



High Nature Value farmland

Examples across Europe: part 3 of 3

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Notes for instructors and users

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The presentation contains minimum or no animation/special effects. Instructors may wish to add such effects according to their preferences.

Learning objectives

- To appreciate a diversity of High Nature Value farmland types across Europe and outside
- To learn of the general characteristics of HNV farmland and farming systems
- To familiarise oneself with various public values of HNV farmland

Content

1. Concept of High Nature Value (HNV) farmland
2. Examples from Europe
 - Spain and Portugal
 - Croatia
 - Romania
 - France
 - Germany
 - **Ireland**
 - **Finland**
3. **Examples outside Europe**

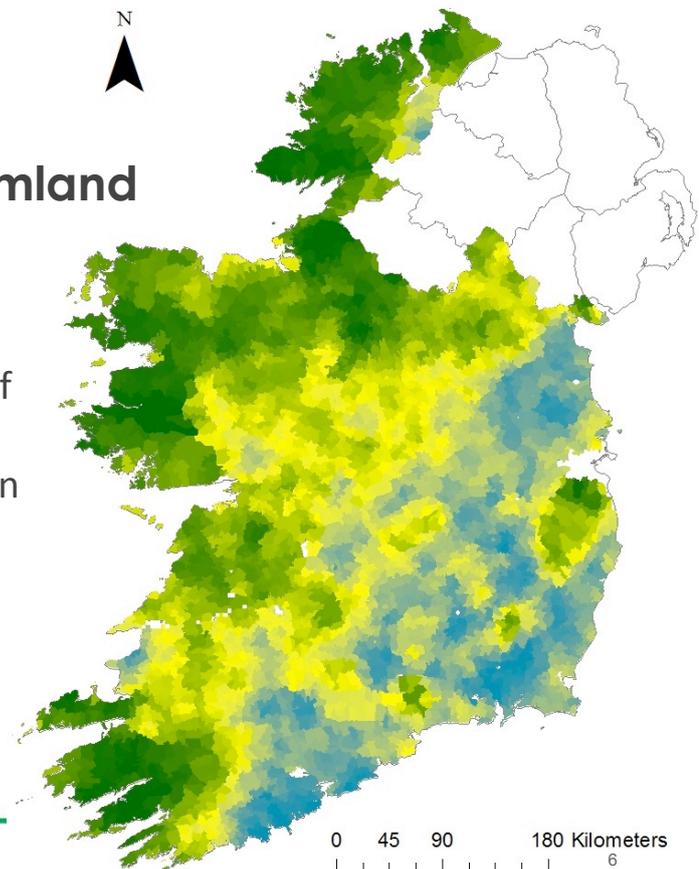
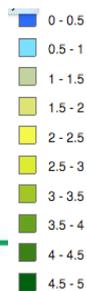
Ireland



Extent of HNV farmland

- 5 classes
- Darkest green = greatest likelihood of HNV farmland
- High HNV potential in classes 4-5

IDEAL HNV Project
<http://www.high-nature-value-farmland.ie/hnv-distribution/>



HNV farming systems

- Pastoral systems
- “Mountain” and “inbye” (enclosed) pastures
- Carrying capacity highly variable and
- Stocking rates lower on HNV farms
- Whole farm, partial & landscape HNVf



Suckler herds



Beef steers



Cattle & sheep



Dairy herds

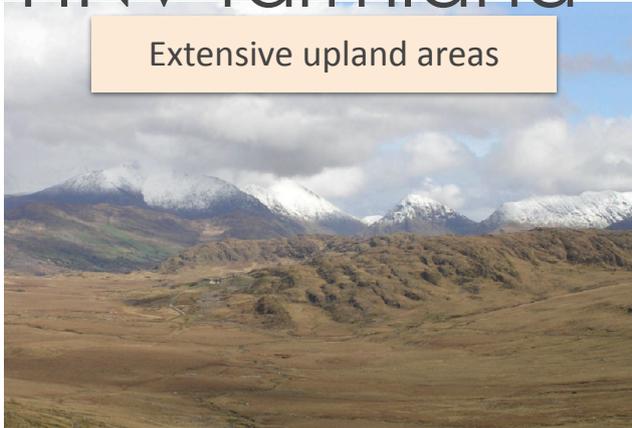


Photos: HNV-Link Baseline Assessment

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HNV farmland

Extensive upland areas



Calcareous grasslands, heaths and limestone pavement



HNV-Link Baseline Assessment

Machair-coastal grasslands



Semi-natural vegetation extending to sea level in west



EFNCP video on Achill Island
<http://dai.ly/x3hq1vc>

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Biodiversity

- Grasslands support insects incl. beetles, flies, butterflies, moths, dragonflies
- Stone walls: habitat, corridors, connectivity
- Fauna: e.g. pine martin, badgers, bats, birds



In focus: The Burren

- A special limestone habitat
- Over 70% of Ireland's species of flowers and 30 of Ireland's 34 butterfly species recorded in the Burren
- 102 species of breeding birds recorded

Photos: HNV-Link Baseline Assessment; Caroline Sullivan (HNV Ideal)

In focus: Winterage in the Burren



Winterage: a unique and ancient “reverse transhumance” practiced in the Burren

- Livestock are moved from the lowlands to the highlands for the winter
- Made possible by the limestone bedrock, which acts as a “heated floor”
- Maintains plant biodiversity by keeping scrub down and grazing when wildflower species are dormant

<https://youtu.be/WHaP3mbJaMY>

Other values: Culture

- Unique cultural landscapes, incl. many archaeological sites
- Profitability is low; farmers' practices shifting, incl. to part-time
- Landscape-based tourism and celebration of farming traditions
- Connemara ponies, rye thatching, stone walls, winterage are some of the farming heritage and skills visible in the landscape.

The Burren winterage weekend- (start 1:14) <https://youtu.be/KUFky2as5hI>



Sources & experts

<https://idealthnv.wordpress.com/> & <http://www.high-nature-value-farmland.ie/>

<http://efncp.org/projects/hnv-farmland-irish-uplands/>

<http://www.hnmlink.eu/learning-areas/the-burren-ireland/>

<https://whc.unesco.org/en/tentativelists/5522/>

<http://burrenprogramme.com/category/high-nature-value-farming/>

<https://www.aranlife.ie/>

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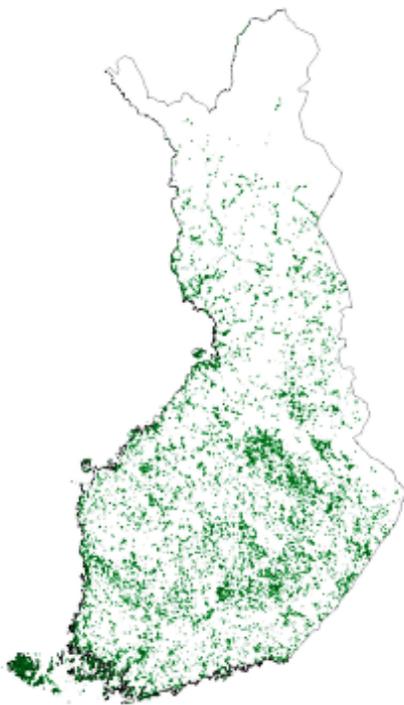
S. Matin, C. A. Sullivan, D. Ó hUallacháin, D. Meredith, J. Moran, J. A. Finn & S. Green (2016) Predicted distribution of High Nature Value farmland in the Republic of Ireland, *Journal of Maps*, 12:sup1, 373-376, DOI: 10.1080/17445647.2016.1223761

Experts: James Moran, GMIT James.Moran@gmit.ie

Finland



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HNV farming indicator at farm level

Farms with highest scores have:

- Large areas of semi-natural grasslands and permanent pastures
- Large areas under agri-environment contracts for managing semi-natural grasslands, but also
 - Small field parcels
 - Animal husbandry
 - Large areas under extensive land use, such as grassland, fallow

HNV farming systems



Include extensive grazing:

- Suckler cow producers
- Sheep, horse farms
- Seldom dairy farms
- All farms also have intensively cultivated grasslands.

Common:

- Management of semi-natural grasslands by grazing or mowing that does not relate to farm production
- Management by conservation authorities, NGOs, volunteers
- Entrepreneurship- grazing as a service.



HNV farmland: Traditional biotopes

- Different types of meadowland, moorland and wooded pastures
- c. 40,000 ha remaining (< 1% from beg. 20th century), highly fragmented, mostly small areas
- App. 1/3 are woodland pastures

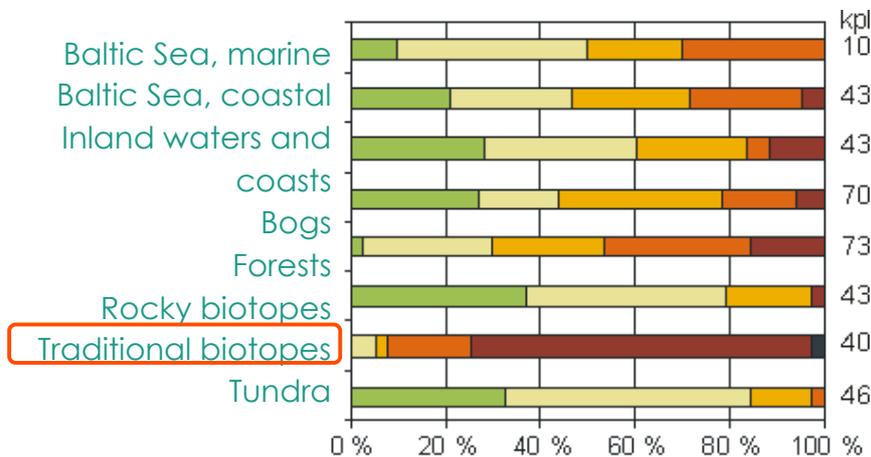
In Focus: wooded pastures & grazed forest

- Forest pastures common till 1960s
- Nowadays, forest and agricultural land separated through policy and subsidies
-> grazing in forest is rare



Biodiversity

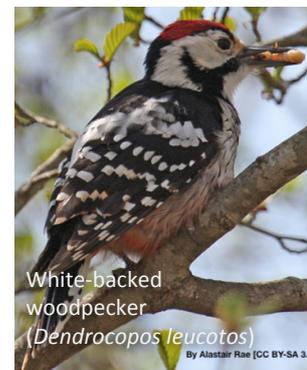
- 28% (421 sp) of the endangered species - foremost on traditional biotopes
- 22% (338 sp) of species of traditional biotopes threatened



Numbers of biotope types by IUCN classes: from favourable in green to extinct in black

Biodiversity

- Management of habitat types most valuable to biodiversity is crucial, e.g.:
 - 44% of endangered species of the permanent grasslands are found in dry meadows (ca 10 000- 13 000 ha);
 - Seashore meadows (ca 57 000 ha) are a designated Habitat of National Responsibility (Finnish Environment Center).



Other values

- **Cultural value:** Often considered the most beautiful part of the Finnish countryside.
- Direct sales of “meadow meat” is important for **marketing** and farm image of some farmers.
- Coastal grazing prevents **nutrient inflow** and removes nutrients.



Sources & experts

Heliölä, J. & Herzon, I. 2012. Finland. In: Oppermann, R., Beaufoy, G., Jones, G. (Eds) 2012. High Nature Value Farming in Europe: 35 European countries – experiences and perspectives. c. Verlag regionalkultur, Germany. 544pp. ISBN: 978-89735-657-3

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Sources & experts

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<http://perinnemaisemat.fi/in-english/>

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Birge, T. 2018. Could results-based payments help Finland's most endangered farmlands?

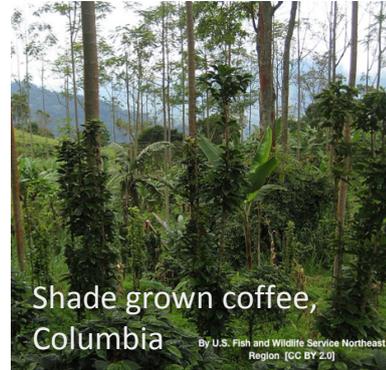
<http://www.arc2020.eu/could-results-based-payments-help-finlands-most-endangered-farmlands/>

Experts:

Irina Herzon, University of Helsinki; Kaisa Raatikainen, University of Turku

Outside Europe

HNV farming outside of Europe

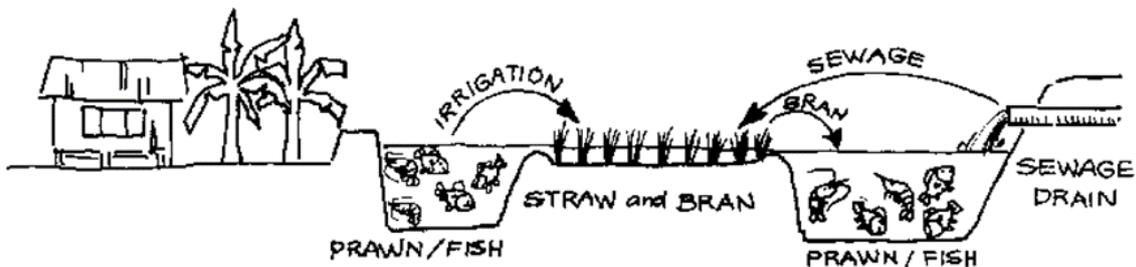


A European concept, but not exclusive to Europe!



<http://www.fao.org/giahs/en/>

China: Rice-Fish System



- Listed as Globally Important Agriculture Heritage System by FAO and UNESCO;
 - average reduction of 30000 ha annual since 2002

<https://www.youtube.com/watch?v=2vhpsM5uriM>



Latin America & Africa: Shade-grown coffee

- Agroforestry with coffee, fruit and timber trees
- Many ecological benefits over sun-grown production:
 - high species diversity, including pollinators and migratory birds
 - soil protection, water retention, carbon storage



By John Blake. Public Domain, <https://commons.wikimedia.org/w/index.php?curid=34486787>

- "Bird Friendly coffee" - most stringent coffee production standards.
- Declining system

One of the most biodiverse tropical cash crop systems

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South America: Andean terrace farming

- Spanish for "platform", Andenes refers to pre-Columbian terraces that enable crop cultivation at high altitudes on steep slopes.
- Highly engineered with fertile soil, sophisticated water management, warmth from stone walls.
- High cultural & aesthetic value.
- Highly adapted for local resources.



By Alexson Scheppa Peisino(AlexSP) [Public domain]

South America: Chinampa island gardens

- Constructed floating islands of high agricultural productivity.
- Native willows, an integral part, provide important habitat for birds.
- Diverse agricultural production.



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