What the EURAPMON inventory tells us about panEuropean raptor monitoring capacity

Al Vrezec, Maja Derlink, Chris Wernham, Irena Bertoncelj, András Kovács, Pertti Saurola, Guy Duke, Paola Movalli

NATIONAL INSTITUTE OF BIOLOGY

BTO Looking out for birds

LUOMUS FINNISH MUSEUM OF NATURAL HISTORY

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- **What is EURAPMON?**

EURAPMON

Research & monitoring *for* and *with* raptors in Europe

2010 - 2015

www.eurapmon.net

EU RAP MON

Research and Monitoring *for* and *with* Raptors in Europe

EUROPEAN SCIENCE FOUNDATION

EURAPMON raptor monitoring inventory

1. Raptor contaminant monitoring inventory (*with* raptors)

Environment International 67 (2014) 12–21

Contents lists available at ScienceDirect

Environment International

journal homepage: www.elsevier.com/locate/envint

An overview of existing raptor contaminant monitoring activities in Europe

P. Gómez-Ramírez [a,*], R.F. Shore [b], N.W. van den Brink [c], B. van Hattum [d], J.O. Bustnes [e], G. Duke [f], C. Fritsch [g], A.J. García-Fernández [a], B.O. Helander [h], V. Jaspers [i,j], O. Krone [k], E. Martínez-López [a], R. Mateo [l], P. Movalli [d], C. Sonne [m]

2. Raptor population monitoring inventory (*for* raptors)

Acrocephalus 33 (154/155): 145–157, 2012
10.2478/v10100-012-0003-y

Overview of raptor monitoring activities in Europe

Pregled monitoringa ptic rop

Al Vrezec[1], Guy Duke[2], András K
Movalli[7] & Irena Bertoncelj[1]

BIRD STUDY, 2018
https://doi.org/10.1080/00063657.2018.1447546

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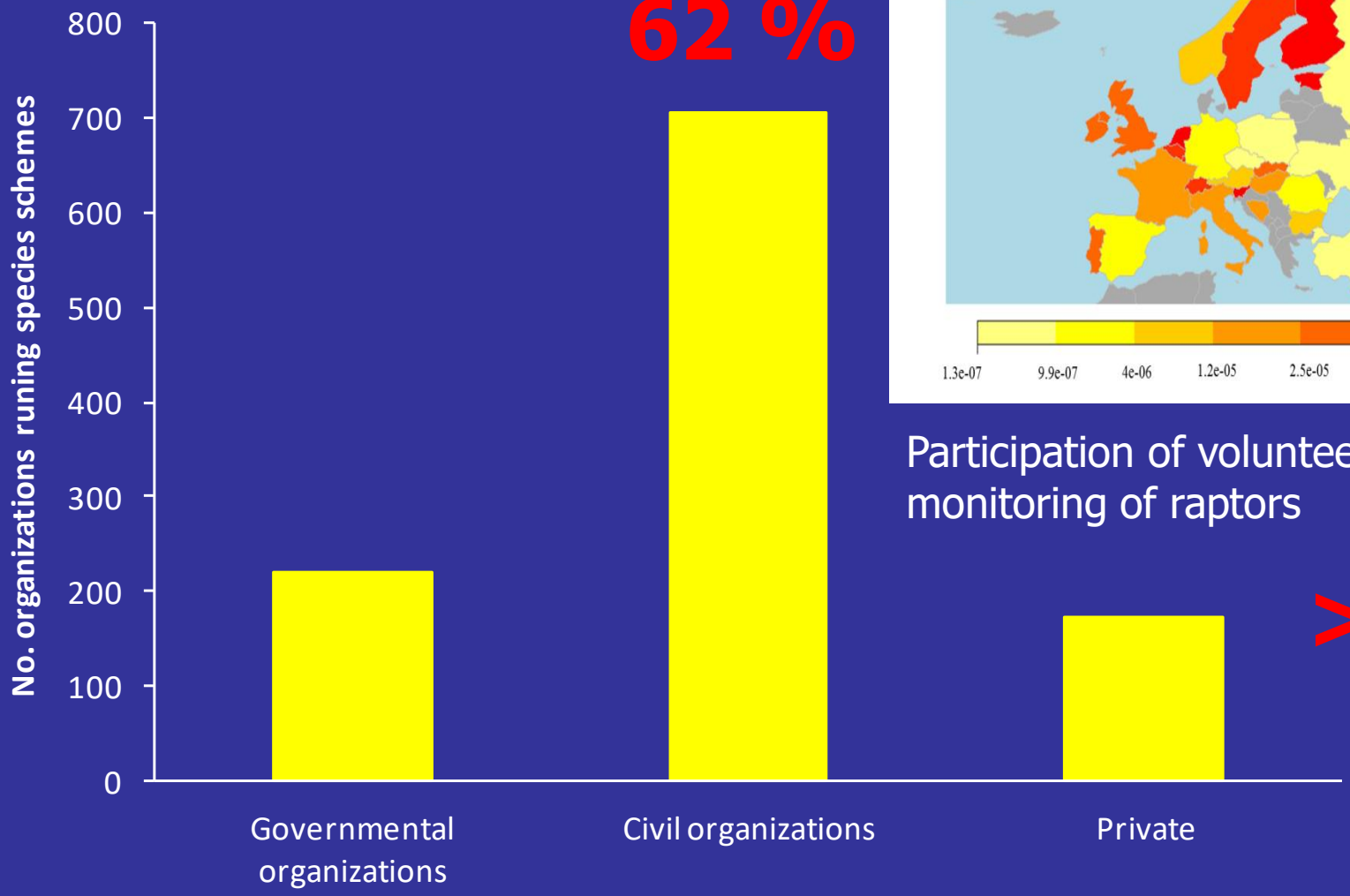
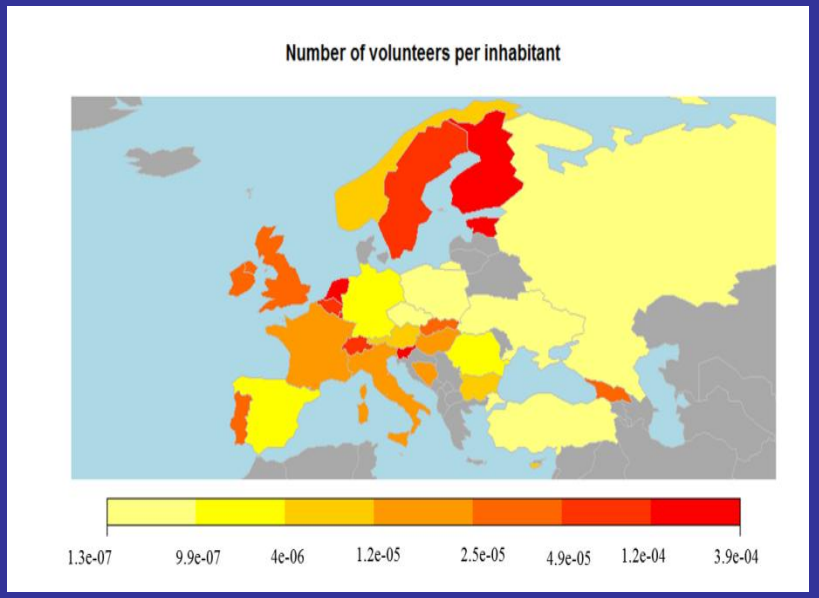
A review of raptor and owl monitoring activity across Europe: its implications for capacity building towards pan-European monitoring

Maja Derlink[a], Chris Wernham[b], Irena Bertoncelj[c], András Kovács[d], Pertti Saurola[e], Guy Duke[f], Paola Movalli[g] and Al Vrezec[a]

Main players

Main actors in runing monitoring for raptors





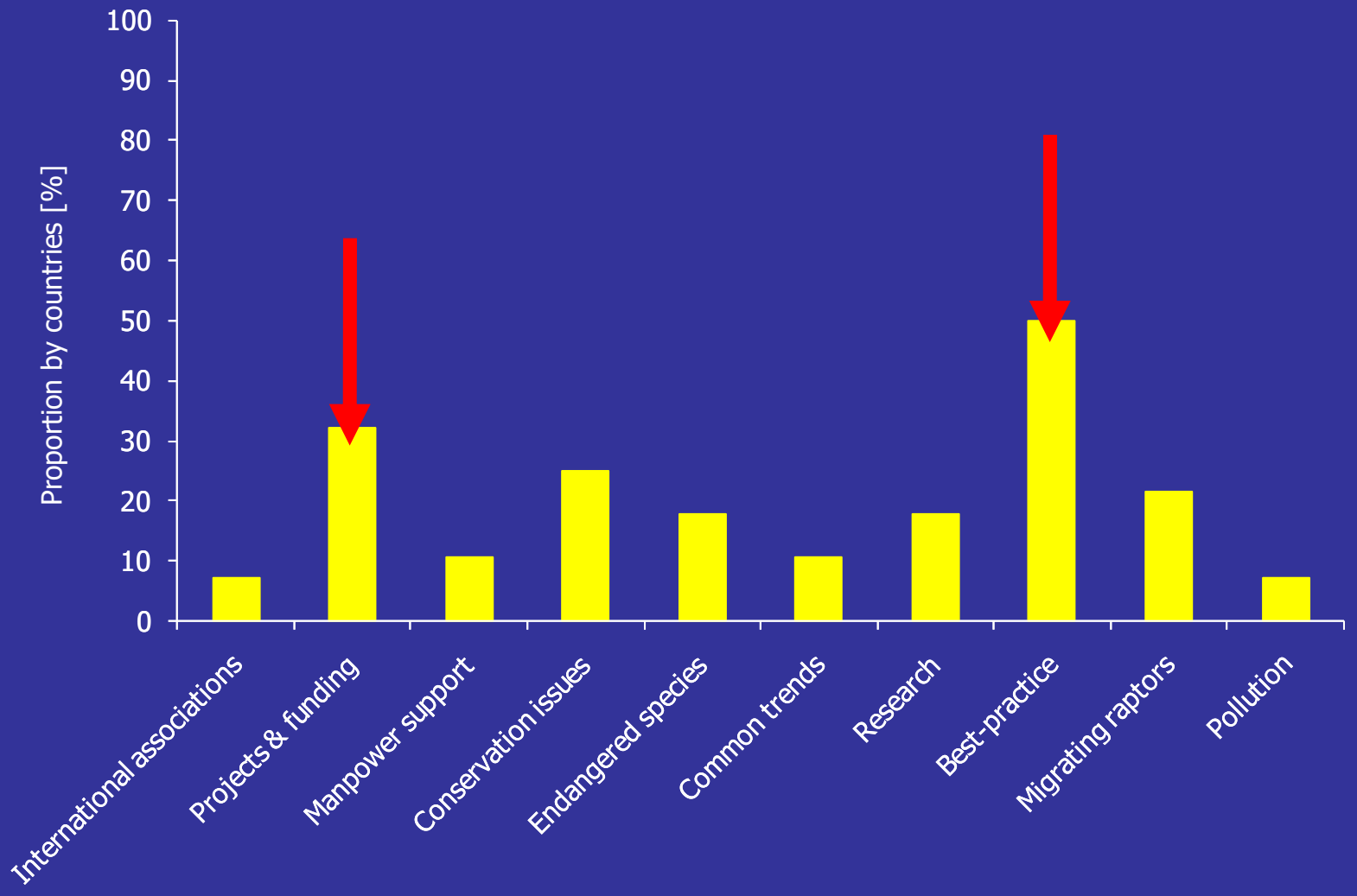
Participation of volunteers in the monitoring of raptors

>50 %

National coordination

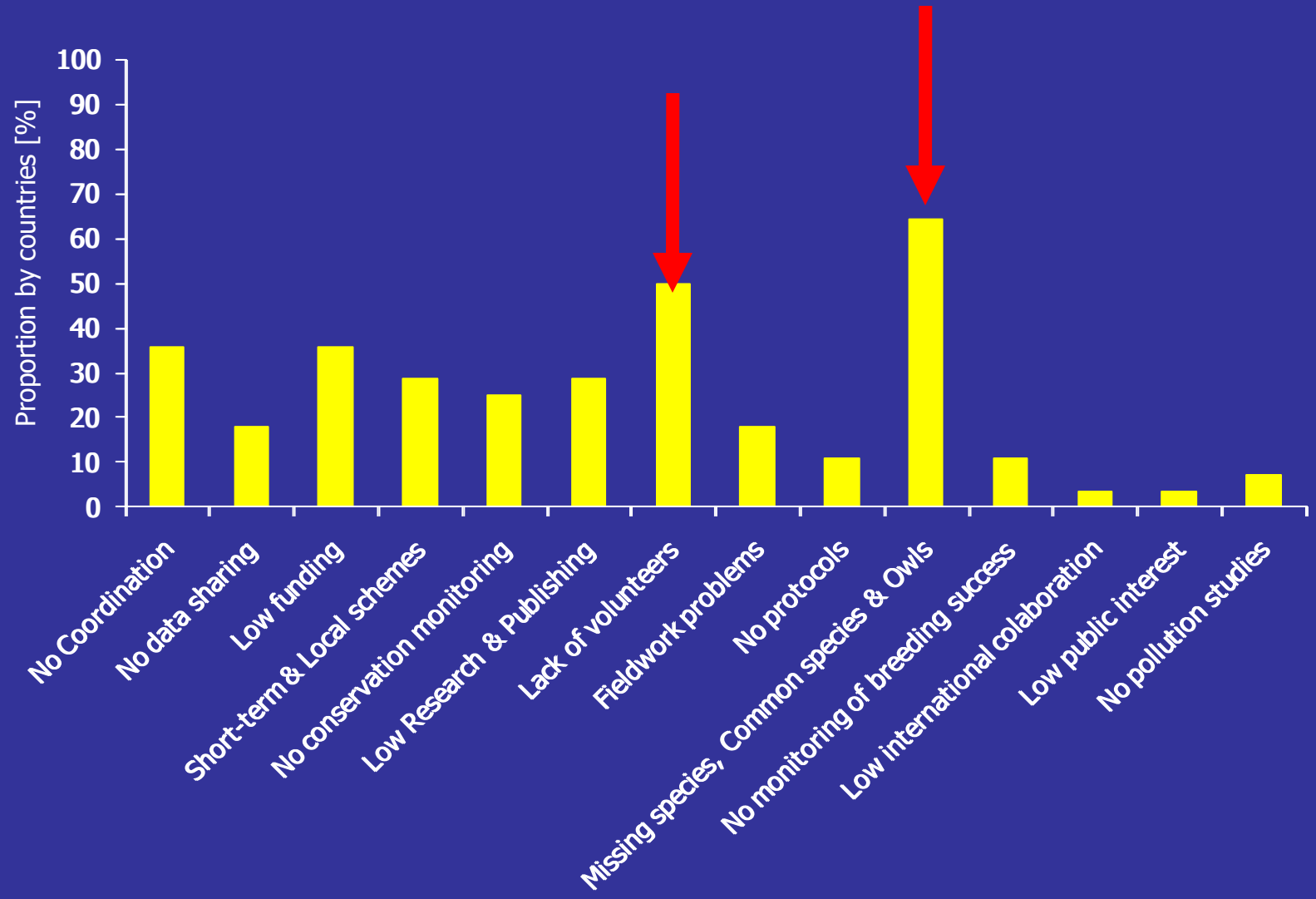
At least some co-ordination exists in 70 % of surveyed countries

Benefits from international networking



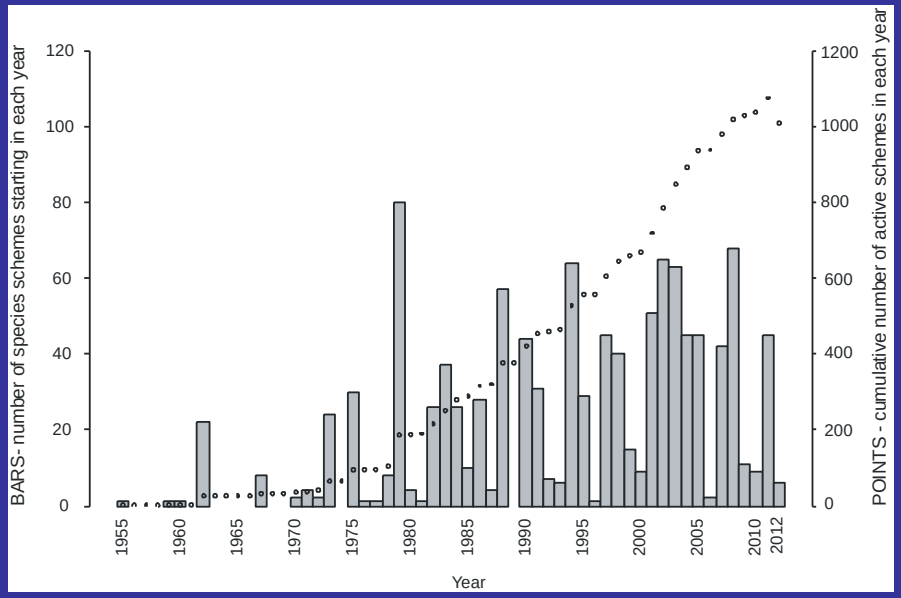
Weaknesses & Gaps

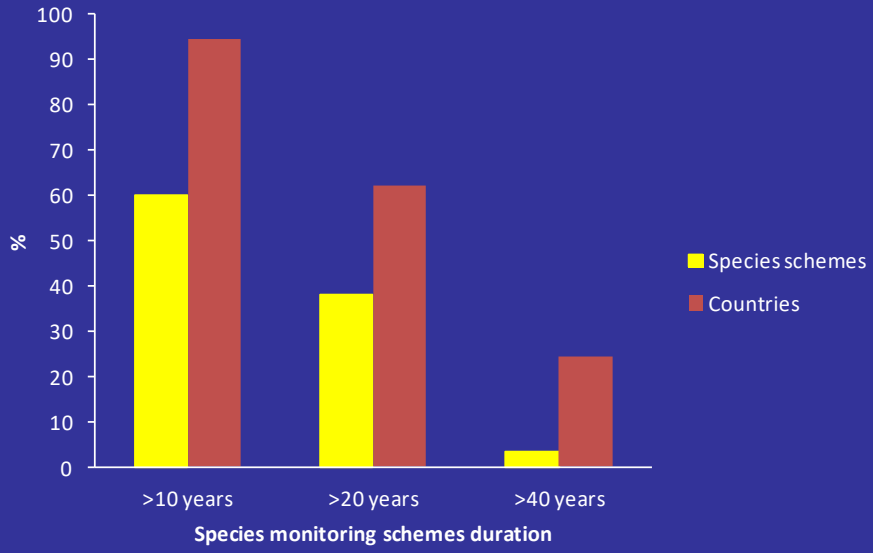
Main weaknesses and gaps of raptor monitoring



Comprehensive inventory of existing monitoring activities *for* raptors

***Questionnaire* on the monitoring for raptors** (236 programs, 1196 schemes, 37 countries)





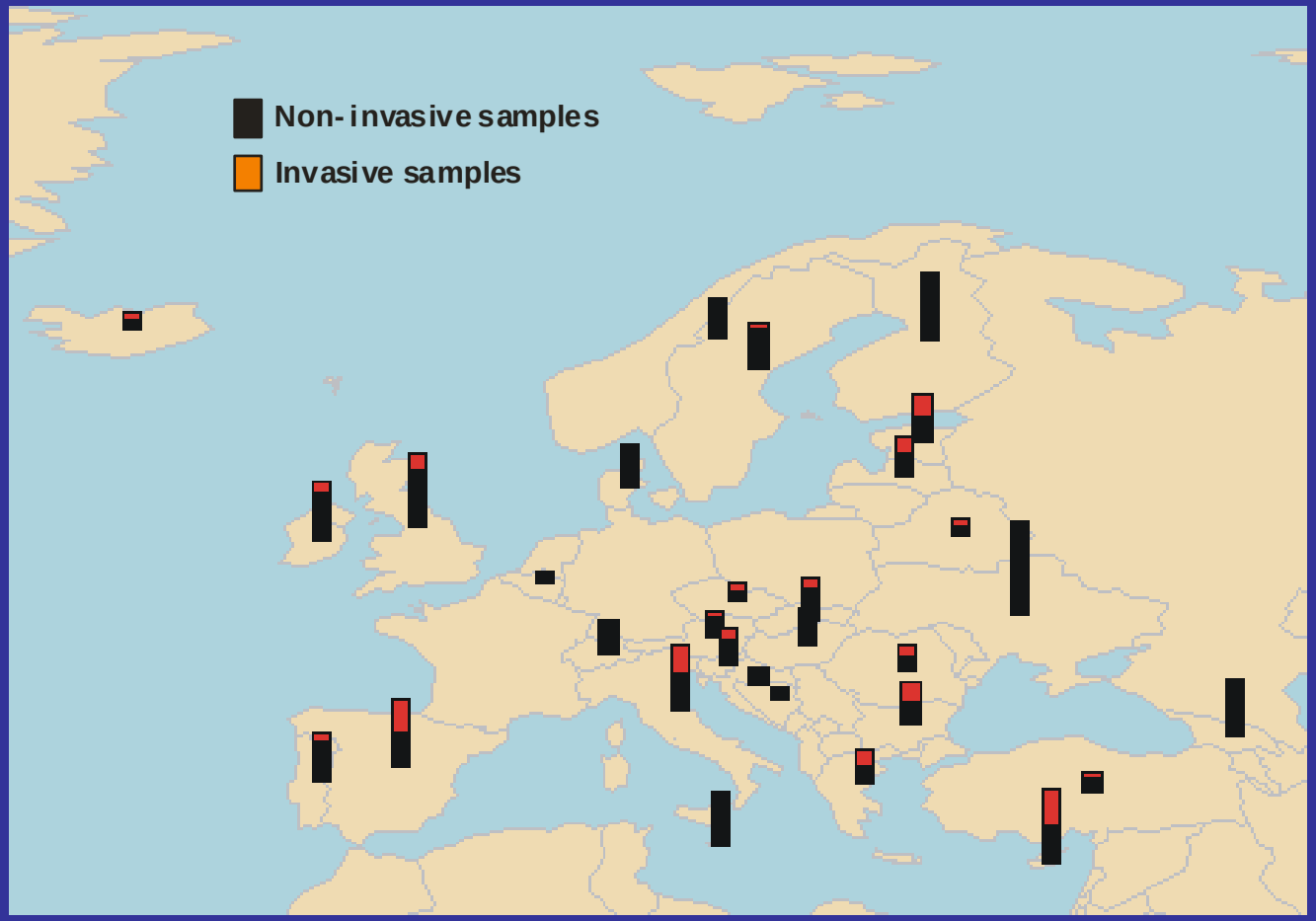
Number of active species schemes and their establishment per year (N = 1196)

Duration of active species schemes

Mean duration: 18.4 ± 12. years

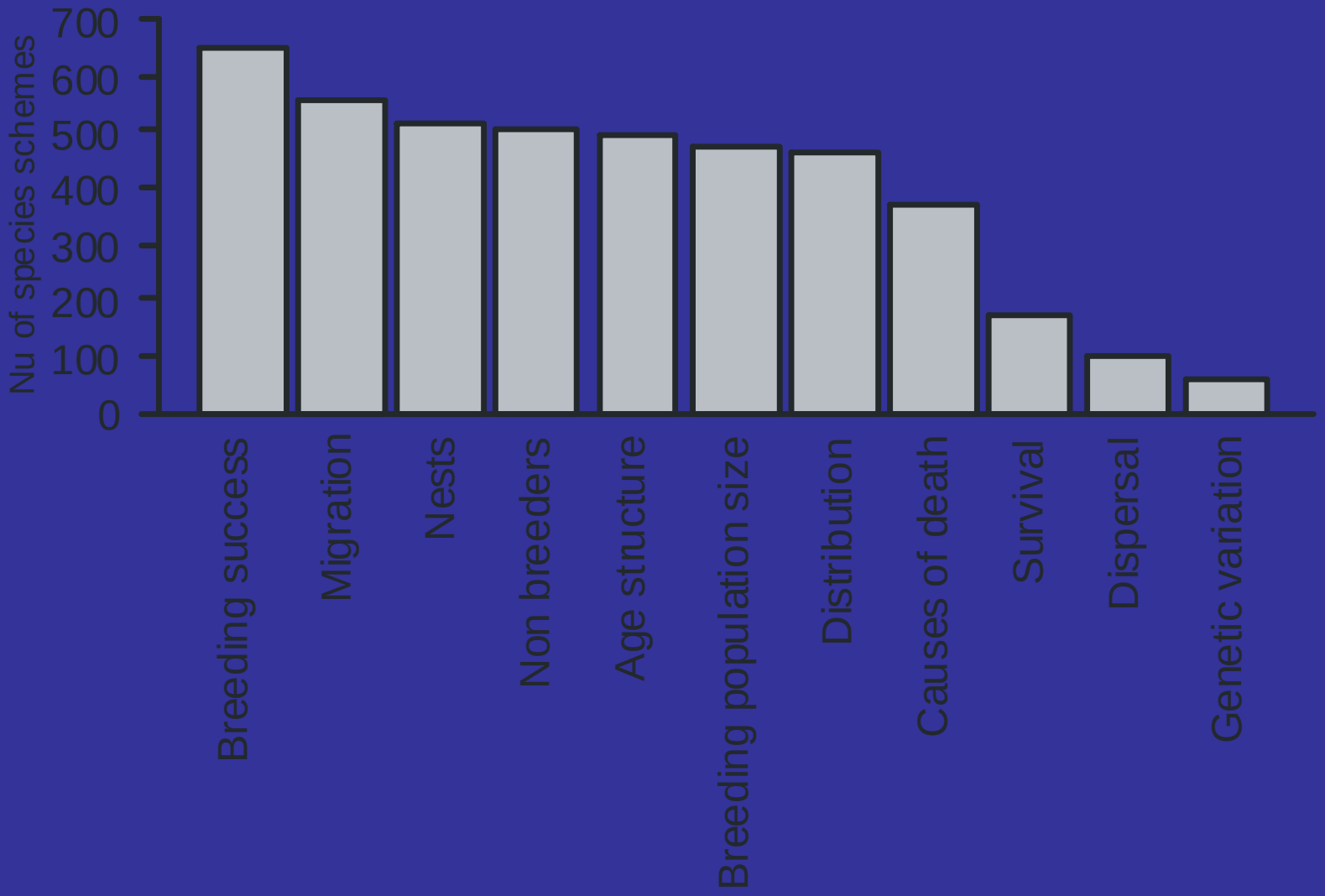
Derlink et al. 2018,
Bird Study

Material sampling



Numbers of raptor population monitoring species schemes per country which collect any samples of invasive and non-invasive biological material.

Contextual data



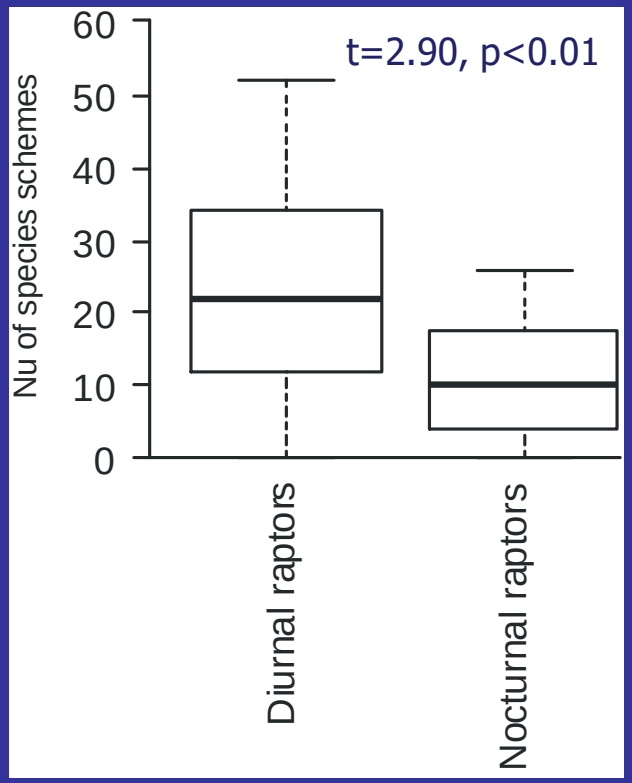
Number of European raptor monitoring species schemes in which different contextual data are gathered and monitored.

Species monitored

Falco peregrinus
(N=52)

Falco tinnunculus
(N=52)

Buteo buteo
(N=50)

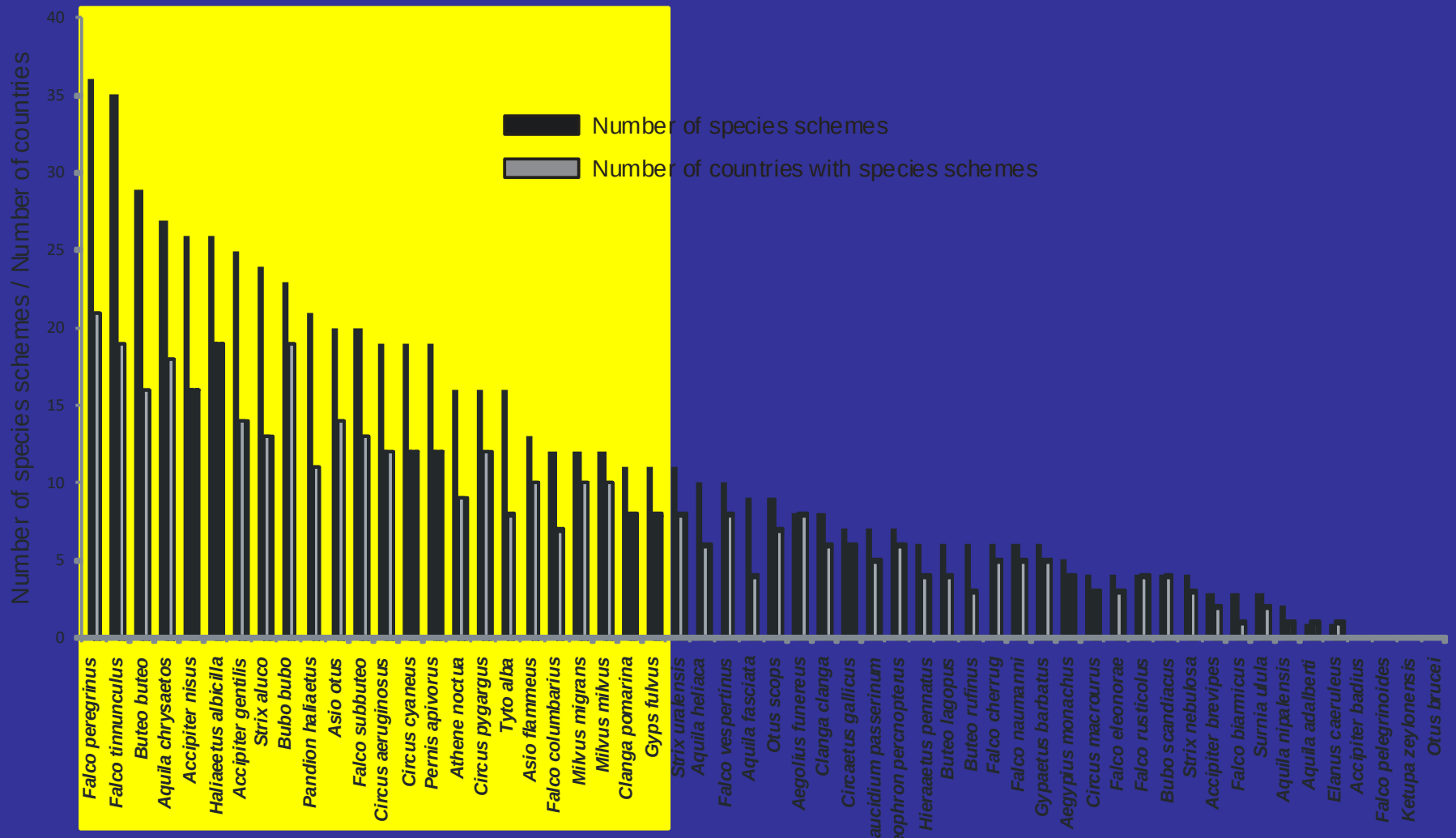


Strix aluco
(N=26)

Bubo bubo
(N=24)

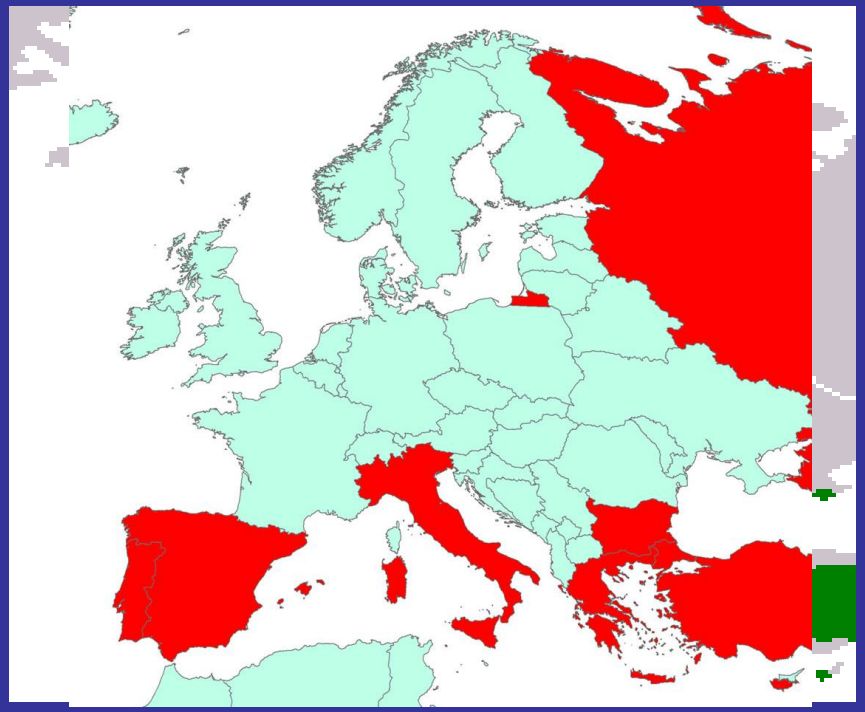
Asio otus
(N=24)

Species monitored

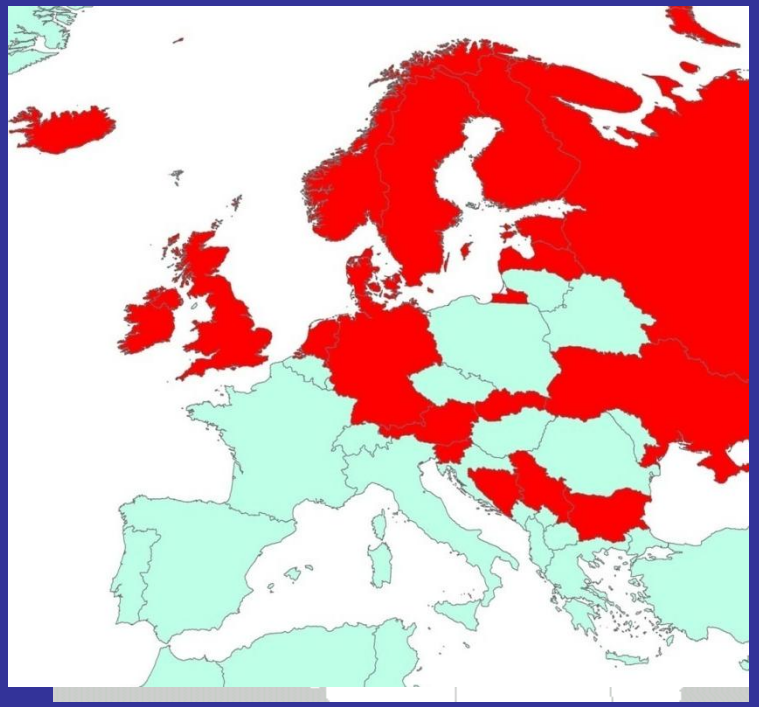


Potential priority species

No. schemes: 19
No. countries: 8
Breeding range coverage: 47 %

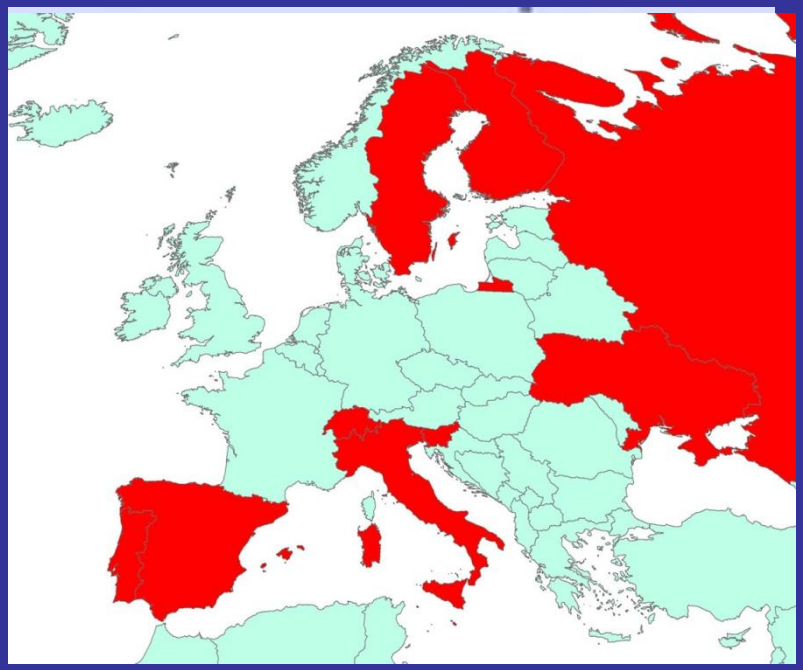


No. schemes: 39
No. countries: 19
Breeding range coverage: 68 %

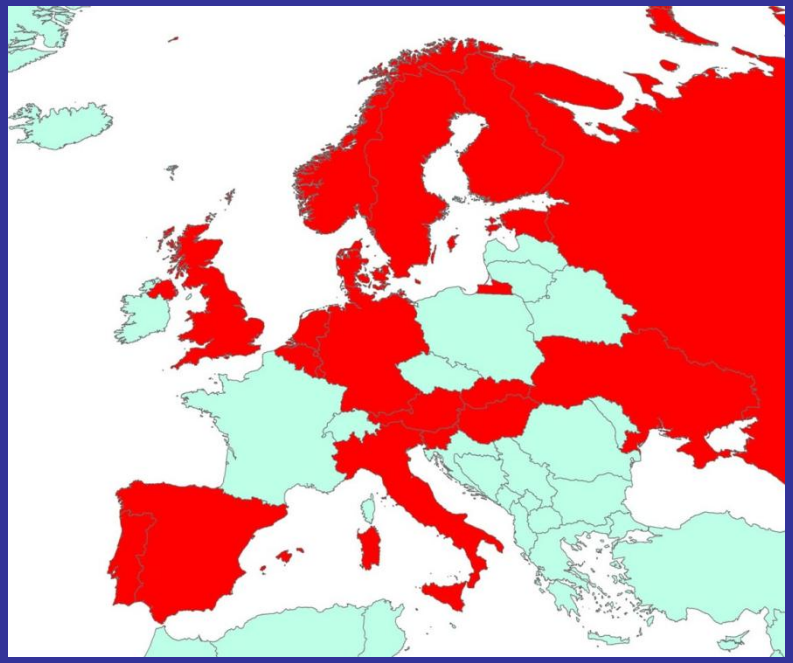


Potential priority species

No. schemes: 31
No. countries: 10
Breeding range coverage: 27 %

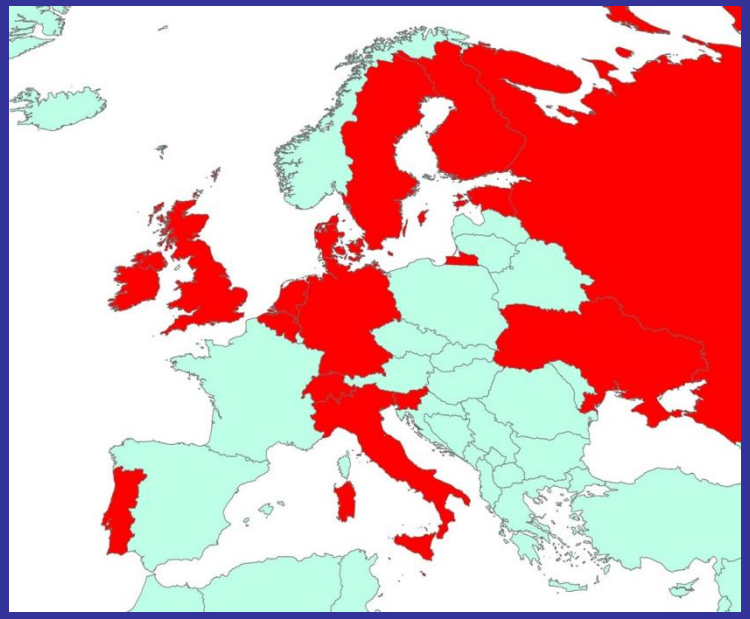


No. schemes: 24
No. countries: 19
Breeding range coverage: 48 %

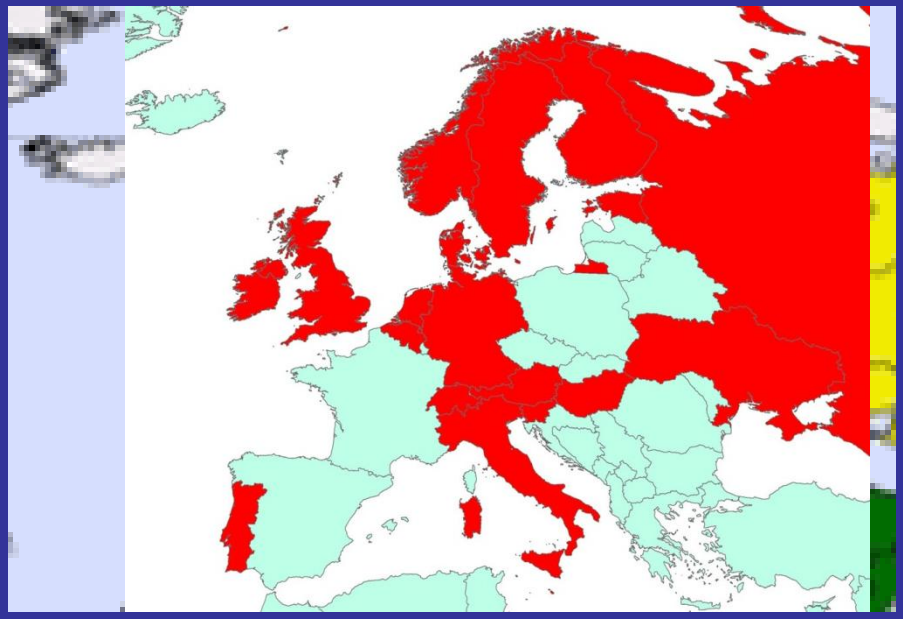


Potential priority species

No. schemes: 50
No. countries: 16
Breeding range coverage: 38 %



No. schemes: 52
No. countries: 19
Breeding range coverage: 43 %

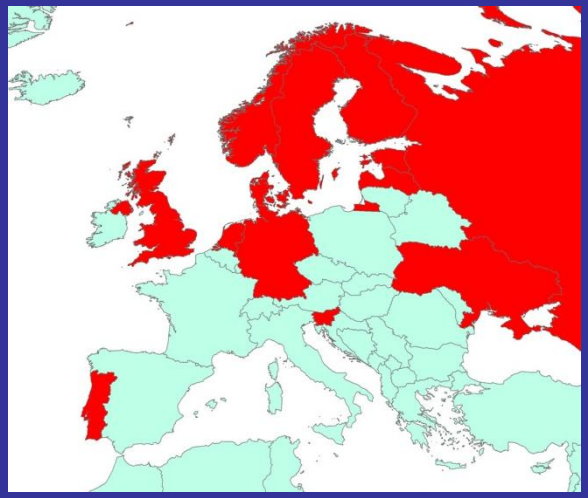


Potential priority species

No. schemes: 26
No. countries: 13
B. range coverage: 32 %

No. schemes: 16
No. countries: 8
B. range coverage: 21 %

No. schemes: 24
No. countries: 14
B.range coverage: 33 %

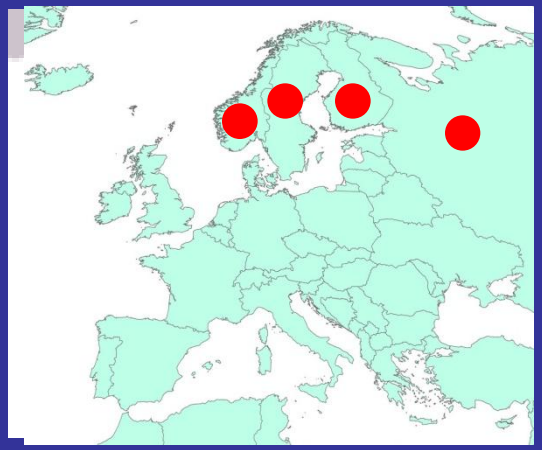


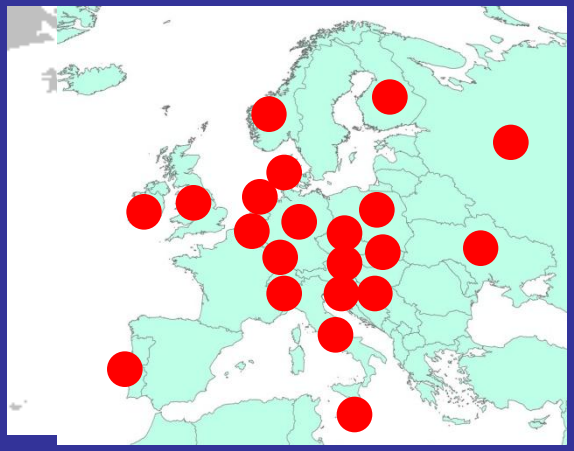
Best monitored species

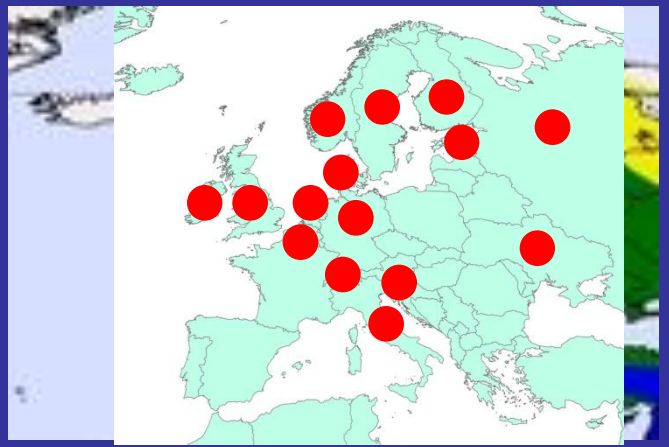
No. schemes: 19
No. countries: 4
B. range coverage: 100 %

No. schemes: 52
No. countries: 21
B. range coverage: 53 %

No. schemes: 44
No. countries: 16
B.range coverage: 38 %







Proof of concept species selection

1. Europe-widespread species
2. Good contaminant indicator species
3. Easy access to different and appropriate matrices
4. Easy access to the needed amount of samples
5. Well defined specimens origin
6. Good access to high quality contextual data (good population monitoring coverage)

Thank you for your attention!

THE EUROPEAN RAPTOR CONTAMINANT BIOMONITORING FACILITY

COST: ERCBFacility

Main proposer: **University of Oxford (UK)**

Currently 22 participating countries:

Austria
Belgium
Bosnia and Herzegovina
Croatia
Denmark
Estonia
Finland
France
Germany
Greece
Hungary
Israel
Italy
Macedonia
Netherlands
Norway
Poland
Portugal
Romania
Slovenia
Spain
United Kingdom

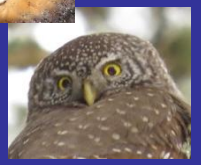
COST proposal page: http://www.cost.eu/COST_Actions/ca/CA16224

Monitoring of owls in Europe







Networking

EURAPMON - Research Networking Project

9 February 2012 – Brussels (Belgium)

NETWORK OF NATIONAL COORDINATORS