



CONTEXTUAL DATA

- Definition
- Data types
- Constraints
- Guidance





CONTEXTUAL DATA

- Definition



Information on the individual, its population, and the environment where it lives that is relevant to the interpretation of data on contaminant exposure



CONTEXTUAL DATA

- Data types



- 1) Basic individual/specimen information
- 2) Relevant individual data
- 3) Population data
- 4) Environmental data

ID	Basic contextual data	Example	Specific skills needed	Live bird handling	Guidance need	Expected constraints
1	Date	Day/month/year	NO	NO	NO	None
2	Descriptive location	Village, municipality, district, country	NO	NO	NO	None
3	Name of the collector	ID/Anonymous	NO	NO	NO	None
4	Raptor species	Subspecies also identified if possible	YES/NO	NO	YES	Lack of experience in raptor identification (specially for shed feathers and eggs)
5	Dead/ alive/ other	If dead mention fresh or decomposed/ If other mention egg, pellet, shed feather	NO	YES/NO	NO	None
6	Matrix sample	Tissue, organ, blood (were blood was taken from)	NO	YES/NO	NO	None
7	Type of feather	Primary (and number), secondary, tail, breast, back, rump, nestling down	YES	YES/NO	YES	Lack of experience in feather identification
8	Ring number (if ringed)	Ring number with Ringing Centre Code and country, (ringing session or found dead ringed)	YES/NO	YES/NO	YES	Lack of information and experience
9	Coordinates	X and Y coordinates obtained by GPS or Google maps	NO	NO	NO	None

ID	Individual contextual data	Example	Specific skills needed	Live bird handling	Guidance need	Expected constraints
10	Age	Nestling age in days, Euring age codes (1,2,3,4)	YES	YES	YES	Lack of experience in age identification
11	Sex	Female, male, unknown	YES	YES	YES	Lack of experience in sex identification
12	Morph/ plumage pattern	dark/ light morph	YES	YES/NO	YES	Lack of experience
13	Photos	Photo of the individual, carcass, nestlings, injuries, etc.	NO	NO	YES	None
14	Condition of the bird (if alive)	Injured, healthy, emaciated	YES	YES	YES	Lack of experience in evaluating bird condition and use of different criteria
15	Body measurements	Wing length, weight	YES	YES	YES	Lack of experience and time
16	Diet	Prey composition, diet diversity, trophic level	YES	NO	YES	Lack of experience and time
17	Reproductive performance	Clutch size, hatching success, breeding success, etc.	YES	YES/NO	YES	Lack of experience and time
18	Behavioural data	Movement behaviour (marking or tracking), aggressiveness, other behavioural parameters	YES	YES/NO	YES	Lack of information, experience and time
19	Blood slide for biomarkers	Endoparasites, cell count	YES	YES	YES	Lack of experience



ID	Population contextual data	Example	Specific skills needed	Live bird handling	Guidance need	Expected constraints
20	Population trends	long- or short term trends in population size or abundance	YES	NO	YES	No monitoring schemes
21	Population reproductive performance	Mean reproductive parameters for the population	YES	NO	YES	No monitoring schemes
22	Population diet	General diet of population	YES	NO	YES	No monitoring schemes
23	Behavioural data	Migration patterns, mean home range	YES	YES/NO	YES	No monitoring schemes

ID	Environmental contextual data	Example	Specific skills needed	Live bird handling	Guidance need	Expected constraints
24	Land use	Land use and practices	NO	NO	NO	Difficulty to determinate in the field and in the office (satellite image)
25	Water and soil	Samples of water and soil near the nest site	YES	NO	NO	Lack of experience and time/ No protocols
26	Contamination sources in the area	Industry, hunting sites, contaminated water course	NO	NO	NO	Lack of information
27	Bait (specific for poisoning events)	Collecting remain baits, especially if poison is observed	YES (police forces)	NO	NO	Not foreseen in police protocols for poisoning events
28	Entomofauna (specific for poisoning events)	Insects that consume the carcass and soil below the cadaver	YES (police forces)	NO	NO	Not foreseen in police protocols for poisoning events



CONTEXTUAL DATA

- Constraints & Solutions

- 1) Need for best practice guidance (harmonise protocols)
- 2) Capacity building (lack of experience) 
- 3) Promoting monitoring programs 
- 4) Priorise sampling of individuals with more contextual data available



CONTEXTUAL DATA

- Guidance

- When and how to collect each contextual data
- Harmonise methods and procedures

- 1) Basic individual/specimen information
- 2) Relevant individual data
- 3) Population data
- 4) Environmental data

ERB Facility – European Raptor Biomonitoring Facility

Workshop 2 – WG4 – BEST PRACTICE GUIDANCE

