THE EUROPEAN OBSERVATORY OF WILDLIFE

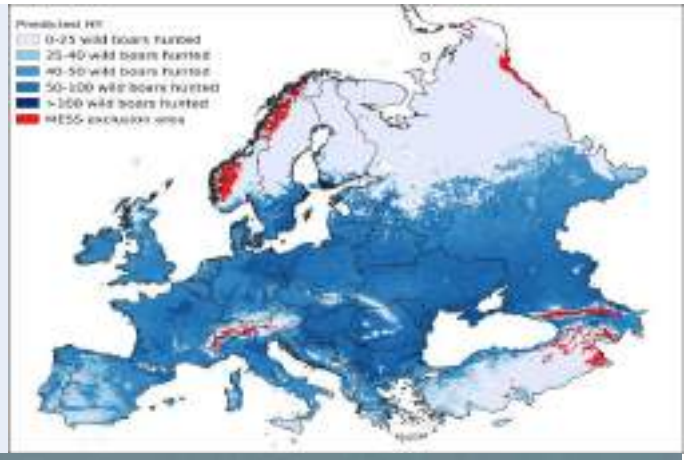
eow

european observatory of wildlife

Tancredi Guerrasio - UNISS

WHY THE EOW?

- To deal with the lack of comparable data on the geographical distribution and abundance of the wildlife hosts at European scale needed to perform **risk assessments for shared emergent diseases**



Objectives

To generate and provide information and unbiased trends on population abundance for those developing, adopting, implementing and evaluating enviromental policy in europe.

To provide sound, independet guidance on methods and protocols for those involved in implmenting wildlife monitoring, in close collaboration with European Institutions.

To develop a network alive for wildlife monitoring, incorporating different stakeholders, such as regional and national administrations, game, protected areas and research Institutions.

Supporting observation points, providing training and facilitating field design, data processing and analysis.

Objectives

- Focused on mammals but looking to integrate other taxa and ecological variables and integrated monitoring (wildlife diseases).
- To improve population abundance estimation protocols, calibrating methods, incorporating information technology and citizen science.
- Highlight areas and recommendations for action working, the inequalities existing in wildlife population monitoring over Europe.

I. Step by step.

1. Promoting networking applying harmonized wildlife population monitoring

Initial inclusion of different study areas representing all European countries

2. Improvement of the Observatory

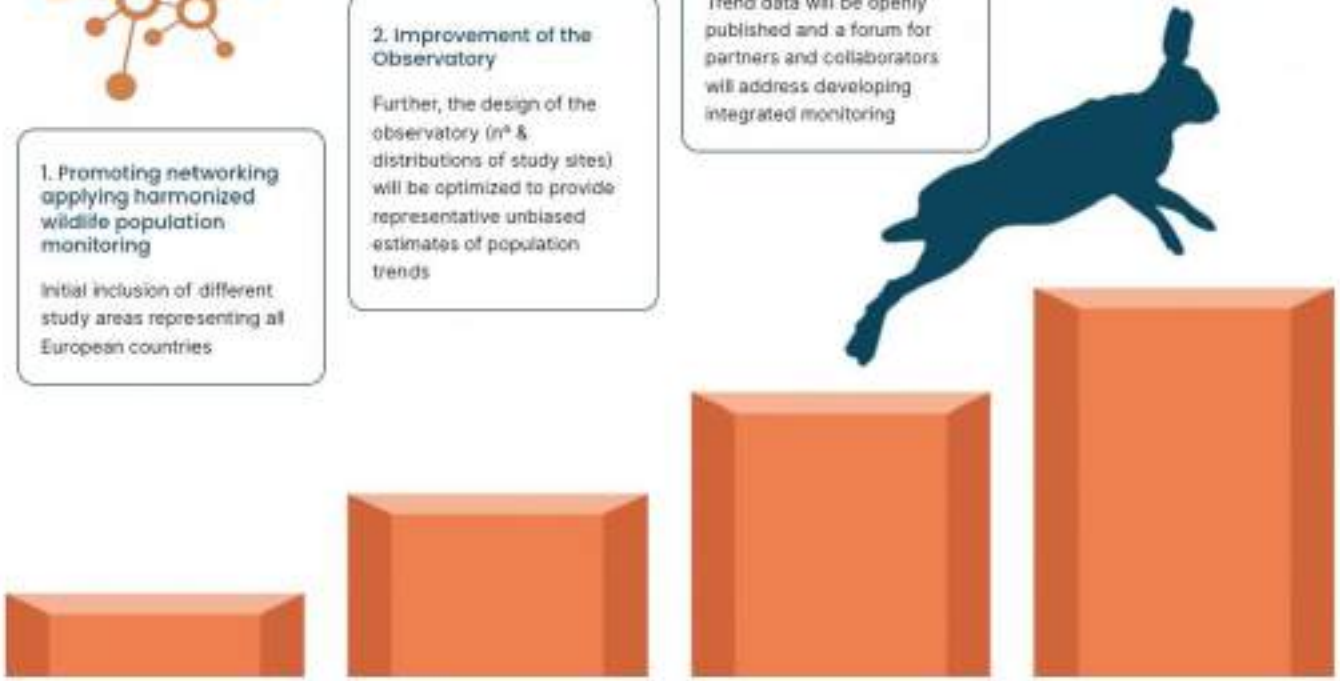
Further, the design of the observatory (*n*º & distributions of study sites) will be optimized to provide representative unbiased estimates of population trends

3. Trend data for wildlife (terrestrial mammals)

Trend data will be openly published and a forum for partners and collaborators will address developing integrated monitoring

4. Integrated Monitoring

Wildlife monitoring integrates different taxa and ecological variables (integrated monitoring) such as wildlife diseases



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A project by:
ENETWILD Funded by EFSA

- **Demonstrative: harmonized approach, sharing data and results**
- **Field laboratory**
- **Training and transfer**

II. Wildlife Population monitoring for SCIENCE-management

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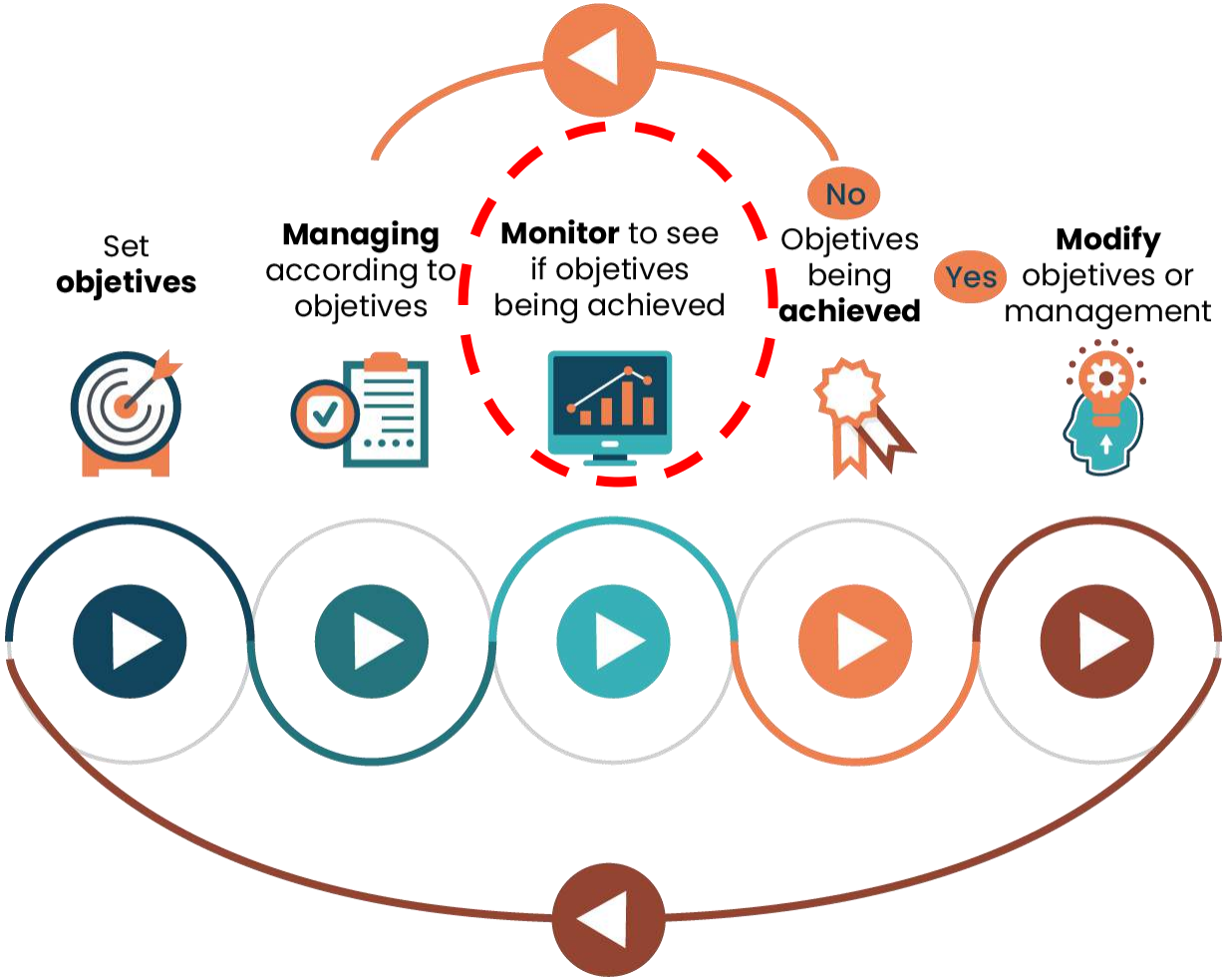

III. INTERNATIONAL SCIENTIFIC-TECHNICAL STANDARDS allowing comparisons and joint use of data

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A network of observation points to harmoniously monitor wildlife at European scale

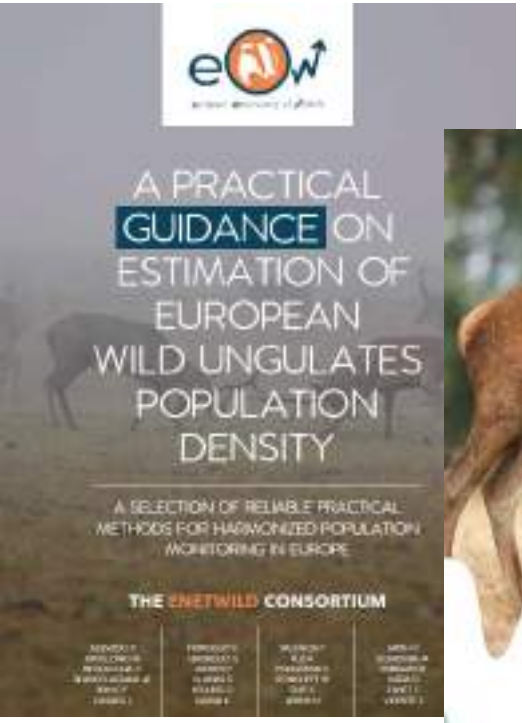
IV. A collaborative approach

A collaborative approach

- The **EOW** is open to professionals, researchers, administrations, NGOs, etc. who wish to contribute by providing at least one observation point in Europe

The EOW provides collaborators with:

- Training on the estimation of wildlife population density
- Protocols for density calculation (multi-species, multi-method: phototrapping)
- Ongoing support: study design, field implementation, data processing and analysis
- ITs & artificial intelligence for phototrapping density, available in summer 2022!
- Participation in work networks, conferences, webinars, publications



https://wildlifeobservatory.org/

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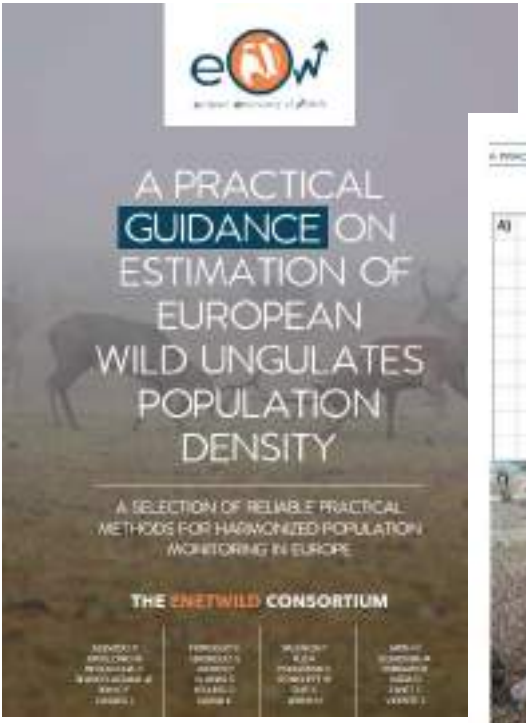
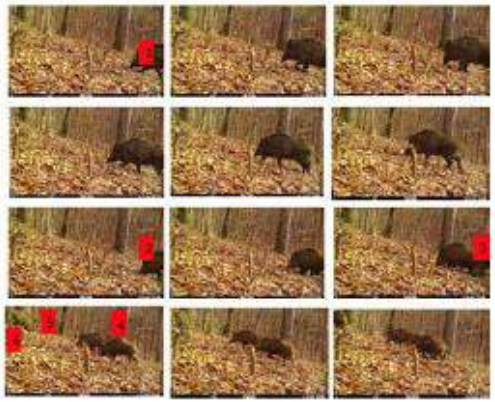
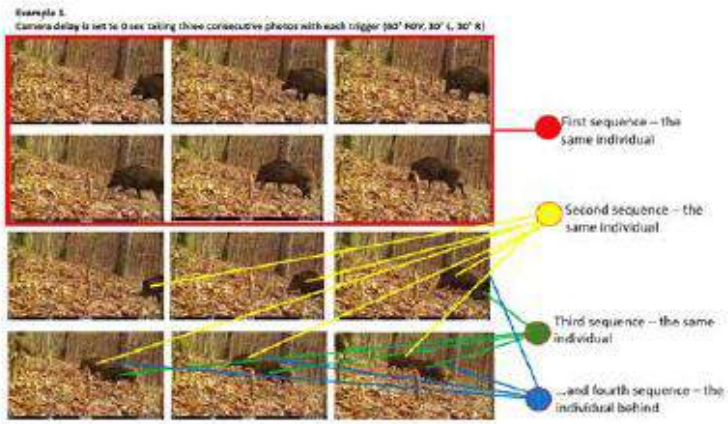
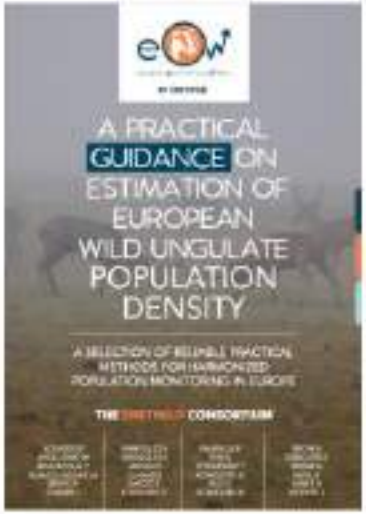








A practical guidance on estimation of European wild ungulate population density

Read

Camera trapping protocol for wild boar density estimation

Read

Guides for carnivores, wild ruminants and wild boar density and abundance estimation

Read

Cards on density estimation methods

Methods for wild ungulate estimation

Direct Methods

1. Distance sampling on transects with thermographic cameras or spotlighting, and point transect
2. Vantage point counts
3. Block counts
4. Aerial counts
5. Drive counts
6. Capture-Mark-Recapture (CMR)
7. Camera trapping (CT) without individual recognition

Indirect Methods

1. Pellet counts
2. DNA: Genetic analyses to determine population size or density

Data collection: training

Report of the first annual general meeting of ENETWILD

Report of the ENETWILD workshop: "Harmonizing wild boar monitoring in North Eastern Europe: Progress meeting of the ENETWILD consortium"

Białowieża, Poland 13-14th May 2019

Report of the ENETWILD workshop on wild boar monitoring in South Eastern Europe

Report of the ENETWILD workshop: "Harmonizing wild boar monitoring in South Eastern Europe: Progress meeting of the ENETWILD consortium"

Senj, Croatia 17-18th September 2019

- Reinforced the network of international collaborators from East Europe which are willing to share expertise with ENETWILD and provide reliable data on wildlife density, abundance and distribution

- Interest in expanding collaboration to other species (carnivores and ungulates) & citizen science

Data collection (density): development and transfer of practical IT tools

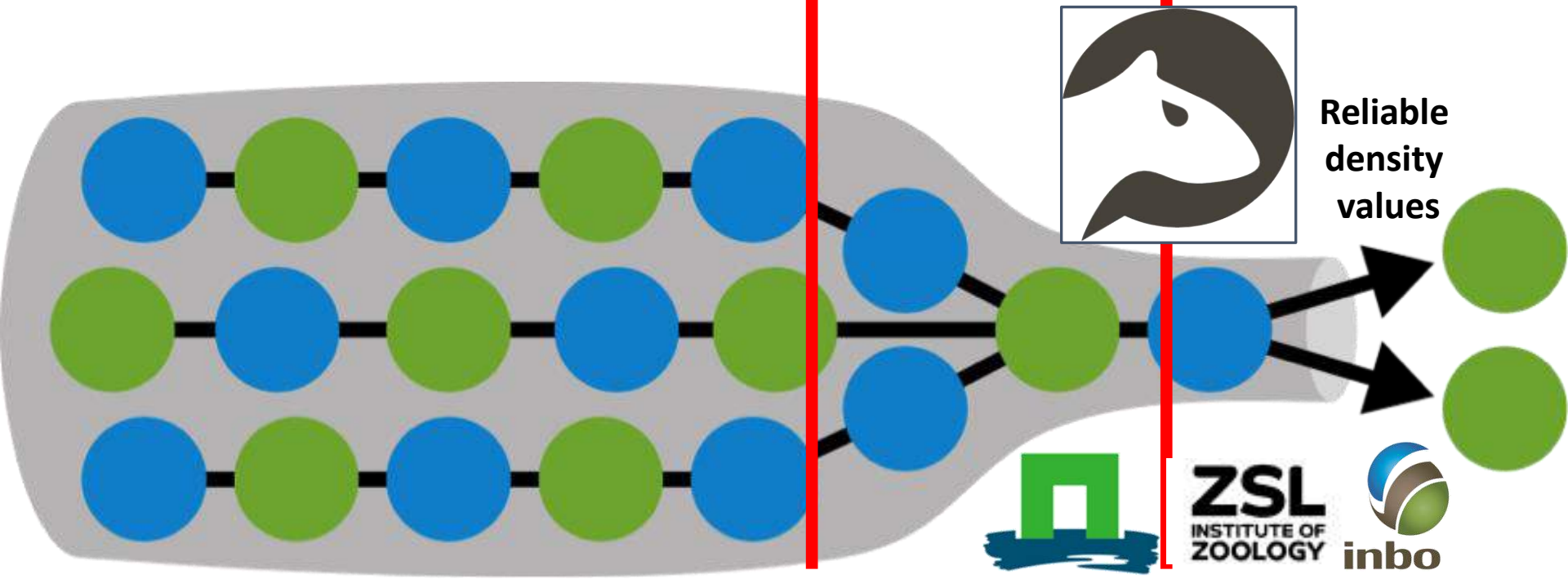
Field work

AI: authomatic Identification spp & other attributes

Data processing

Friendly online interface

Data analysis



Implementation of the protocol

- CTs deployed for a minimum of 2 months July-Sep 22
- Field protocol based on ENETWILD guidance: min. 12 CTs 2000-4000ha.

The criteria to select the study sites

- Intensive feeding not provided (occasional feeding or baiting for hunting not problem)
- Hunting statistics recorded by event: nº animals shot, sighted and surface beaten

Data processing and density estimation

- Our goal is to make participants independent in processing and calculating density
- All images will be processed in *AGOUTI* app, where a specific project will be created for each study area

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A project by:

ENETWILD

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ENETWILD

THANK YOU!!

@enetwild

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Vlaanderen

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OFB

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FLI

ZSL INSTITUTE OF ZOOLOGY

Animal & Plant Health Agency

PIWet

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