





In Hands of Farmers and Society: Semi-Natural Grasslands in the Boreal Region

Irina Herzon & Guy Beaufoy
University of Helsinki & European Forum on Nature
Conservation and Pastoralism

14th Eurasian Grassland Conference 2017, Riga




Content

- The extent of the semi-natural grasslands (SNG) in the boreal region
- Drivers of change
- Farming systems of relevance
- Strategies for conservation of SNG
- Tentative directions for future research

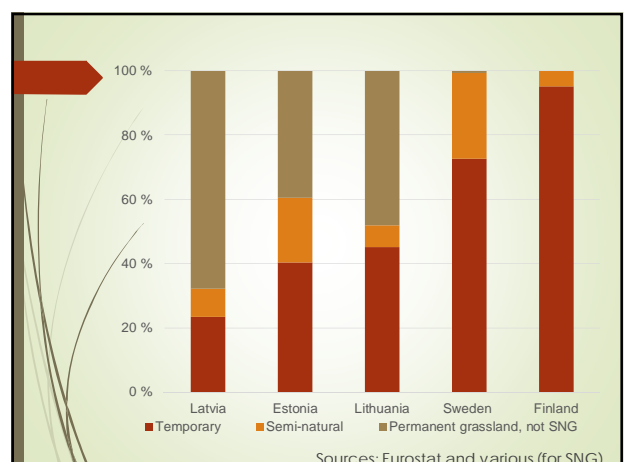
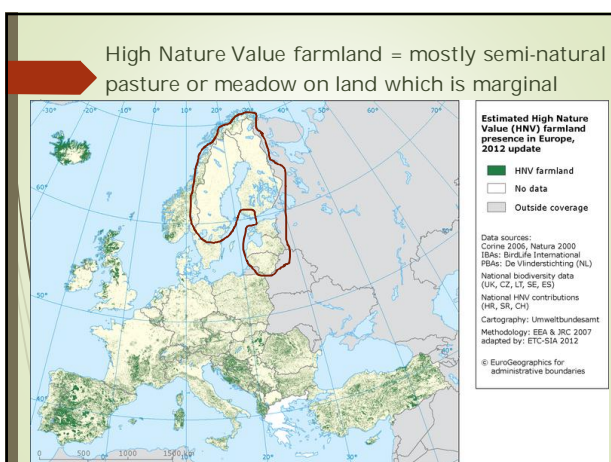
High Nature Value farming throughout EU-27 and its financial support under the CAP. IEEP, 2014

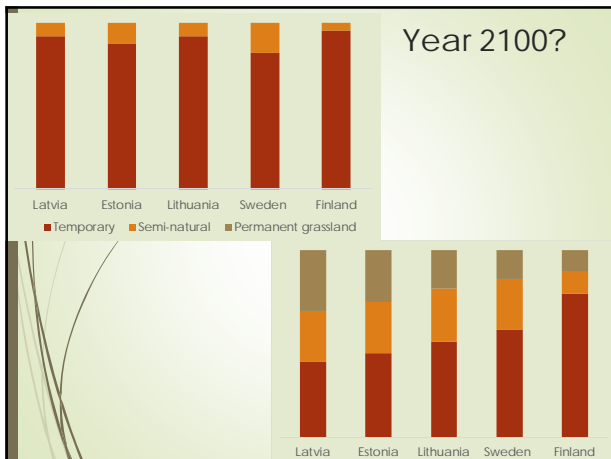





EIP-AGRI Focus Group on
High Nature Value
farming profitability
20 experts, 2014-15
Final report 2016
<https://ec.europa.eu/elp/agriculture>

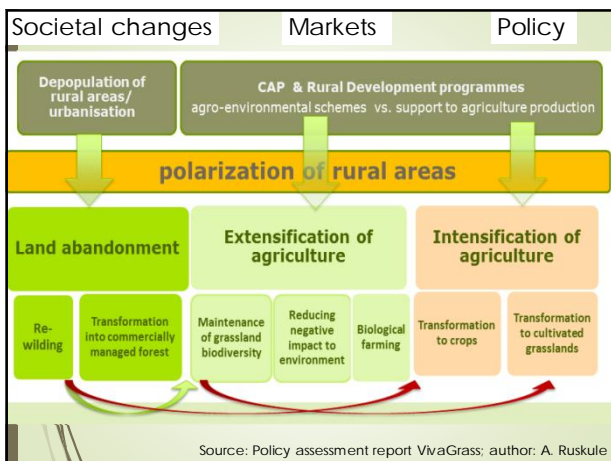
Project HNV-Link: High
Nature Value farming:
Learning, Innovation
and Knowledge
www.hnmlink.eu/
H2020-ISIB-2015-1, 2016-2019





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1. Market

- Management of SNG, most often, does not result in a marketable product
- A (traditional) agri-product is not always differentiated from the products of intensive systems
- Pricing system may even punish SNG-based product

Policy: current CAP

EU budget for agriculture (2009):

- 40 % = over €40 bln / year = ca €100 / EU citizen (EU data)

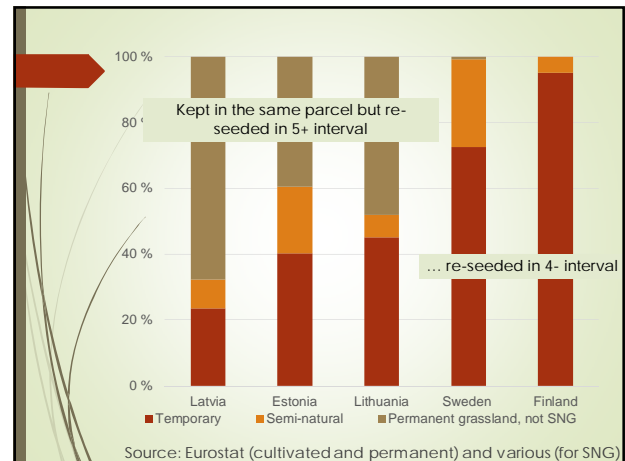


Issue 1.

- Large areas of SNG - not eligible for the direct and/or AE support
 - patches of scrub and hedges (over 2m wide) – subtracted from eligible area
 - 100 tree/ha-rule
- Some flexibility allowed
 - e.g. ligneous (wooded) pastures in France, the UK Spain and now in Estonia, hedges of any width in Ireland – all eligible!
 - In most Member States (incl. Finland, Latvia), flexibility not used.
- Thousands of hectares excluded in Sweden, Finland and Estonia, incl. the EU Habitats Directive habitats.

Issue 2.

- Permanent grassland (incl. SNG) – must be retained under “greening” (= new rule)
- = land used to grow **grasses or other herbaceous** forage naturally (self-seeded) or through cultivation (sown) and that has not been included in the crop rotation of the holding for five years or more, it **may include other species such as shrubs and/or trees** which can be grazed provided that the grasses and other herbaceous forage remain predominant



Issue 3.

- Agri-environment (AE) funding is inadequate and declined overall.
- Example of Finland**
 - Estimates of real costs up to €1000/ha
 - Before 2014: detailed budget (eg of every meter of fence) but allowed max €450/ha/yr
 - Now: Flat rate of €450/ha/yr and €600/ha/yr for nationally valuable sites
 - Now: AE funding down 20% -> budget deficit of 40 % -> new contracts for managing SNG only in 3 first years

Has the CAP become any greener with the recent greening (2013 ->)?

Offered nothing new for SNG!

More: Hart, K., Buckwell, A. and Baldock, D. 2016. Learning the lessons of the Greening of the CAP. IEEP

2. Policy: past

The New York Times
World

WORLD | U.S. | N.Y. / REGION | BUSINESS | TECHNOLOGY | SCIENCE | HEALTH | SPORTS | OPINION
AFRICA | AMERICAS | ASIA | AUSTRALIA | EUROPE | MIDDLE EAST

Swedish Farm Animals Get a Bill of Rights
By STEVE LOHR, Special to the New York Times
Published: October 25, 1988

Swedish cattle have been given grazing rights under the new law.

3. Wider societal changes and culture

- Aging population (example for the UK in McGinlay et al. 2017. Environmental Science & Policy, 69: 39–49)
- Depopulation of rural areas
- Dietary choices (e.g. chefs would chose “Argentinian beef” over nationally produced)
- Etc. etc.

www.bhv.fhnw.ch

3. Wider societal changes and culture

- Level of awareness:
 - Sweden (Kumm, 2017) (n=1000):
 - For ca 60 % SN pastures are important, esp. if with old trees
 - mainly for their biodiversity
 - 40 % of meat consumers willing to pay 20 % premium
 - SN pastures raise property prices
 - BUT: younger respondents - least appreciation of SN pastures -> risk of a shifting baseline



Finland

- Interviews with producers of meat from SNG (n = 10) and consumers (3 focus groups)
- Customers value 'an overall wellbeing of animals' = just 'seeing the animals out in the pasture'.
- Producers: explaining details (natural vs cultivated pasture) is too challenging; consumer are not ready to say "oh wow, they are grazing natural pastures!!"
- > labelling ("natural pasture meat") difficult nationally

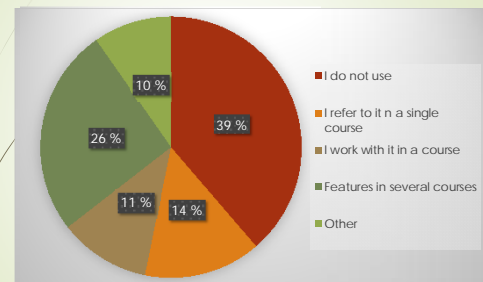
M. Kaljonen & I. Viholainen, LUKE, in work

Place in education



How much do you use the concept of High Nature Value farming/farmland in your teaching?

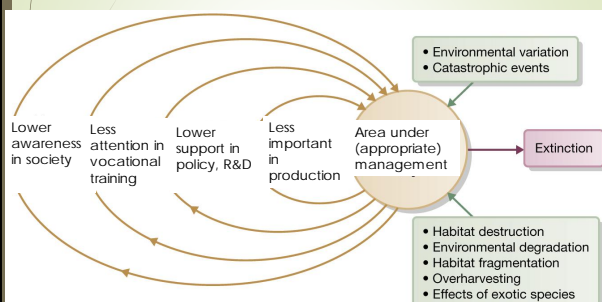
Answered: 62 Skipped: 0



300+ HE institutions (agricultural sciences & biology) and educators across Europe

Source: HNV-Link project, unpubl.

"Extinction vortex"

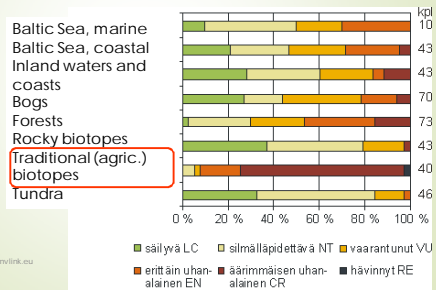


Finland



Endangered habitat type, Finland

Number of biotope types by IUCN classes

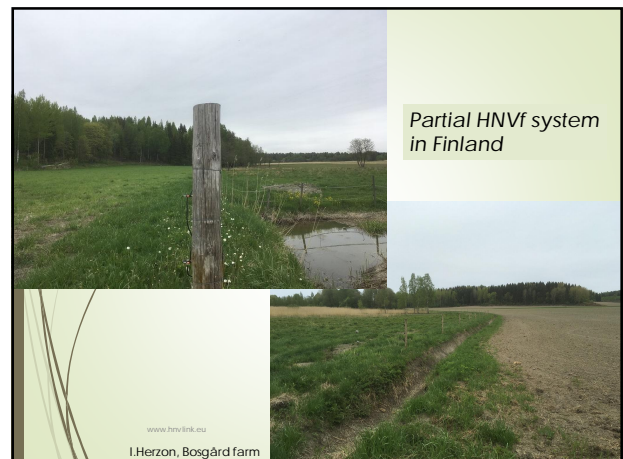
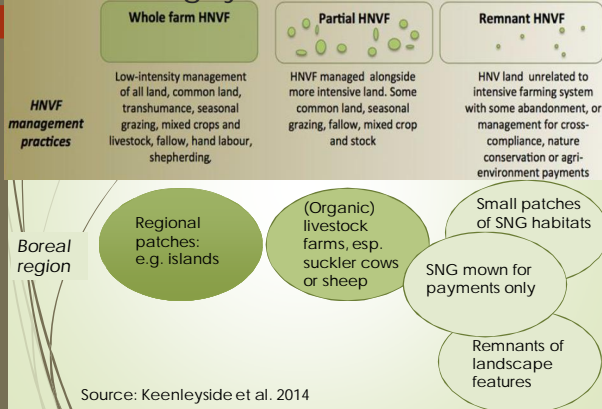


www.hnv.fi/ku

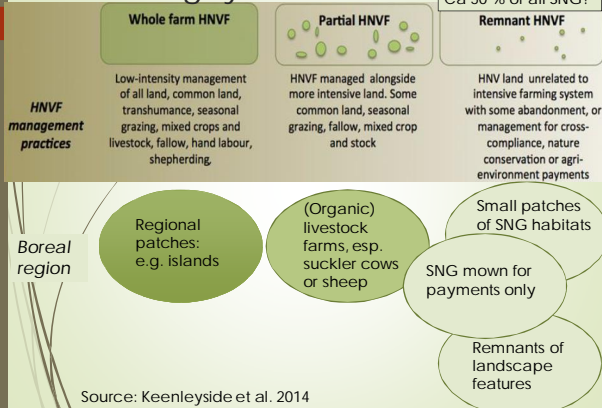
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HNVF farming systems



HNVF farming systems



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POLICY PERSPECTIVE Conservation Letters 5 (2012) 167–175

Conservation policy in traditional farming landscapes
Joern Fischer¹, Tibor Hartel^{2,3}, & Tobias Kuemmerle^{4,5}

Preservation strategy: maintain traditional practices by making them financially attractive (eg agri-environment payments). **Transformation strategy:** though ecosystems from traditional agriculture are worth maintaining in their basic structure and function, changes in the social system are inevitable and often desirable.

Strategies

	Preservation	Transformation
Focus	practices of the past, results are assumed to follow	ecosystem characteristics; modification of practices is acceptable
Public support	prescribed management individual farmers	self-organisation, support of pilots, risk buffering, payment for public-goods, results-based payments communities, NGOs
Farmer role	passive recipient	active user, innovator
Markets	outside	integration
Innovation	redundant	crucial
Research	biology-centered	interdisciplinary

HNV Link

Network of 10 Learning Areas

Identify innovations that improve the socio-economic and environmental sustainability of HNV farming.

Identify innovations gaps.

Promote the exchange and uptake of good innovation practice in support of HNV farming.

Learning Areas

- 1. Denmark (DK)
- 2. Sítio de Monturado (Portugal)
- 3. Salween Hills, of Cui (Burma)
- 4. Salmann Hills (Croatia)
- 5. Eastern Hills of Cui (Burma)
- 6. Western Hills of Cui (Burma)
- 7. The Burren (Ireland)
- 8. The Burren (Ireland)
- 9. The Burren (Ireland)
- 10. The Burren (Ireland)
- 11. The Burren (Ireland)
- 12. Causse & Cevennes (France)
- 13. Extremadura (Spain)

Work Package Leaders

- 1. CITEA (France)
- 2. CITEA (France)
- 3. CITEA (France)
- 4. CITEA (France)
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- 13. CITEA (France)

This project is funded by the European Union Horizon 2020 research and innovation programme.

HNV Link

In all Learning Areas - semi-natural pastures and extensive livestock

www.hnvlink.org

HNV-Link innovation themes

Social & Institutional

Regulations & Policy

Farming Techniques/Management

Products & Markets

This project is funded by the European Union Horizon 2020 research and innovation programme.

Example 1: Sweden

- Europe's first mobile butchery for fully grown cattle - Hälsingestintan
- "Ethical" meat, also from the Learning Area, with a stress on HNV pasture production

<https://www.finedininglovers.com/stories/ethical-meat-halsingestintan/>

Example 2: Sweden

- Community Supported Sheep - a new approach of the Svanängen farm to market meat from HNV-land
- = customers buy a lamb before the season: support HNV-land restoration and give the farmers security.



Example 3: Greece, Thessalia

- Participatory Guarantee System -> certification of local traditional products of extensive grazing in HNVf landscape: fair redistribution of the added value to farmers and small cheese makers, prevention of conflicts between farmers and forestry, support for indigenous breeds.
- GPS, drones, various cooperation and advisory modes, etc.



<http://www.terraithessalia.gr/warranty/participatory-guarantee-system/?lang=en>

Review of literature & compilation from the HNV-Link network



Can innovation secure a future for HNV farming?

- Successful innovations working in some places
- Expanding their usage - a major challenge
- Role of a leader (incl. NGO, group of locals, expert)
- Institutional and regulatory barriers -> Institutional and Regulatory innovation needed to enable and facilitate all other innovations
- EIP Operational Groups and pilot projects - opportunity for kick-starting innovative processes at local level



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Focus Group ideas for further research on HNV farming

- Better understanding of HNV farming systems: socio-economic characteristics, economic performance, motivation, social dynamic, trends
- Developing technical and management solutions

Some future directions

- Improve inventory of SNG and HNV farming systems
 - Remote sensing technologies for easy classification (eg SNG vs Permanent Grassland), use of drones for monitoring
- Novel solutions for targeted mechanical plant control, incl. toxic and invasive species
- Use of biomass from SNG: eg energy, bedding, "spider refuges"
- Trade-offs between quantity and quality in products from extensive systems
- Regional "meadow meat" labelling
- Ecosystem services -> "product"
- Multi-purpose land-use planning

