

Strengthening the links between arenas

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The three 'Arenas'

- **Analysis**

- labs, ecotoxicologists

- **Collections**

- NHMs, ESBs, other collections

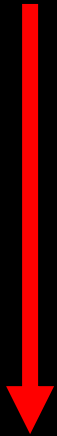
- **Field**

- field ornithologists/ecologists, raptor conservationists





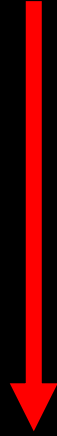
Analysis Arena



Laboratory
Ecotoxicology
Veterinary sciences



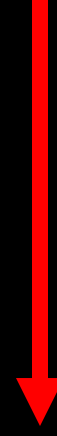
Collections Arena



Museum collections
Taxonomy
Historical studies

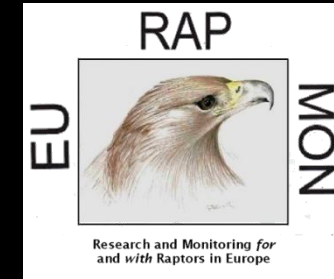


Field Arena



Fieldwork
Ornithology, ecology
Raptor conservation

Specific Aims of Arenas



2010-2015



2017-2022



COST-ACTION ERBFacility NETWORK

ERBFacility Executive Committee
group of people coordinating a future biomonitoring scheme

Specific guidelines of the biomonitoring scheme
- focal species
- sample type
- sampling effort
- sampling protocols

GENERAL GUIDANCE
Sampling and contextual data protocols; Constraints and solutions; Recruitment and training of volunteers

SPECIFIC GUIDANCE
Urban falcons, vultures, Raptors in nest boxes, etc.

Data analysis and interpretation

Results from Ecotoxicological analysis

ANALYTICAL LABS

Feedback of results

CONTEXTUAL DATA

NATIONAL COORDINATOR

SAMPLES

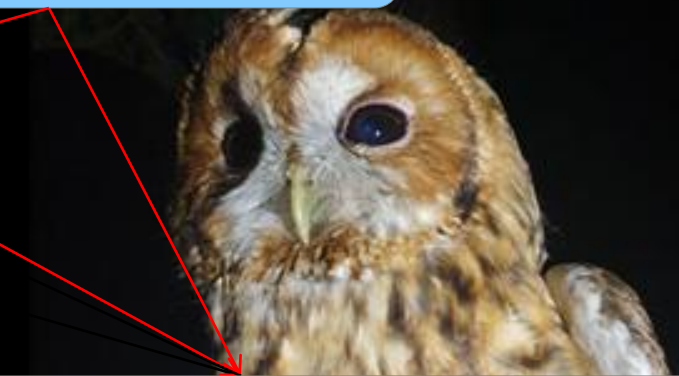
Feedback of results

GENERAL AND SPECIFIC GUIDELINES
sample type, species, effort, sites, contextual data, sampling material, etc.

SAMPLES

COLLECTIONS (NHMs, ESBs)

FIELD WORKING INSTITUTIONS/PEOPLE



Expected Arenas Outputs in ERBF

COMMON

Analysis of samples from selected tissues for selected contaminants

Analysis Arena

Regular collection/storage of selected samples and their provision to the labs with specimen contextual data

Collections Arena

Active and passive field collection of samples and monitoring of population contextual data for contaminant interpretations

Field Arena

SPECIFIC (longer termed)

Development of analytics for new emerging contaminants (& diseases) in connection to human and environmental health

Long-term preservation of different type samples by building storage facilities for continental based specimen banks and scientific collections for retrospective analyses

Development of continental wide monitoring scheme for key contextual data that would serve contaminant biomonitoring, raptor conservation and research



Sharing samples, data and skills

**Analysis
Arena**

ANALYSIS

**Collections
Arena**

LONG-TERM STORAGE

**Field
Arena**

SOURCE

SAMPLES FLOW



INTERPRETATION

LEGACY

CONSERVATION

DATA FLOW

**CORRECT
SAMPLES**

**VALUED
SPECIMENS**

**SAMPLING
CONSTRAINTS**

SKILLS EXCHANGE

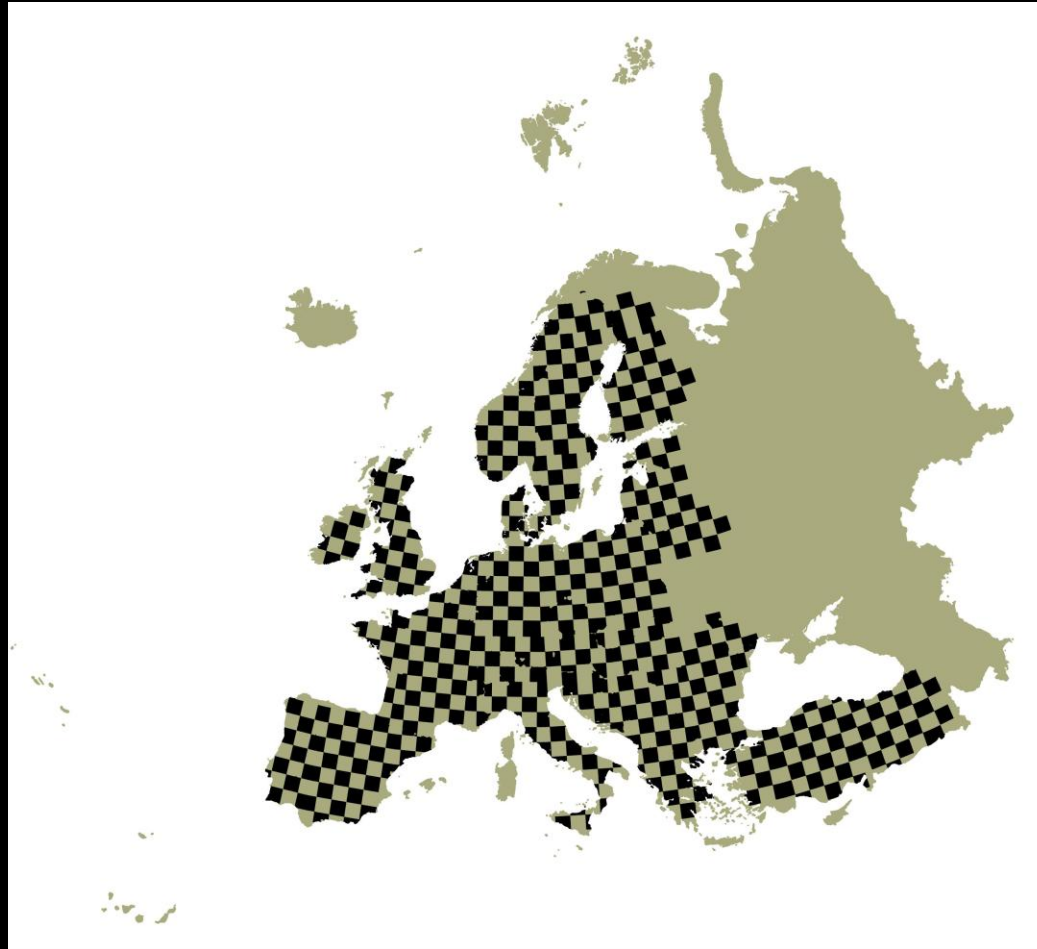


Proof of Concept

Life APEX
(with assistance of
ERBFacility)

Common Buzzard
(*Buteo buteo*)

Multitarget
contaminant
screening



ERBFacility

Tawny Owl
(*Strix aluco*)

- Metals (Hg, Pb)
- Second generation anti-coagulant rodenticides



Demonstrations of collaborative work

Showing the value of ecotoxicological studies to raptor conservationists



Dr Silvia Espín (WG4)
Dr Pablo Sánchez Virosta (WG4; ERBF coordinator)

The value of contextual data to contaminant studies – Tawny Owl proof of concept example



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