BioSpace25 - Biodiversity insight from Space
10 - 14 February 2025 | ESA-ESRIN | Frascati - Italy

Ecosystem Conservation I

Conveners: David Coomes & Kyla Dahlin

In situ Data for Conservation

- **Nature FIRST** show-cased its local habitat mapping approach. They recommend co-design of products with users, to increase relevance to end users.
- Similarly **Biodiversa+** is the partnership for long-term ecological monitoring across the EU, working on in-site monitoring and RS observation. It recommends more cross-sectorial cooperation, and the co-designed products fit for developing/ implementing policies on appropriate scales
- The **Jane Goodall** Institute works on conservation of iconic animals in Africa, integrating many remote sensing and in-situ data streams to deliver on-the-ground solutions. They recommend converting pixels and data into management polygons with specific decision makers and mandates. High resolution imagery key to tell a story and connect people hearts and minds
- **ConScape** seeks to understand how habitat fragmentation and reconnection affects movements of wildlife, by integrating habitat and network models. They recommend further integration of population models with mapping products to develop better management plans for wildlife
- A speaker from the **German Federal Agency for Nature Conservation** recommended greater coordination and standardisation among EO projects and applications. He recommended investing in build trust in remote sensing products within the legal cases (e.g. as has happened with DNA evidence) and working with organisations embed new products into their systems.

SUMMARY

- **In summary**, some talks recommended **local co-design** of products to maximize local usefulness and buy-in while others recommended EU-wide / global standardization of products built on high quality data. There is, surely, merits in both approaches and they are not mutually exclusive. For example, GEO's World Ecosystem Atlas operates on the principle that habitat mapping must be hierarchical (e.g. following the IUCN habitat typology)
- **Higher level mapping can/should be globally standardized**, while lower levels (e.g. plant communities within a region) can/should be created locally (nationally or subnationally).
- The talks illustrated the creative use of RS technologies by conservationists for a wide range of practical applications