Mapping Cultural-Historic Landscapes? The Landscape Planning Perspective by D.M. Wascher, Alterra, Wageningen



Overview

- Landscape between the Institutions
- EEA Project Traditional Agricultural Landscapes
- Landscape Planning
- ELC Project 'Benchmarking'
- EC Project 'geoland2'
- Landscape Character as the *Missing Link*
- NL Project 'SUSMETRO'
- Recommendations

Landscape Definition

"An area, as perceived by people, whose character is the result of the action and interaction of natural and/or human factors."

(ELC, Council of Europe 2000)

ELC - Article 5

- to recognise landscapes in law as an essential component of people's surroundings...;
- to establish and implement landscape policies aimed at landscape protection, management and planning ...;

to establish procedures for the participation of the general public, local and regional authorities....;

to integrate landscape into its regional and town planning policies and in its cultural, environmental, agricultural, social and economic policies, as well as in any other policies with impact on landscape.

INSPIRE

- Data collected only once and kept where it can be maintained most effectively
- combine seamless spatial information from different sources across Europe and share it with many users
- information collected at one level/scale to be shared with all levels/scales;
- Geographic information needed for good governance at all levels should be readily and transparently available.
- Easy to find, use and acquire geographic information that is available

Landscape definition

Counseling & Promoting Landscape as a Sense of Place (Council of Europe)



Landscape as a *Type of Place* (European Commission)

EEA Project

Traditional Agricultural Landscapes in Europe

Wascher, 2008

FAO definition for Globally Important Agriculture Heritage Systems (GIAHS) :

Traditional agriculture is an indigenous form of farming, result of the co-evolution of local social and environmental systems that exhibit a high level of ecological rationale expressed through the intensive use of local knowledge and natural resources, including the management of agrobiodiversity in the form of diversified agricultural systems.



'lemon gardens' ("giardini di limoni") - in the Italian southern peninsula sorrentina-amalfitana



'Via Appia', Rome (Photo: Wascher 2002)



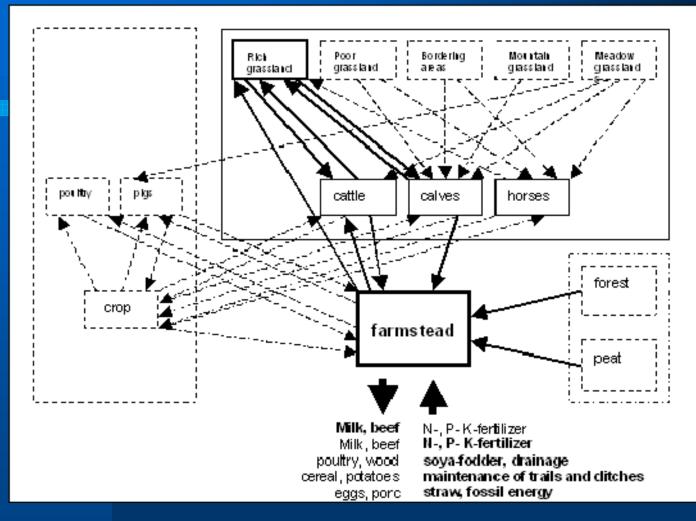
Cornflower field on Carpathian mountains (Photo: Michaël Pontégnie, 2002)



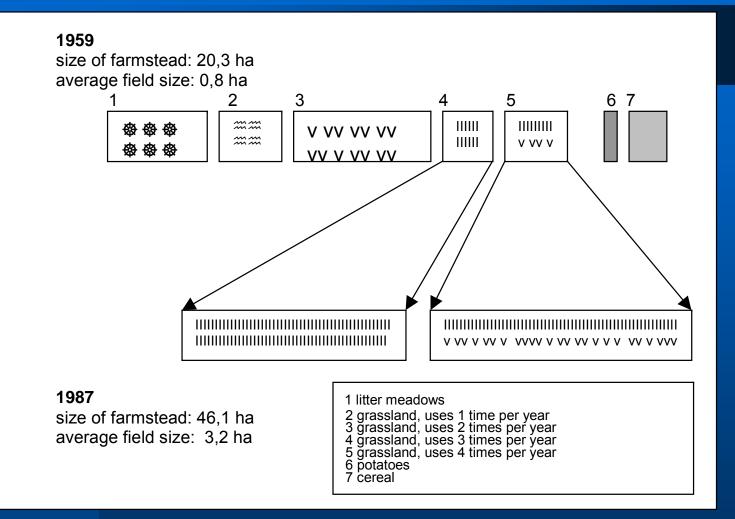
Portuguese Montado systems near Evora (Photo: Wascher, 2004)



Agro-forestry in South-western Portugal (Photo: Wascher, 2004)



Change of agricultural systems in the Loisach-Kochelsee Fens (Germany) 1959 - 1987

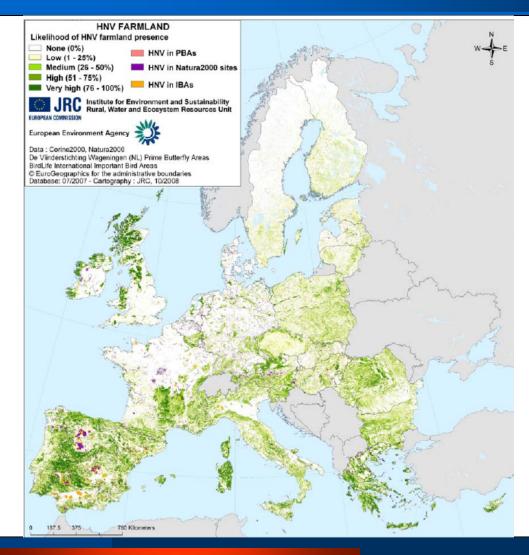


Change of land use in the Loisach-Kochelsee Fens (Germany) 1959 - 1987

Criteria for TAL

- Grassland management is of greater importance than cereal and crop production.
- Subsistence farming is still of central significance.
- Resource and material flows are still forming closed circuits.
- Agricultural production is mixed (livestock, grassland, crops, and horticulture) and combined with different forms of forestry, allowing benefiting from a variety of local site conditions.
- This is frequently reflected in a regionally specific structure of land use parcels and landscape elements.

HNV & TAL



High Nature Value Farmland

<u>Type 1</u>: Farmland with a high proportion of seminatural vegetation.

<u>Type 2:</u> Farmland dominated by low intensity agriculture or a mosaic of semi-natural and cultivated land and small-scale features.

<u>Type 3:</u> Farmland supporting rare species or a high proportion of European or World populations.

Project definition for TALs:

Traditional agricultural landscapes are considered as results of farming methods, technologies and structures dating back to the historic as well as to the more recent past. Though frequently associated with low-input, smallscale, family-operated (subsistence-style) and diversified land management of high aesthetic value and low environmental impact, many different forms of traditional agricultural landscapes have existed and continue to exist, including a wide range of highly intensive agricultural systems of no or low sustainability or nature value.

Landscape Planning

Design of public spaces according to economic, environmental and cultural principles"

Urban Planning

"Protection of Nature and of plant and habitat diversity"

Spatial Planning Landscape Planning Nature Conservation Planning

Agri-Envirnomental Planning

Germany: Landscape & Spatial Planning

Planning level	Spatial Planning Instruments	Landscape Planning Instruments	Working Scale	
Federal State	Federal State Development	Landscape Programme	1: 500 000 1: 200 000	
Region/ Sub-Region (''Landkreis')	Regional Plan Short-Distance Plan ("Nahbereichsplan")	Landscape Framework Plan	1: 50 000 1: 25 000	
Municipality/ part of the 'Landkreis'	Zoning Plan	Landscape Plan	1: 10 000 1: 5 000	
Part of the Municipality	Construction Plan	Green Structure Plan	1: 2 000 1: 1 000 1: 500	
Sector Administration (regional, municipal and object level)	Technical Plan	Accompanying Landscape Adjustment Plan	Different scales depending on the level	



Germany: Landscape Framework Plan Fulda

Flächen mit rechtlicher Bindung für Naturschutz und Landschaftspflege



Naturschutzgebiet - Bestand



Naturschutzgebiet - Planung, Nr. s. Kap. 2.1.1.1, Teil 2



FFH - Gebiet (vom Land Hessen gemeldet)
 flächenhaft, Fläche < 2 ha



 Landschaftsschutzgebiet - Bestand
 flächenhaft (ohne Innenabgrenzung), Fläche < 2 ha



Landschaftsschutzgebiet - Planung (ohne Innenabgrenzung)

Flächen für den Biotopverbund und die Biotopentwicklung

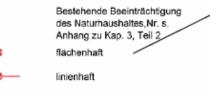


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Raum für den Biotopverbund Magerrasen, Bergwiesen, Heiden, Fließgewässer

Fläche des regionalen Biotopverbundes Magerrasen, Bergwiesen, Heiden

Flächen mit Beeinträchtigungen des Naturhaushaltes



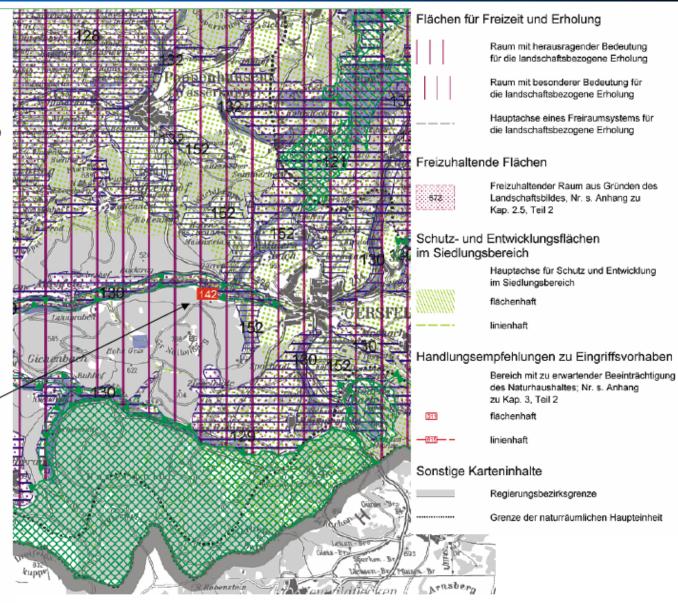
Flächen mit besonderer Bewirtschaftung oder Pflege



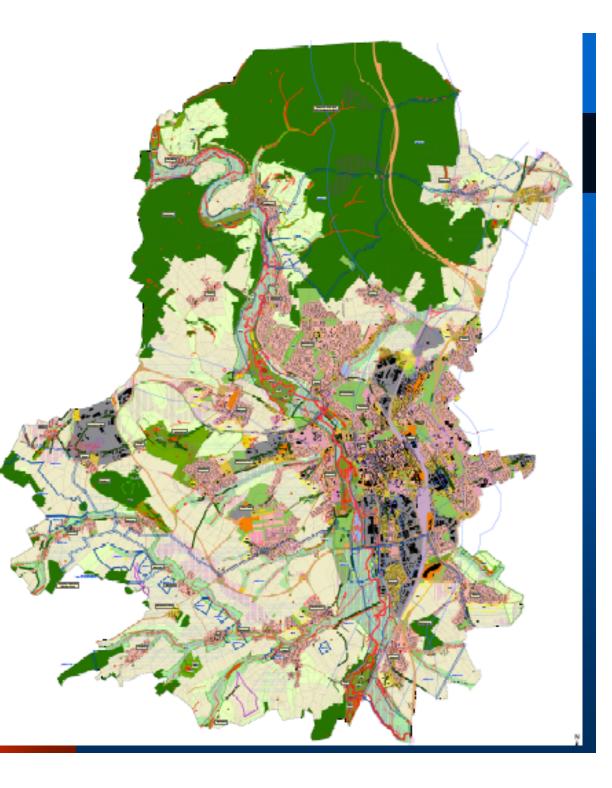
Pflegefläche des Regionalen Landschaftspflegekonzeptes



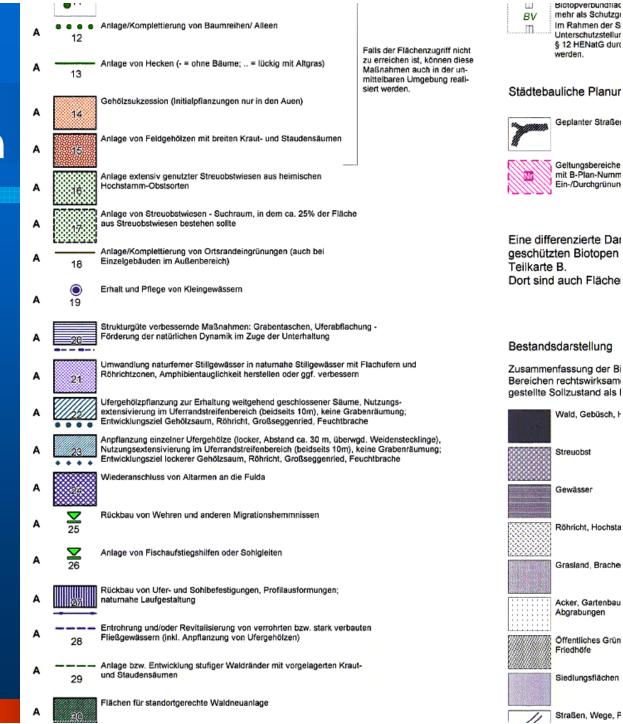
Pflegeraum Landschaftsbild, 1. Priorität, Nr. s. Anhang zu Kap. 2.5, Teil 2



Germany Landscape Plan Fulda



Germany Landscape Plan **Fulda**



Biotopverbundtiac

mehr als Schutzge

Im Rahmen der S

Unterschutzstellur

§ 12 HENatG dure

Geplanter Straßer

Geltungsbereiche mit B-Plan-Numm

Ein-/Durchgrünun

Wald, Gebüsch, H

Streuobst

Gewässer

Röhricht, Hochsta

Grasland, Brache

Acker, Gartenbau Abgrabungen

Öffentliches Grün

Siedlungsflächen

Straßen, Wege, P

Friedhöfe

werden.

Landschaftsbild und Naherholung

Raumeinheiten



Grenzen der Landschaftsbildeinheiten Nummer entsprechend unten stehender Tabelle



Grenzen der Landschaftsbild-Untereinheiten Nummer entsprechend unten stehender Tabelle

- Fuldaaue Südliche Fuldaaue bis Johannesberg Fuldaaue im Stadtbereich Fuldaaue von Horas bis Lüdermünd 1.1
- 1.2
- Kuppenlandschaft des westlichen Fuldaer Beckens 2
- Ruppenterbachait des Wasichen Fulsaer de Hangbereich siddlich von Johannesberg Zirkenbach/Zeit bis Istergiesel Ackerbactich geprägte Hochlagen zwischen Zirkenbach/Johannesberg und Mabrzeit Schulzenberg, Haimberg und der Taltaum 2.1
- 2.3
- 2.4
- 2.5
- Rodges Besges Maikes Raum von Maikes über Oberroda bis zum Gleseital 2.7 B 254 - Trätzhof
- 3. Kuppenlandochafi zwischen Eichanzeiler Höhe bis zum Geisküppel 3.1 Eichanzeiler Höhe bis Röhlingsberg 3.2 Ackerbaulich geprägte Päichen bei Edetzeil 3.3 Geistüppel und Rombuchaub

- Siedlungsnahes Offenland Fulda-Nord 4
- 4.1 Horasbachaue Ackerbaulich geprägte Filichen bei Niesig und Lehnerz 4.2
- Offene Hochflächen bei Bernhards und Dietershan 5
- Ackerbaulich geprägte östliche Fuldatalhänge Staatsforst Fulda-Nord

Landschaftsbildqualität

- Waldflächen Am Schlebberg
- Kernstadt Fulda mit direkt angrenzenden Stadtteilen
 Ländliche Stadtteile

Sehr hoch

hoch

mittel

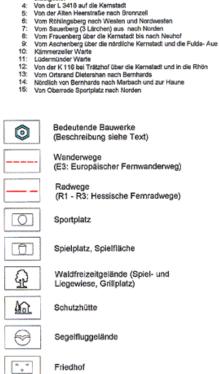
hoch

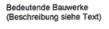
mittel

gering

Stadtbildqualität

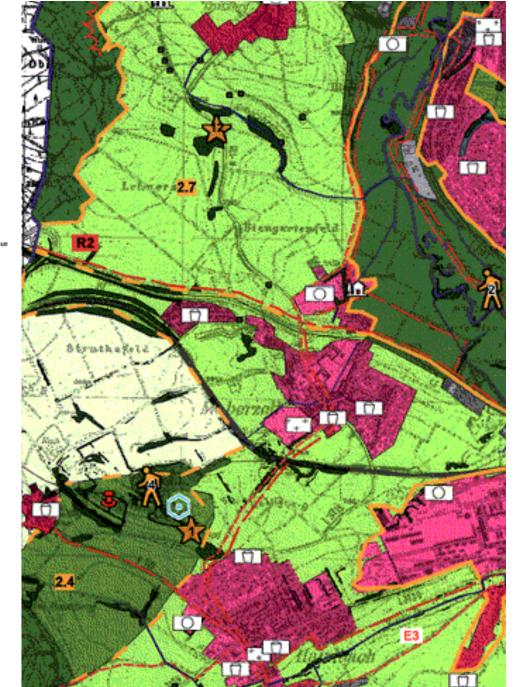
nachrangig





- (E3: Europäischer Fernwanderweg)
- (R1 R3: Hessische Fernradwege)

Waldfreizeitgelände (Spiel- und



Ortsbildqualität (gesamter Ort)

Beeinträchtigungen

Stark befahrene Straßen, Bahnlinien mit beeinträchtigender Wirkung aus Sicht des Landschaftsbildes

hoch



Naherholungsgebiete der Stadt Fulda 1: Frauenberg 2: Fuldaaue 3: Gerlos 4: Schulzenberg 5: Geisküppel

Vom ehemaligen Fluggelände über das westliche



Vom Haimberg über den Talraum

und den Talraum

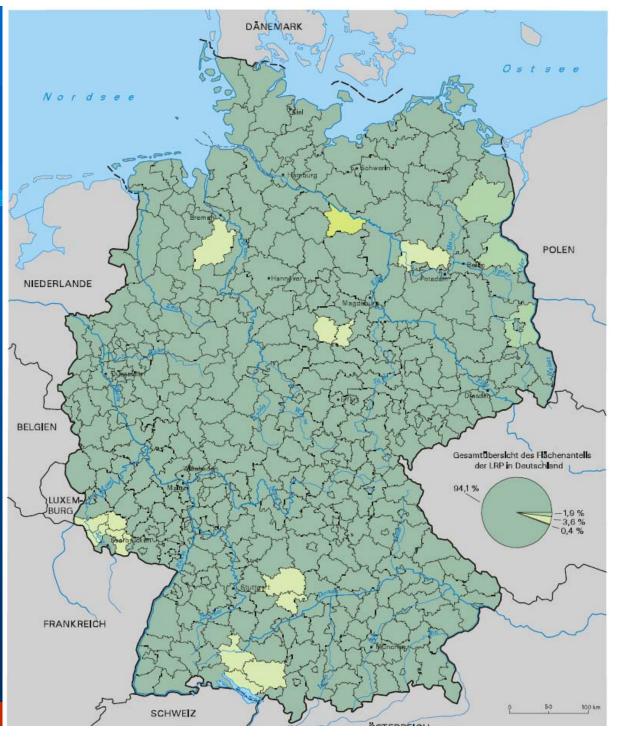
Freizeit und Erholung

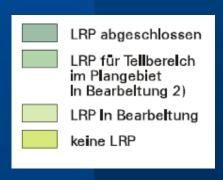
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3: Stadtgebiel

Germany: LRP implementation 2004



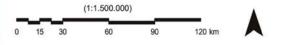


NL: National spatial strategy



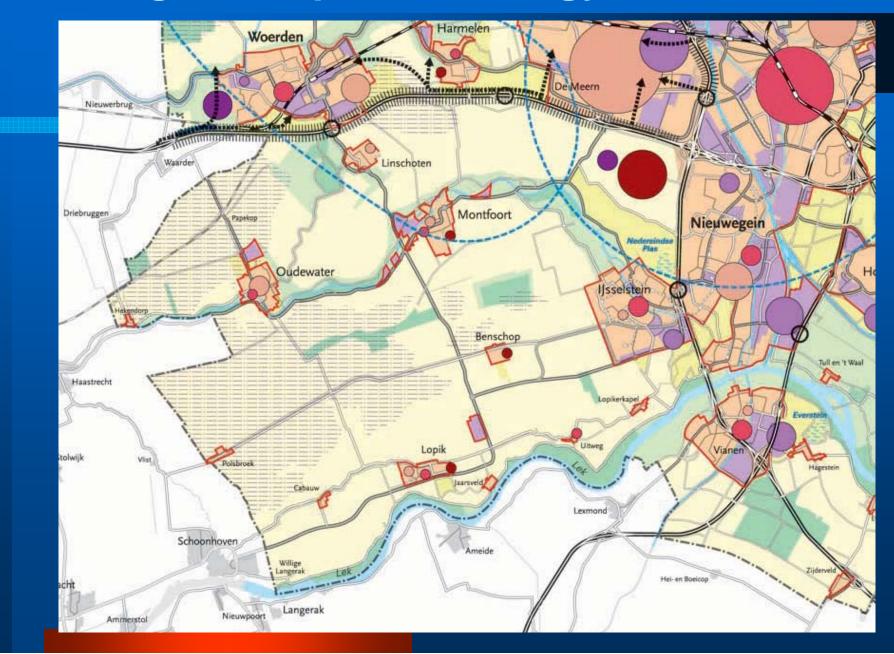
Kaart B: Nationale Ruimtelijke Hoofdstructuur: economie, infrastructuur, verstedelijking





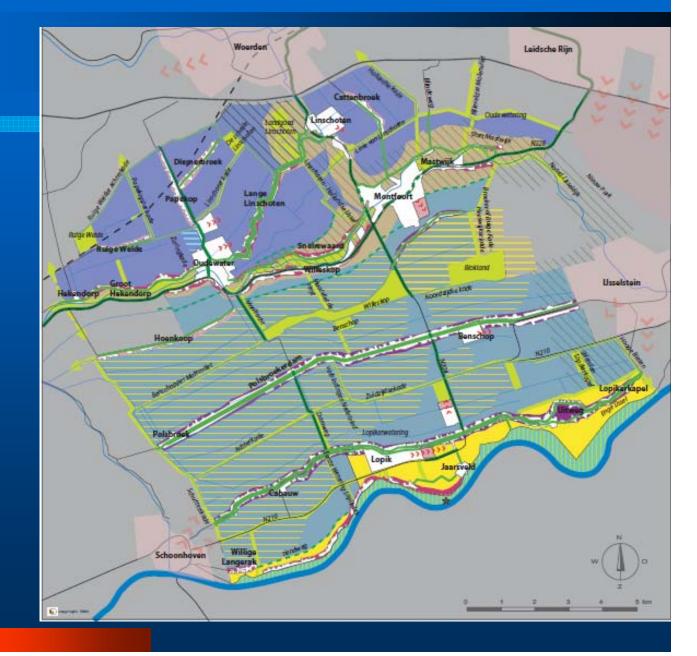
De nationale Ruimtelijke Hoofdstructuur omvat gebieden en netwerken, die voor de ruimtelijke structuur en het functioneren van Nederland van grote betekenis zijn. Voor deze elementen draagt het rijk dan ook in het algemeen een grotere verantwoordelijkheid dan daarbuiten. Ze staan voor complexe en/of kostbare opgaven die rijksbemoeienis noodzakelijk maken. Het gaat in de stedelijke sfeer om elementen en opgaven, die voortkomen uit ontwikkelingen met betrekking tot de economie, de infrastructuur en de verstedelijking en uit het onderlinge

NL: Regional Spatial Strategy – Utrecht

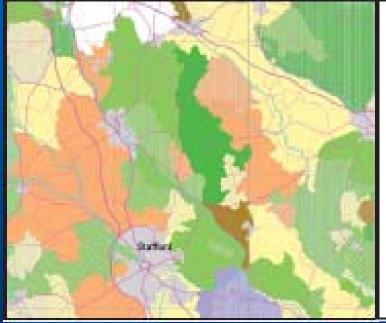


NL: Landscape Development Plan (LOP)

Lopik Montfoort Oudewater



England: Staffordshire Landscape Policy Zones map (extract)



Landscape policy objectives

Landscape regeneration Landscape restoration Landscape enhancement Landscape maintenance Active landscape conservation

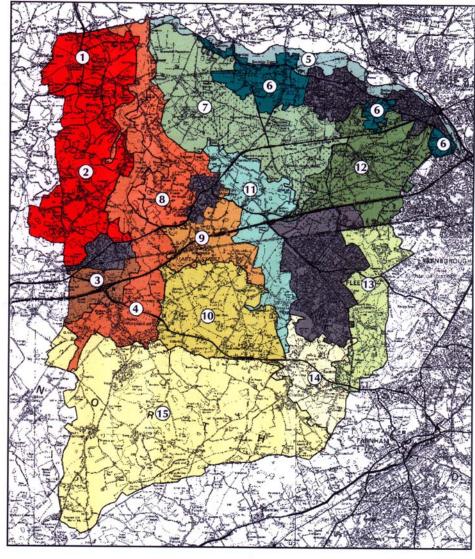
Areas of highest landscape sensitivity Landscapes at risk of rapid loss of *(existing)* character and quality

Area of outstanding natural beauty

Areas of built character

England: Character-based development plan policies

Hart District



	A A	Y		N.	1 A	2	E X	= fox as
ĸ	ey							
1	Wellington	5	Blackwater Valley	9	Winchfield	13	Tweseldown	0
2	Tilney	6	Firgrove	10	Dogmersfield	14	Redlands	Based on the Ordnance Si permission of the Controller of 1 Crown Copyright Scott W Abingdon, Licence no. AL 5499
3	Bartley	7	Bramshill	11	Hart Valley	15	Hart Downs	Figure 5
4	Whitewater Valley	8	Hazeley/ West Green	12	Minley			

5 Km Survey's 1:25 000 map w of Her Majesty's Stationary Office

Crown Copyright Scott Wilson Resource Consultan ingdon. Licence no. AL 549959.

LANDSCAPE

ELC Project

Benchmarking Landscape Policy in NW-Europe

Country	Landscape & Spatial Planning Schemes	Key (regional) instruments	Strengths	Weaknesses
Netherlands	Landscape Quality Agenda Nature for People, People for Nature (LNV) National Spatial Strategy Landscape Programme	Landscape Development Plan Regional Spatial Strategy (Streekplan) VINEX (1990) Bestemmingsplan Landscape Framework Plan,	Protection of specific sensitive sites; Concentration of urban development Strong integration	Developers play significant role; ongoing landscape cluttering; Bureaucratic-
	1:200 000 to 500 000 National Spatial Development Plan	Landscape Plan (1:5000 – 10 000), Green Space Dev.Plan Regional Strategy, General Zoning Plan, Building Zoning Plan	between spatial and landscape planning; sectors cooperate well; landscape plan is binding in NRW	political system is rather slow; strong influence of local/regional politicians
England/UK	English Regional Planning Guidance Town and Countryside Planning Act (1990)	Regional Spatial Strategies Local Development Framework	Based on scientific approaches; LCA part of spatial planning	Only recommendations
Flanders/BE	Integrated area-specific approach 'spatial structural planning'	Basis: Landscape Atlas, tools: (i) protection, (ii) subsidies, (iii) heritage landscapes in RUPs	Atlas widely used, embedded in spatial planning,participatory, susbsidiarity,	No practical experience yet, little cross-sector cooperation
France	Spatial Coherence Scheme	Landscape Atlas Landscape Plan (Groups of Municipalities)	Good examples for management plans	Landscape planning still rather isolated.

EC Project



geoland2 CIS Agri-Environmmental Indicators 'Landscapes'

Wascher, D.M., Hazeu, G. van Eupen, M. & van Doorn, A. 2010



EC Project geoland2

CIS AgriEnv aims at providing indicators on the basis of state-of-the-art HR remote sensing data allowing to:

- Assess both the beneficial and the harmful pressure of agriculture on the environment,
- Assess the impact of agriculture on water, soil, landscapes and biodiversity,
- Address both the European, national and regional scales.

Service AE-06: Agricultural land use changes as driving force for sustainability – Landscape (Service manager Alterra)						
Changes of landscape closedness/openness per region	Percentage/size of Landscape Closedness vs Landscape Openness per LANMAP2 units determined by the presence/absence of forest vegetation, thereby influencing the degree of opennenn/closedness. Built-up (urban) are considered to contribute to "closedness".	High-risk areas inside EU-08, EU-09, EU- 10, EU-15 (total 6.000 km ²)	Administrative/ hydrographical/ landscape (LANMAP2) units according to users'	2009 - 2011	Every 2 years	SAGE, geoland, GSE Land and BOSS4GMES for the development of the LMCS
Changes of land use diversity per landscape unit	Shannon index on landscape diversity for agricultural land use per LANMAP2- unit by tracking the evolution of indices of agricultural land use diversity as well as of selected landscape elements.	High-risk areas inside EU-08, EU-09, EU- 10, EU-15 (total 6.000 km ²)	Administrative/ hydrographical / landscape (LANMAP2) units according to users'	2009 - 2011	Every 2 years	SAGE, geoland, GSE Land and BOSS4GMES for the development of the LMCS
Changes of landscape heritage functions per landscape unit	Land use change characteristics in and adjacent to protected areas (IUCN Categories 4-6) and NUTS2/3 regions with high tourist visitor numbers	High-risk areas inside EU-08, EU-09, EU- 10, EU-15 (total 6.000 km ²)	Administrative/ hydrographical / landscape (LANMAP2) units according to users'	2009 - 2011	Every 2 years	SAGE, geoland, GSE Land and BOSS4GMES for the development of the LMCS

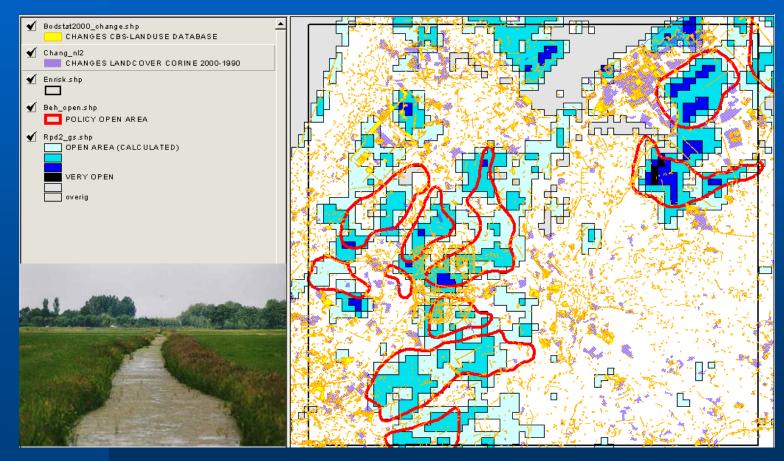


Agri-Environment Core Information Service Policy Document

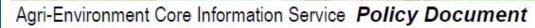
LANDSCAPE OPENNESS



Indicator title: Changes of landscape closedness/openness per region



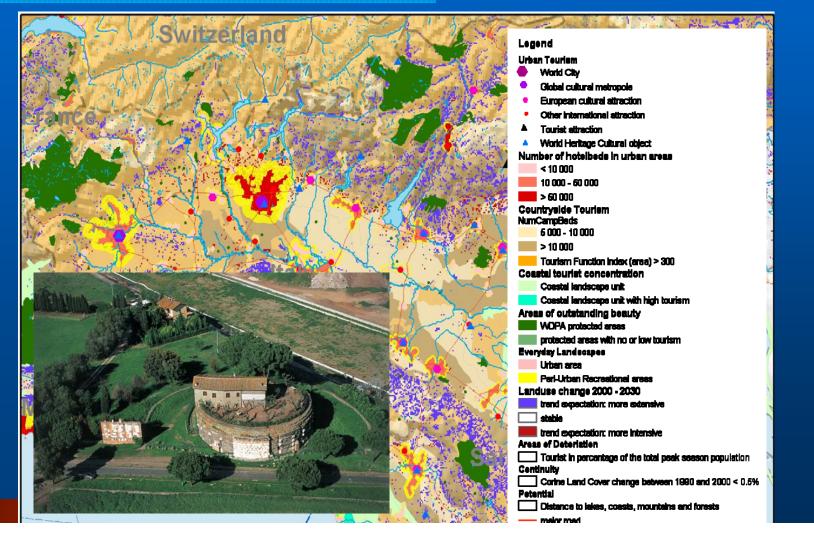
Openness 1990-2000 (CBS-database & Image 2000)



LANDSCAPE HERITAGE



Indicator title: Changes of landscape heritage functions per landscape

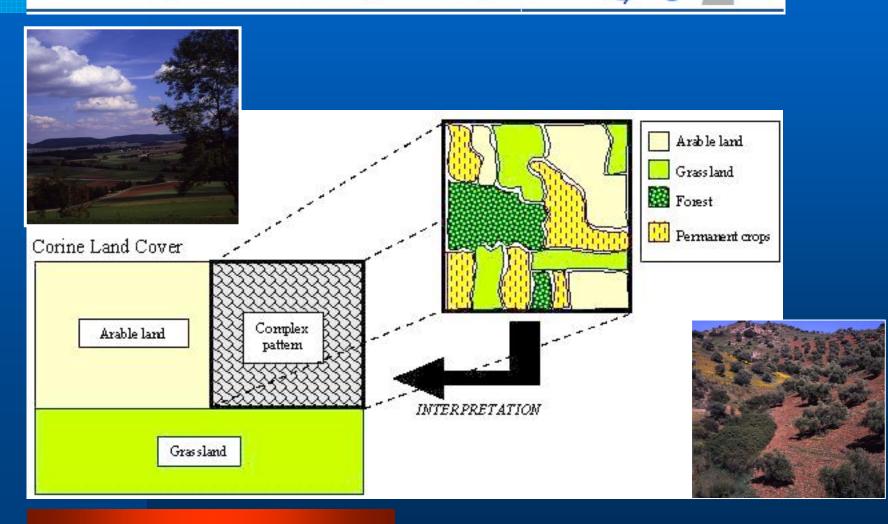




LANDSCAPE DIVERSITY

Indicator: Changes of land use diversity per landscape unit





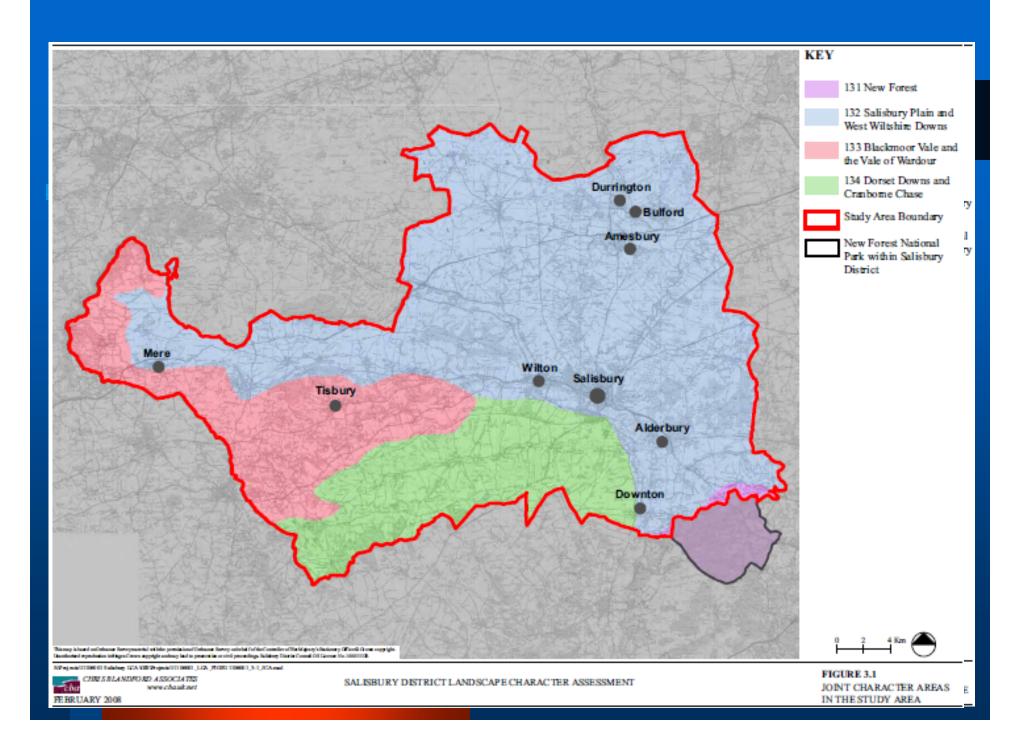
Landscape Character as the Missing Link

Landscape Character as the Missing Link

Landscape Character is a distinct and consistent pattern of elements in the landscape that makes one landscape different from another, rather than better or worse.

Landscape Character Assessment is a way of identifying, classifying and mapping areas of distinctive character on the basis of holistic principles. As such, it can be a measure of integration and a reference for modelling future landscapes

Landscape Character Areas are pieces of land where biophysical conditions, historical and/or cultural processes have been recognised as cartographically defined territorial entities.



Concepts & tools: mapping

English Landscape Character Areas

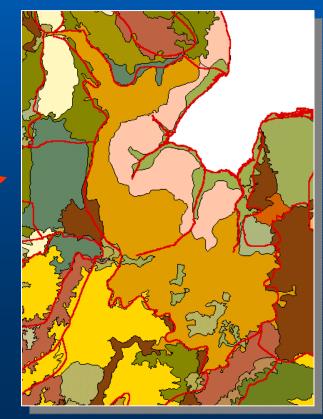
Character Area definitions/ descriptions based on biophysical and cultural factors



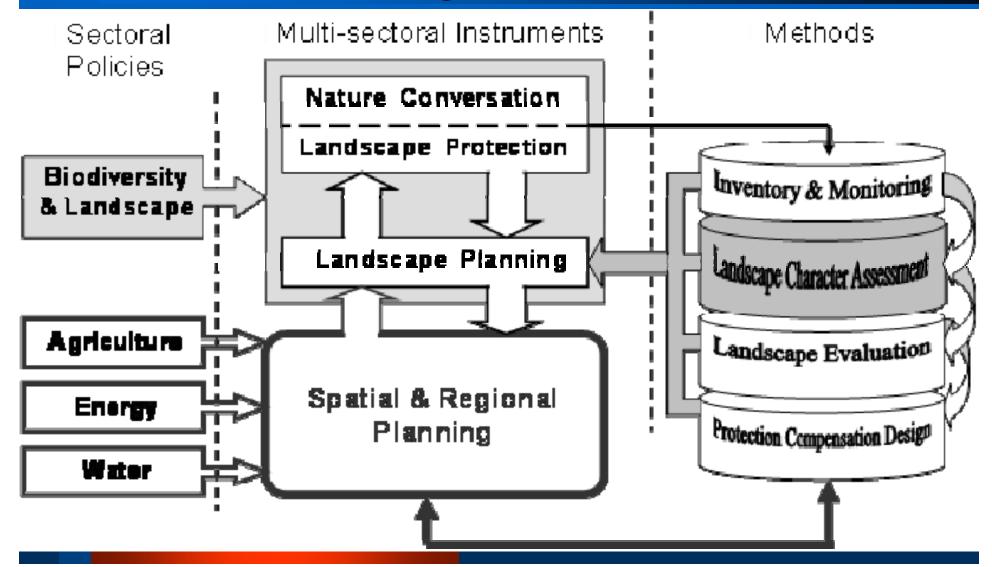
Concepts & tools: mapping

Figure 2.3: The Landscape Character Assessment spatial hierarchy - an example of the relationship between the different levels [2] Character Area (National/Regional Level) Joint Character Area 36 - The South Pennines (from The Character of England) Character Types Character Type (County /District Level) (County/District Level) Moorland Hills South Pennines Landscape WEIP MODE PLATERIN ALCON. MICH. INCLOSED UPLANDS MOOR AND PROVIDE NAM FRANCES WITHOUT NAME OF ACCOUNTS IN A VILLA CARLING AND LOD. FOR LUND-UPLAND FAIRING AN PRIA PRINCIPLICATION Character Area (County /District Level) **Rombalds Hills** Character Types (Hypothetical) **Character Area** (Local Level) (Hypothetical) 1. High Moorland Tops (Local Level) 2. Grassy Moorland Fringes Rombalds Top 3. Complex Moorland Mosaic Source: Derived from LUC (1999) South Peninnes Landscape Character Assessment. For SCOSPA, Bradford.

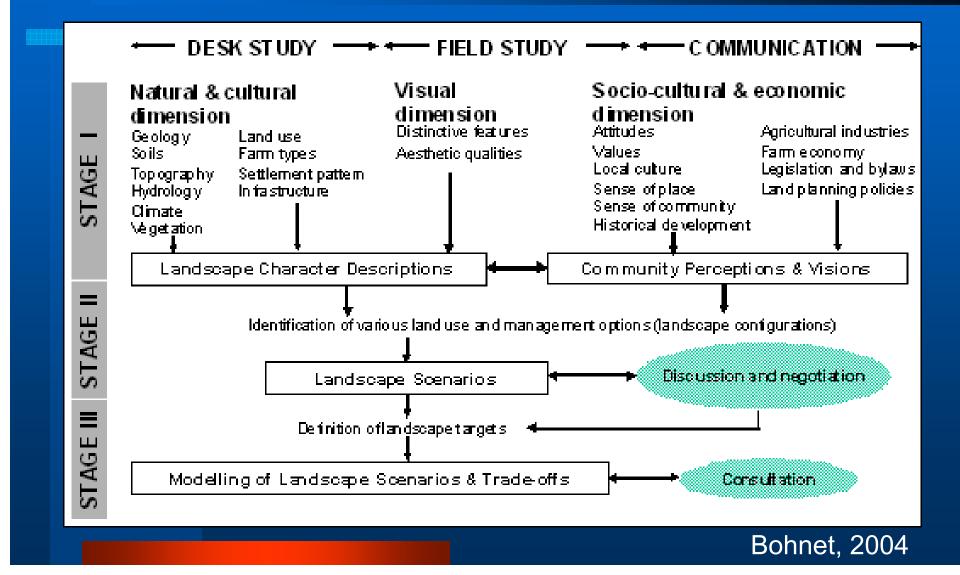
- New national landscape typology
- Systematic framework and approach linking scales
- Decision support



LCA in Planning



LCA - Method



Recommendations

- Make national spatial references available for INSPIRE. INSPIRE needs to take up the existing national and regional data sets deriving from spatial and landscape planning. Already now, several countries offer interactive websites.
- 2. Make use of INSPIRE-based European data such as CORINE, geoland2 or thematic layers (e.g. HNV) for regional assessments. Only this can ensure that supra-regional and supra-national aspects are taken into account in landscape and regional planning.

 Make use of LCA techniques as part of regional planning. This allows to build region-wide consensus regarding landscape identity and future planning goals.

THANK YOU