



NORWEGIAN MINISTRY OF
THE ENVIRONMENT



A national method for landscape identification required as a common basis for landscape analysis at national, regional and local levels

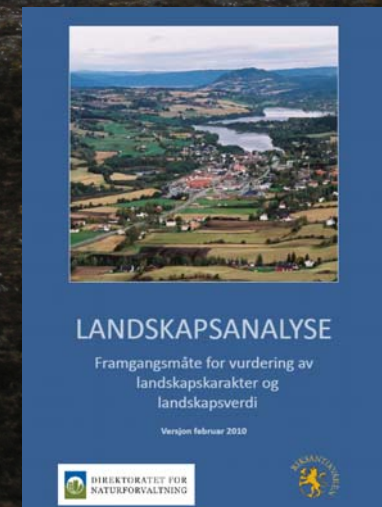
Liv Kirstine Mortensen, Department for Planning

13th Council of Europe Meeting of the Workshops, Cetinje, Montenegro, 2-3 October 2013

The use of landscape identification and analysis



Photo Ina Rognerud



Increasing need for detailed information about landscapes

We need more systematic knowledge of the diversity we have in the Norwegian landscape to know what is

- Rare/unique
- Common/representative



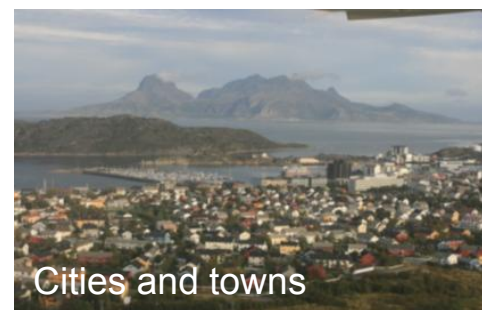
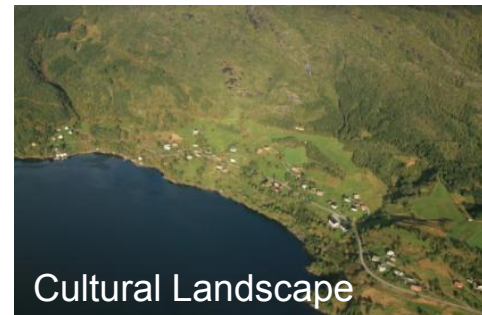
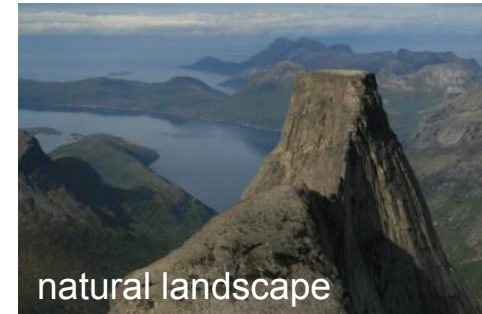
Landscape identification

European Landscape Convention, Article 6c:

«(...) *each Party undertakes (...):*

- *to identify its own landscapes throughout its territory*
- *to analyse their characteristics and the forces and pressures transforming them (...)*»

The convention distinguishes between Landscape identification and Landscape analysis



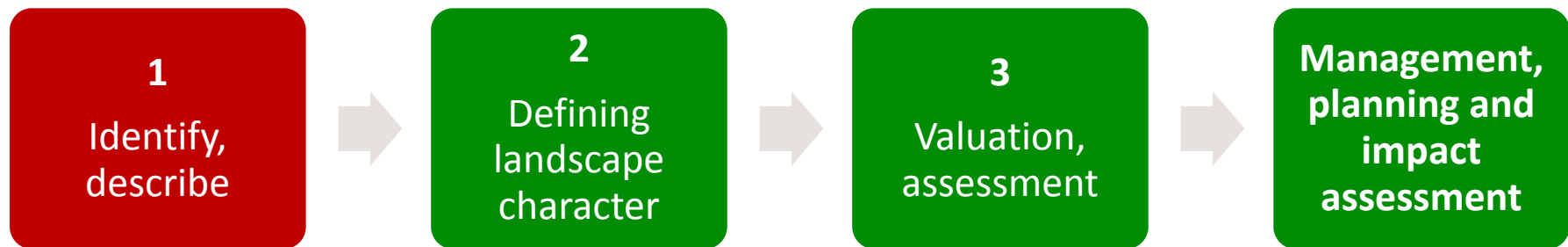
Landscape identification

- **Identification of landscape types**

Identification with the aim of a systematic description of the variations in landscape (phase 1)

- **Landscape analysis**

Analysis of selected characteristics of the landscape assessed in relation to a clearly defined purpose / intended use (phase 2 and 3)



Public knowledge databases

Artskart 1.6

Start Søk Artstre Kart Objektinfo Utvalgstatistikk Om tjenesten

Velkommen til tjenesten Artskart

Antall poster totalt			
1632884			
Antall arter			
28497			
Antall databaser			
108			
Statistikk for artgrupper			
Artsgrupper	Prosent	Antall	Arter
Fugl	57	9135548	570
Karplanter	23	3730944	3512
Sopp	3	509609	6104
Lav	2	397215	2197
Sommerfugler	2	385693	2232
Fisk	2	345163	257
Biller	1	267931	3419
Moser	1	211457	1121
Krepsdyr	1	159102	653
Pattedyr	0	122379	97
Bløtdyr	0	115495	747
Alger	0	88222	643
Døgnfluer, øyenstikkere, steinfluer, vårflyer	0	77331	316
Veps			
Tovinger			
Edderkoz			
Nebbmur			
Leddorm			
Amfibier			
Sporedyr			

1. Storbordsgjæverbie (*Megachile lagopus*) (CR), Foto: Jens Christian Schou Biopix. 2. Rødvulv (*Vulpes vulpes*), (LC), Foto: Åslaug Viken. 3. Huldrestrey (*Usvna longissima*), (EN), Foto: Einar Timdal, NHM, UIO. 4. Vanlig uer (*Sebastes marinus*), (EN), Foto: Alf Jacob Nilsen, Bioquatic Photo.

Artsdatabanken og GBIF-Norge har sammen med dataeierne laget denne tjenesten for å formidle stedefest artsinformasjon fra dataeierne til brukere. Her kan du søke på arter og finne hvor arten er funnet. Du kan også søke på geografiske områder, fylke eller kommune, og få vist i kartet hvilke arter som er funnet. Under arkivene Kart kan du også avgrense søket til belegg og observasjoner. Tjenesten er ufyllestendig i den forstand at ikke alle eksisterende funn av artene er tilgjengelig i tjenesten. Mange artsfunn er ikke digitalisert ennå og mange primærdatabaser er ennå ikke gjort tilgjengelig for tjenesten. Derfor må du som bruker av tjenesten ha dette i tankene når du bruker Artskart. Artsdatabanken og GBIF-Norge arbeider systematisk med å gjøre stadig flere datasett tilgjengelig etterhvert som de

Kulturminnesøk

Hjem / Minnesøk Nyheter Om kulturminner Om Kulturminnesøk

Bergenhus, Bergen (bydel)

Avansert søk Legg til kulturminne

Bebyggelse-Infrastruktur Mer info

SKUTEVIKSODER

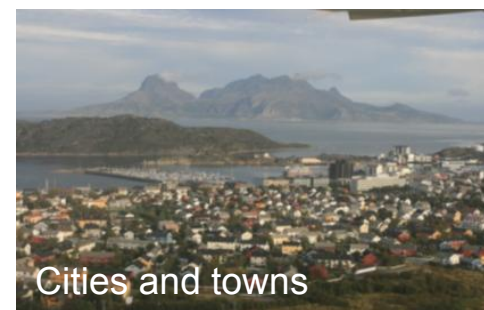
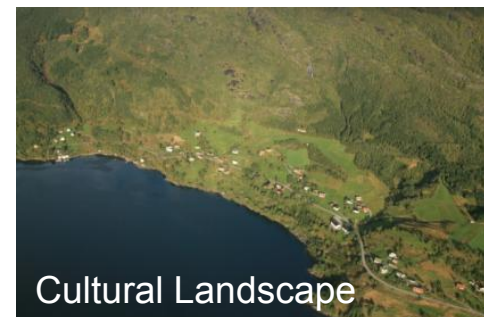
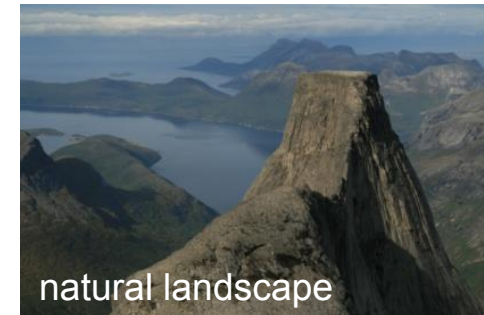
Type kulturminne Handelsanlegg Datering 1700-tallet

Vernestatus Vedtaksfredet Kommune Bergen

UTM zone 33, nord: 7204696, est: 387722

Landscape types classification for Norway

- Part of the identification system «Norwegian nature types» «Naturtyper i Norge» (NiN)
- Continuation of «National Reference System for Landscape» «Nasjonalt referansesystem for landskap»
- Further development and practical testing in Nordland county 2011-2013



Alle foto: Trond Simensen

Which landscapes do we identify?

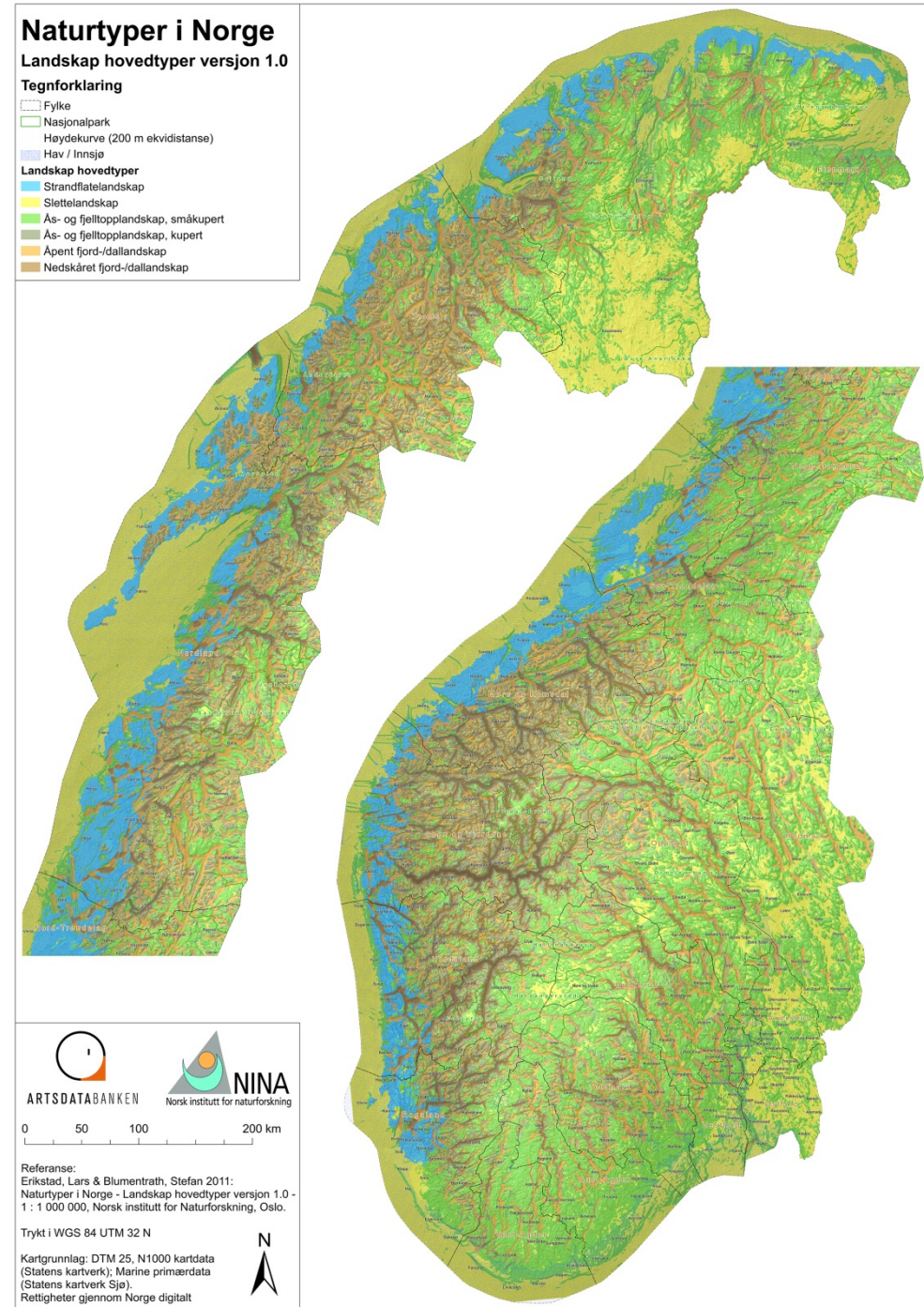
- **The Landscape Convention's landscape definition**
*"Landscape means **an area, as perceived by people,** whose character is the result of the action and interaction of natural and/or human factors."*
- **Interpretation as a basis for new landscapes typology for Norway**
 - 'as *perceived* by people' We search for characteristics that are *observable* at a relevant scale.
 - 'as perceived *by people*' – we search for *general aspects* in the variation in the landscapes characteristics.
 - '*natural and/or human* factors' that are observable, will together form the basis for the landscape type classification

excludes cultural references and intangible properties - this have to be captured by the identification of landscape character and landscape value

Landscape types

Landscape types on two levels:

1. Main types - landscape
 - Main types of landscape based on landform
 - Made to facilitate identification at a scale 1 to 500.000
2. Basic types – landscape
 - Landform and the landscape content of elements and attributes.
 - Made to facilitate identification at a scale 1 to 50.000



Basic types - landscape

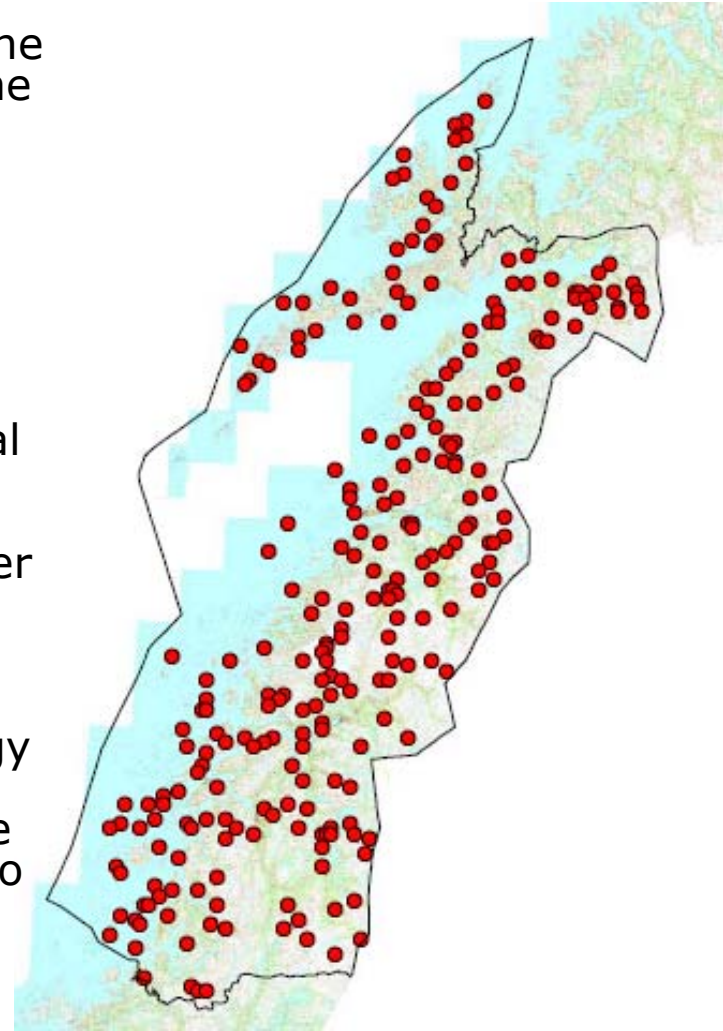


Landform and the landscape content of elements and attributes.

Mosjøen. Photo: Trond Simensen

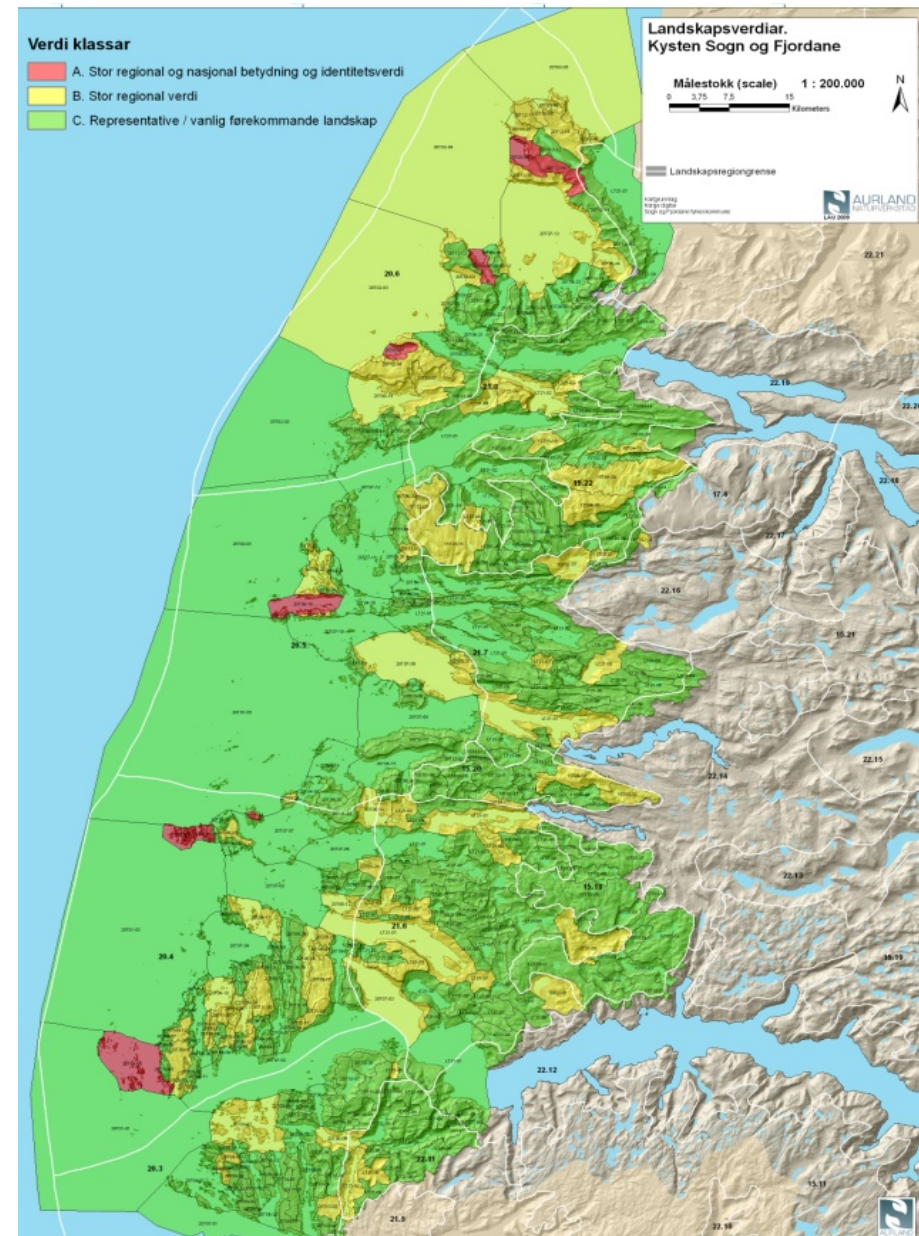
The division into landscape types

1. Systematic collecting knowledge about the variation in landscapes in Nordland on the basis of
 - 258 observation units up to 5×5 km in size
 - 279 landscape variables recorded for each observation unit
 - Cartographic data, interpretation of aerial images, field work
2. Statistical processing of the data material with the aim of finding patterns and relationships in how the landscape contents and characteristics vary together and separately
3. Draw up, on the basis of the analyzes in the preceding steps, a landscape typology that as completely as possible describes the landscape variety and that is suitable for landscape identification at a scale 1 to 50 000



Possible use

- Makes it possible to start using the concept of landscape diversity
- Provides the opportunity to identify (and documenting):
 - Rare / unique landscape
 - Representative landscapes
 - Strong or weak version
- Tool to monitor and describe the condition of landscapes and monitor landscape changes
- Form a knowledge base for landscape analysis



A national identification of landscape types



Knowledge base for:

- Identification of the landscape character
- Value assessments
- Vulnerability assessments
- Impact assessments
- Suitability Ratings
- Indication of important biodiversity
- Cultural historical analysis
- Evaluation of intervention status (Wilderness)
- Mapping of outdoor interests
- Municipal land use planning
- Strategic land use planning / major infrastructure projects
- Monitoring the condition and landscape changes

Database for knowledge about the landscape

- The results of the methodological development and the work on a landscape typology / classification of landscape types for Norway opens to create a national database of knowledge about landscapes
- Will contribute to fulfilling key objectives of the European Landscape Convention
 - Article 5c Participation
 - Article 6a Awareness-raising
 - Article 6b Training and education
 - Article 6c Identification and assessment



Kvitsanden, Røros - Photo: Trond Simensen

Landscape identification for all of Norway's territory will be useful for managing a variety of purposes



Thank you for your kind attention!

