

Natura 2000-habitats under pressure

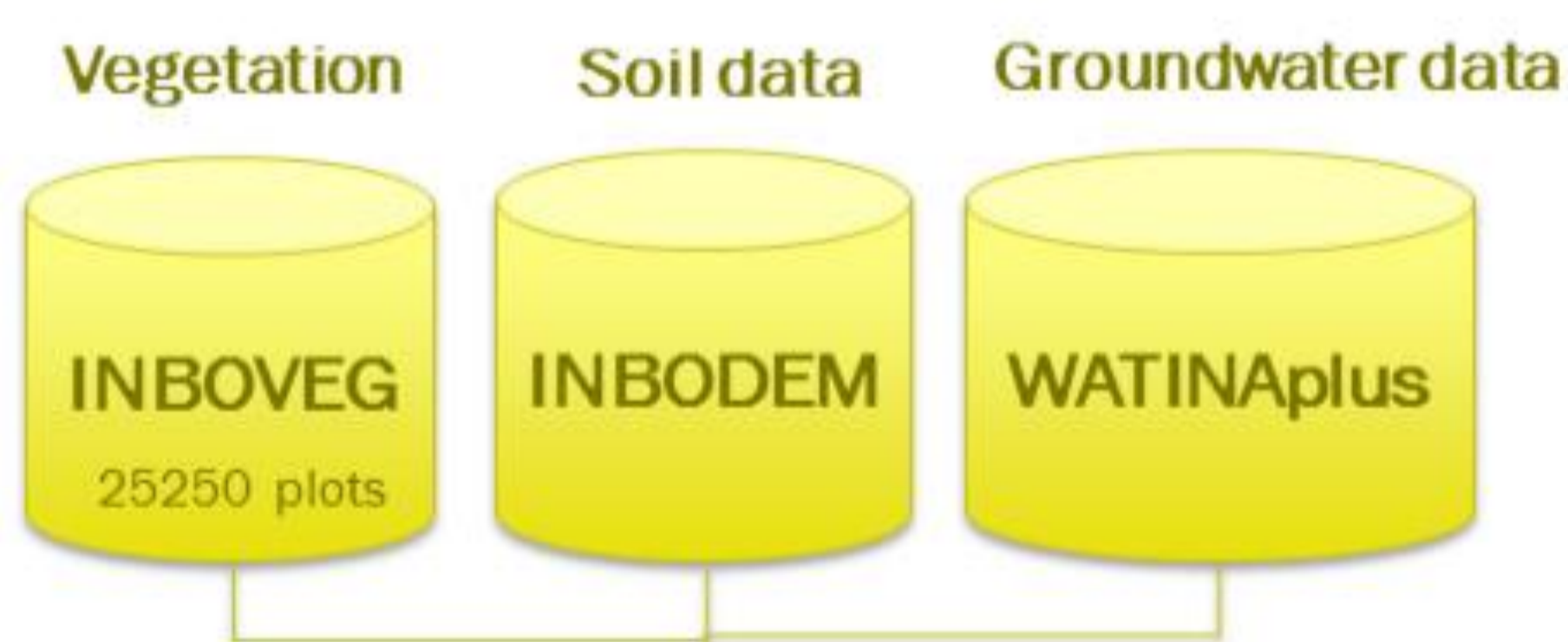
In search of science-based ecological thresholds for regulating human activity

Context

A full implementation of the Habitats Directive implies that all enlisted habitats and species attain a favourable conservation status all over the European territory. Most Habitat Directive areas encounter severe environmental bottlenecks. Desiccation, acidification and eutrophication occur very often. A huge effort is needed in environmental restoration. Furthermore damaging activities should be avoided. Therefore an appropriate assessment -required under Article 6 of the habitats directive- can be made. In this assessment environmental conditions with and without human pressures are estimated and compared with thresholds corresponding with the favourable conservation status of a habitat.



Relational databases

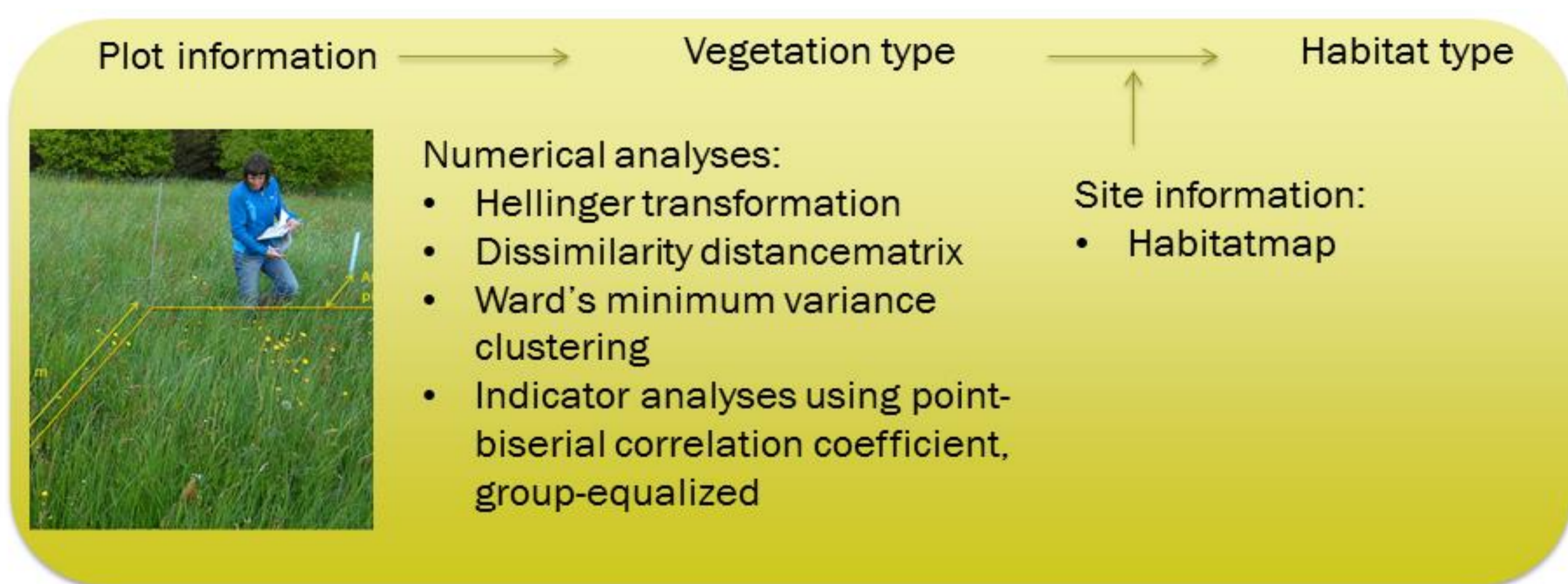


Science underpinning the implementation of the the European Habitats Directive

1. Priority setting

Based on: habitats sensitive for pressures, priority in Europe, contribution of Northern-Belgium to the conservation status in Europe and area

2. Habitat types



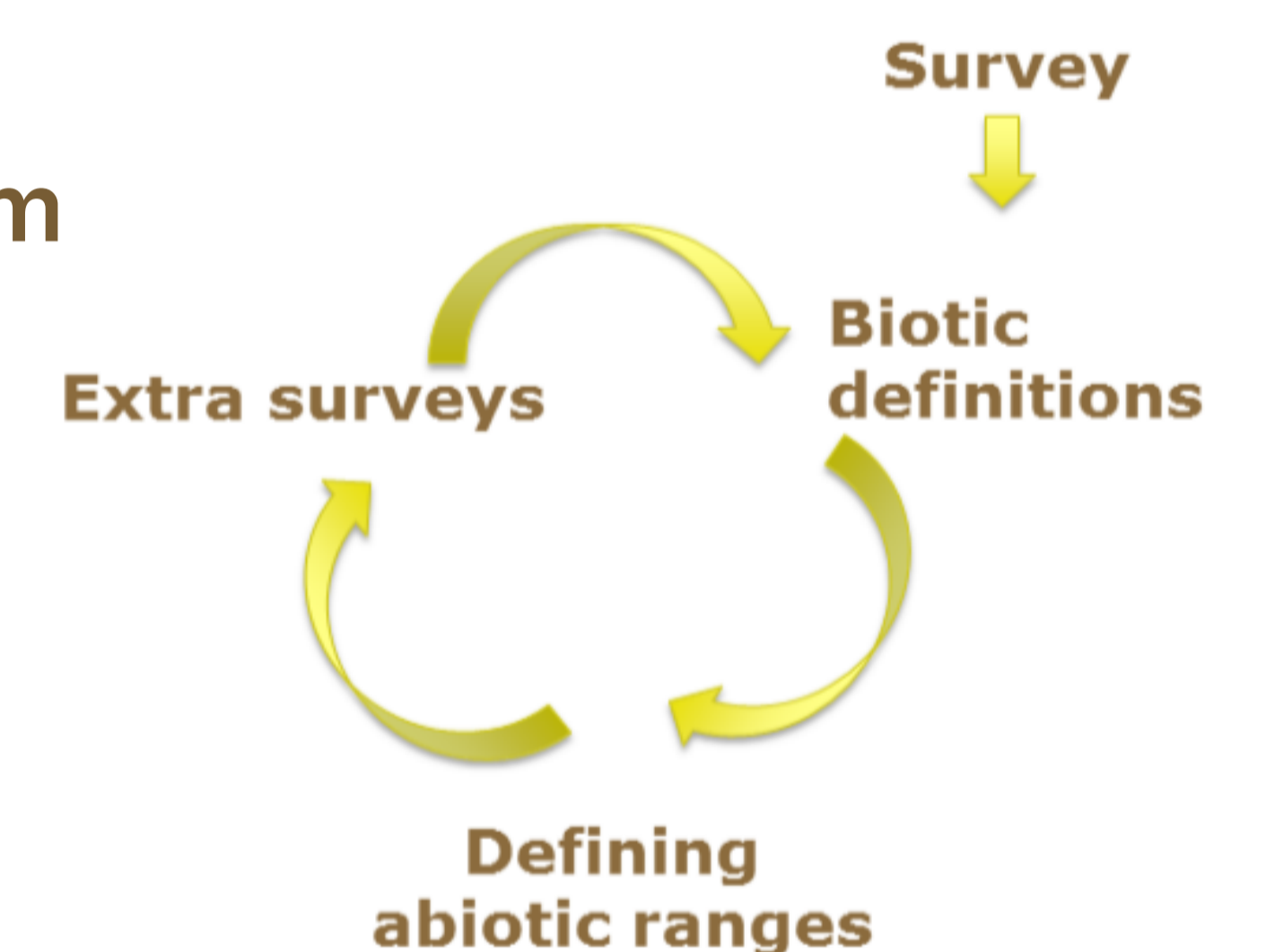
3. Habitat quality

Assessment based on structures and functions, typical species and spatial configuration

Example	Criterion	Indicator	Importance	Site 1	Site 2	Site 3
Structure	Dead wood	M	67 (% area unfavourable)	67 (% area unfavourable)	67 (% area unfavourable)	
	Height herb layer	M	66 (% area unfavourable)	6 (% area unfavourable)	66 (% area unfavourable)	
Disturbances	Tall herb encroachment	H	12 (% area unfavourable)	12 (% area unfavourable)	12 (% area unfavourable)	
	Desiccation	H	9 (% area unfavourable)	89 (% area unfavourable)	89 (% area unfavourable)	
Typical species	Fauna & Flora	H	GOOD	BAD	BAD	
Spatial configuration	Size of the core area	M	67 (% area favourable)	89 (% area favourable)	89 (% area favourable)	
Overall conclusion			4/6 FV	3/6 U1	2/6 U2	

Surveys in Northern-Belgium

- Vegetation plots 3x3 m²
- Soil samples
- Groundwater dynamics
- (Ground)water samples

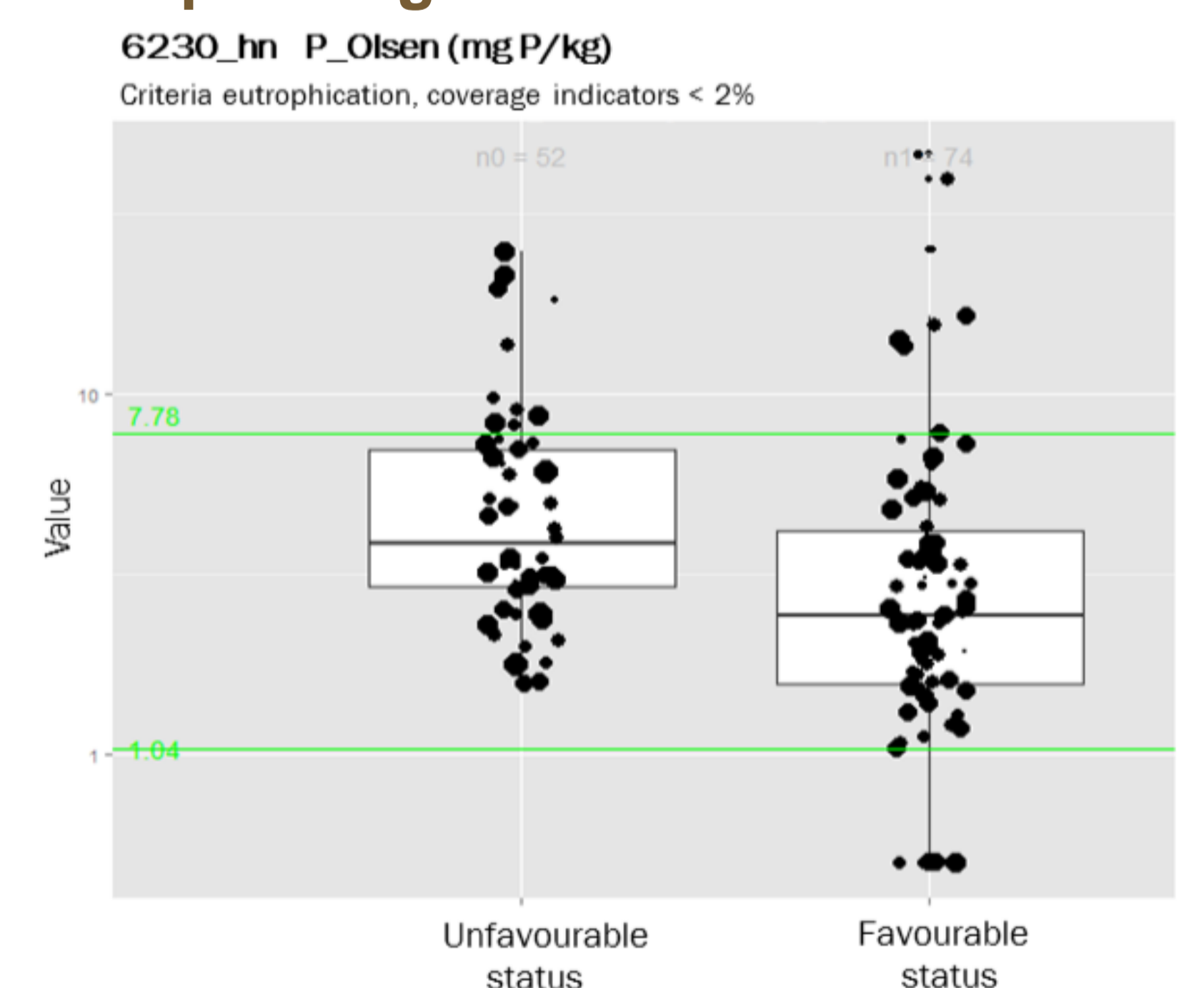


4. Consistent methods for identifying ecological thresholds

- Defining the thresholds; marking the ecological uncertainty
- Selecting appropriate variables
- To assure the link with the decision-making framework

5. Defining abiotic ranges corresponding with the favourable status of a habitat type

- Defining ranges with data from Northern-Belgium



- Combining sources

