# Species and trophic guilds for pan-European monitoring

Nico, Richard, Antonio, Rafa



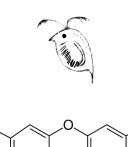
## Aims of monitoring

### Substance oriented (*with* raptors) Species oriented (*for* raptors/conservation)

## Species of choice



- Accumulation potential of substance
- Metabolism of substance by species
- Complexity of food web

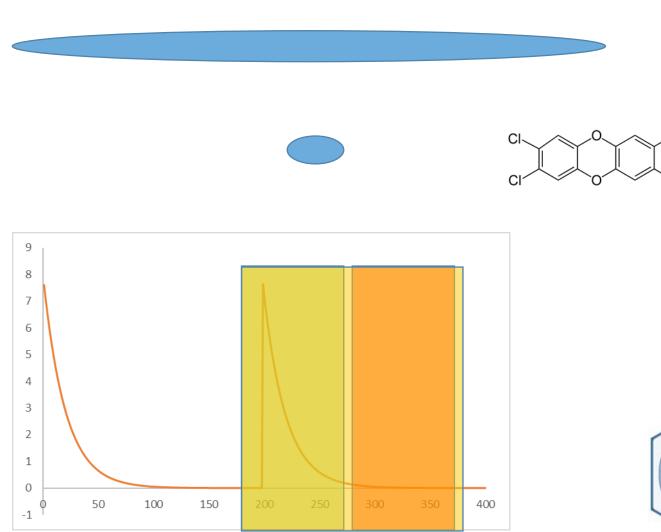




## Species of choice

Spatial configuration







## Species of choice



- Food web relationships
- Spatial overlap
- Temporal connection

### • Species

- Specialists versus generalists/opportunistic feeders?
- Territorial versus larger home ranges, migratory?
- Abundant versus rare species?

Substance

- Usage pattern, environmental distribution
- Fate within environment and food web

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An overview of existing raptor contaminant monitoring activities in Europe

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#### Gomez-Ramirez et al. 2014

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#### Use of Terrestrial Field Studies In the Derivation of Bioaccumulation Potential of Chemicals

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Van den Brink et al. 2014







*For* raptors: species is major focal point, based on species traits select which substance may be of concern

With raptors: substance major focal point, based on substance properties select which species may show proper signals that can be interpreted



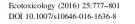
## Species of choice

Practical considerations

#### Connect to WP3 and WP4

Output for this action Scientific paper

- Species traits and chemical properties, linking species and chemicals for monitoring
- Linking to output of WP3/4 with practical considerations
- White paper on the use of raptor monitoring in chemical regulation.



Tracking pan-continental trends in environmental contamination using sentinel raptors—what types of samples should we use?

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Espin et al. 2016



