The Nature Index
- *a measure on state and trends of biodiversity and ecosystems*

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How is state and trends of biodiversity usually communicated?

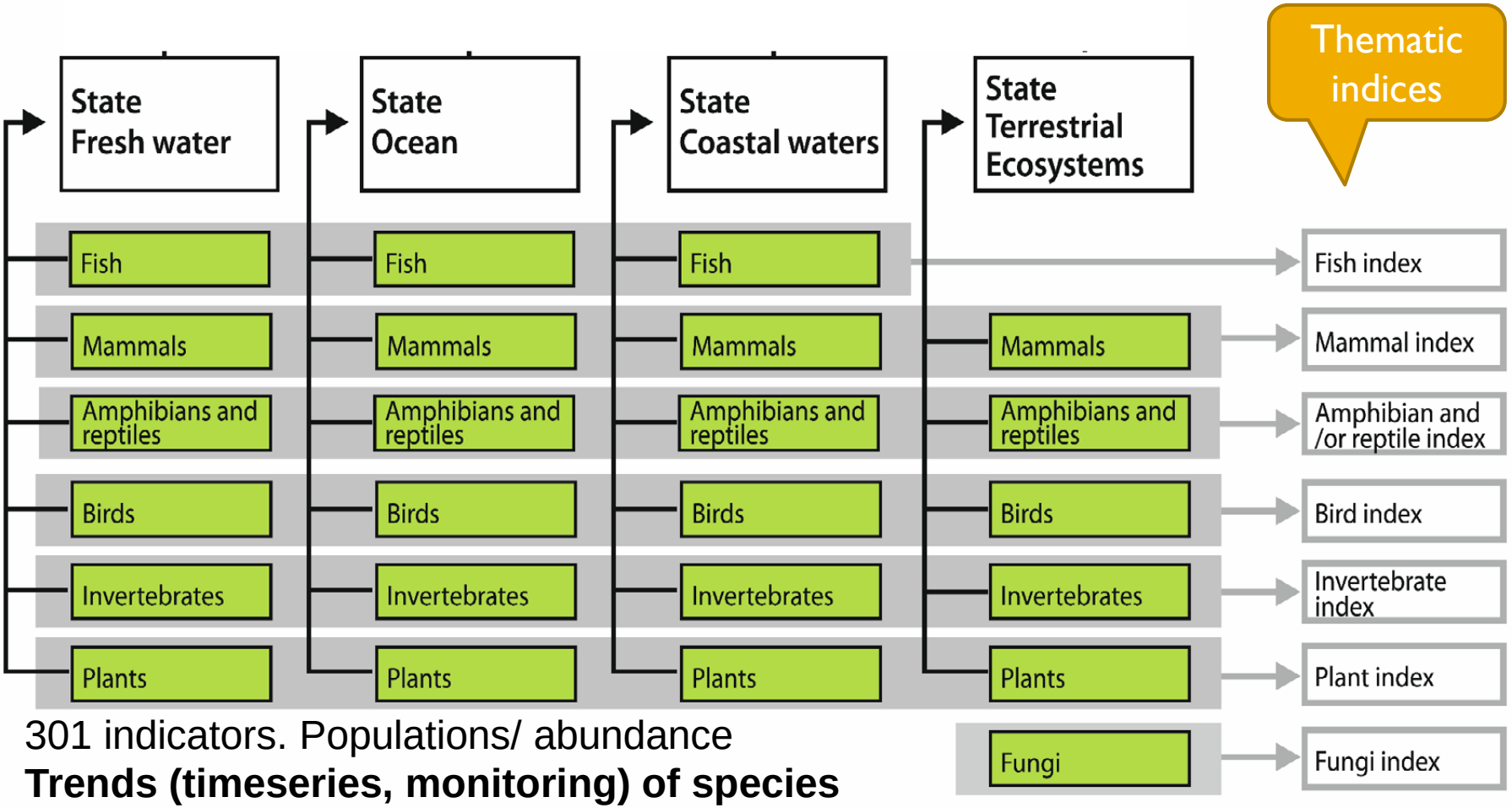
- Overview reports:
  - Indicator by indicator is presented, species by species.
  - The overview is presented as text only
  - Also, lack of overview
  - Only crisis are reported in the media and to the public

- Why this fragmented presentation?
  - Lots of biodiversity data (monitoring, research, observation knowledge)
  - Data been gathered with different methods
  - Monitoring often focuses on bad areas, not area representative
  - Data not easily accessible
  - Not any good methods for integrating existing knowledge (data, expert judgement and research results)

Educational video

https://www.youtube.com/watch?v=b_StrvtbKSk

Nature Index Framework



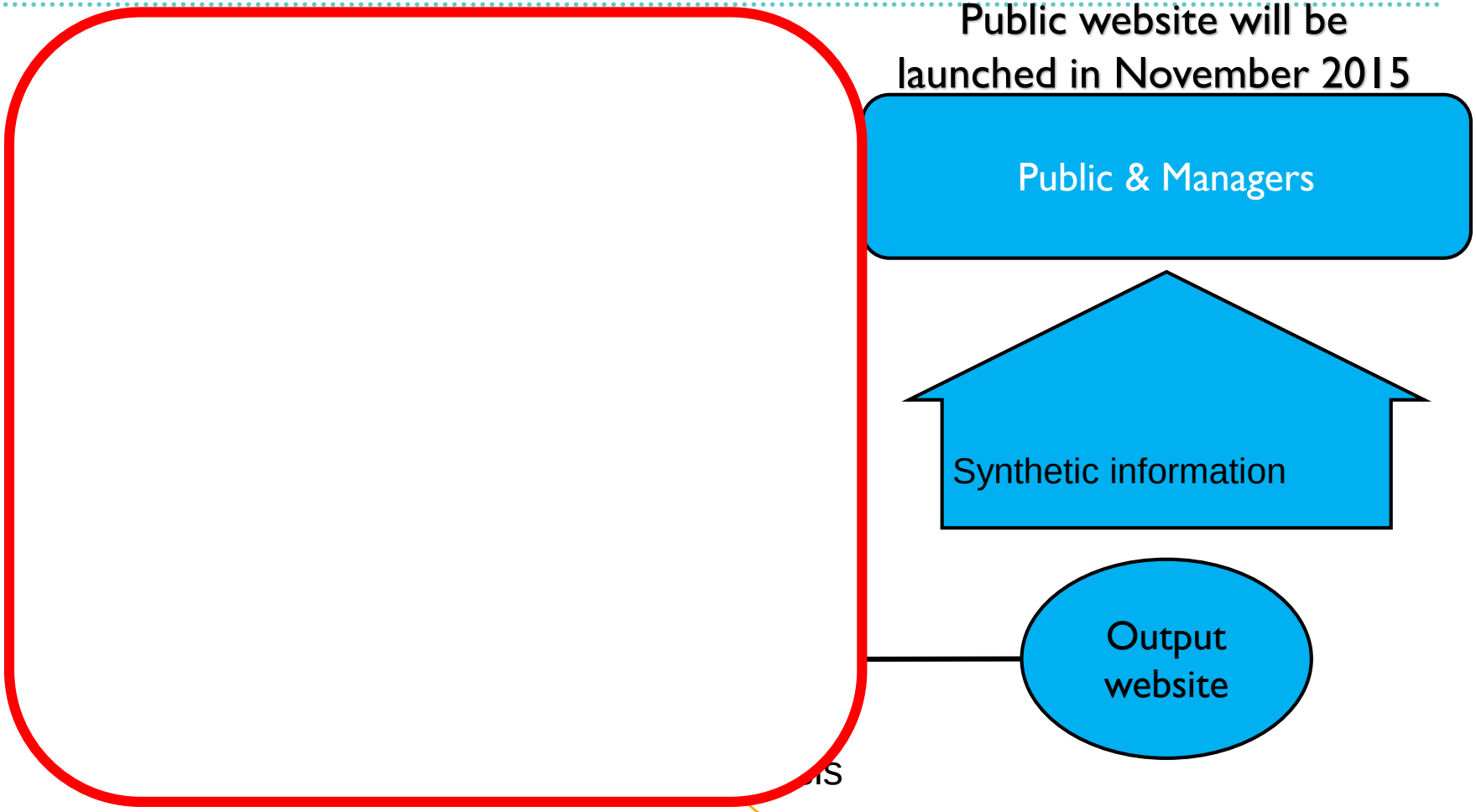
301 indicators. Populations/ abundance

Trends (timeseries, monitoring) of species

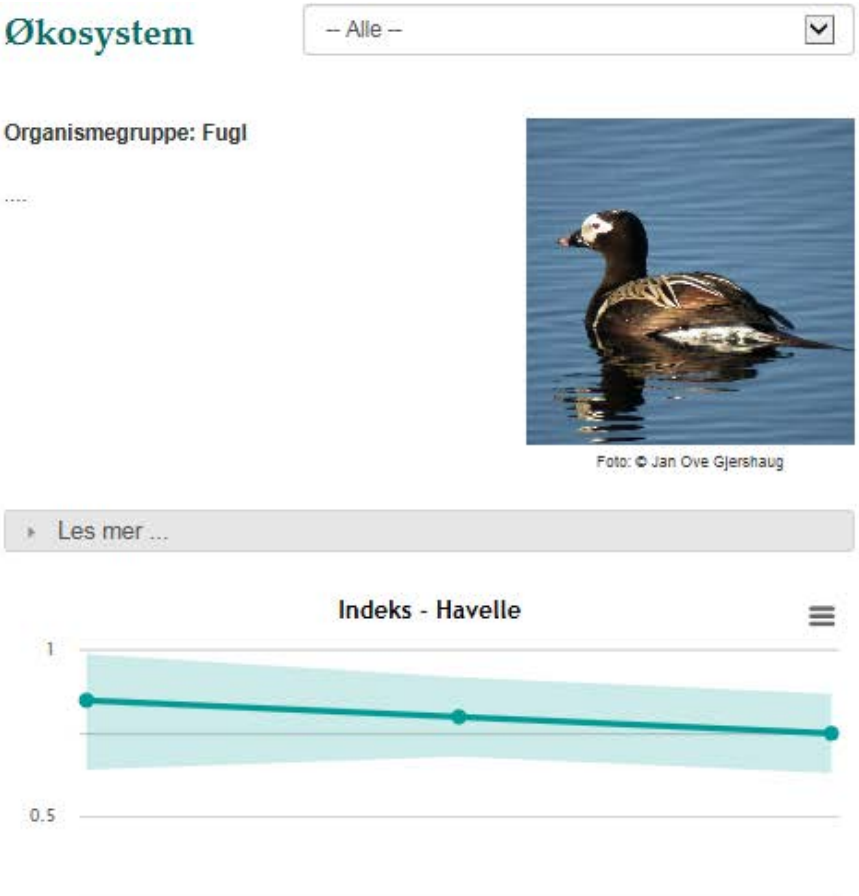
Values scaled 0 -1, where 1 is ecosystems in good condition for biodiversity

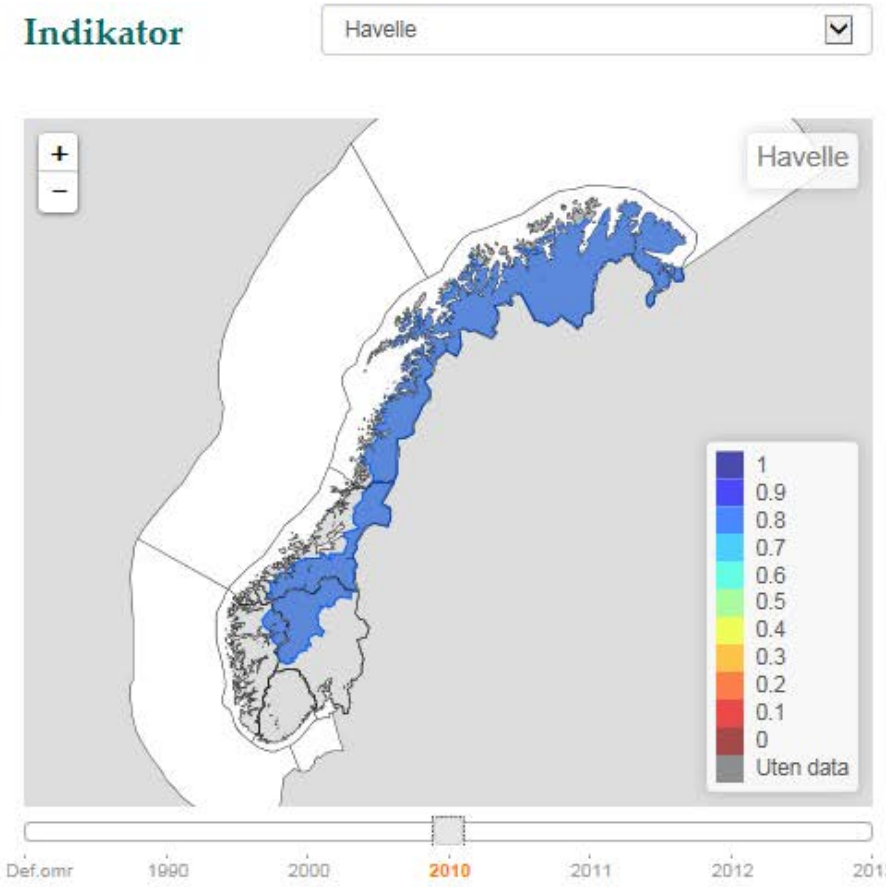
What is the Nature Index ?

An online database for storing monitoring data and knowledge, analyzing information and communicating state and trends of ecosystems and species

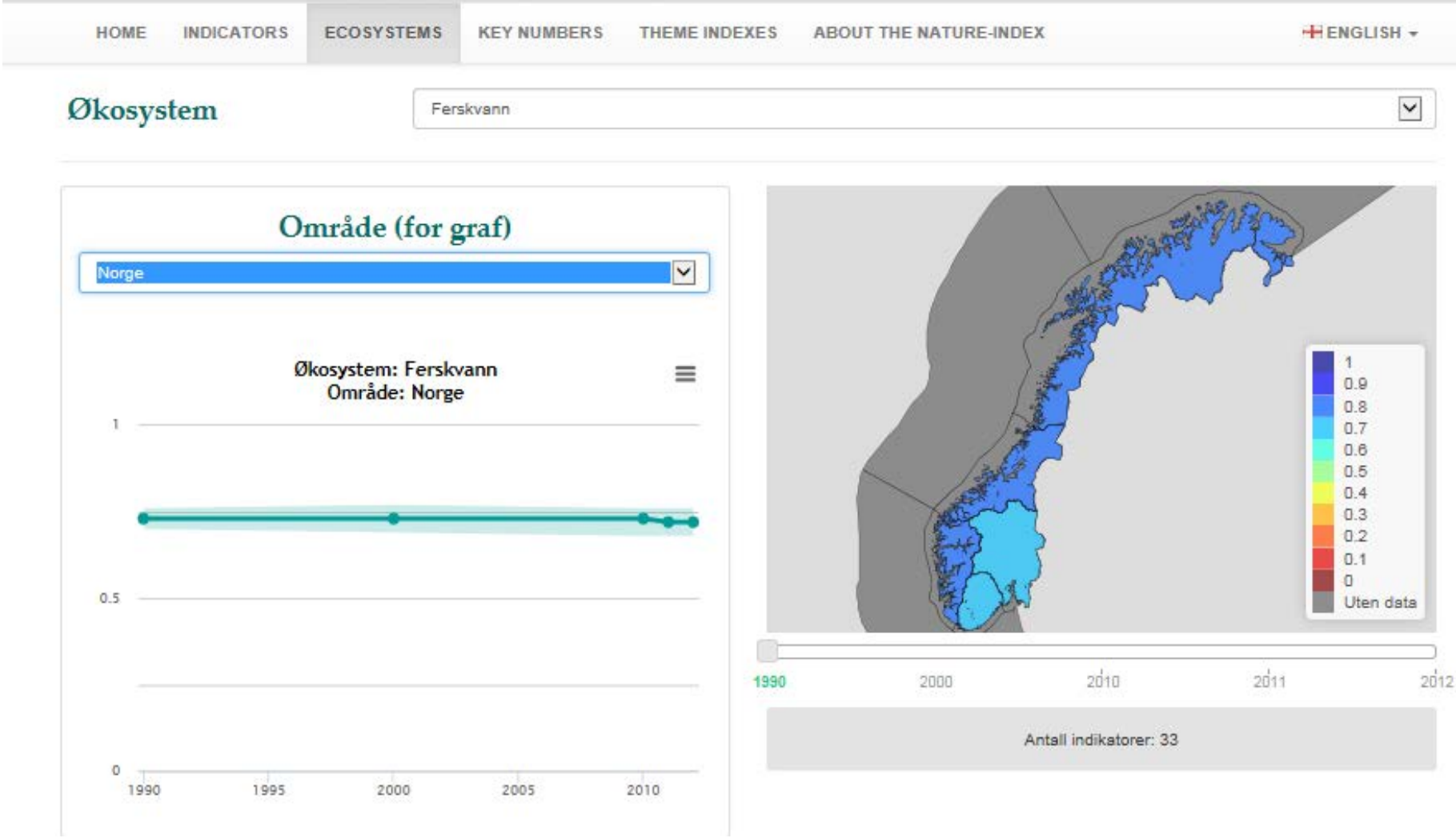


Trends and state of individual indicators

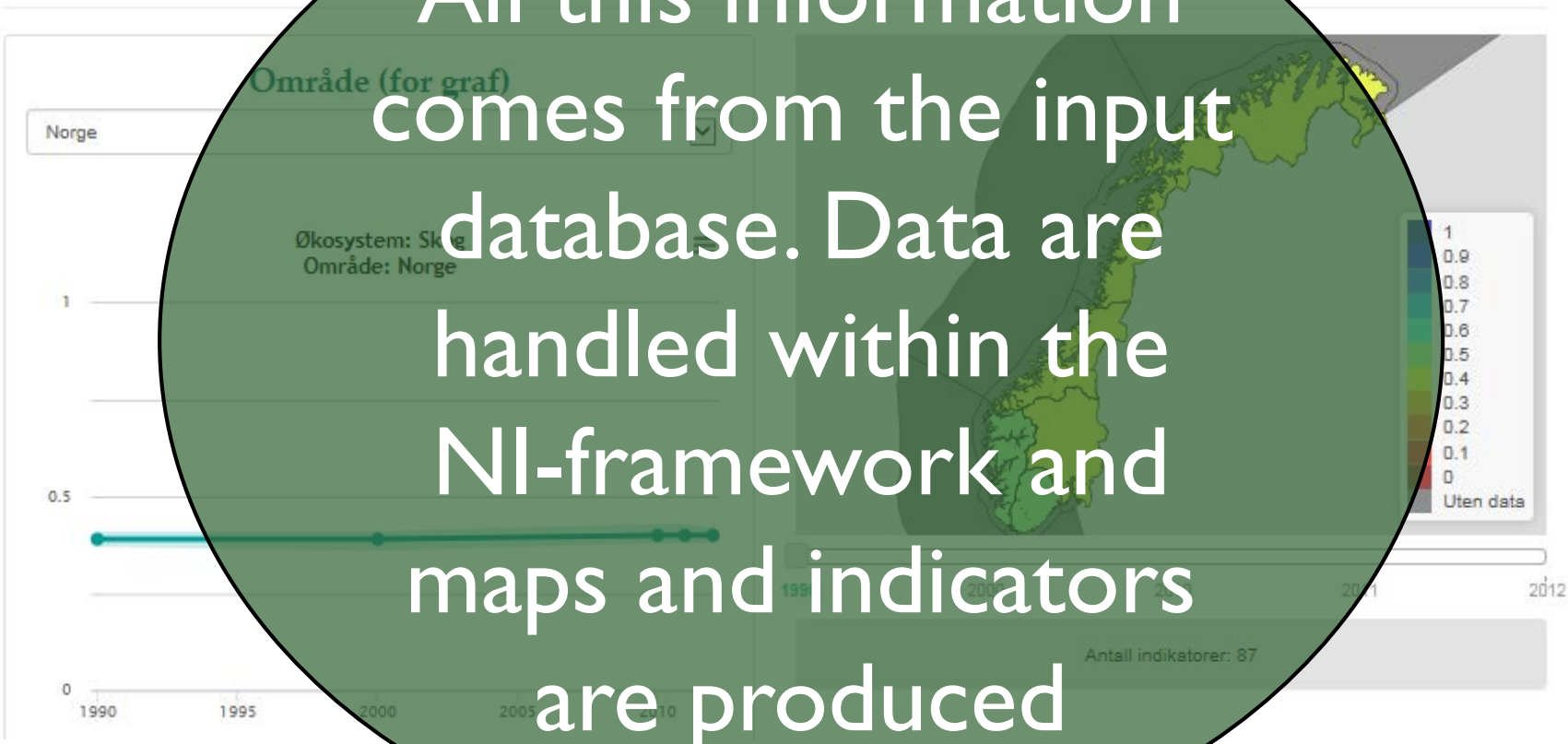




State of biodiversity in fresh water

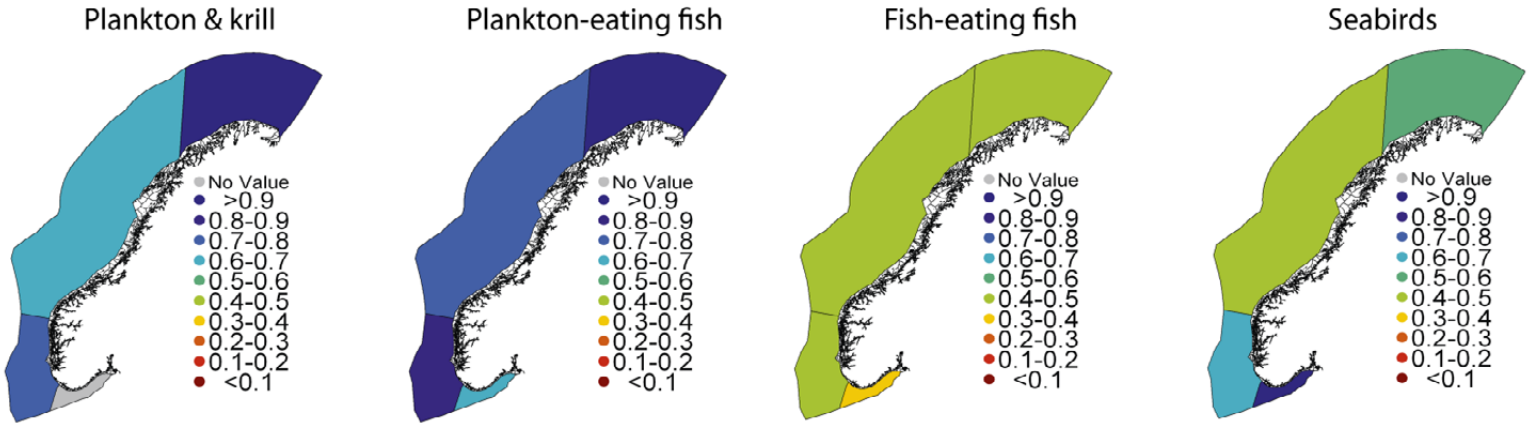


State of biodiversity in forests

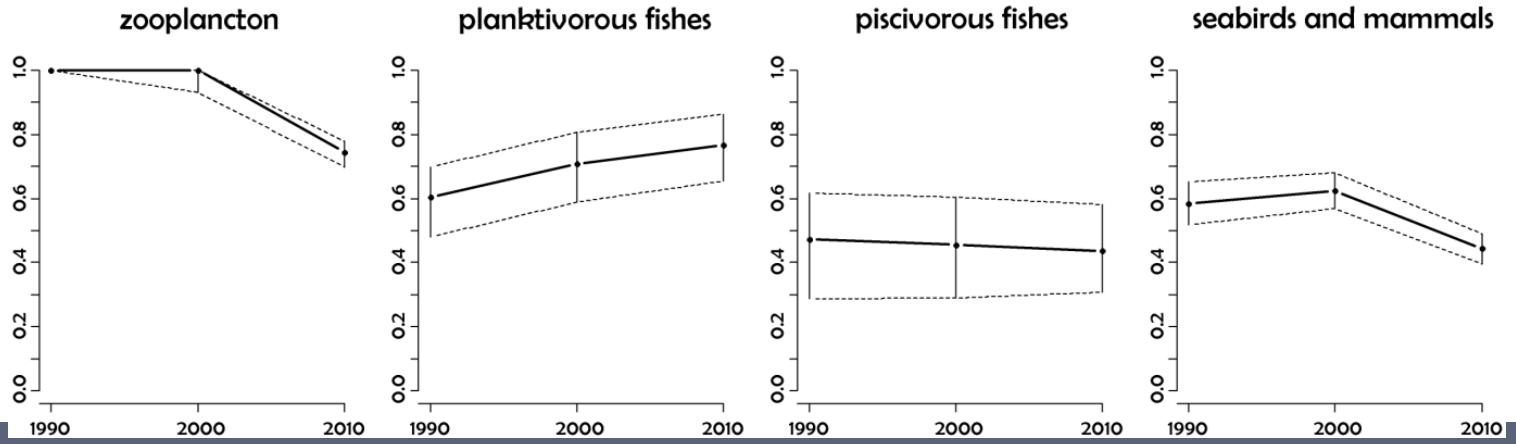


All this information comes from the input database. Data are handled within the NI-framework and maps and indicators are produced

Trends and state of thematic indices 2010



d) thematic index on trophic groups of pelagic systems



Experiences; is it useful?

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Outside the ecological academic community

- Used for reporting on biodiversity regional, nationally and internationally (CBD). Relevant for clearing house mechanism
  - National headline indicator for state of biodiversity within major ecosystems
- Awareness raising and capacity building among non-scientists (public web-page)

Nature Index relevant for reporting on CBD Strategic goal C: *To improve the status of biodiversity by safeguarding ecosystems, species and genetic diversity*

Aichi target	Indicators possible to calculate using the NI methodology
4	Population trends of utilized species, including species in trade
5	Degradation of natural habitats; population trends of habitat dependent species in each major habitat type
6	Population trends of target species and bycatch aquatic species
7	Population trends of forest and agriculture dependent species in production systems
9	(Impacts of invasive alien species on extinction risk trends)
12	Trends in abundance of selected species
15	Status and trends in species that provide ecosystem services

+ New millennium goals--

Experiences within ecological academic community

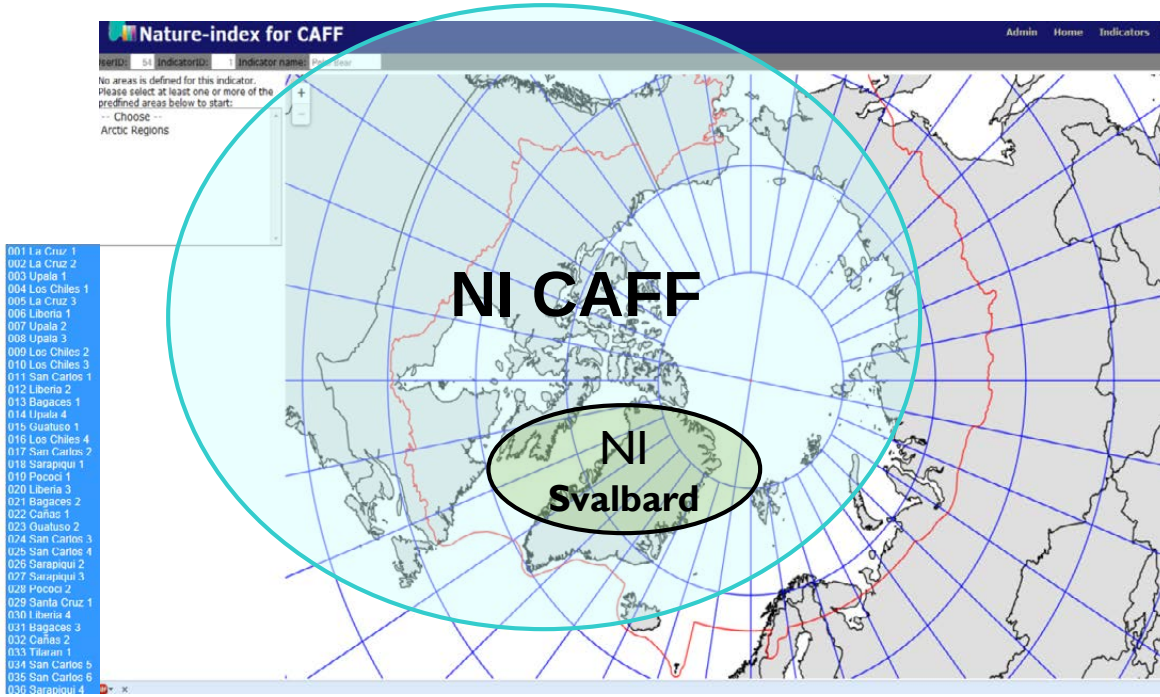
- For the first time a common framework has been used to analyze and synthesize ecological information to communicate overall trends of biodiversity within ecosystems to policy makers.

- Success factors to get experts to contribute
  - Average values and uncertainties are included in the analysis
  - Experts responsible for quality assurance and updating own data
  - Relevant experts participate in assessment
  - Structure monitoring and analytical tool

- Creates an arena for cooperation among institutions and scientists working with biodiversity. Fruitful discussions, also across major ecosystems and institutions

Implementation of the Nature Index in other areas

- Pilot projects in the arctic area marine mammals – Arctic Nature Watch (CAFF)
- Pilot project in Costa Rica (INBio)
- Lithuania, EPA
- India
- Bulgaria?+ +...



Thank you for the attention!

Involved Research institutes:
Norwegian Institute for Water Research (NIVA)
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Norwegian Institute for Nature Research (NINA)
Marine Institute
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