

# Naturetech tools: Glencripesdale's decision-grade biodiversity data

RSPB Scotland in partnership with  
the Alliance for Scotland's  
Rainforest

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<https://finance.naturalcapitalscotland.com/contact-us/>







5°C



12/20/2022

09:46PM

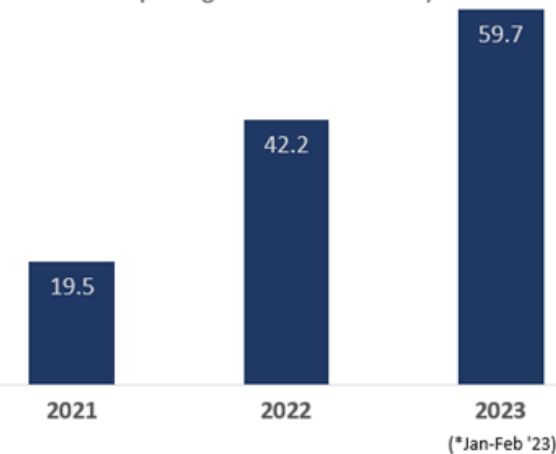
GCP02



**IoT nature tech – good  
for ground truthing**

**Decision-grade data?**

**Sharp increase in cyber attacks  
targeting IoT devices**  
(by average weekly attempts  
per organization 2021-2023\*)







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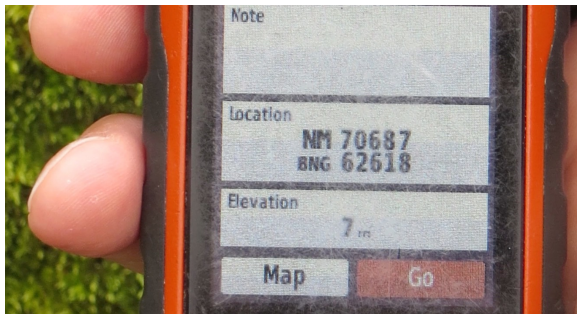
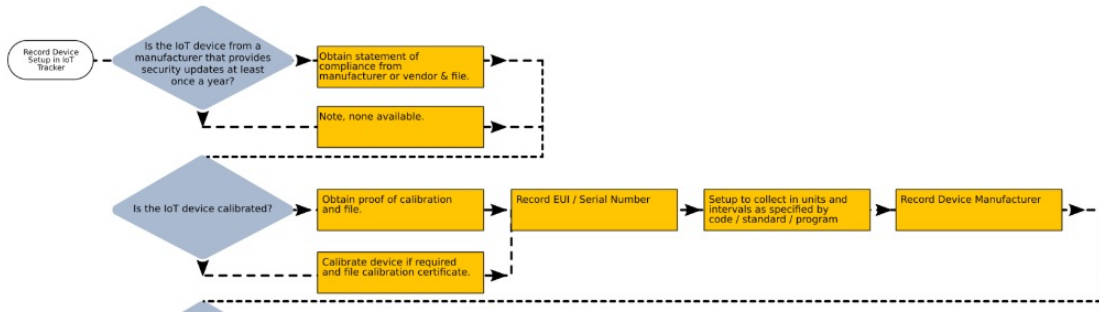


10/10/2022

08:27AM

GCP08





## Open standardised processes

- Set up
- Calibration
- Validation
- Authentication
- Security





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03/10/2023

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# Wildlife in Scotland's Rainforest



English (United Kingdom)

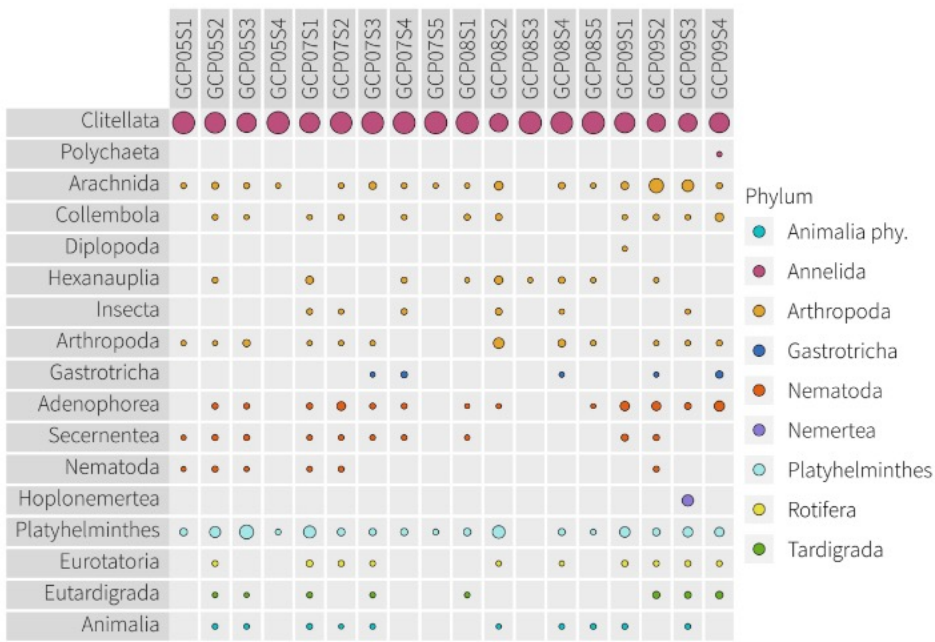
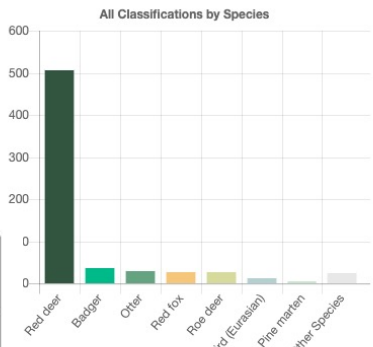
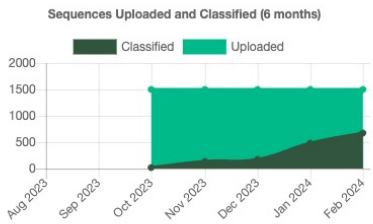
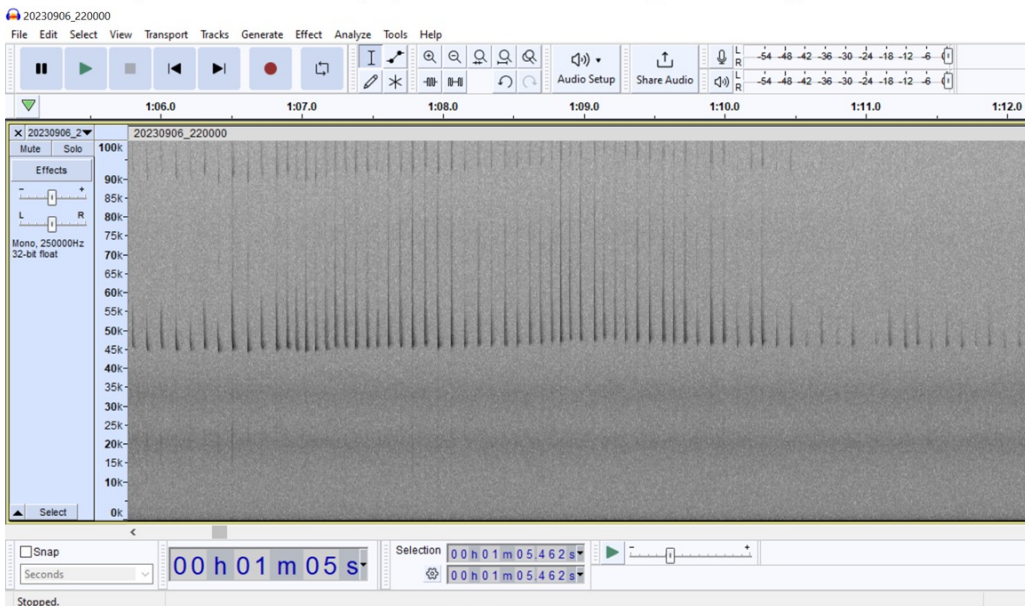
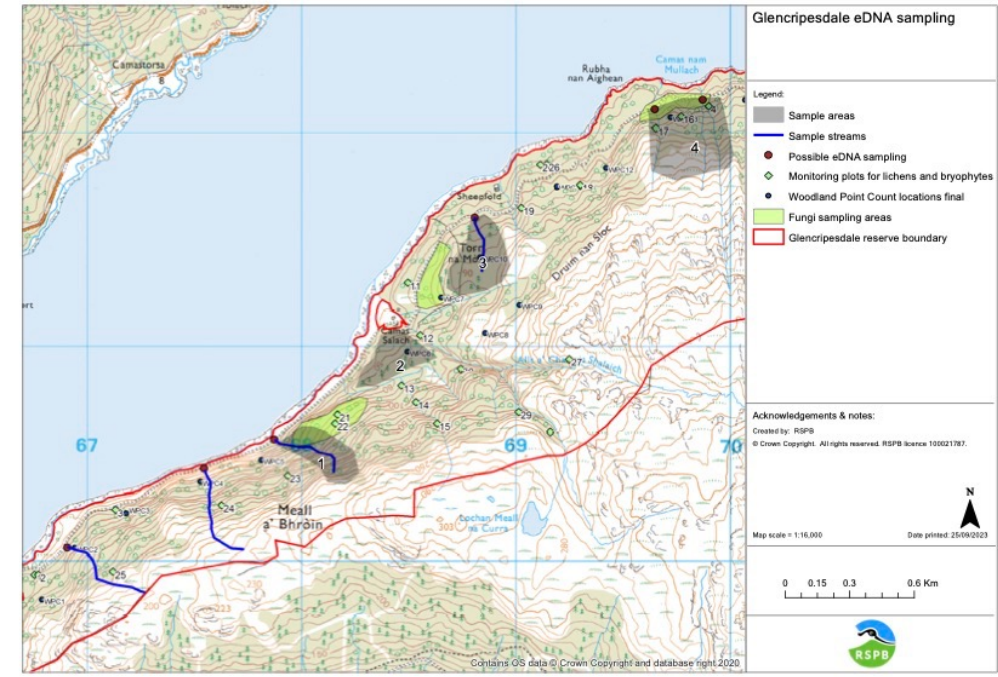


Figure 10: Soil Invertebrate results showing the presence of taxa across all samples, reprinted from NatureMetrics Report. The size of the bubble represents the proportion of DNA sequences within a sample, which indicates a stronger eDNA signal.





## Case Studies

Nature tech is emergent, but with it, improvements and impairments to nature can be measured with an integrity that can be trusted. Local communities of people, many of them resource-constrained, can steward nature together with inexpensive nature tech. With it, they have the capability to (digitally) measure, report and verify (dMRV) how they are preserving, managing, and restoring nature based solutions (NbS) – measuring value to create value. Nature tech can help mobilise investment because it provides transparency and connection – we can baseline the health of nature and then measure whether a human activity improves or worsens it.

You can't scale up NbS without engaging, consulting, and including the people who work in nature every day. dMRV brings accountability, fairness and integrity to NbS and also gives us data so that we can reward those who successfully improve the natural environment and those who do no harm.

We have [written-up three diverse case study examples of biodiversity projects in Scotland which use nature tech](#), including from the Royal Society for the Protection of Birds (RSPB)'s Glencripesdale Reserve, Highland Rewilding Ltd.'s Beldorney Estate, and Edinburgh Agroecology Co-op's Lauriston Farm. The report focuses on how each of these the projects have developed their business models, community engagement, baseline ecological data and biodiversity project planning. The report also highlights successes and challenges each of the projects have had in developing and running projects to improve biodiversity. Through these case studies, we aim to build our understanding of the business models, community engagement approaches, and data collection methods from both nature tech and traditional ecological approaches that can be used in biodiversity projects, and our understanding of what is needed to create high integrity data and methods to support investment in biodiversity projects. You can watch films about them all too.

- [Investing in data for nature-based projects: a case study from Lauriston Farm](#)
- [Decision grade data at RSPB Glencripesdale – a case study](#)

[Digital Devices & Data at Bunloit](#)



Decision Grade IoT

Decision-Grade Data

FAIR Data

Team

Standardised Processes

Deployment & Management

Device Setup

Calibration

In-Field Deployment

Authentication

Data Security

Data Accountability

Case Studies

Participate

Working group 1

Working group 2

Working group 3



Izzy Baker

Sunart Reserve, RSPB Scotland

Dr Hannah Rudman

Thriving Natural Capital Centre, SRUC

<https://vimeo.com/825026630>





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10/26/2022

04:44PM

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