

# IDENTIFICATION OF HIGH NATURE VALUE FARMING IN ESTONIA

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HNV farmland and forestry areas are not finally defined in Estonia. At the moment only semi-natural habitats in Natura 2000 areas are considered as supported HNV areas in the current Estonian RDP context. According to several data sources there are ~100 000 ha of semi-natural habitats in Estonia, out of 73 000 ha are included into Natura 2000 network.

Though, Natura 2000 network is priority, there are other areas which have high nature values; especially important are mosaic agricultural landscapes with small fields and abundant landscape elements. Therefore it is important also to support farmers outside of Natura 2000 network for creating and maintaining diverse agricultural landscapes in environmentally friendly way.

In 2009 ARC established HNV working group with an objective to further develop HNV concept suitable for the Estonian RDP context. 2 x 2 km grid cell based mapping approach for defining HNV areas was agreed and further work with following HNV characteristics has been started:

## AGRICULTURAL LAND USE IN ESTONIA

**Agricultural land ~852 000 ha (~20% of total area):**

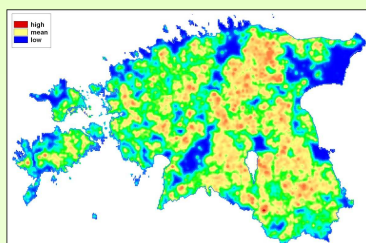
~27% permanent grasslands; ~72% arable land (including short-term grasslands) and ~1% permanent crops

**~19 950 farm holdings:**

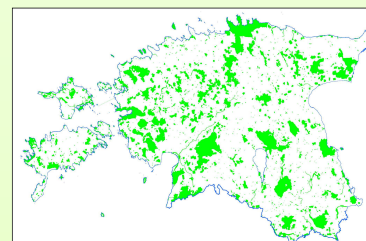
~ 52% animal husbandry and dairy farms; ~33% plant production farms and ~14% mixed farms

71% of farms are under 2 European Size Units using ~10% of total agricultural area

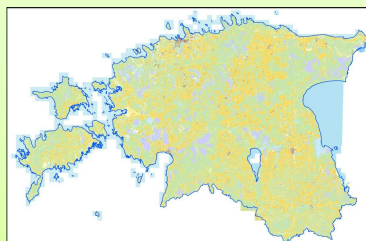
Sources: IACS/LPIS 2008



Land use intensity based on number of animals and area of arable land, ARC 2010



Natura 2000 and semi-natural habitats in Estonia, ARC 2010



Landscape mosaic on the basis of Estonian Base Map, ARC 2010

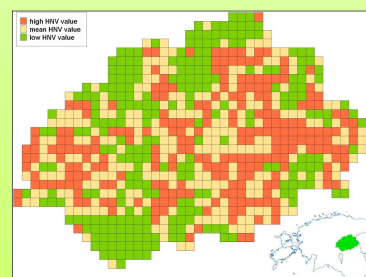


Illustration of grid cell solution in Jõgeva county, ARC 2010

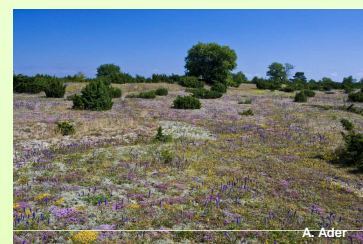
## Selected characteristics of low farming intensity:

- Share of arable land and permanent grassland
- Number of animals and types, animal density
- Share of organic land
- Amount of mineral and organic fertilizers used
- Share of peatsoils, calcareous and eroded soils.



## Selected characteristics of nature conservation:

- Share of semi-natural habitats
- Farmland bird species diversity
- Share of protected areas and Natura 2000 areas
- Presence of protected species



## Selected characteristics of landscape diversity:

- Size of field parcels
- Number and size of fields
- Field edge index, types and total number of areal landscape elements
- Share of valuable landscapes



Each cell will have a merged value that corresponds to the HNV features and characteristics at the site.

Currently work on assessment of availability and applicability of some of the characteristics as well as determination of threshold values for HNV and non-HNV is taking place.

