LabGPT

AI OPERATING SYSTEM FOR FIELD BIOLOGY

Auditable field data for nature strategy and reporting

Verifiable records, measured at your sites.

01 THE PROBLEM

The uncertainty is in the field, not the laboratory

Companies file these reports because regulators mandate them and fine those who do not comply. The data behind them is still collected by hand, written down by hand, and carried to a laboratory by hand.



In contaminated soil, more than 90% of the error in a result comes from how the sample was taken, not from how it was analysed. One study measured sampling error at over 20 times the analytical error.[1,2]

That is why so much of this data cannot be reproduced. In a survey of 1,576 researchers, more than 50% could not reproduce their own results, and in ecology only 27% of published studies include the code needed to check them.[3,4]

Meanwhile the evidence requirements are rising.

EU SOIL MONITORING DIRECTIVE — IN FORCE DEC 2025

Soil health monitored against a common list of descriptors: organic carbon, erosion, compaction, contamination and soil biodiversity.

National law by December 2028. PFAS contaminant list within 18 months; public register of contaminated sites within ten years.[5]

ESRS E2, E3 AND E4 — REPORTING NOW

Pollution, water and biodiversity reported for each individual site.

Germany, since January 2026: fines to € 10 million or 5% of group turnover, plus director liability.[6]

REVISED ESRS — ADOPTED JUL 2026

Mandatory datapoints cut by over 60%.

Fewer datapoints does not mean weaker evidence. The ones that remain still have to be supported.[7]

THE SAME RECORD HAS A SECOND USE

Compliance sets the deadline. The evidence a filing needs is the evidence a nature strategy needs.

- **Baseline and restoration.** Measure a site before and after an intervention, and show the change is real.
- **Nature and biodiversity targets.** Commitments backed by measured site data rather than desktop estimates.
- **Change over time.** The same protocol every round, so movement reflects the site and not the contractor.
- **Natural capital.** Measured inputs for valuing the natural assets held in your custody.

>90%

of the error in a soil result comes from sampling, not from the laboratory[1]

<1%

of publicly reporting companies disclose their biodiversity impacts[8]

US$10.3bn

paid by 3M Company to settle PFAS claims from 11,000+ US public water systems, 2024[9]

02 THE SOLUTION

From mission plan to auditable report

LabGPT plans the campaign in software, collects the samples with autonomous drones, and returns results with the record of how they were produced.

01 Plan

Mission design, site selection, sampling protocol, airspace and constraint validation, and a 3D simulation of the flight. This part is live today at console.labgpt.com.

02 Collect

Autonomous sample collection across all terrains (soil, water, canopy). Coordinates, timestamp and custody transfer are written by the system at the moment of collection. Data documented digitally, machine-readable and verifiable.

03 Analyse

Environmental DNA assessment for biodiversity and species presence, PFAS monitoring under EPA Method 1633A, and heavy metals screening. All analysis runs at ISO/IEC 17025-accredited partner laboratories.[10]

04 Report

Results come back against the ESRS, the Taskforce on Nature-related Financial Disclosures (TNFD), Global Reporting Initiative (GRI) or Science Based Targets Network (SBTN) datapoint each one answers, at the resolution your filing needs. The full method-level record sits behind it if a regulator asks for a detailed audit.

WHAT IS AVAILABLE TODAY

AVAILABLE NOW

Mission planning & simulation

AI mission design, site selection, protocol grounding, airspace validation, 3D simulation and chain-of-custody design. Live at console.labgpt.com.

PILOT PHASE

Drone collection + partner-lab analysis

Autonomous sampling with analysis at accredited partner laboratories. Available to first pilot customers on completion of our current hardware deployment.

ROADMAP

Autonomous Micro-Lab on site

Solar-powered on-site unit running DNA assays without shipping samples, cutting biological results from days to hours. In development.

WHY IT HOLDS UP IN AN AUDIT

Assurance providers test whether a number traces back to a method and a measurement.

- **Same method, every round.** Sampling and preservation follow a documented protocol, and that protocol is filed with the result, so an assurance provider can confirm nothing changed between rounds.
- **Traceable to source.** Every result carries the coordinates, timestamp and custody chain it was collected under.
- **Two levels of detail.** Headline indicators for the filing itself, and the full method-level record underneath for a regulator who asks for one.

03 WHAT IT SAVES YOU

Lower programme cost, no staff on site, more data

Ten sites, four rounds a year, four points per site: 160 samples annually, which generates evidence on pollution, water and biodiversity conditions at each location. The laboratory charges the same either way. What changes is that none of your people go to site, and every round also returns site-wide mapping and sensing you were not collecting before.

	MANUAL PROGRAMME	WITH LABGPT
Field days on site, your staff	40	0
Field labour at € 850/day	€ 34,000	—
LabGPT programme fee	—	€ 26,000
Laboratory analysis	€ 56,000	€ 56,000
In-flight site data each round	Not collected	Included
Reporting turnaround	2–4 weeks	Days
Annual programme cost	**€ 90,000**	**€ 82,000**

€ 8,000
less a year

40 → 0
field days on site

Weeks → days
reporting turnaround

Included
site-wide mapping and sensing

Illustrative model from published European field-day rates and typical accredited-laboratory pricing, including LabGPT's own fee. Not a quotation. Laboratory analysis is passed through and costs the same either way. Turnaround is a design target; no pilot has yet completed.

WHY WE DO THIS

The global goal agreed under the Kunming-Montreal framework is to halt and reverse nature loss by 2030 against a 2020 baseline, and reach full recovery by 2050. Most organisations cannot say what condition their sites are in, so they cannot say whether it is improving. Every programme here starts with a baseline, because without one there is nothing to recover towards.[11]

04 CONTACT LABGPT

Start with one site

Book a 30-minute call. We will design and simulate a sampling mission for one of your sites, present it for your approval, and scope what a programme would cost.

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