

EU natural and semi-natural grassland formations diversity, distribution and future prospects in Lithuania

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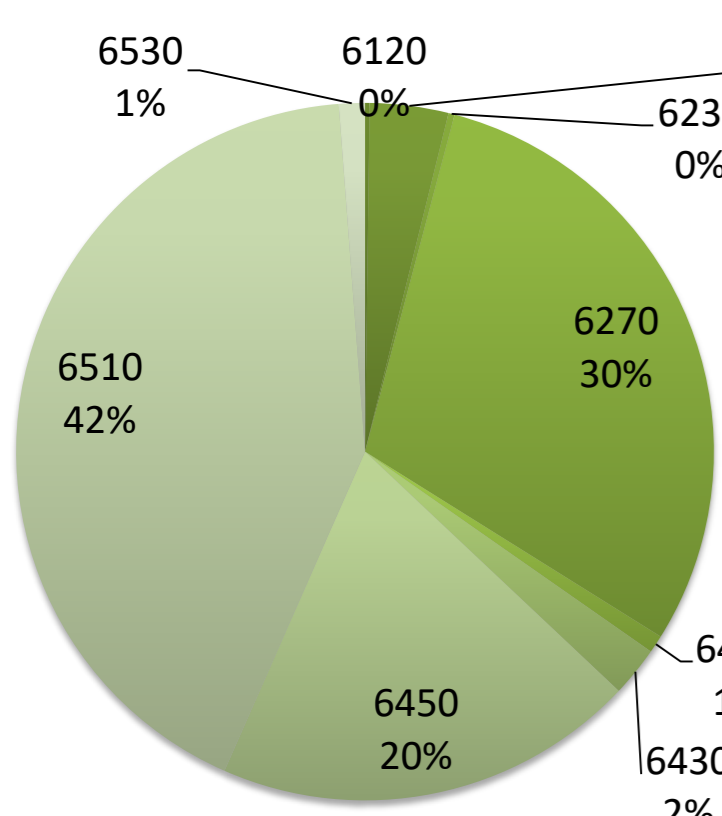
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METHODOLOGICAL APPROACH

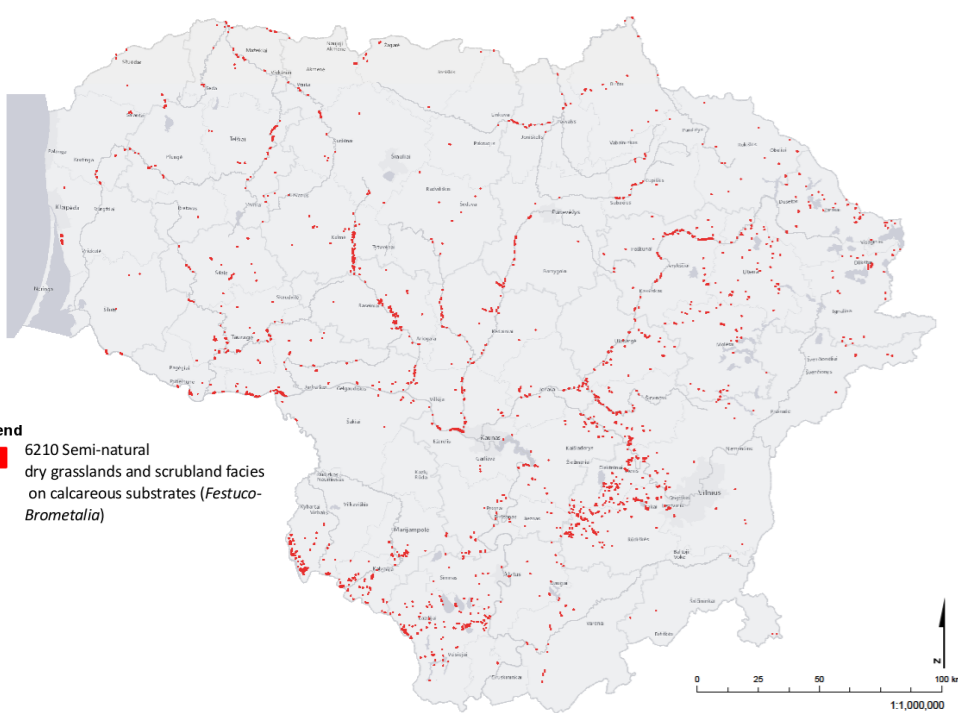
- Field survey methods for EU habitat type (Habitats Directive, Annex I) inventory were applied, for which 1:10000 scale maps were used;
- All naturally survived localities throughout the country were visited; at the study sites, habitat types were identified; polygon boundaries were drawn and field sheets were filled;
- Field work was performed in 2011–2014 by 200 field workers;
- National guidebook for EU habitat type identification was used (Rašomavičius, 2012), GIS data base of habitat inventory (BIGIS) was created;

Area of grassland habitats

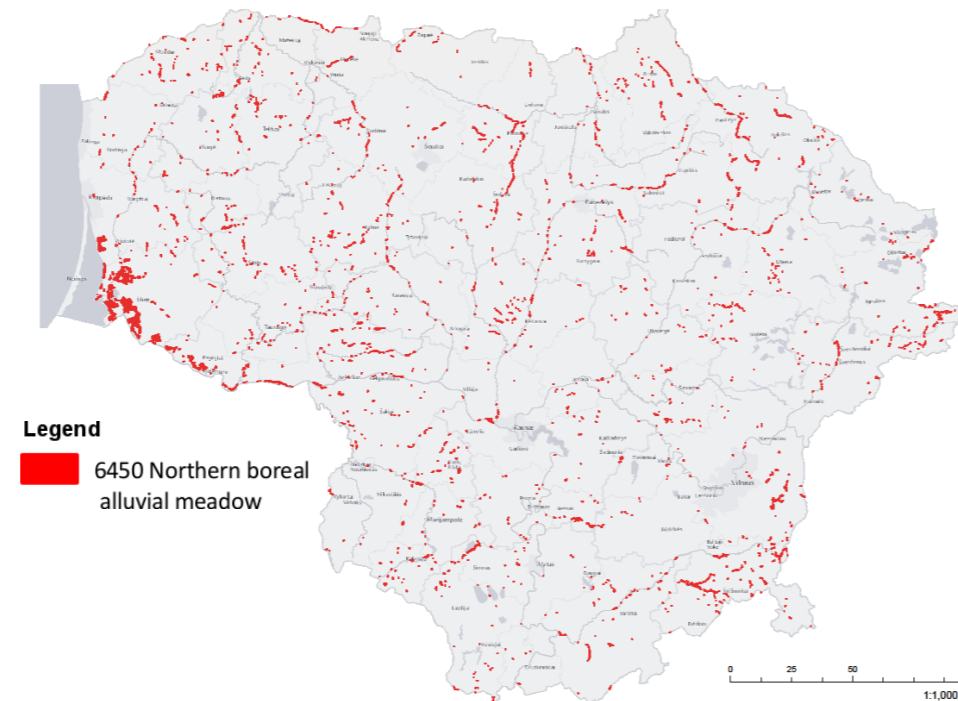
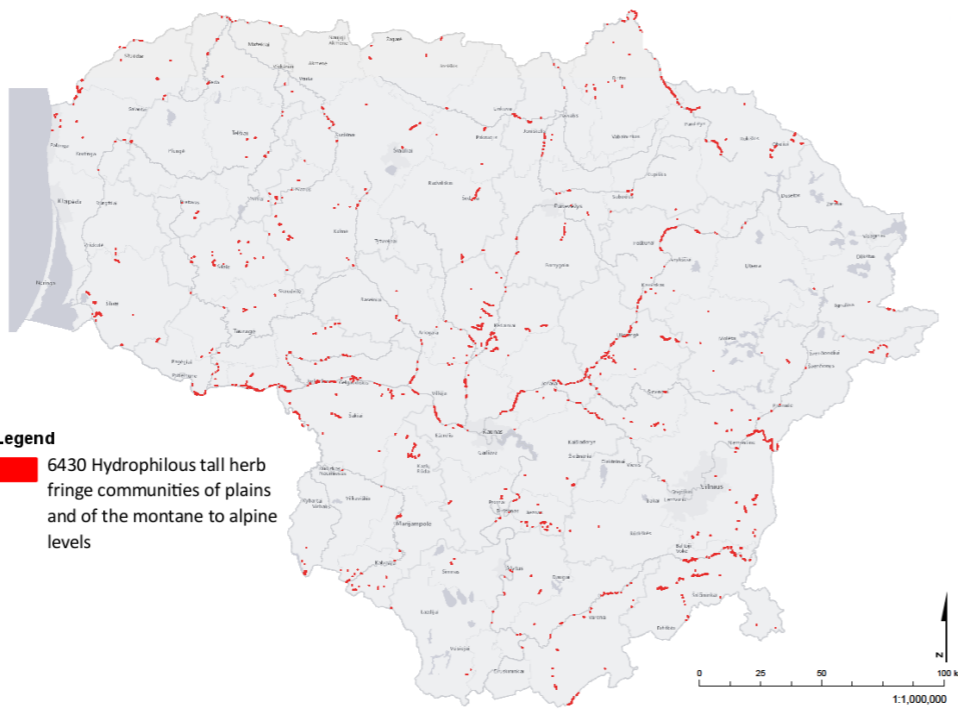


A total number of natural and semi-natural grassland formations polygons is 21 138, all polygons cover 756 km², it comprises 18% of all mapped habitats.
Average cover of the area for each polygon varies from 0.67 to 5.71 ha.
The three most common habitat types (6510, 6270, 6450) together account for over 91.52% of the total EU grassland habitat type area.

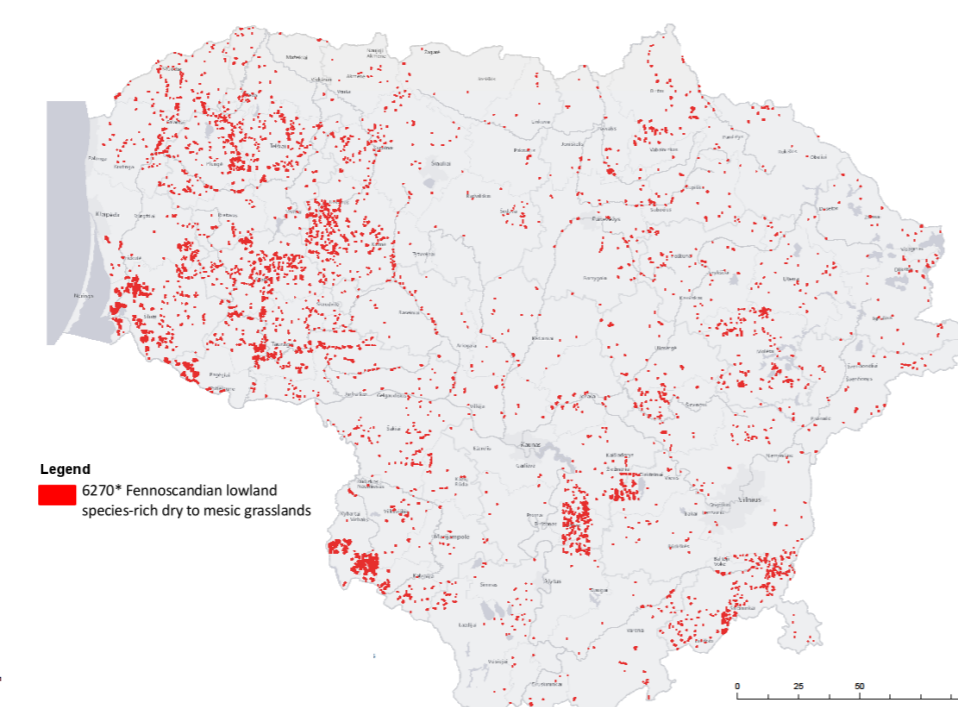
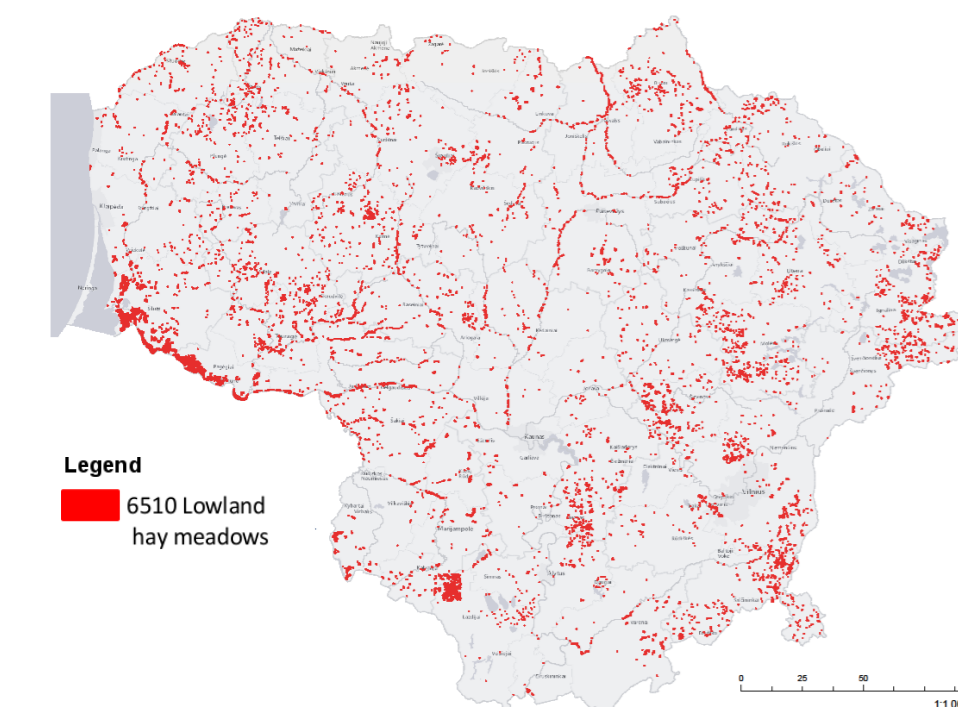
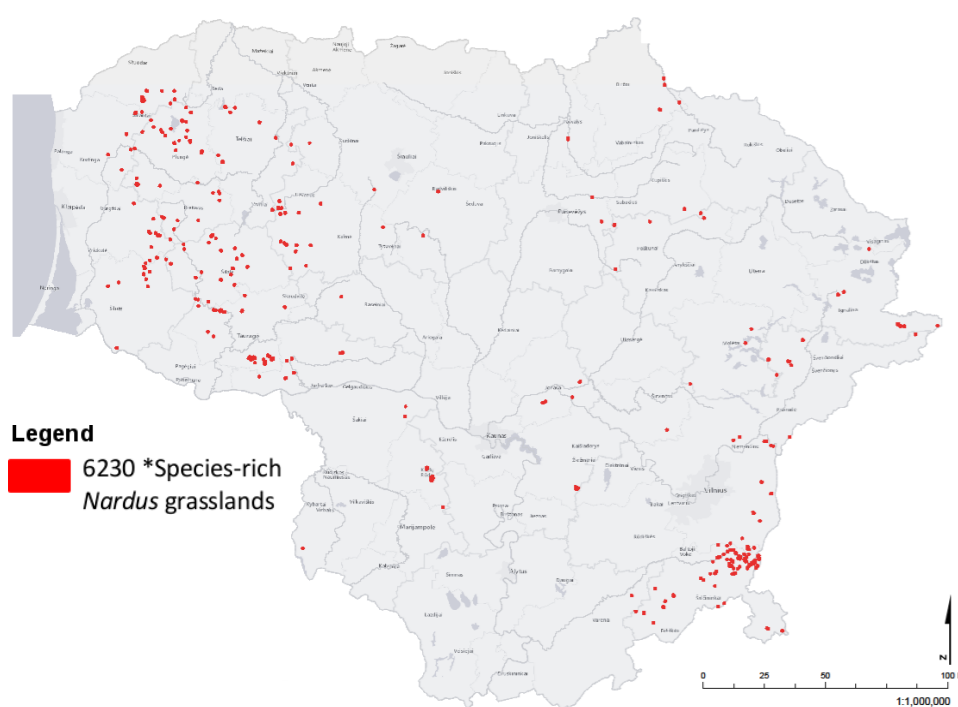
GEOGRAPHICAL DISTRIBUTION



Habitat types 6210, 6430, 6450 are closely related to river valleys – 6210 occur on steep, south facing slopes, 6430 are widespread on the fringe near water streams, 6450 – take place on low-level floodplain inundated in spring flood time and presented mostly as Magnocaricetalia.



The habitat 6230 is more common in the western and southeastern parts of Lithuania, where decalcified soils prevail and grazing is the most common agriculture activity.



Distribution of habitats 6270 and 6510 is generally reflected in landscape feature, and prevailing agriculture activities – pasture (6270) more common in hilly relief, meanwhile meadows (6510) are also widespread in the valleys of rivers and streams (including large area in Nemunas Delta).

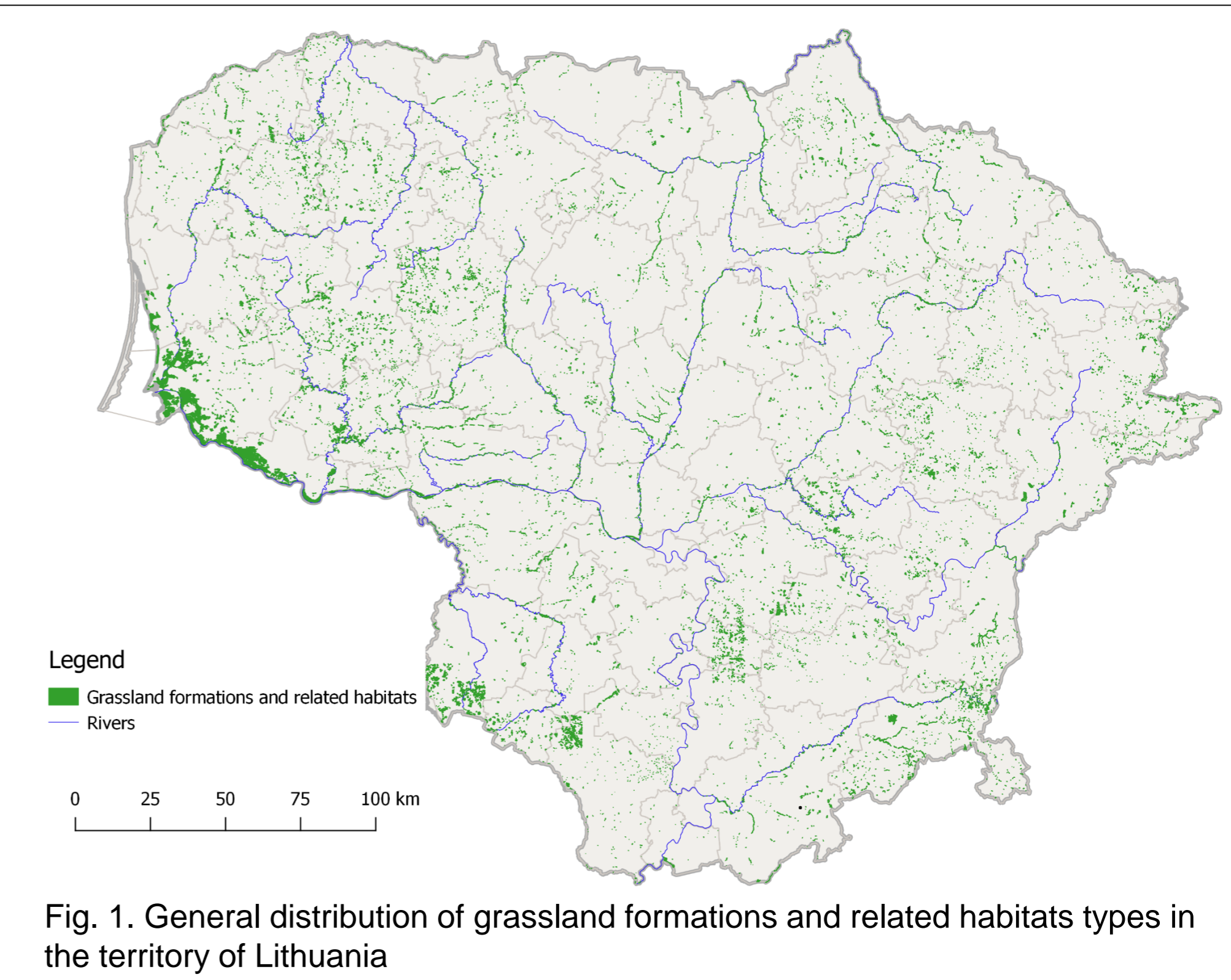
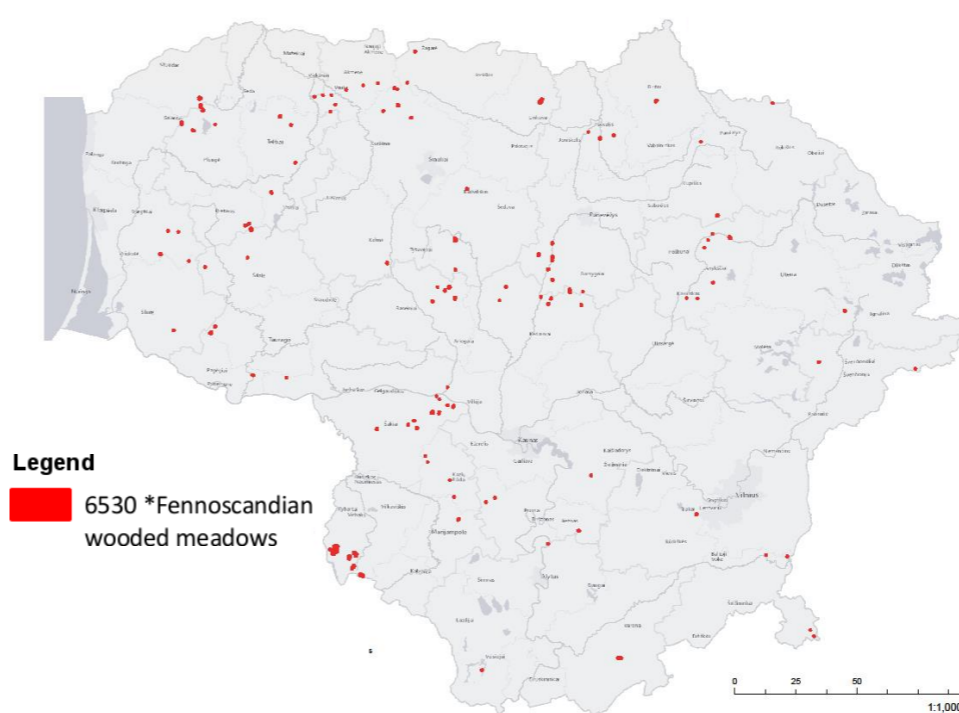
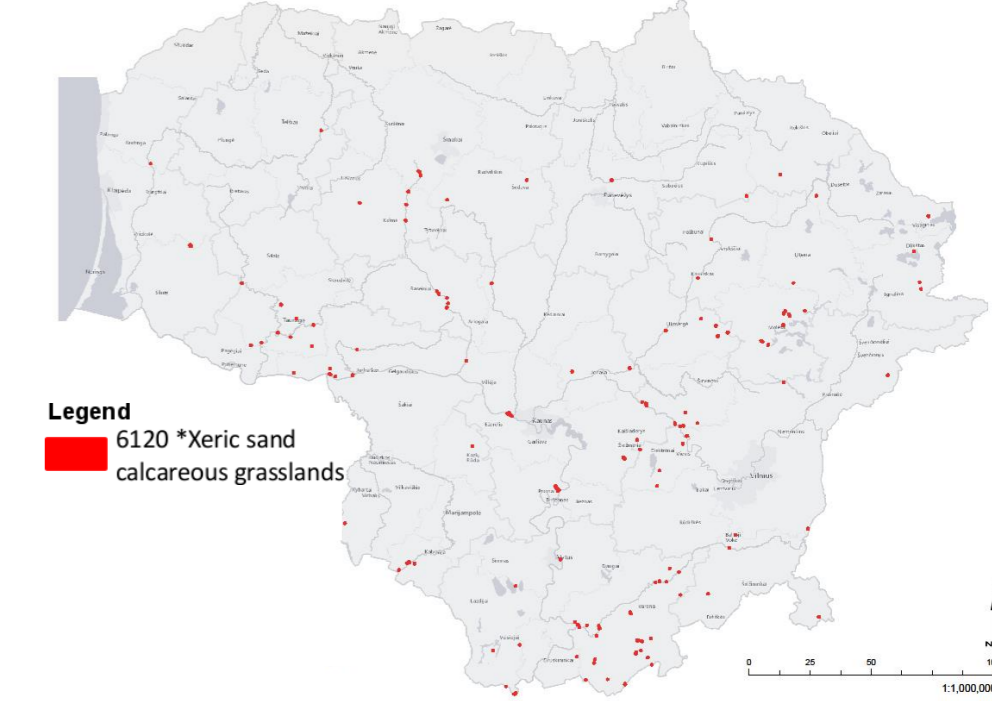


Fig. 1. General distribution of grassland formations and related habitats types in the territory of Lithuania

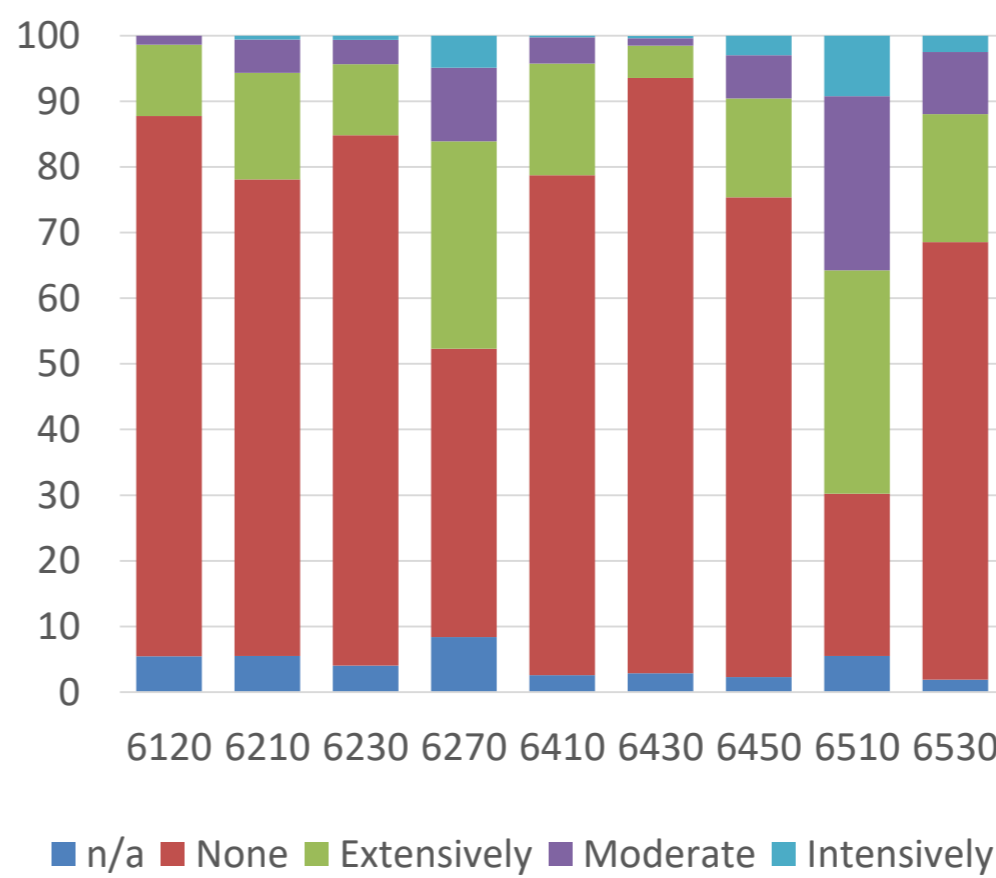


The habitat types 6120, 6410 and 6530 are rare and occupy small patches.



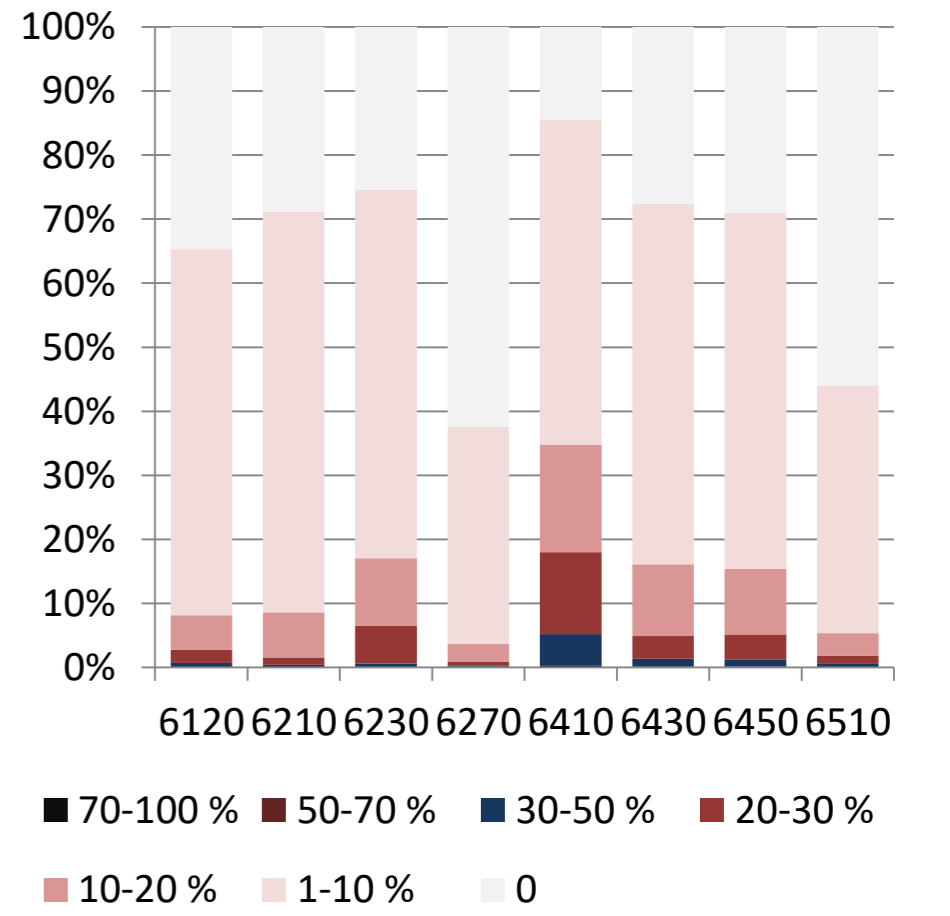
STRUCTURE AND FUNCTIONS

Mowing intensity of grassland habitats



47650 ha (63.1%) of the habitats are mowed at least once per year.

The abundance of shrubs layer in grassland habitats



Overgrowth with shrubs present the biggest threat for *Molinia* and *Nardus* grasslands and natural hay meadows

FUTURE PROPECTS

About one third of the area of natural and semi-natural grassland formations occur within Natura 2000 site. The average portion of each habitat type area in Natura 2000 sites is 26.97%.

