

Stanje negozdnih habitatnih tipov na vzhodnem delu Goričkega v letih 2010–2012

State of non-forest habitat types
in eastern part of Goričko in years 2010–2012

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Goričko Nature Park area



- NE part of Slovenia, 460 km²
- border with Hungary and Austria, north of Pomurje plain
- hilly landscape, average altitude 275 m
- highest peak (Sotinski breg) 419 m
- population density: 47 persons per km² (2001), ½ of Slovenian average
- precipitation: driest part of Slovenia, down to 800 mm (dry years only 600 mm)

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Habitat type mapping

- mapping of Goričko in 2002–2003 (Kaligarič et al. 2004)
- 2010–2012: E part of Goričko
- Aim: Guidelines for the management plan

Habitat type

- characteristic community of plants and animals closely linked with other environmental factors (light, warmth, humidity, light, soil type and structure)
- clearly separable from neighbouring habitat types
- some examples: montane beech forest, riparian willow formation, common reed bed, high-stem orchard, hay meadow, stream.

41.111 – Medio-European colline woodrush beech forests



37.311 Calcicline purple moorgrass meadows



82.11 - Field crops



83.151 – Northern fruit orchards



83.22 – Low-stem orchards



Methodology

- Tipology: HTS 2004, new version (2012) in preparation
- combinations of habitat types (hybrids)
- state of overgrowing
- state of preservation (-, +, certain combinations)

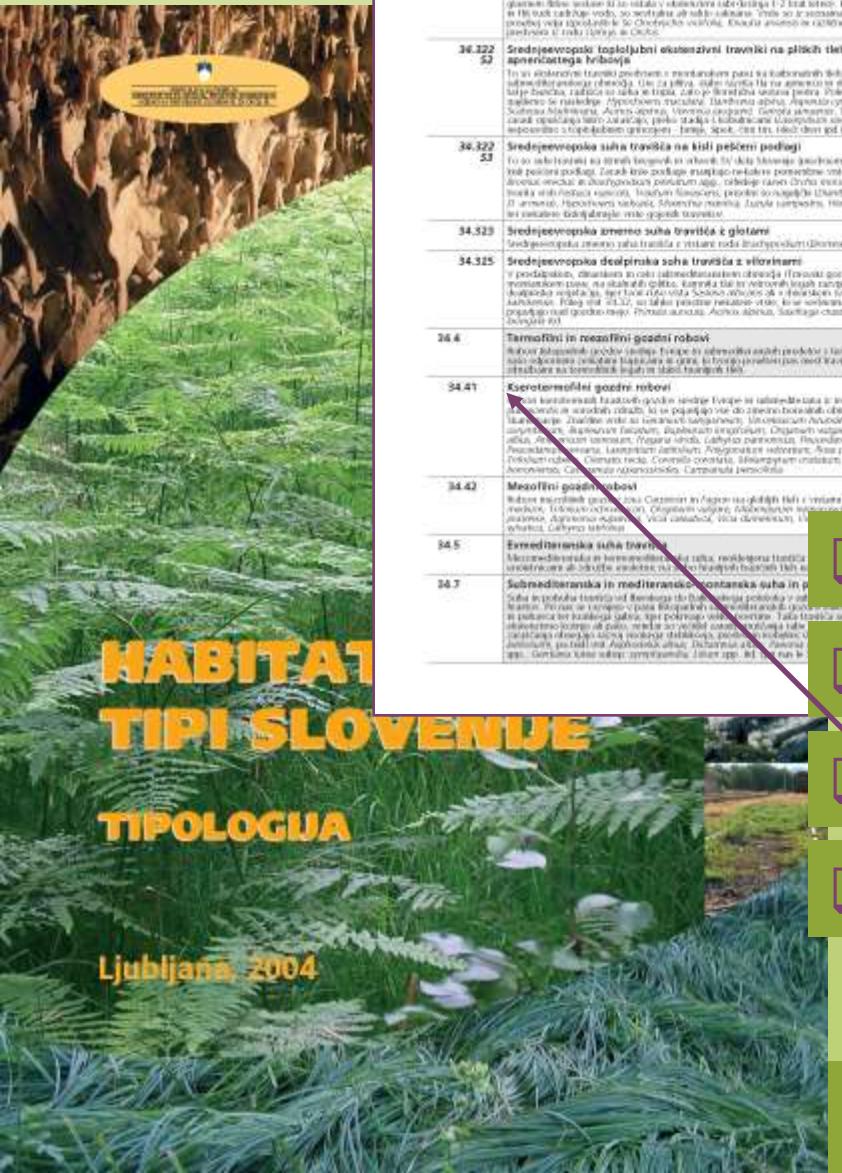
- invasive species
- streams types
- small plots (important for some HTs)

field work → digitization → nature conservation evaluation → analysis → Guidelines

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Tipology



HABITATI TIPI SLOVENJE

Ljubljana 2004

34/321 Submediteransko-litarski palinzi in uhi karnevič travnik Vitoškega kraja z nizkimi uhi skalični glasivci.
35/321 In uhi trutnica, pre-trutni in sladkogljivični Vitoškega kraja, izraziti granit Hanusa, brez vodnjaka, gospodarska Števila na Gorenjski do favoritom, Hrastec, Vrhnika in

Hierarchical structure

- modified palearctic classification
- PHYSIS code (comparability)
- combined habitat types (31.8121×38.221)

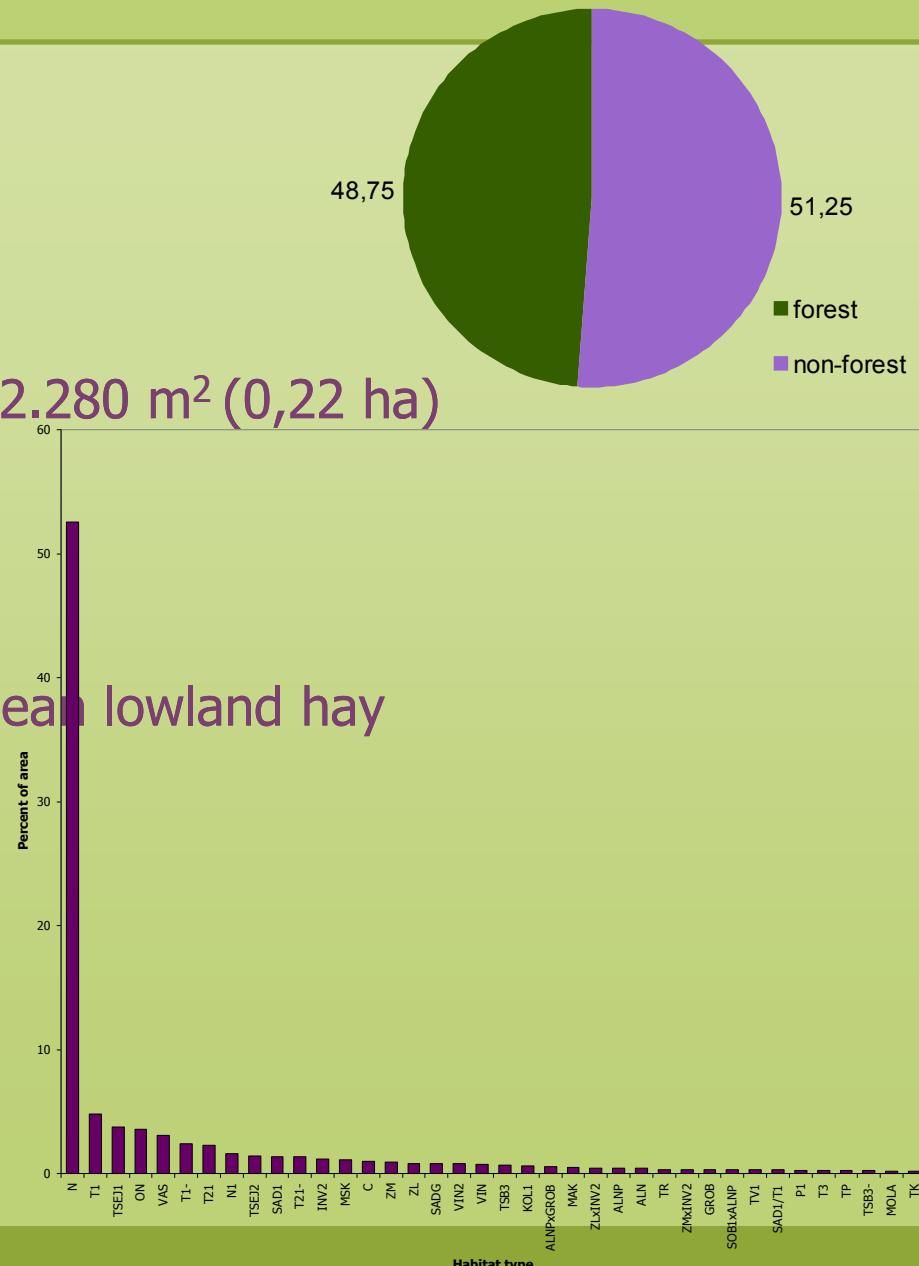
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Abbrev.	Physis	Habitat type	FFH	Decree HT	Bern	NCE
TN	35.11	Mezofilna do kserofilna volkovja pod gozdno mejo	6230*	3	B	5
TVE	37.2	Mokrotni mezotrofni in evtrofni travniki ali pašniki		3	B	4
TV1	37.21	Mezotrofni mokrotni travniki		3	B	5
DES	37.26	Vlažni travniki z rušnato masnico		3	B	4
TVM	37.3	Oligotrofni mokrotni travniki		3	B	4
MOL	37.311	Mokrotni travniki z modro stožko	6410	3	B	5
MOLA	37.313	Mezofilni do vlažni travniki s trstikasto stožko	6410	3	B	5
T1	38.221	Srednjeevropski kseromezofilni nižinski travniki na razmeroma suhih tleh in nagnjenih legah s prevladajočo visoko pahovko	6510	3		4
T2	38.222	Srednjeevropski higromezofilni nižinski travniki na srednje vlažnih tleh s prevladajočo visoko pahovko	6510	3		4

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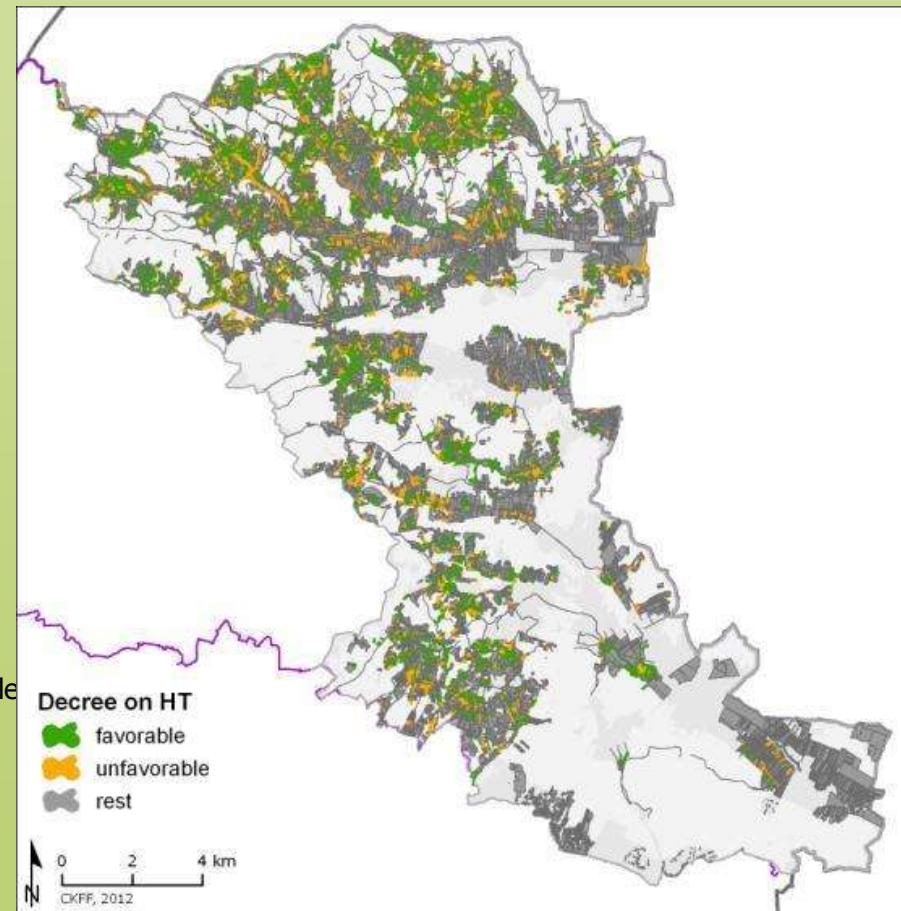
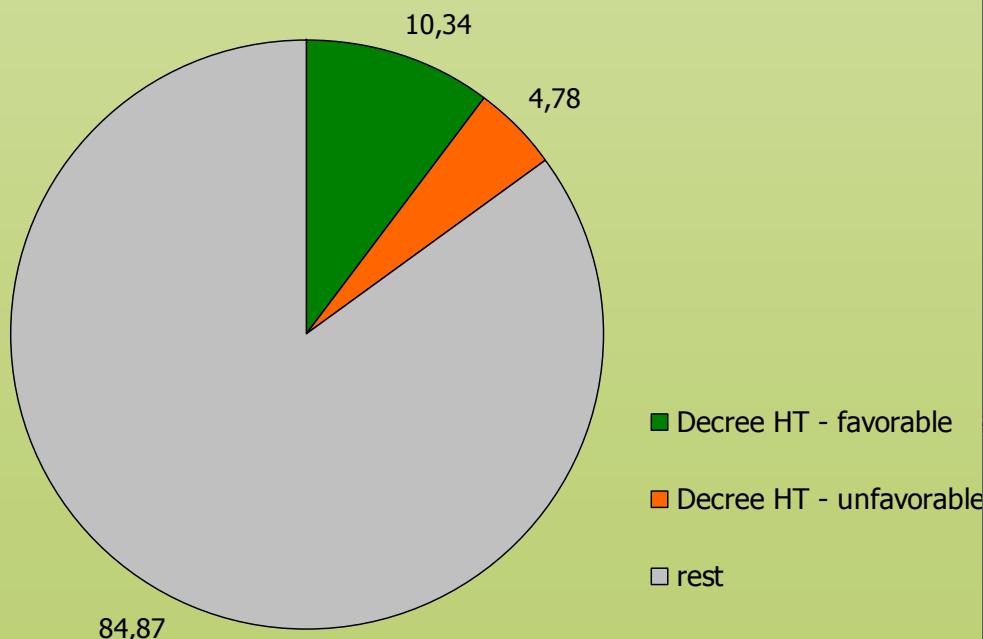
Results

- 257,5 km²
- ½ of area covered with forest
- average surface area of a polygon: 2.280 m² (0,22 ha)
- 68 % of non-forest area analyzed:
 - 54 % Field crops
 - 5 % Xeromesophile medio-European lowland hay meadows
 - 4 % Dry improved grasslands
 - 4 % Fallow fields

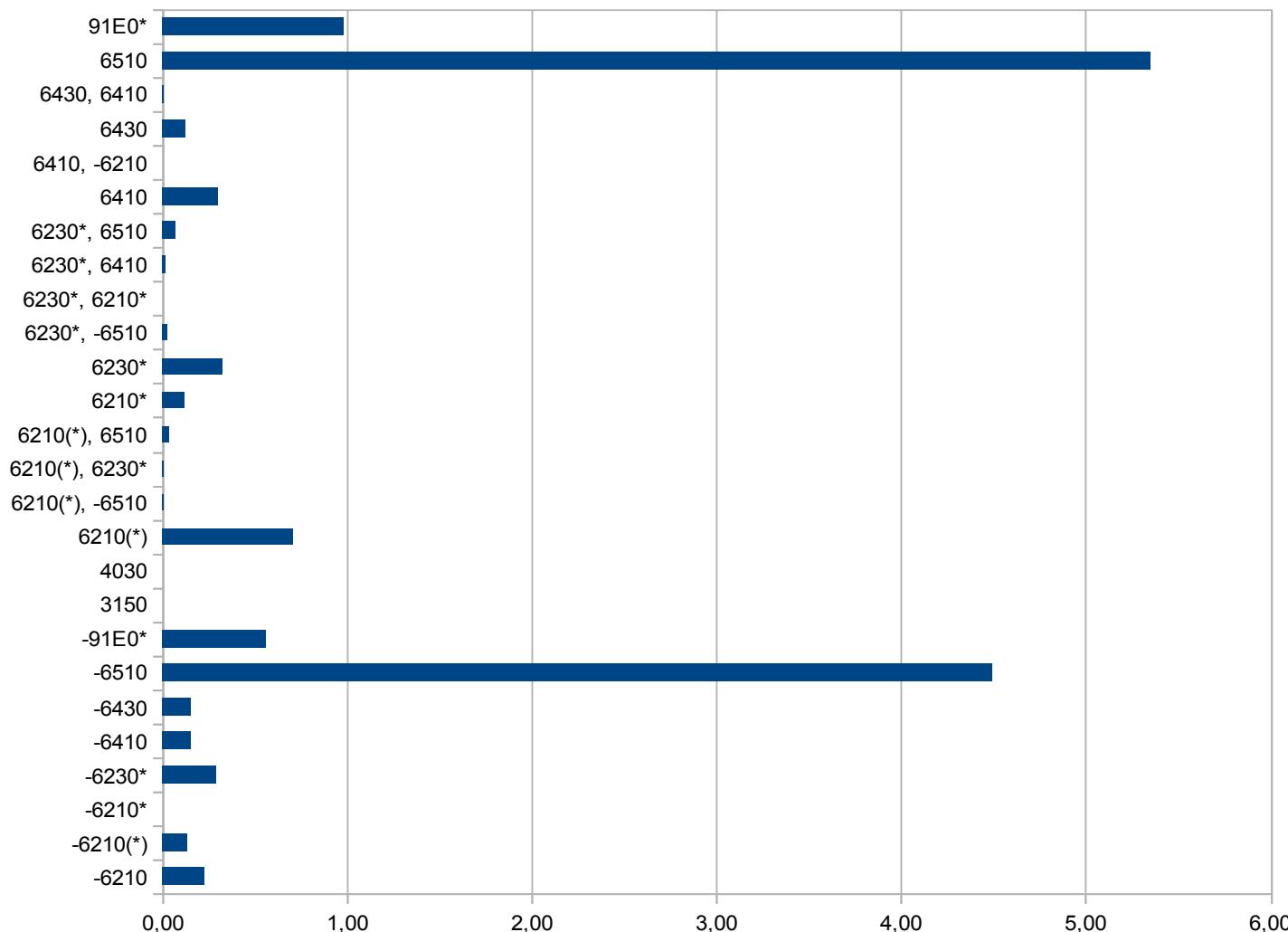


Protected habitat types

- 15 % protected by Decree on habitat types
- 1/3 with unfavorable status

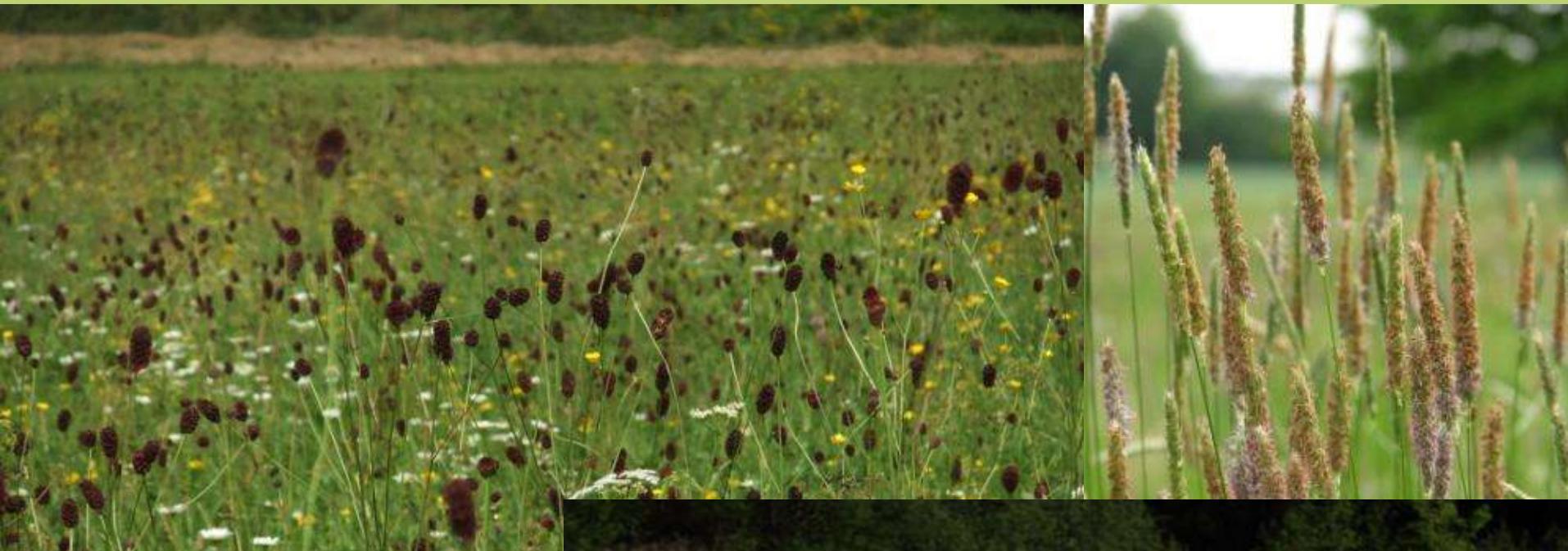


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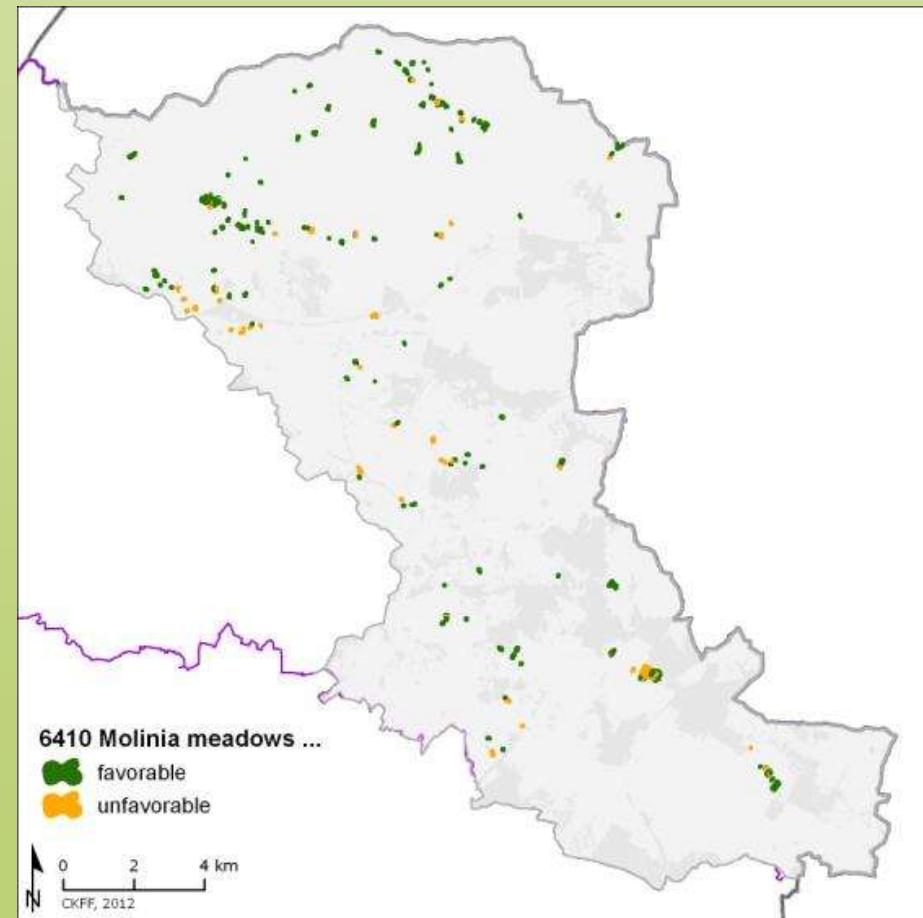
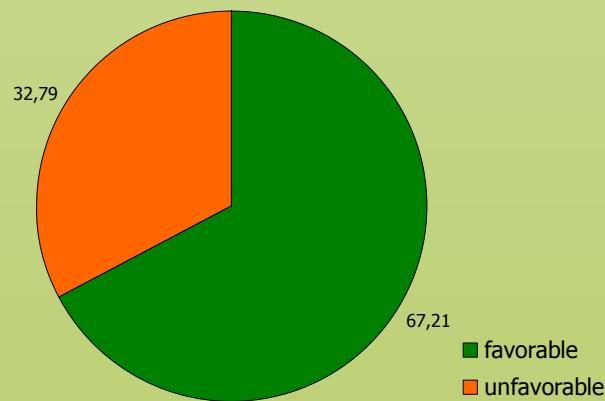
Habitat directive

- 6510 Lowland hay meadows (*Alopecurus pratensis*,
Sanguisorba officinalis)



Habitat directive

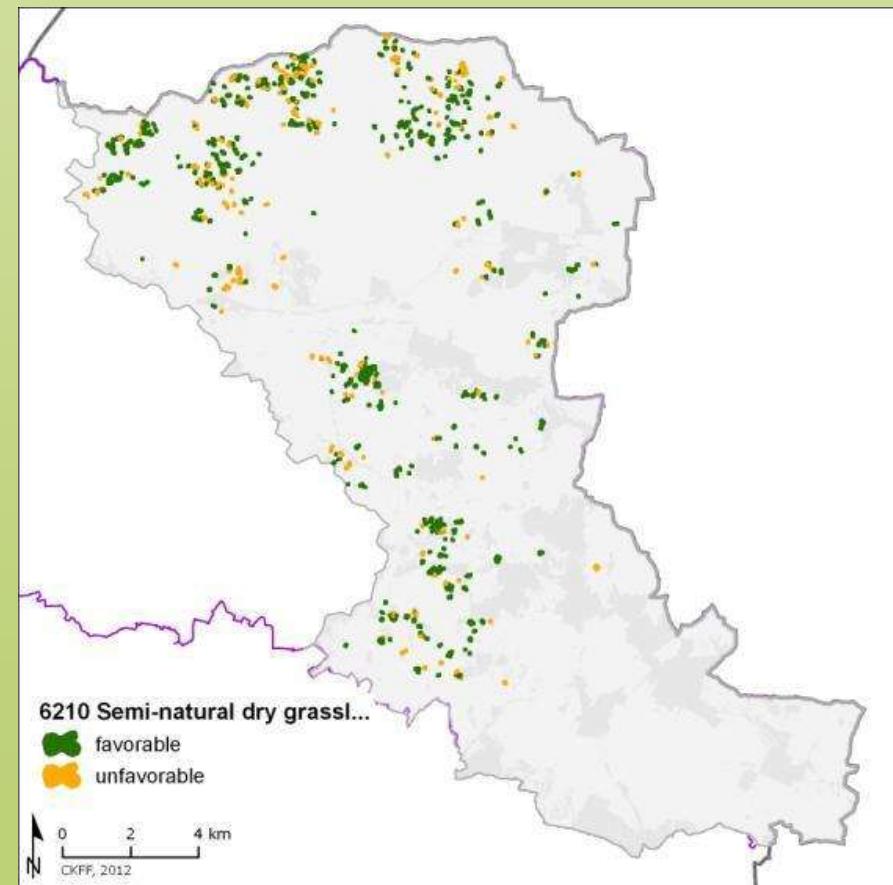
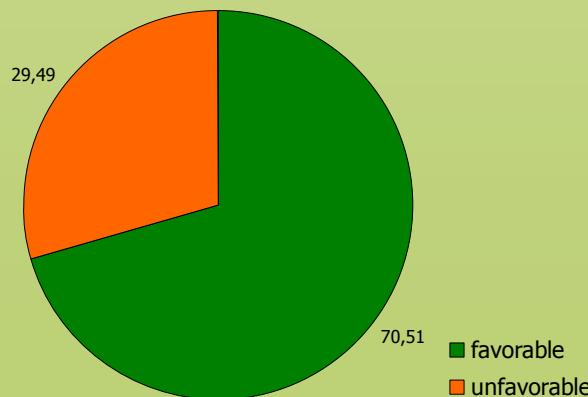
- 6410 Molinia meadows on calcareous, peaty or clayey-silt-laden soils (*Molinion caeruleae*)
 - 0,47 % of non-forest area
 - 1/3 with unfavorable status





Habitat directive

- 6210(*) Semi-natural dry grasslands and scrubland facies: on calcareous substrates (*Festuco-Brometalia*)
 - 1,32 % of non-forest area
 - ca. 30 % with unfavorable status





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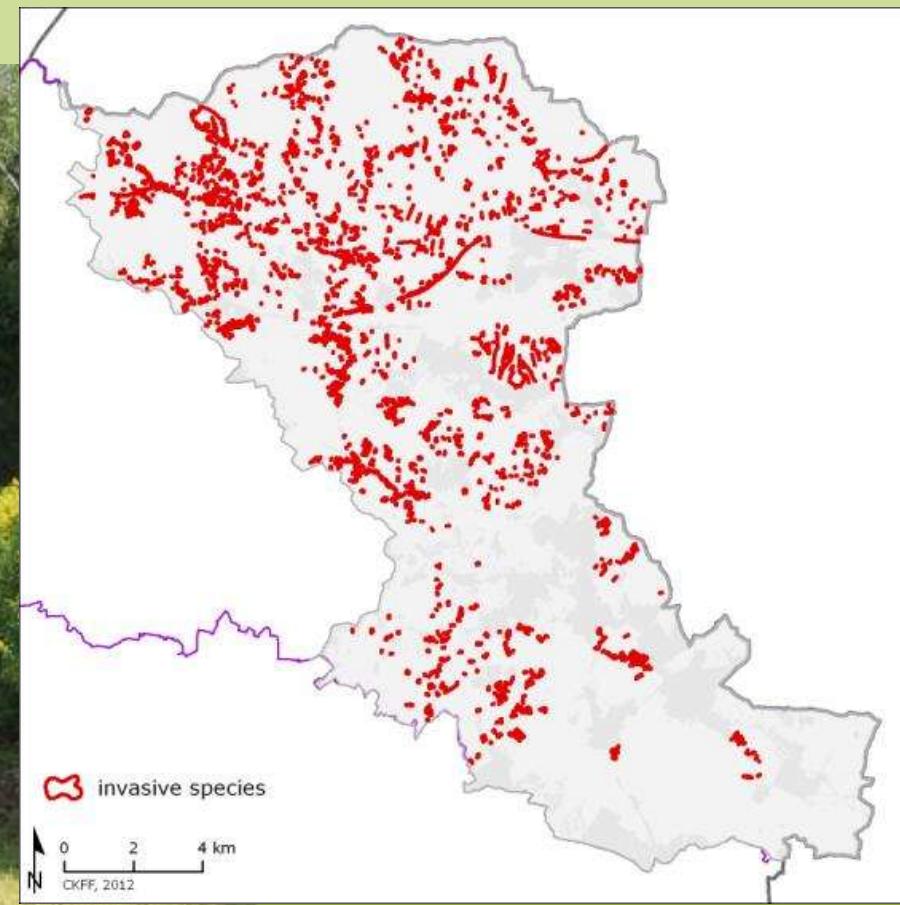






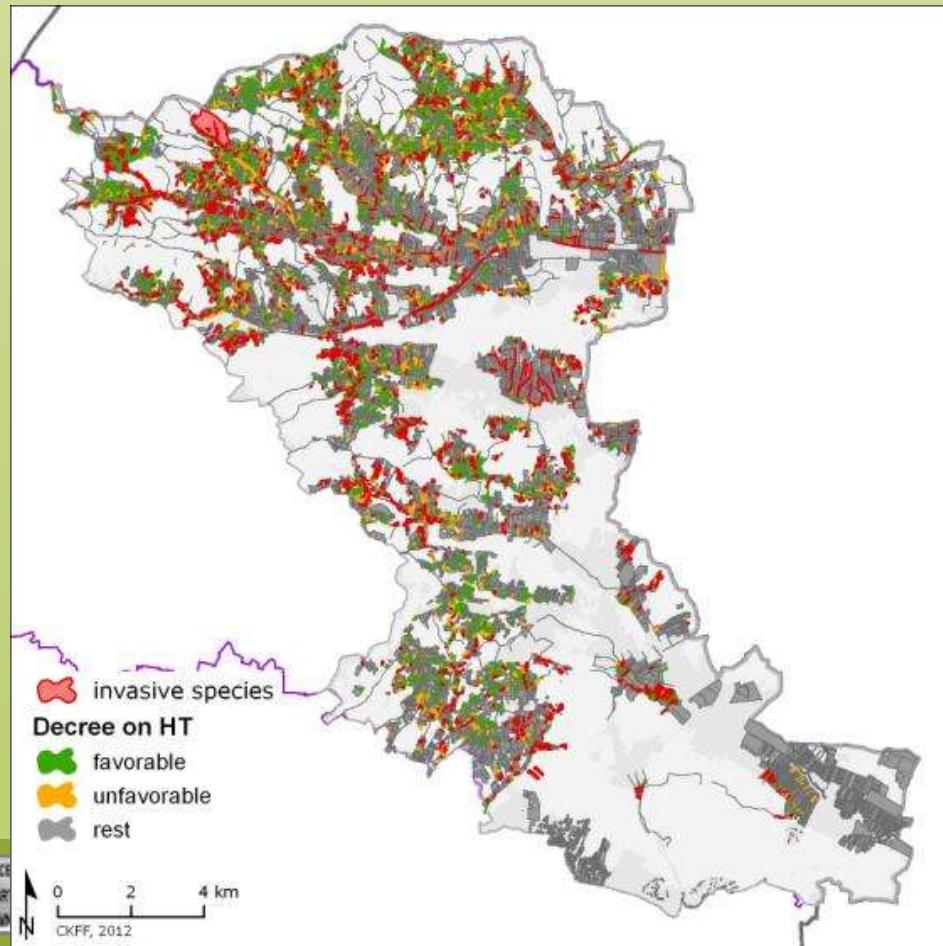
Invasive species

- *Solidago gigantea, Solidago canadensis*
- 4,13 % of non-forest area



Invasive species

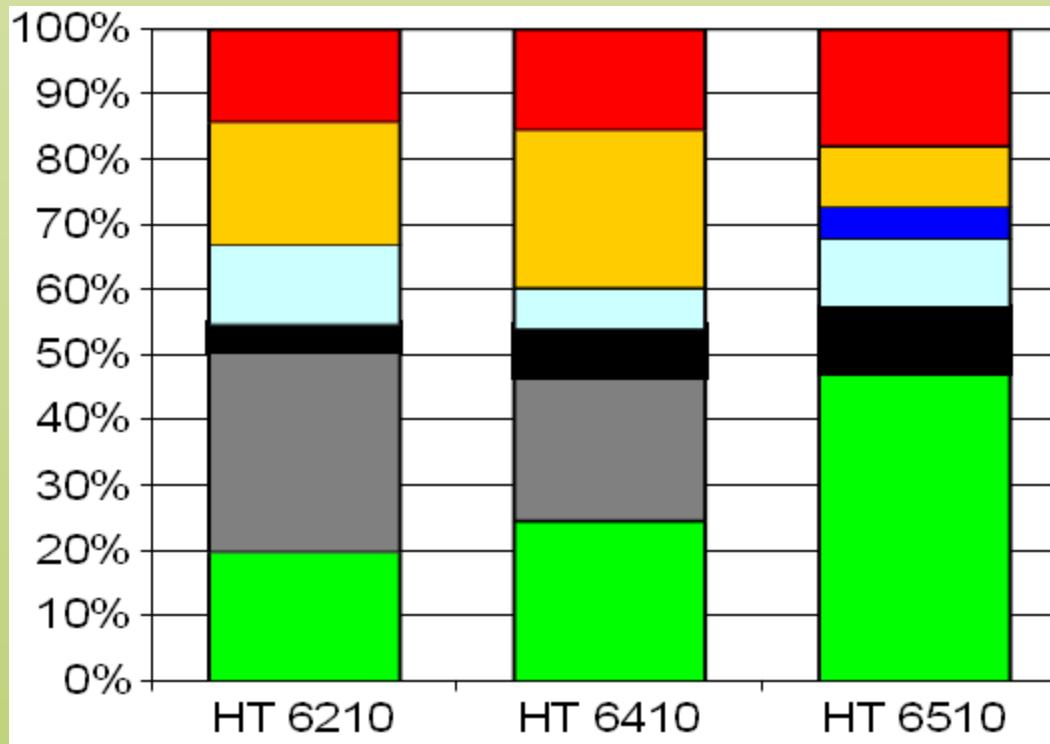
- *Solidago gigantea, Solidago canadensis*
- 4,13 % of non-forest area



Negative factors:

- Abandonment, overgrowing
- Intensification of agriculture, disappearing of valuable habitat types

Changes of meadows in 9 years



Conclusions:

- What do we want? Preserved nature? Agriculture?
Both?
- We need both.
- Let's start with regular mowing...



Pozdrav z Goričkoga