

E-BIND

Evidence based improvements of the implementation of the Birds and Habitats Directive

9th of April, Anne Schmidt (WENR) on behalve of E-BIND consortium



The E-BIND consortium



Background and objectives

■ **Fitness Check of the Birds and Habitats directive:**

- Nature directives are fit for purpose, but implementation needs improvement
- Significant data and knowledge gaps that constrain efficient and effective implementation
- Improve the knowledge base and access to information

■ **E-BIND objectives:**

- Better use of scientific knowledge and scientific networks in support of the implementation of the nature directives
- Mobilise the scientific community in support of better and more effective implementation

Focus areas and themes

Focus area A Better availability of data, information and knowledge

1. Monitoring of species and habitats (incl. citizen science)
2. Remote sensing for conservation
3. Data and information access

Focus area B Scientific support for successful implementation

1. Effectiveness of conservation and restoration measures
2. Network coherence and connectivity
3. Ecosystem services

Target groups

Policy makers
Decision makers



Practitioners /
Site managers

Scientists



Workflow chart



The common thread for all themes

- Functional groups (groups of species and habitats):
 - Coastal systems (marine systems)
 - Water dependent systems (wetlands, rivers)
 - Grasslands (natural and management dependent)

- EEA and ETC Biodiversity (State of Nature)



Remote sensing for conservation

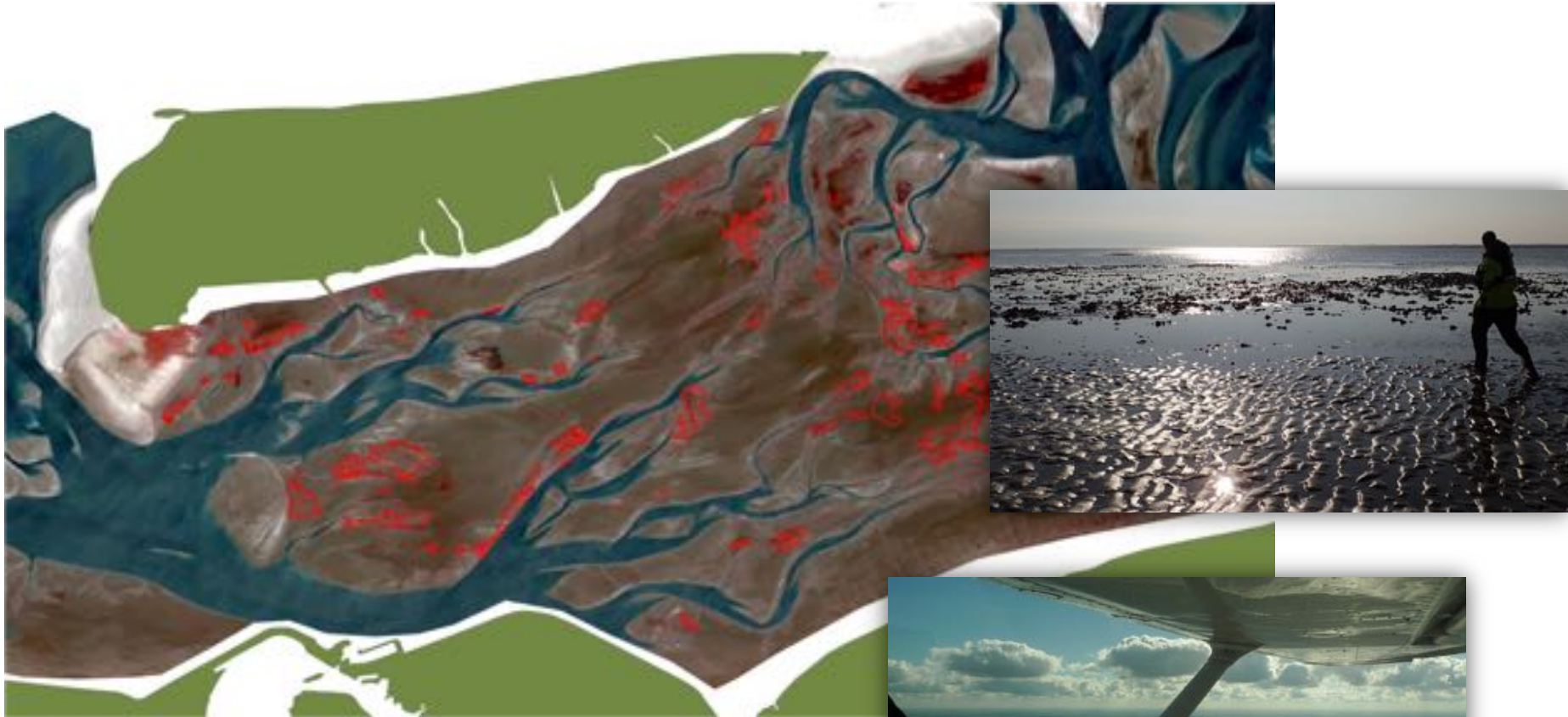
- Techniques, methods, products for mapping and monitoring of:
 - Natura 2000 habitats inside and outside Natura 2000 network
 - Threats and pressures e.g. land use changes and invasive species
- Distribution, extent and “quality” of habitats:
 - Composition: species composition
 - Structure: vegetation structure
 - Function: biomass production



Some examples from NL ...

Coastal habitats, mussel beds

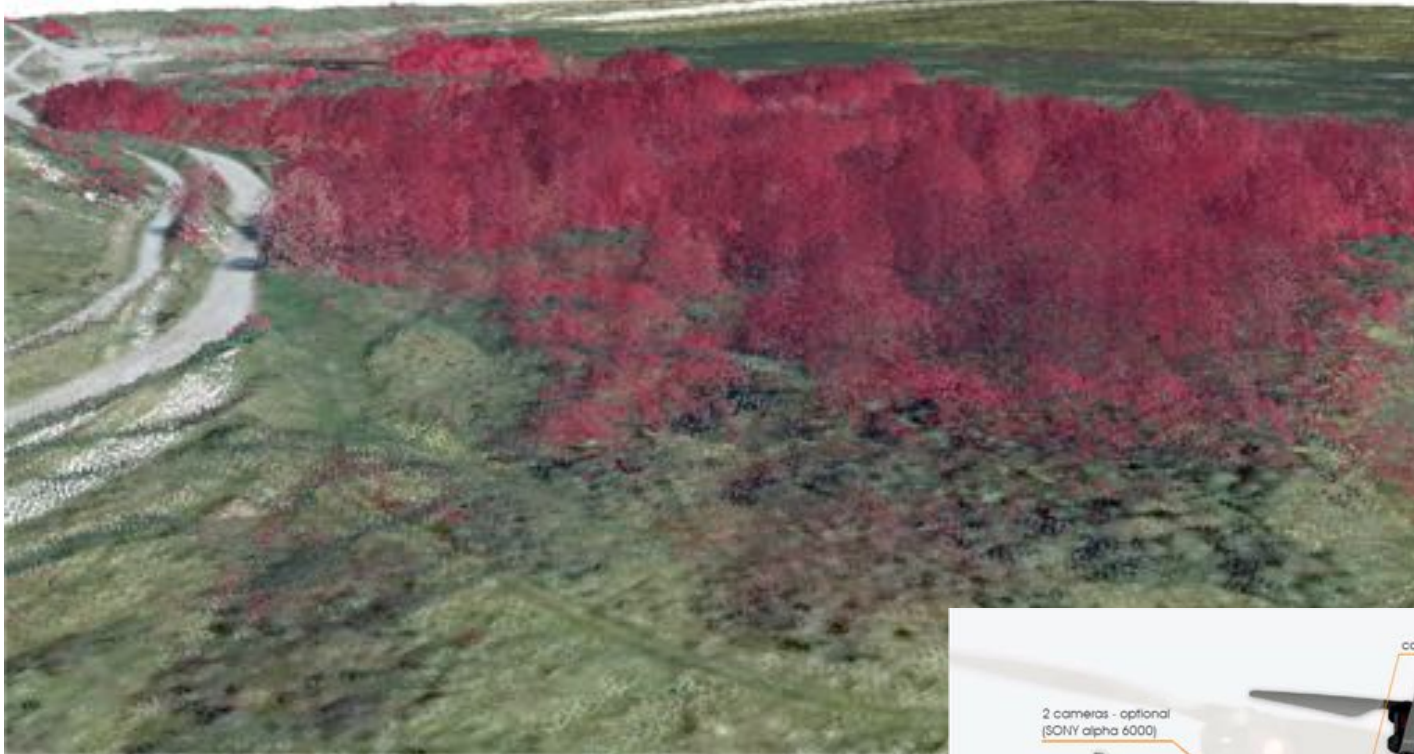
Schiermonnikoog



Detection of mussel beds
(high resolution images)

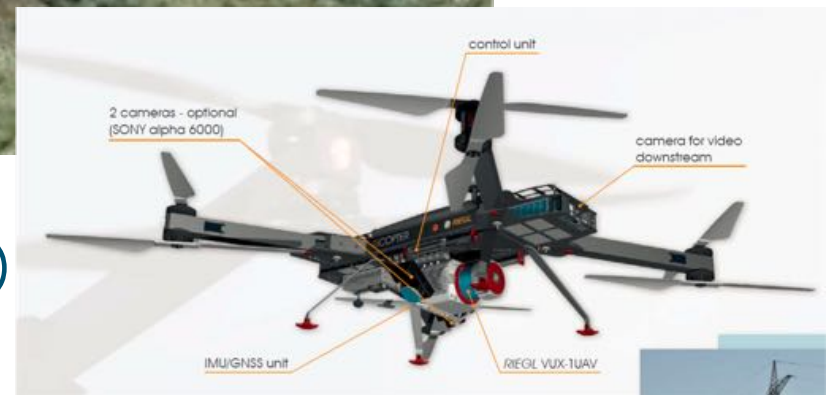
Coastal habitats, dunes

Meijndel-Berkheide



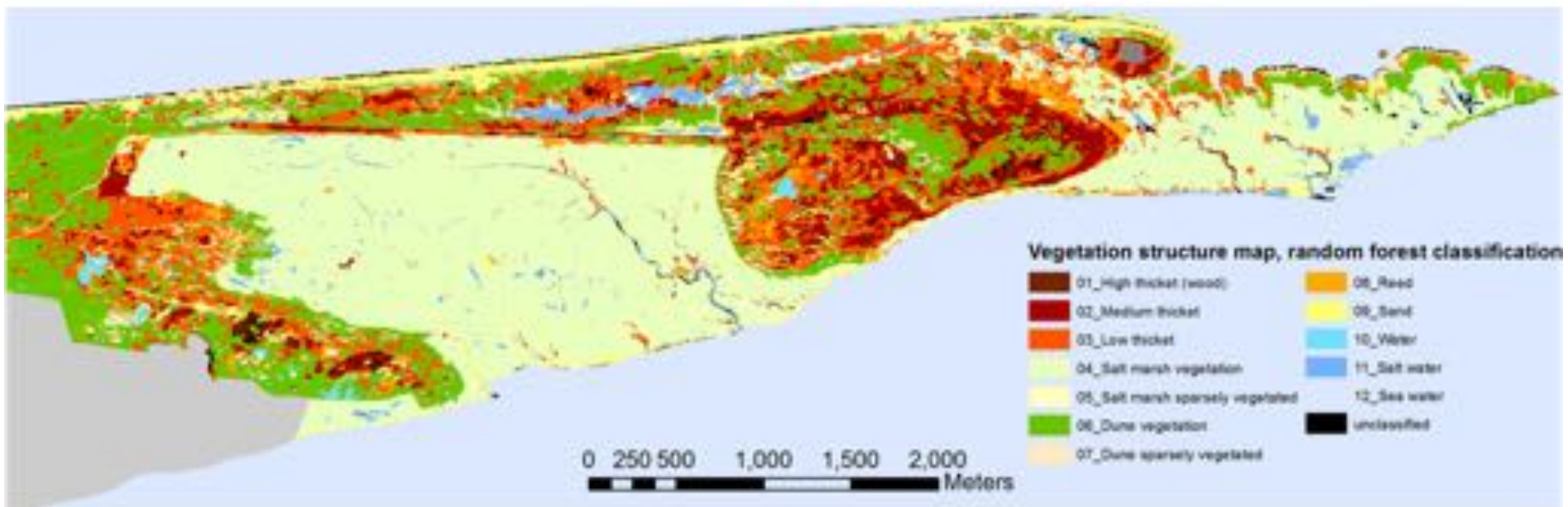
LiDAR RiCopter

Vegetation structure
(Lidar in combination HR satellites)



Coastal habitats, dunes and salt marshes

Ameland, Wadden Sea



Vegetation structure monitoring / change detection
(Lidar in combination with aerial photographs)

But.....

- Most of these techniques and methods are not (yet) applied for e.g. conservation status assessments on national level and site level (in NL)

- Due to ...?:
 - Data availability and accessibility
 - Data quality
 - Costs
 - Robustness
 - Consistency
 - ..

Questions (to be discussed later on)

- What habitats (and components) are most suitable to be mapped and monitored by remote sensing?
- What remote sensing techniques, methods and/or products are most suitable for habitat mapping and monitoring?
- What is the added value or remote sensing in terms of cost-effectiveness?
- What are the barriers for site managers to have access and to use remote sensing techniques, methods or products?
- What are future prospects and challenges?

Questions

- What are good examples of remote sensing applications for nature conservation, specifically Natura 2000 => this workshop

- What are best practices, strategies, approaches transferrable from one Natura 2000 site to another site or one MS to another MS

END

