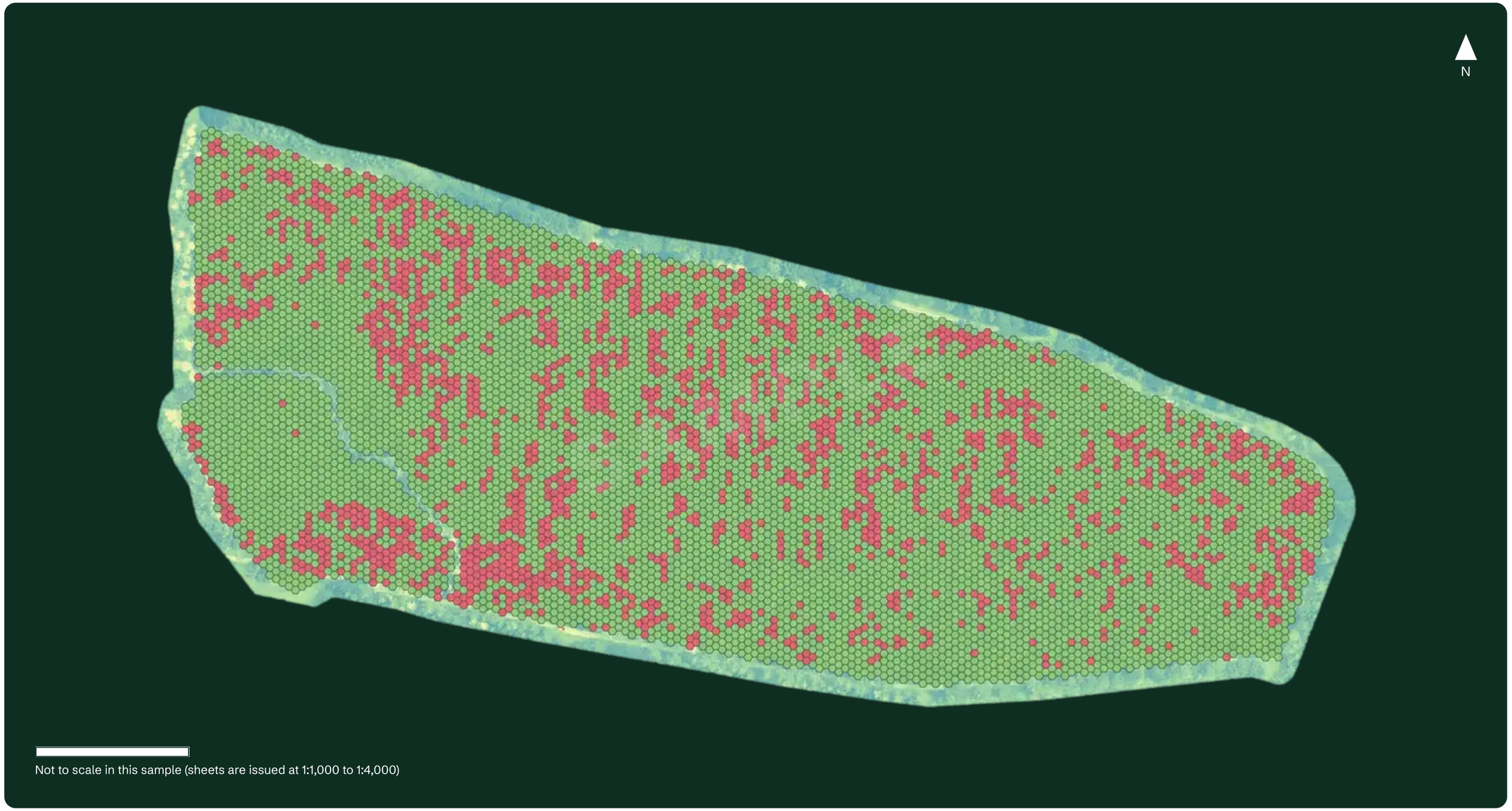
**Coordinate system**
Irish Transverse Mercator (ITM, EPSG:2157) · property boundary from the owner's records · compartment codes removed for this sample

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**Forest Measurement Ireland**
MULTISPECTRAL SURVEY REPORT · SAMPLE

# Tree health assessment

Every cell of the larch classified healthy or not healthy on a hexagonal grid, and summed up by subcompartment.




Not to scale in this sample (sheets are issued at 1:1,000 to 1:4,000)

**Survey**
DJI Mavic 3 Enterprise Multispectral RTK · 20 MP RGB and four-band multispectral · RTK-positioned · flown June–July 2026 · processed in DJI Terra and QGIS by FMI

**Coordinate system**
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**Class** Healthy · Not healthy · Dead (crown-level sheets)

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# Results and method

What accompanies the three map sheets for every property surveyed.

## Results by subcompartment

| Subcomp. | Area ha | Healthy ha | Not healthy ha | Healthy % | Not healthy % |
|---|---|---|---|---|---|
| 1 | 10.6 | 8.16 | 2.44 | 77 | 23 |
| 2 | 1.16 | 0.93 | 0.23 | 80 | 20 |
| **Total** | **11.76** | **9.09** | **2.67** | **77** | **23** |

Compartment codes removed. On properties assessed crown by crown, the table gives the number of trees in each class — dead, not healthy, healthy — rather than areas.

## What the manager gets

- Three A2 sheets per property in Irish Transverse Mercator — orthomosaic, GNDVI and tree health assessment — at 1:1,000 to 1:4,000 depending on the property.
- A results table for every subcompartment: area, the area or number of trees in each class, and the percentages.
- The GeoTIFF layers behind the sheets, ready for the owner's own GIS.

## Method

In June and July 2026 FMI flew nine larch properties with the multispectral drone to survey for Phytophthora. Each property was flown by FMI's own crew — a registered drone operator with the Irish Aviation Authority (Operator ID IAA-2021-28153) — under a documented risk assessment, within visual line of sight and RTK-corrected throughout.

The orthomosaic is true colour from the sensor's 20 MP camera. GNDVI (Green Normalised Difference Vegetation Index) is calculated from the green and near-infrared bands as a measure of chlorophyll rather than colour. The tree health assessment classifies every cell of the larch as healthy or not healthy on a hexagonal grid and sums the result by subcompartment; on some properties the assessment is made crown by crown in FMI's AI-assisted tree health assessment, with crowns marked white for dead, red for not healthy and green for healthy.

Results are cross-checked against the crop on the ground by a forester, and no dataset leaves the office until a second team member has signed it off. Every survey comes with the rendered maps and the processed datasets behind them; the data is the client's to keep.

## About this sample

This is an anonymised extract from a real survey: one stand's three sheets and its results table, with the property, owner and compartment codes removed. The map sheets in this sample are reduced in size and not to scale.

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