



John Proudlock / BTO



**European  
Raptor  
Biomonitoring  
Facility**



## **WG4 Florence workshop**

**ERSamP**

**Best Practice Guidance**

**Introduction to Capacity Building**

# WG4 Florence workshop - Objectives



- Consider further the **structure of ERSamP** (the European Raptor Sampling Programme framework) and consolidate the draft documentation **THURSDAY**
- Consolidate our work on **constraints to effective operation of ERSamP** and discuss and document possible solutions/mitigating actions. **THURSDAY**
- Consolidate our work on **generic guidance for (a) collection of samples for contaminants analysis and (b) supporting contextual data.** **THURSDAY**
- Begin discussions around the range of **participant types** ('actors'), both individuals and organisations, that we need to engage in order for ERSamP to be effective, and document ideas on **their needs and how to motivate them to take part.** **FRIDAY**
- Consider the potential for **proof of concept case studies to test one or more pathways for the collection of new samples for analysis.** **FRIDAY & SCOTLAND MEETING**

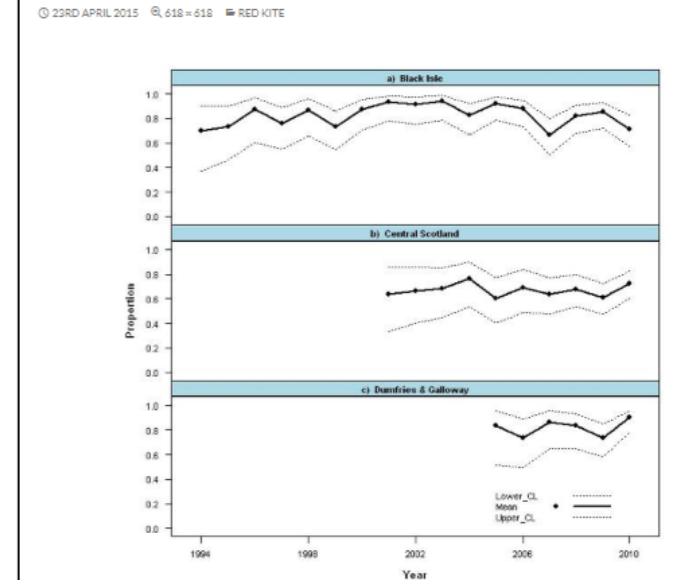


# Session 1

- 1. Basic obligatory data about the matrix sample collected**  
(e.g. date, time, location, collector's name, species, sample type, type of feather, ring number, **unique individual ID**)
- 2. Data about the individual bird / pair from which the sample is taken**  
(age, sex, condition, body measurements, diet, breeding performance, movements – tracked birds, behavioural observations e.g. aggressiveness, **unexpected observations e.g. abnormalities**)
- 3. Data about the population of birds from which samples are taken**  
(e.g. population trends, breeding productivity and trends, timing of breeding and trends, population diet, population movements – **relevant contaminant source area**)
- 4. Relevant environmental data**  
(e.g. local sources of contamination, **local cropping/land management**, photos of immediate surroundings)



Trends in the fledging success (proportion of pairs known to hatch young that fledged at least one young) of Red Kites between 1994 and 2010 for the three subpopulations with sufficient sample sizes for trend analyses. (Source: RSPB data)

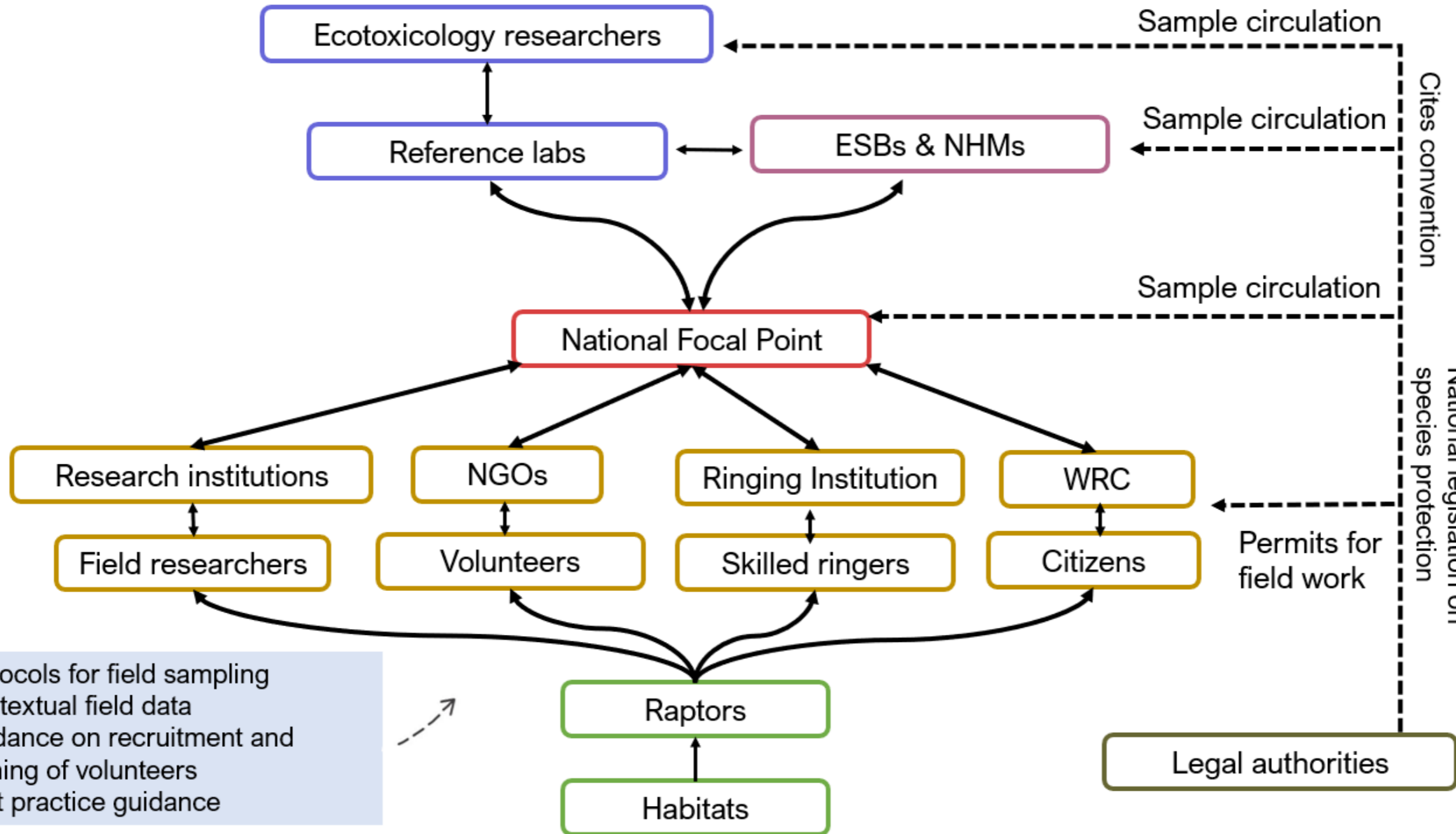


Fledging success (proportion of pairs known to hatch young that fledged at least one young): 1994-2010

Thursday 7 March		
14:00 – 14:30	Introduction to Workshop and plan for the sessions	Chris Wernham
14:30 – 14:45	Structure of ERSamP, including how the guidance fits in (generic and species-specific). With time for discussion	Chris Wernham & Rui Lourenço
14:45 -15:00	Constraints already identified	Rui Lourenço & Maria Dulsat Masvidal
15:00 – 16:00	Break-out groups to discuss the framework and in particular solutions to constraints (45 minutes + 15 minutes feedback)	Led by Rui Lourenço & Maria Dulsat Masvidal
16:00 – 17:00	Break-out groups to discuss any extra work required on generic guidance – contextual data	Introduced by Chris Wernham
17:00	END OF DAY 1	
19:30	Meet for dinner in the city – who would like to meet?	

Friday 8 March		
09:00 – 09:30 <b>(WE MAY START A BIT LATER)</b>	Introduction to the day and consideration of field actors (and collection of different sample types/contextual data types)	Chris Wernham
09:30 – 09:45	Example of one group of actors (ringers) – what we know already or will know from the ringing review	Abbie Maiden
09:45 – 10:00	What the Derlink review tells us about the availability of other field actors across Europe	Al Vrezec
10:00 – 10:15	Moving towards proof of concept study(ies) for testing the collection of new data	Rafael Mateo –refresh of ideas
10:15 – 11:00	Plenary discussion and introduction to break-out groups	Led by Chris Wernham
11:00 – 11:15	SHORT COMFORT BREAK	
11:15 – 12:00	Break-out groups to work through scenarios focusing on different groups of actors – 3 possible groups (carcass collection/blood sampling/collection of population and demographic data) – who would need to be involved and how would we achieve it?	
12:00 – 12:30	Feedback from Groups	
12:30 – 14:00	LUNCH BREAK	
Friday 8 March		
14:00 – 16:00	Further discussion of work for GP3 – STSMs; Slovenia meeting objectives and programme; proof of concept study development	Led by Chris Wernham & Al Vrezec
16:00 – 16:30	SUMMING UP & CLOSE OF WORKSHOP	Chris Wernham

# Session 1 -European Raptor Sampling Programme (ERSamP)



➤ The collection of the right samples from the right locations at the right times

➤ Standards and protocols to ensure harmonised sampling methods and recording of contextual data

1. Protocols for field sampling
2. Contextual field data
3. Guidance on recruitment and training of volunteers
4. Best practice guidance

# European Raptor Sampling Programme (ERSamP)



- **Vision and overall objectives** of the Sampling Programme
  - Focal **contaminant types, sample types, traits/species** and **geographical areas** (sample sizes)
  - Generic **best practice guidance – sampling protocols** – Espin *et al.* EURAPMON – enhanced
  - Generic **best practice guidance** – collection of **contextual data**
    - data relevant to individual sample (e.g. date, time, species, age, sex, location etc – essential)
    - data relevant to individual bird (e.g. breeding success, movements)
    - data relevant to population (e.g. population trends, timing of breeding productivity, survival, movements) e.g. Hardey *et al.* *Raptors – a Field Guide to Survey and Monitoring*
    - environmental data – (e.g. known contaminant sources; local land use)
  - **Project- and species-specific best practice guidance** (e.g. falcons; vultures)
  - **People and institutions** available to collect samples and contextual data in the field
  - Generic **best practice guidance on how to engage / motivate / train field participants** by actor group
  - **Project-specific guidance for involving people in the field** e.g. for proof of concept studies
  - Consideration of **national ambassadors / coordinators / focal points**
- The collection of the right samples from the right locations at the right times
  - Standards and protocols to ensure harmonised sampling methods and recording of contextual data



## 1. Legal constraints

(relating to the legislation for handling and sampling raptors and moving samples around – focus on within country movements)

## 2. Methodological constraints

(relating to best practice guidance for sampling and collecting contextual data and its availability)

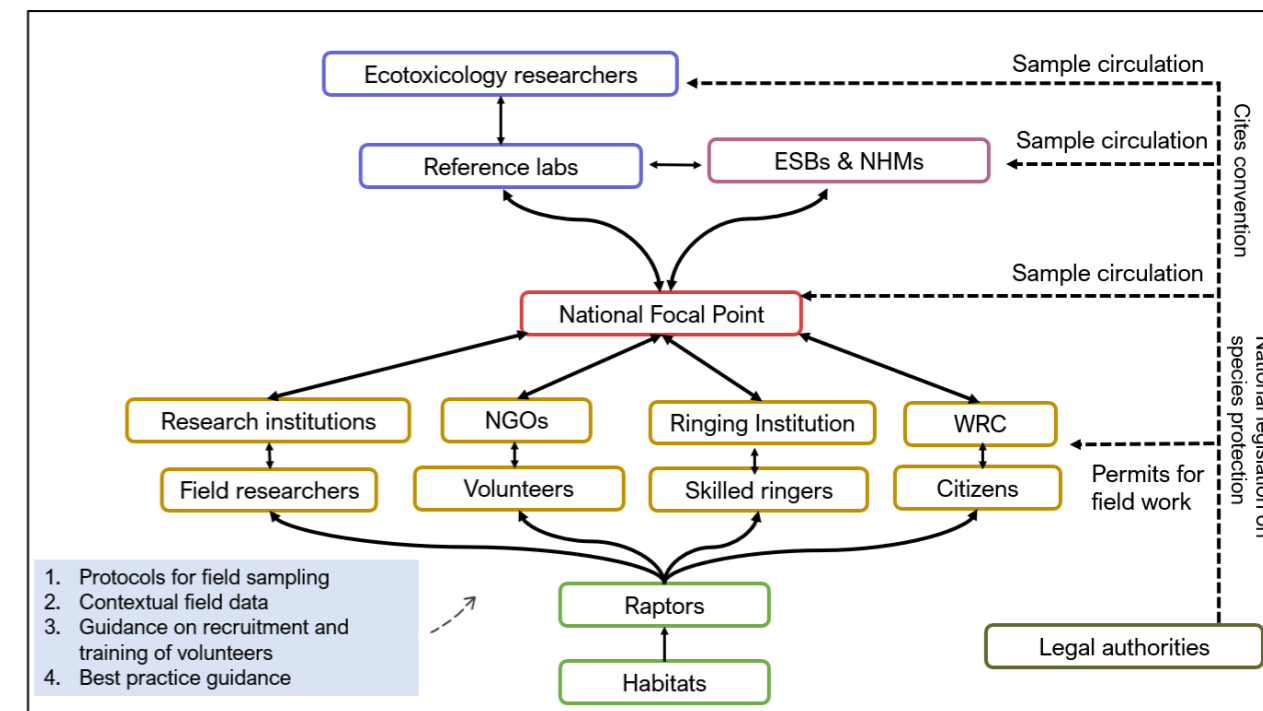
## 3. Constraints posed by spatial distribution of monitoring coverage

(use of information from Gomez-Ramirez *et al.* and Derlink *et al.* EURAPMON inventory work)

## 4. Constraints posed by need for skills and knowledge in the field

(which types of field participants could help collect samples)

# Session 2 Constraints and solutions work







# Session 3

## Best practice guidance

**ANNEX II**  
**PROTOCOL FOR TAKING BIOLOGICAL SAMPLES IN THE FIELD FROM LIVE BIRDS, FOR TOXICOLOGICAL AND PARASITOLOGICAL ANALYSIS**

**Rupis VCE**

**INTRODUCTION**

This protocol was basically prepared to support the research activities foreseen in the Rupis Project, such as the sampling of the captured birds within action D6. It can be also use for the presumably poisoned live animals entering into the wildlife recovery centres on Portuguese or Spanish side.

Although the project foresees only toxicological analysis we consider it to be important to include also parasitological samples/analysis that can also be easily collected while sampling for toxicology (only small additional effort is needed and the cost of these analyses is nearly insignificant compared to the cost of the toxicological analyses).

The results of the toxicological and parasitological analysis can provide important information regarding the physical condition of the animal but could also identify some unknown threat/problem.

**Rupis VCE**

**IMPORT**

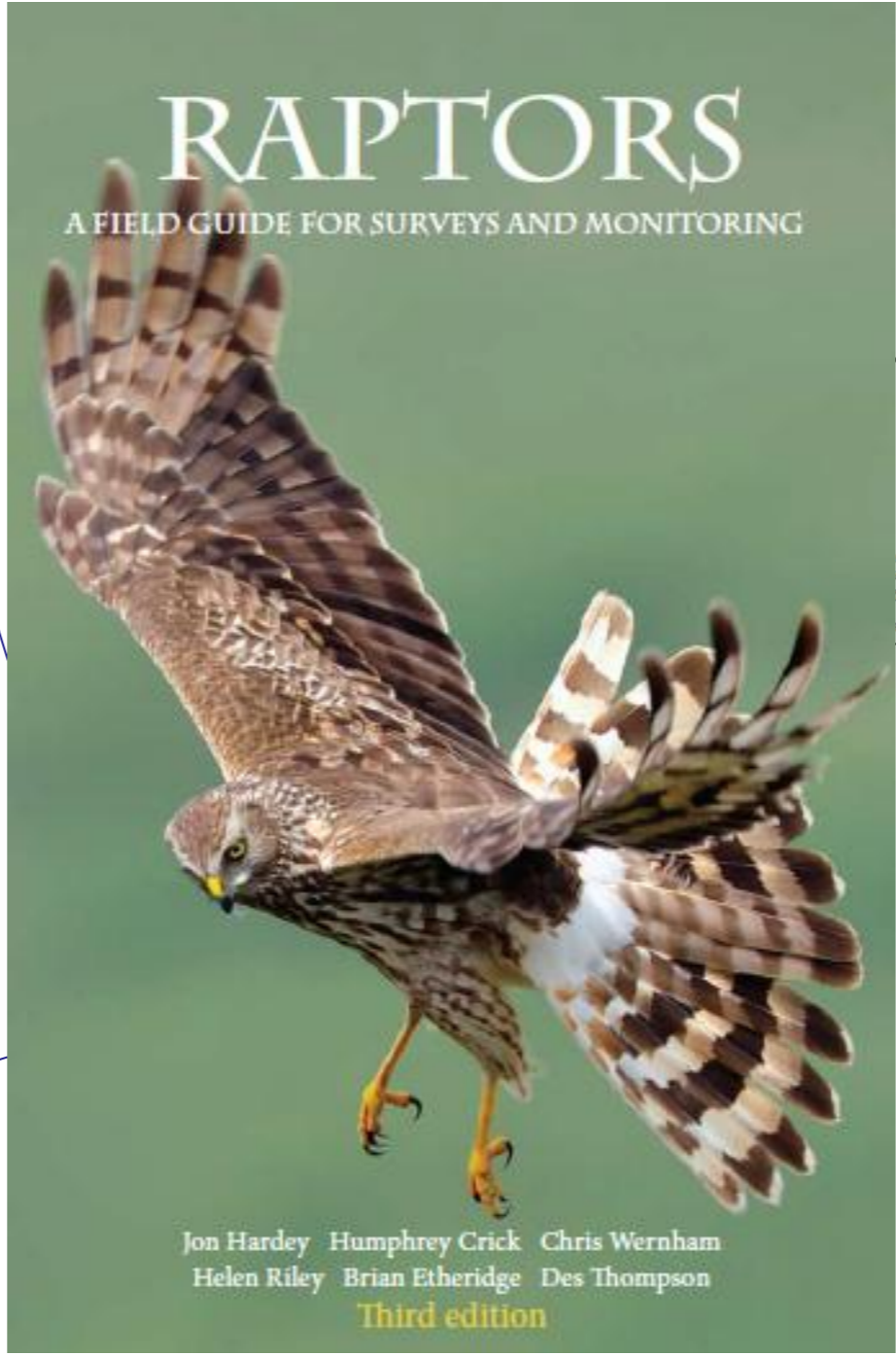
The most in sufficient related obtained

**2. Sample collection: FAECES**

- Collect fresh faeces. Try to discard the urea phase (the white or yellow content).
- Use a sealed, sterile container.
- Possible analysis:
  - Parasitology.
  - Microbiology: Microbiology: diverse bacteria species: Salmonella, Campylobacter, Escherichia coli O157.

**3. Sample collection: BLOOD IN EDTA AND HEPARIN**

- Take the sample by venepuncture, previously disinfect the area with 70% alcohol and wait at least 30 seconds.
- Fill in the sample tube with blood. Overturn smoothly 3-4 times for mixing the blood and the EDTA / heparin, to prevent lysis (blood cell destruction) of the erythrocytes.
- Recommended volume: 1 tube of 1 ml heparin to study toxicology: heavy metals, Non Steroid Anti-inflammatory Drugs (NSAIDs), antimicrobials and pesticides; 1 tube of 1 ml EDTA to study molecular diagnostics (PCR); 1 tube EDTA for haematology and sex determination (few blood drops in alcohol can also do); 1 tube heparin for biochemistry and proteinogram.
- Analysis from EDTA:
  - Sex determination
  - Molecular diagnostics (PCR): different microorganisms (bacteria, virus, parasites).
  - Metals: lead, cadmium.
  - Non-steroid anti-inflammatory NSAIDs
  - Antimicrobials
  - Pesticides



**Peregrine**  
*Falco peregrinus*

**1. INTRODUCTION**

The peregrine (peregrine falcon) breeds throughout most of Britain and Ireland (Gibbons et al., 1993; Banks et al., 2003, 2010; Hardy, 2007). The population is largely sedentary but birds occupying less productive home ranges may move elsewhere in winter. Populations across mainland Europe become progressively more migratory further east and north. Young peregrines in their first year can travel large distances but many remain close to their natal area (Hardy, 2002). Some migrant peregrines from Scandinavia winter in the UK, although the numbers involved are unknown. Female peregrines are about one-third larger than the males but it is often difficult to separate the sexes, even when a pair is seen together. Females may be distinguished by their alarm call, which is generally lower in pitch than that of the male. Fledgling young are often and browner than the adults, with a distinctive pale breast. Females may be distinguished by peregrines in their first year can be recognized by their pale breast. Fledgling young are often at one year old but most do not breed until the age of two.

For further information on the biology and ecology of the peregrine, see the book 'The Peregrine: A Field Guide for Surveys and Monitoring' by S. A. D. (2012) provide comprehensive accounts.

Breeding Activity	Peak Period	Range
Site occupation	March to July	All year in
Courtship display	March to July	Early Mar
Egg laying	Early April to late April	Mid Mar
Incubation	Early April to late May	Mid Mar
Hatching	Early May to late May	Late Apr
Young in nest	Late May to late June	Late Apr
Fledging	Late June to early July	Early June
Juvenile dispersal	August to September	July to late

**2. HABITAT, HOME RANGE, NESTS AND NESTING**

**2.1 Habitat**

Peregrines need open areas with a plentiful supply of bird prey (Ratcliffe, 1993). A highly adaptable species, peregrines including estuaries and other areas with large concentrations of prey can be seen almost anywhere.

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Foreword by Ian Newton  
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Raptors: a field guide for surveys and monitoring V

# Best practice guidance – generic and falcons

Feedback to  
capture

>>>>>>

Any further  
offers of help  
with this or other  
guidance?





John Proudlock / BTO



# European Raptor Biomonitoring Facility



## WG4 Florence workshop

Friday 8 March

Consolidation of knowledge  
about available field participants

Thinking about capacity building  
/ skills development

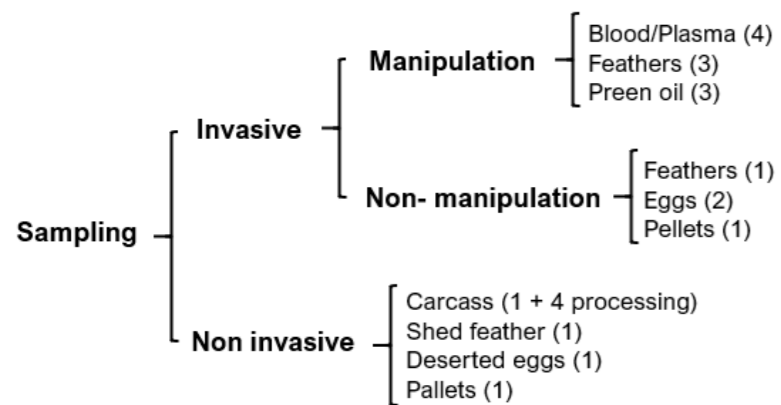
Planning for WG4 in GP3

<b>Friday 8 March</b>		
09:30 – 09:45	Introduction to the day and consideration of field actors (and collection of different sample types/contextual data types)	Chris Wernham
09:45 – 10:00	Example of one group of actors (ringers) – what we know already or will know from the ringing review	Abbie Maiden
10:00 – 10:15	What the Derlink review tells us about the availability of other field actors across Europe	Al Vrezec
10:15 – 10:30	Moving towards proof of concept study(ies) for testing the collection of new data	Rafael Mateo (tbc)
10:30 – 10:45	Feedback from first discussion on field training	Al Vrezec
10:45 – 11:00	Plenary discussion / introduction to break-out groups	Chris Wernham
11:00 – 11:30	COFFEE	
11:30 – 12:15 12:15 – 12:30 Feedback (or after lunch)	Break-out groups - scenarios focusing on different groups of actors – 3 possible groups (carcass collection/blood sampling/collection of population and demographic data) – who would need to be involved and how would we achieve it?	Facilitated by .....
12:30 – 14:00	LUNCH BREAK – PICNIC LUNCH	
<b>Friday 8 March</b>		
14:00 – 16:00	Further discussion of work for GP3 – STSMs; Slovenia meeting objectives etc	Chris Wernham & Al Vrezec
16:00	CLOSE OF WORKSHOP	Chris Wernham

# WG4 Field Arena - Tasks



<b>T4.1 Develop framework for European Raptor Sampling Framework (ERSampP)</b> (a) focal species & sample matrices (b) existing sampling coverage and gaps (c) opportunities to fill gaps (d) contextual data for interpretation of contaminant exposure	<b>Grant Period 1-2</b> First draft by April 2019
<b>T4.2 Review key constraints</b> (legislative/practical) to activities (e.g. nest visits, transfer of samples between countries) for sampling and contextual data; identify how to resolve constraints	<b>Grant Period 1-3</b> Mission by April 2019
<b>T4.3 Develop best practice guidance and protocols</b> for raptor sampling and contextual data capture; trial with one or more case study species from several European countries; review and amend as appropriate; disseminate guidance and protocols	<b>Grant Period 2-3</b> Mission by April 2019 Vulture Task Group 2 Missions in 2019
<b>T4.4 Expand stakeholder involvement in raptor sampling and contextual field data gathering</b> - assessing potential; identifying ways to involve more professional and amateur ornithologists in raptor biomonitoring (working with NGOs and raptor ecologists in the network); developing guidance on recruitment and training	<b>Grant period 3-4</b> Mission in 2019 Workshop in 2019 Training school
<b>T4.5 Deliver proof of concept</b> involving, for a case study focal species (or group of species), applying the framework, guidance and protocols to collect new raptor samples and contextual field data through existing and/or novel networks	<b>Grant period 3-4</b> Workshop in 2019 Funding discussions Missions



## WG4 Workshop Florence

Categories of people depending on the skills required for sampling and monitoring:

1. No specific skills required (e.g public collecting carcasses or feathers)
2. Experience in species monitoring
3. Permits for handling live birds (e.g. field researchers, ringers and veterinarians)
4. Permits for extraction of specific samples as blood and 'processing' dead birds (e.g. necropsies)

# WG4 – Capacity Building (and developing guidance)

Review existing raptor relevant projects and share experiences in recruiting, motivating and training volunteers



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### Scottish Raptor Monitoring Scheme

RECENT POSTS

Article about the work of the SRMS published in Bird Study

JOB ADVERT: Scottish Raptor Monitoring Coordinator – Maternity Cover

SRMS 2017 Annual Report now published

Scottish Raptor – July 2018

SRMS 2016 Annual Report now published

Scottish Raptor – September 2017

Scottish Raptor – November 2016

SRMS 2015 Annual Report now published

Forthcoming event – The North of England Raptor Conference 2016

Scottish Raptor – May 2016

### Advice

The Scottish Raptor Monitoring Scheme has published a field guide which provides expert advice on surveying and monitoring raptors.

Now onto its third edition the *Raptors: A Field Guide for Surveys and Monitoring* details the survey techniques that should be employed to successfully survey each of the raptor species which regularly occur in Britain.

Chapters can be accessed through following the links below:

- Part 1: Introduction
- Part 2: Species accounts

- Honey Buzzard
- Red Kite
- White-tailed Eagle
- Marsh Harrier
- Hen Harrier
- Montagu's Harrier
- Northern Goshawk
- Eurasian Sparrowhawk
- Common Buzzard

Hardy, J., Crick, H., Wernham, C., Riley, H., Etheridge, B. & Thompson, D. (2013). *Raptors: a field guide to surveying and monitoring* (2nd Edition). The Stationery Office, Edinburgh.

## IOD - International Observation Days

INTERNATIONAL BEARDED VULTURE MONITORING

IOD = yearly survey in October since 2006

IOD 2018

- > 850 (+380) observers
- > 530 sites
- weather: 40% bad, 26% ok
- > 640 observations

My BTO

## Tawny Owl Point Survey

Survey Completed Autumn 2018

Despite being widespread, we know surprisingly little about our Tawny Owl population. The BTO's core monitoring schemes do suggest a recent decline but as they are daytime surveys, they can't show us the full picture.

### Why survey Tawny Owls nationally?

We get better information on how Tawny Owl populations are doing by carrying out periodic targeted surveys for Tawny Owls in Britain in the autumns of 1989 and 2005. So by carrying out a comparable survey during autumn 2018 (August 15th - October 15th 2018) that also takes advantage of modern statistical techniques, we aimed to get an up to date measure of change in their occupancy and populations as well as habitat associations and geographical patterns. Through this, we hope to learn more about our noisy but often mysterious neighbours.

### Tawny Owl Point Survey structure

This survey involved volunteers visiting random preselected tetrads (2x2km squares). In total there were over 6,000 tetrads available at the start of the survey, of which approximately 2650 were surveyed previously in 1989 and/or 2005. Over 2900 of these tetrads were surveyed during autumn 2018 making it the largest and most in-depth survey of Tawny Owls ever.

The survey was carried out during the autumn of

BTO Regional Proportion of Tawny Owl Point Survey Tetrads Recording Tawny Owls during Autumn 2018

- 0 - 20%
- 20 - 40%
- 40 - 60%
- 60 - 80%
- 80 - 100%
- No Survey Tetrads

Click the map to view some provisional results!

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### Raptor Patch

You do not need to already know lots about raptors or raptor monitoring to be able to take part in Raptor Patch. Everything you need to get started is available here on the SRMS website. Click [here](#) to understand how you can progressively develop your skills and experience at a pace that suits you or take a look at the three leaflets below:

My BTO

## Tawny Owl Calling Survey

Take part in the Tawny Owl Calling Survey

Join the Tawny Owl Calling Survey

- New to BTO surveys? register account
- Existing Surveyor? sign up again
- Go to Data Entry

Project Owl

- About Project Owl
- Tawny Owl Point Survey
- Tawny Owl Calling Survey
- About the survey
- FAQ

### Why we need your help

Are there Tawny Owls calling in your area? By listening out for them in your garden or nearby green space you could help us to

My BTO

## LifeCycle

LifeCycle is the magazine of the [British & Irish Ringing Scheme](#) and the [Nest Record Scheme \(NRS\)](#), published twice a year, in the spring and autumn.

A newsletter for volunteers...

LifeCycle is primarily a magazine for the dedicated ringers and nest recorders who contribute so much time and effort to collecting essential data on the breeding success, survival and movements of Britain & Ireland's birds. As such, it includes practical ringing and nest finding tips, details of novel techniques and summaries of successful monitoring projects that demonstrate the initiative, hard work and skill of existing volunteers, while hopefully inspiring others to set up their own studies. Many of the articles are written by ringers and nest recorders, the people with the field expertise, and we would welcome ideas and contributions for future editions.

...and also a magazine for those interested in birds

# WG4 – Capacity Building (and developing guidance)



Thinking about the different sorts of field participants and answering some questions ....

What sort of people fit into the different categories?

What are their motivations for doing what they do in the field?

How are they currently coordinated – how do we reach them to encourage them to participate?

What guidance and training will they require to take a more active role in ERSamP?

What feedback will they require to keep them engaged?



Which key people and organisations must we involve in future workshops and work areas?







# **WG4 Field Arena**

**Grant period 3  
(May 2019 – April 2020)**



# WG4 Workshop

Slovenia  
September  
2019

## Objective

To develop plans for capacity building and related guidance on engaging, motivating and training volunteers to collect samples and contextual data



# WG4

## Field Arena

### 3 or 4 short-term missions in GP3

1. Develop guidance for training and volunteer recruitment (and plan the Slovenia meeting)
2. Best practice guidance for vultures
3. Best practice guidance for species group(s) for proof of concept study
4. Plan and coordinate field data collection/collectors for proof of concept study



## WG4 Team

Management of WG4 work programme

Chris Wernham

Al Vrezec

Rui Lourenço

Arianna Aradis

András Kovács

Yael Choresch

Stavros Xirouchakis

Ulf Johnasson

## WG4 Task Groups

Vulture guidance

Jovan Andevski

Rafa Mateo

STSM Mission hosts

Giacomo Dell'Omo

Jari Valkama

Rui Lourenço

**WG4 Corresponding members**  
including other WG Leads

# WG4 Field Arena



**Please register your interest with any WG4 member!**



**Thanks!**