

What we do & why we do it

Nature's Data is a British agri-tech start-up harnessing data analytics and precision farming to help hemp farmers improve yield, profitability and sustainability, worldwide.

The founding idea? Using data to drive forward positive change in the global hemp industry and championing hemp as an environmental solution.

We work on both a farmer level and a global level.



Why Nature's Data

Nature's Data was borne out of our founder, Shaun's, desire to do something for the environment. First, he thought about planting 1000 trees. Once he began to learn about the incredible properties of hemp, he never looked back. Shaun combined his decades of expertise in software analytics and data acquisition with a desire to combat climate change. The result: Nature's Data.



How it works

We deploy a range of different sensors to the farm, which collect an array of metrics and data sets. These include soil moisture and temperature, NPK, plant health & size, climatic data and carbon capture. Our data-whizzes collate and correlate the data sets and transform them into dynamic dashboards (see examples on page 3). The sensors we use are always evolving - where we excel is turning data into knowledge.

The dashboards help farmers better understand and manage their crops, mitigate against risk and collect farm-level environmental data.

Real-time

- Alert Your soil is dry and no rain is forecast for the next 24 hrs: consider turning on irrigation
- Alert Nitrogen levels in plot c are low
- Alert Storm forecast in next 24 hrs: consider harvesting early
- Plant when the soil is at the optimum temperature for seeding

Long-term span

- □ Why did plot b do better than plot a?
- □ How hemp restores soil before and after
- □ Increases in follow-on crop yields if using hemp in a rotation
- Environmental data for science-driven lobbying & carbon credits

Upcoming dashboards

- □ Farmers across similar latitudes and climates can see which strains work best where
- Local crime data
- Seed and biomass market price information



Example dashboards



Soil moisture & temperature probes:

Soil NPK levels:

Do I need to adjust my soil?							
Latest Nitrogen Level High	Latest Phosphorus Level	Latest Potassium Level	Latest PH Level				
100 ppm 75 ppm 50 ppm 2 5 ppm 0 ppm 0 ppm 0 08/20 08/23 08/26 08/29 09/01 09/04 - Latest Nitrogen Level	60 ppm 40 ppm 0 ppm 0 6/20 06/23 06/26 06/29 09/01 09/04 - Latest Phosphorus Level	100 ppm 75 ppm 50 ppm 25 ppm 0 ppm 0 ppm 0 06/20 06/23 06/26 06/29 09/01 09/04 - Latest Potassium Level	10 8 6 4 2 08/28 08/23 08/26 08/29 09/01 09/04 - Latest PH Level				

Seed market information (dummy data):

 Market Information 					
Current Seed Price /Tonne		Current Biomass Price /Tonne			
Seller A	Seller B	Seller C	Buyer A	Buyer B	Buyer C
£59	£ 56	£58	£11(0 £103	3 £103
Seed Price /Kg		Biomass Price /Kg			
08/19 08/21 — Seller A — Seller B — Seller C	08/23 08/25 08/27 08/2	9 08/31 09/02 09/04	08/19 08/21 — Buyer A — Buyer B — Buyer C	08/23 08/25 08/27	08/29 08/31 09/02 09/04



Our global trials

To be able to add genuine value to the industry, we're running trials this year with hemp farmers in 12 countries, from Europe to Latin America, the US to Australia. Our goal: to find out which metrics matter.

We're building our platform to be open-source, and we hope to have farmers from all over the globe joining Nature's Data. If you want to find out more about what we're doing, or get involved, please get in touch!





Associations

European Industrial Hemp Association



Global Cannabis Network Collective



For more information, head over to our website: www.naturesdata.co.uk