

A photograph of a bird of prey, possibly an osprey, in flight over a field of tall, golden-brown grass. The bird is centered in the upper half of the frame, with its wings spread wide. The background is a clear blue sky with some distant, blurred hills or structures. The overall scene is bright and natural.

ERB Facility

Guy Duke

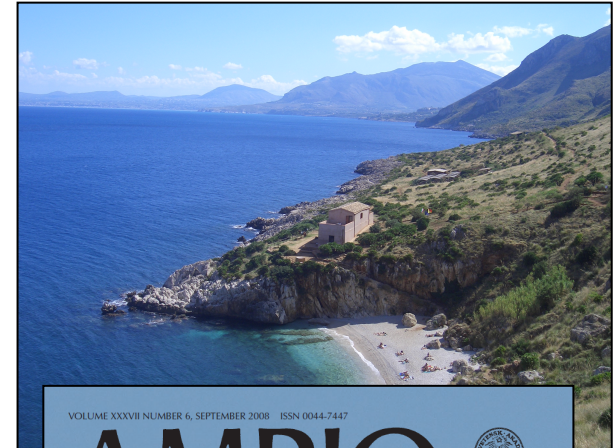
Candidate Chair

1st Management Committee meeting

Brussels, 17 October 2017

A little history

- Workshop, Scopello, Sicily 2006
- Special Issue Ambio 2007
- EURAPMON proposals 2007/08
- EURAPMON 2010-15 (ESF, c.€500k)
 - Network – ecotoxicologists, ornithologists
 - Inventory – raptor monitoring in Europe
 - Reviews – monitoring for, monitoring with raptors
 - Papers – e.g. what samples types to use
 - Protocol – contaminant monitoring with raptors
 - *Acrocephalus* 2017
- ERBFacility proposals Feb & Dec 2016
- ERBFacility 2017-21 (COST, c.€600k)



The challenge

- Environmental contaminants:
€ multi-bn costs to human and wildlife health
- EU objective (7EAP) - a non-toxic environment
- EU chemicals regulations – assess risk, impose risk mitigation measures (restrict/ban)
- Need biomonitoring data to:
 - enhance chemical risk assessment
 - enhance assessment of effectiveness of regulations
 - provide early warning of emerging contaminant problems



Why 'ERBFacility'

- 'Facility' (from Latin *facilis* – 'easy')
 - not an infrastructure, but a 'provision' or 'package' of key elements
- 3 key elements:
 - European Raptor **Monitoring Scheme** (ERBioMS)
 - *Distributed* European Raptor **Specimen Bank** (ERSpeB)
 - European Raptor **Sampling Programme** (ERSamp)



The goal

- Underpin generation and use of raptor biomonitoring for regulatory applications
- Use raptors as sentinel species to answer:
 1. What are the environmental risks of specific chemicals?
 2. Are chemicals regs effective in reducing environmental exposure to contaminants?
 3. Are there emerging contaminant problems requiring remedial action?
- Thereby:
 - contribute to a non-toxic environment
 - Reduce contaminant toll on human and wildlife health

The three 'arenas'

- Analysis arena – labs, ecotoxicologists
- Collections arena – NHMs, ESBs, other collections
- Field arena – field ornithologists/ecologists, raptor conservationists

Research Coordination Objectives

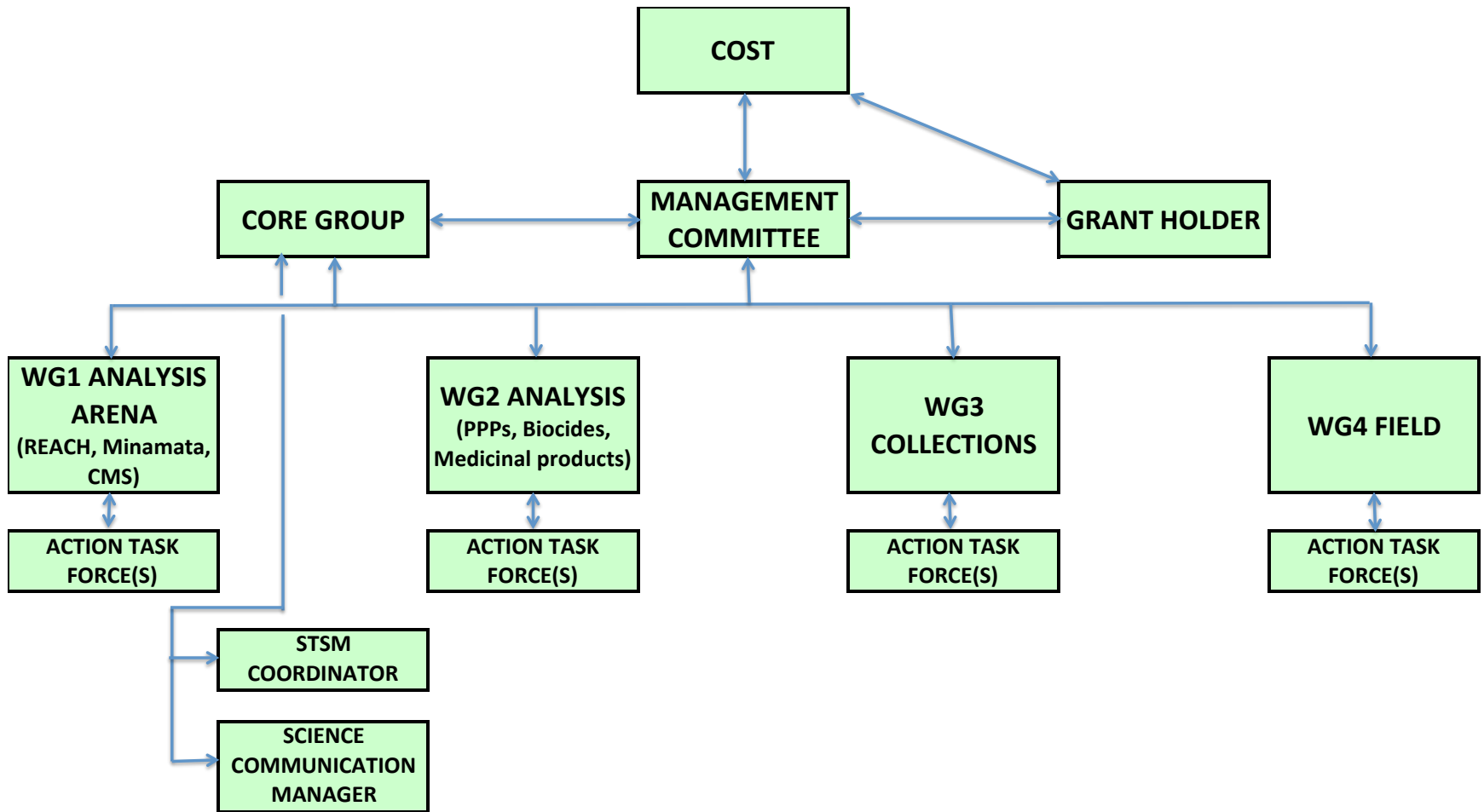
- R1 – Assess current capacities for pan-European raptor biomonitoring, develop a framework for ERBioMS
- R2 – develop a framework for a distributed ERSpeB
- R3 – Develop a framework, standards and protocols for a ERSamP



Capacity Building Objectives

- **C1 - Analysis arena**
 - Collaborative work on ERBioMS
 - Piloting joint assessment and reporting
 - Developing guidance on integrating reports with regulatory assessments
- **C2 - Collections arena**
 - Collaborative work on ERSpeB
 - Constructing meta-database of samples/data
 - Stimulating expansion of raptor collections
- **C3 - Field arena**
 - Collaborative work on ERSamP
 - Stimulating/harmonising collection of raptor samples and contextual data
 - Developing and field-testing sampling framework, standards and protocols

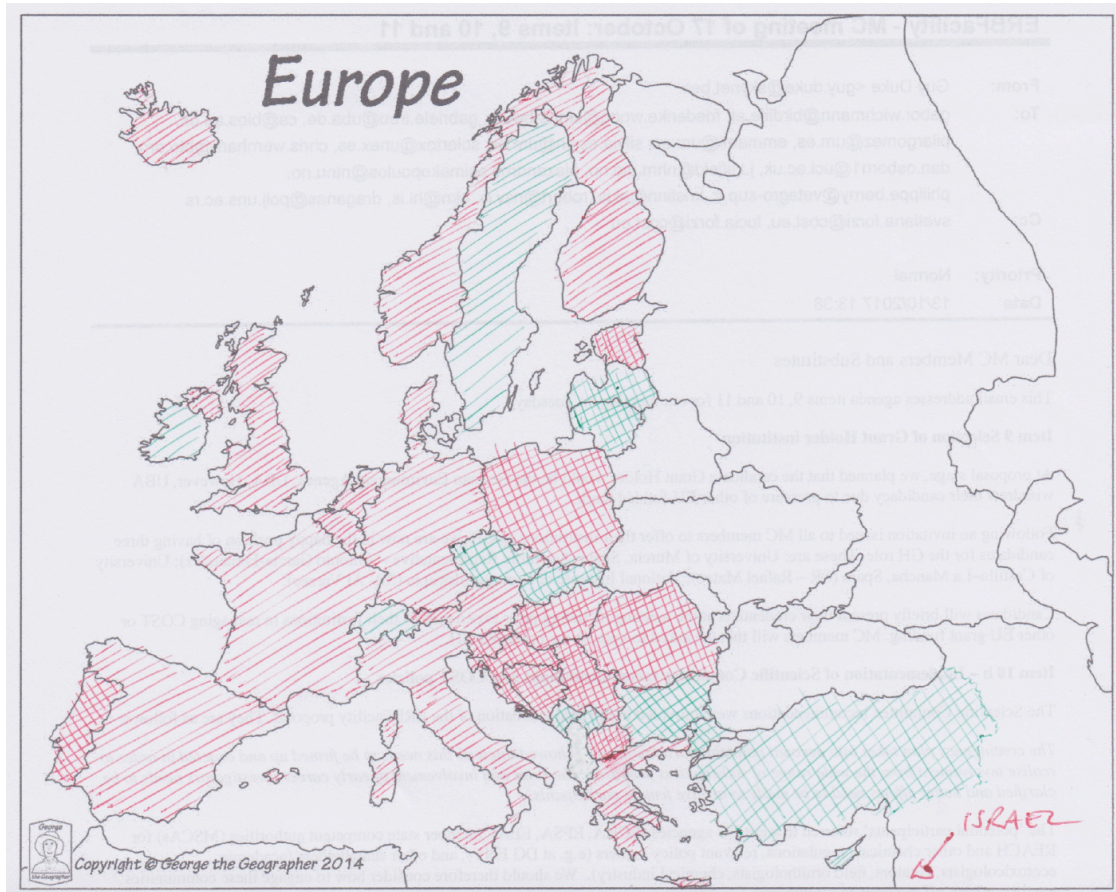
MANAGEMENT STRUCTURE



THE NETWORK

- 25 Parties - more expected to join
- 40 MC members
- IPC secondary proposers (US)

Red = ERB Facility Party
Green = COST country not yet a Party
(cross-hatch = ITC)



COST policies

- Geographical coverage/ICT countries
 - 25 of 37 COST countries
 - 10 of 25 Parties ICT (40%)
- Gender balance
 - Only 9 of 35 Members female
 - 2 of 4 candidate WG Leads female
- Early Career Investigators
 - ? How many MC members <8 years post PhD?

Relations to existing efforts

- [EURAPMON](#) – monitoring for and with raptors
- [HBM4EU](#) – human biomonitoring
- [NORMAN](#) – monitoring of emerging substances
- [IPChem](#) – European platform for chemical monitoring

Main deliverables

- **WGs 1 & 2**
 - ERBioMS technical specs
 - Papers – lab analyses capacities, ERBioMS framework
 - Pilot reports – selected substances
 - Proof of concept, guidance for integration with regulatory processes
- **WG3**
 - ERSpeB technical specs
 - Meta-database of samples & linked data
 - Guidance – use of collections for contaminant monitoring
 - Papers – collections/constraints, ERSpeB framework
- **WG4**
 - ERSamP technical specs
 - Best practice guidance, protocols for sampling
 - Guidance – volunteer recruitment
 - Reports – proof of concept, network of collaborating organisations

EXPECTED IMPACT

- Analysis arena
 - European capability for pan-European assessment of contaminant exposure
 - Pan-European consensus on priority species/samples
 - Clarity on integration of these assessments with regulatory processes
- Collections arena
 - New distributed ERSpeB
 - Enhance access to samples and related data
- Field arena
 - New European approach to collection of samples
 - Enhance sampling capabilities

Dissemination/exploitation

- Dissemination and Exploitation Plan
- Dissemination and communication tools:
 - Website
 - Social media
 - Publications – frameworks, proof of concept reports, tech specs, guidance, protocols
 - High impact papers
 - Media articles
- Exploitation opportunities

PERIOD 1 MILESTONES & DELIVERABLES

(Period 1 & beyond to m12)

- WG1
 - M1.1 – WG1 Workplan [m6]
 - M1.2 – STSM1: ability to conduct pan-European assessment for priority contaminants (m10)
- WG2
 - M2.1 – WG2 Workplan (m6)
 - M2.2 – STSM2: ability to conduct pan-European assessment for PPPs, biocides & medicinal products (m10)
- WG3
 - M3.1 – WG3 Workplan (m6)
 - M3.2 - STSM5: consideration for development of ERSpeB framework (m9)
- WG4
 - M4.1 – WG4 Workplan (m6), scoping of framework
 - M4.2 – STSM8: Questionnaire on constraints to data gathering
 - M4.3 – M/WS2: Development of ERSamP framework: pan-European review of field protocols and monitoring results for selected species