AI annotation software can ensure compliance of the EU data protection regulation and improve work efficiency.

Examples from two European camera trap projects

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The **General Data Protection Regulation (GDPR)**

A comprehensive data protection law enacted by the **European Union (EU)** in **2018**.

It governs how organizations collect, process, store, and share **personal data of individuals** who are located **in the EU** or **European Economic Area (EEA)**, regardless of where the organization is based.

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Why is GDPR Important?
Empowers individuals to have more control over their data
Holds organizations accountable for how they handle sensitive information

When Does GDPR Apply?
Any organization operating within the **EU/EEA,**
Any organization outside the EU/EEA that processes the data of individuals within the EU/EEA

Find out more about GDPR here:

SCAN ME

GDPR regulations may influence camera trap projects:

1. Study Design

- Study area
- Time of day
- Seasonal impact

2. Aims and interests

- Human activity as factor of interest
- Distinguish between levels of human activity

  Adam et al. 2021 https://doi.org/10.3390/su131810287

3. Detection of illegal presence of humans

4. Impact annotation efficiency

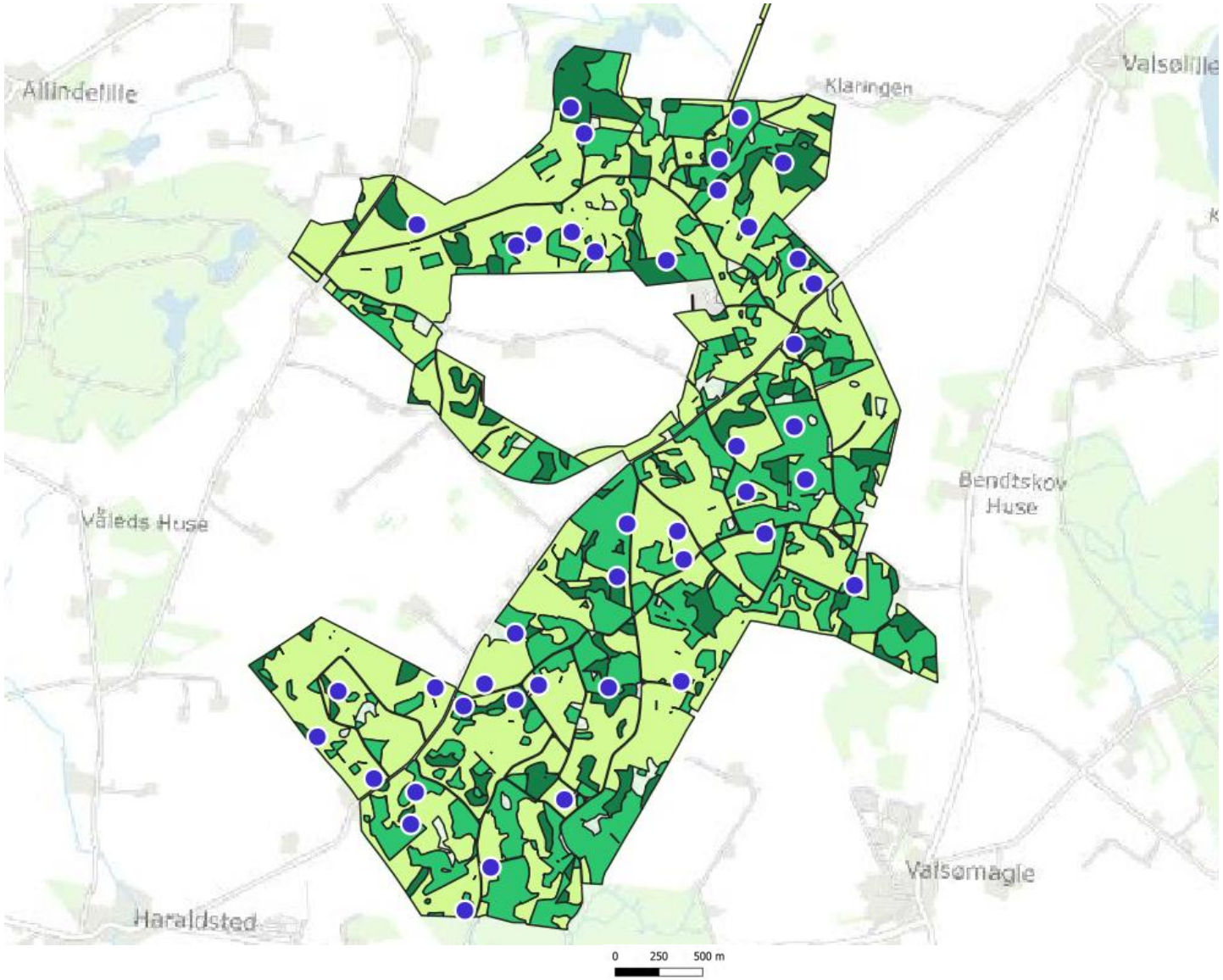
5. Data processing and storage

- Economy
- Security: Personal data must be kept private

  Reyserhove et al. 2023: https://doi.org/10.35035/doc-0qzp-2x37

6. Comparing studies?

Vesterskoven, Denmark: A camera trap survey impacted by GDPR



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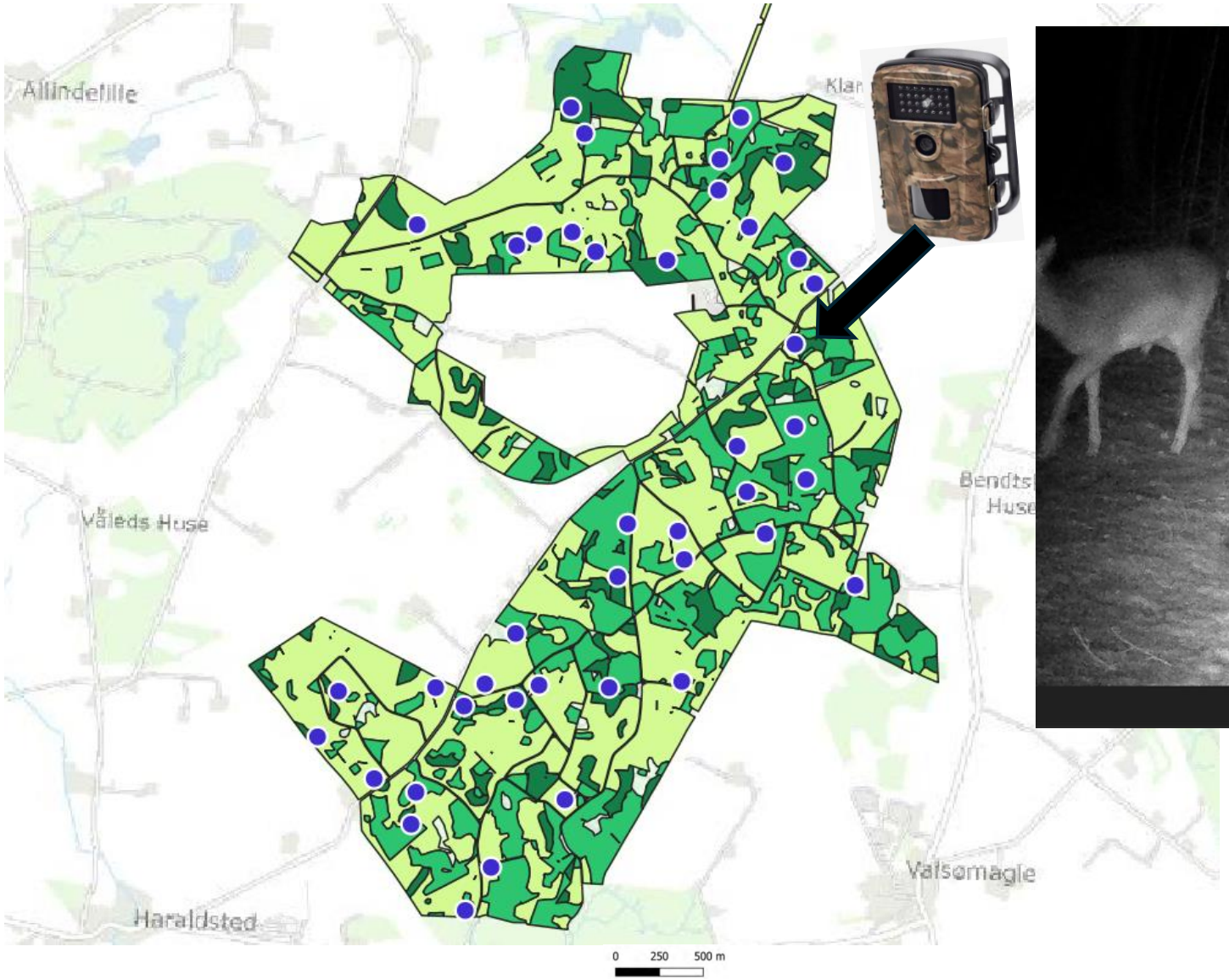
The benefits of making a mistake



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Testing the accuracy of AI annotation software

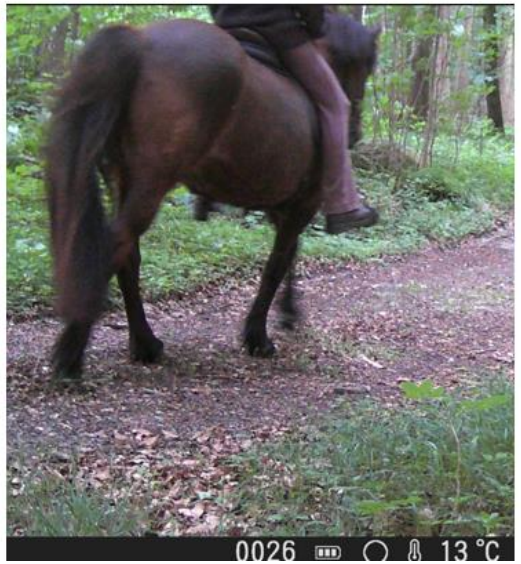
TrapTagger European classifier (V1.1.0)

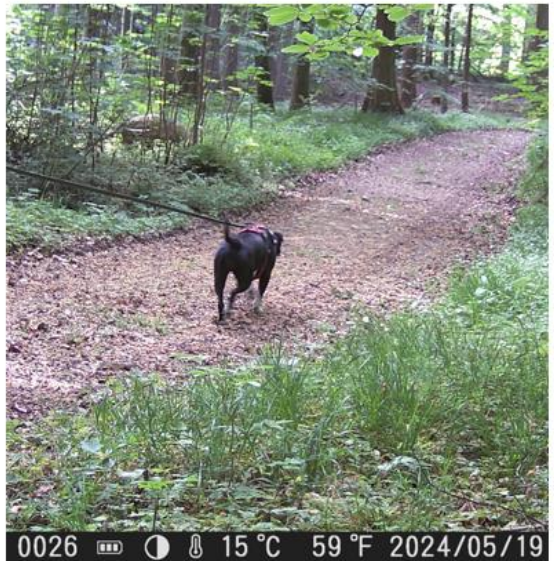
Table 1: Species statistic from test setup (5076 images)

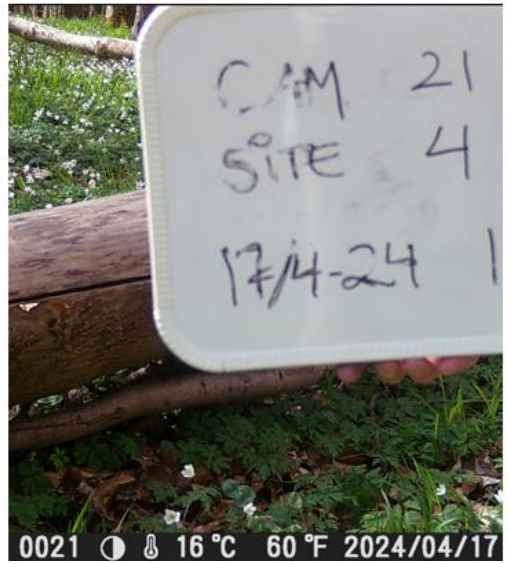
Species	Badger	Fallow deer	Red deer	Roe deer	Fox	Hare	Marten	Human
Precision (in %)	100	81,25	N/A	99.68	89.29	100	100	93.07

Table 2: Species statistic from Vesterskoven dataset (78,548 images)

		AI (auto classification)	
		Human	Other
Manual annotation	Human	1485	68
	Other	91	76904



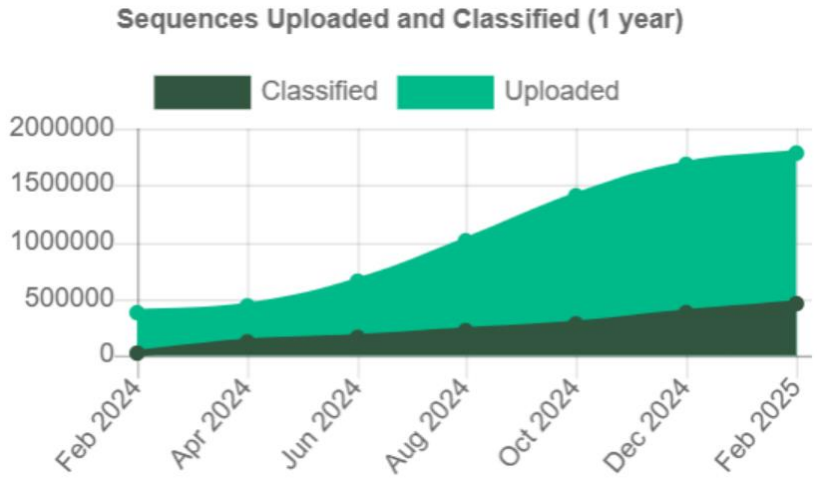




Using AI for effective and safe citizen science projects

The National Hedgehog Monitoring Programme – wildlife species annotated by AI and volunteers

Protecting personal data of humans **-** and ensuring that **volunteers are not exposed to offensive** or inappropriate **material**



Photos: Henrietta Pringle, NHMP2024, MammalWeb.org

The National Hedgehog Monitoring Programme is run by People's Trust for Endangered Species and The British Hedgehog Preservation Society, in partnership with Nottingham Trent University, Zoological Society of London, London Hogwatch, MammalWeb and Durham University, and co-funded by Natural England.

Take home messages

AI annotation software can **ensure compliance of GDPR** and improve work efficiency:

- Detect and **remove photos of humans**
- Limit the number of photos for manual annotation
- Free up time for (demanding) manual tasks
- Provide **secure platforms for storing photos**
- Ensuring that volunteers are not exposed to offensive or inappropriate material

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