

Nature conservation situation of 91H0 and 91H1 forest habitats in Hungary



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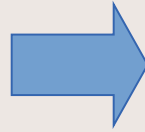


Aims and objectives

- Brief overview of the two selected forest habitats
 - *habitat interpretation*
 - *designation process*
 - *current status* (based on the Report on the main results of the surveillance under article 17 for annex I habitat types)
 - *broader assessment in Natura 2000 context* (annex species, adjacent habitats)
 - *general management issues* (landuse, practice, history, economical value, ownership, etc.)
- Case studies – lessons learned

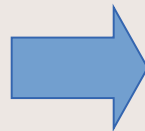
Target habitats

91F0 - Riparian mixed forest of *Quercus robur*, *Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia* along the great rivers (*Ulmenion minoris*)



Riverine hardwood forests

91I0* - Euro-Siberian steppic woods with *Quercus* spp.



Steppe oak woods

91I0 habitat

Steppe oak woods on loess

Aceri tatarico-Quercetum roboris



91I0 habitat

Steppe oak woods on foothills

Aceri tatarico-Quercetum roboris



91I0 habitat

Steppe oak woods on salt

Gallatello-Quercetum roboris



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91I0 habitat

Steppe oak woods on sand

Convallario-Quercetum roboris
Iridi variegatae-Quercetum roboris
Festuco rupicolae-Quercetum, etc.



Source: DINPI

91F0 habitat

Riverine oak-elm-ash woods

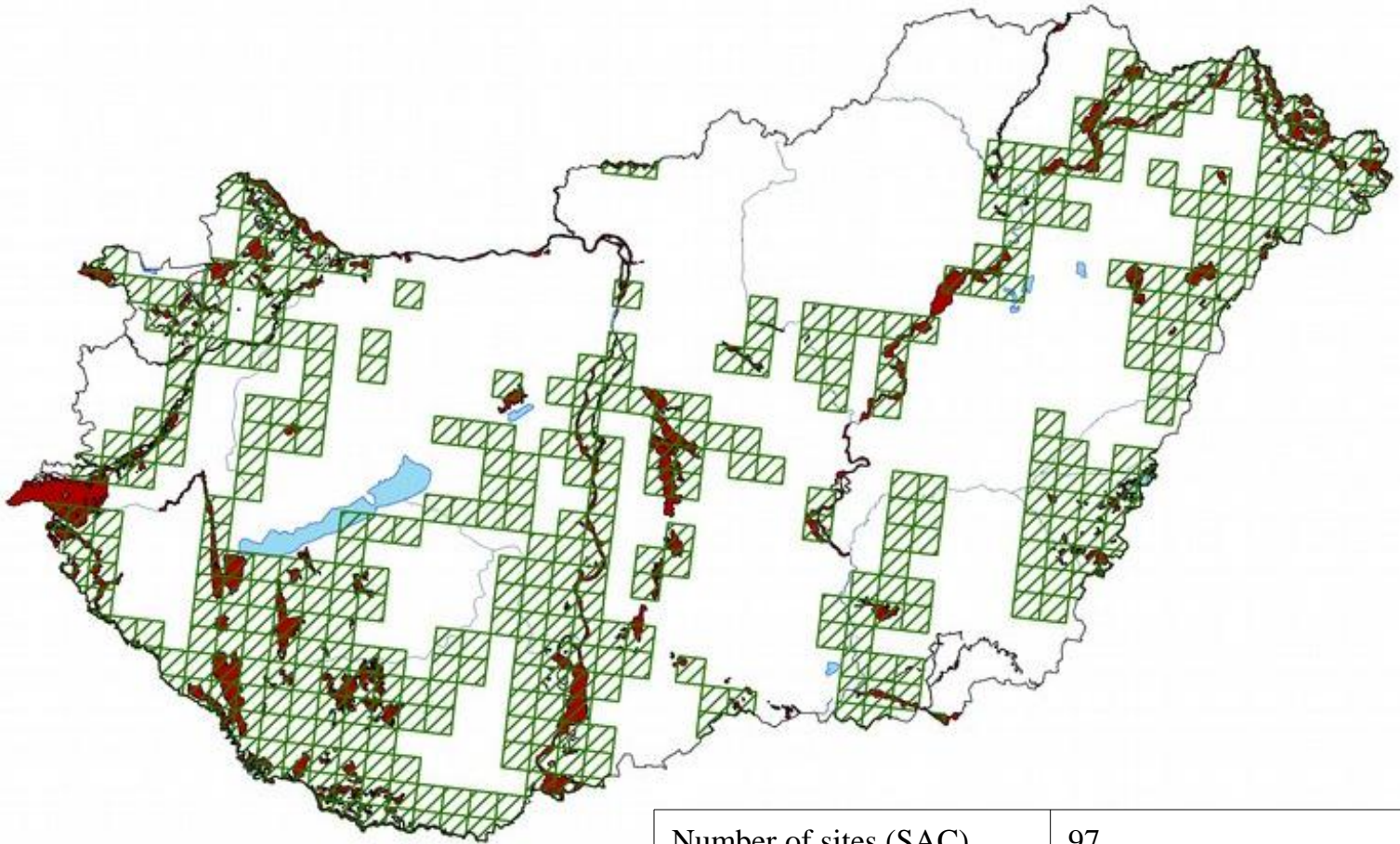
Fraxino pannonicae-Ulmetum



Conservation status

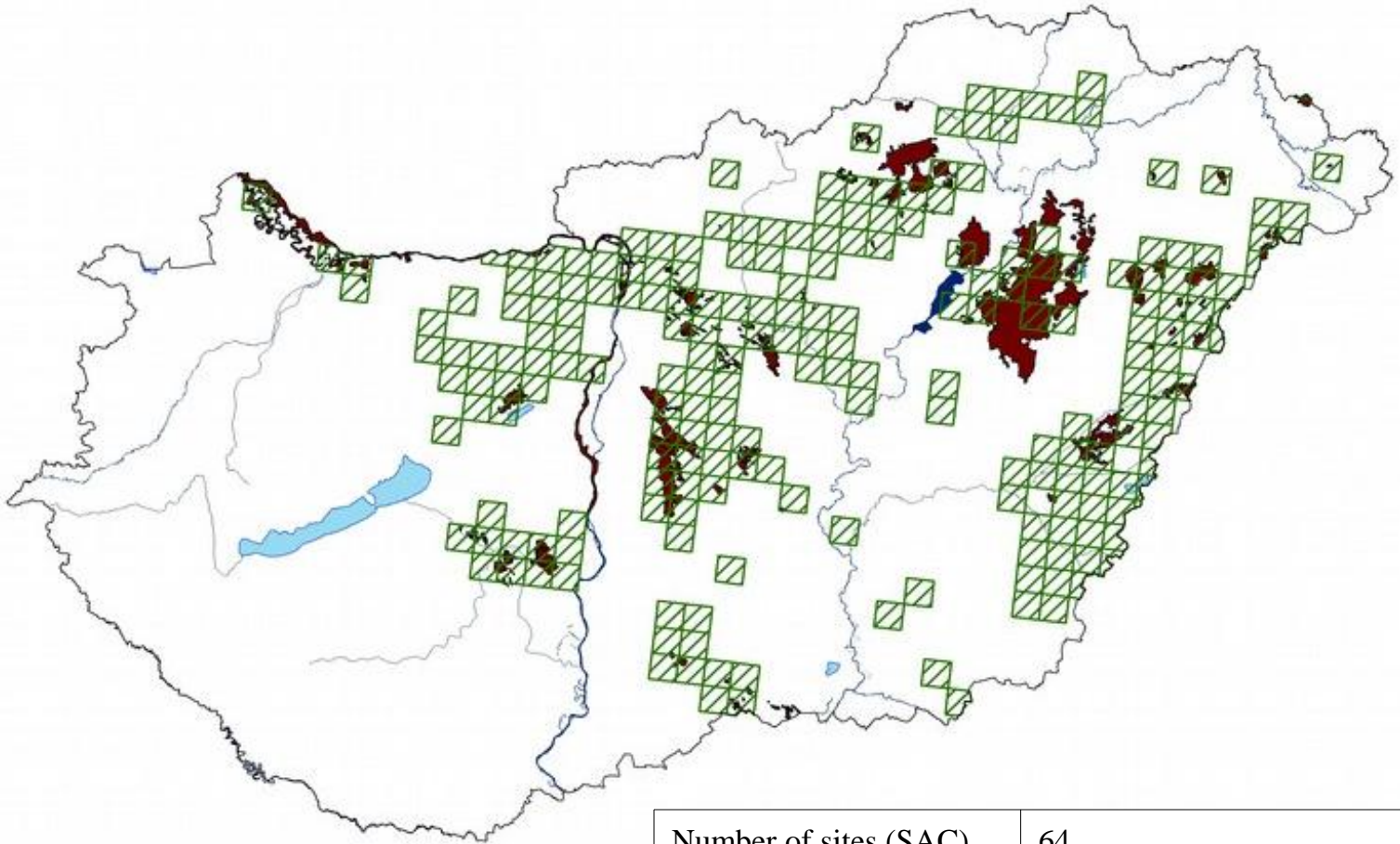
Parameter	91F0	91I0
Range (km ²)	38.184 (FV)	20.960 (U1)
Area (km ²)	350 (U1)	45 (U2)
Number of sites (SAC)	97	64
Cover on sites (SAC) (ha)	1980,8	4437,8
Structures and functions	Inadequate (U1)	Bad (U2)
Future prospects	Inadaquate (U1)	Bad (U2)
Overall assessment of C.S.	Inadaquate (U1)	Bad (U2)
Overall trend in C. S.	Declining (-)	Declining (-)

91F0 – area and range



Number of sites (SAC)	97
Cover on sites (SAC)	1980,8 ha
Potential cover	2 million ha
Actual cover	15.000-(25.000) ha

91I0 – area and range



Number of sites (SAC)	64
Cover on sites (SAC)	4437,8 ha
Potential cover	? ha
Actual cover	>5.000 ha (open: max.500 ha)

Broader assessment in Natura 2000 context

91F0 – riverine forests

- Plants: Adenophora liliifolia, Angelica palustris
- Invertebrates: **Carabus hampei**, **C. variolosus**, Cerambyx cerdo, Chilostoma banaticum, Cucujus cinnaberinus, Euplagia quadripunctaria, **Euphydryas maturna**, **Kovacsia kovacsi**, Lucanus cervus, Limoniscus violaceus, Morimus funereus, Osmoderma eremita, Vertigo angustior
- Vertebrates: Aquila pomarina, Barbastella barbastellus, **Ciconia nigra**, Dendrocopus medius, Dryocopus martius, **Haliaeetus albicilla**, Milvus migrans, Myotis bechsteinii, M. dasycneme, Pernis apivorus, Picus canus

91I0 – steppe oak woods

- Plants: Echium russicum, Iris aphylla, I. arenaria, Thlaspi jankae
- Invertebrates: Bolbelasmus unicornis, Catopta thrips, Cerambyx cerdo, Cucujus cinnaberinus, Eriogaster catax, **Dioszeghyana schmidtii**, Euplagia quadripunctaria, Euphydryas maturna, Lucanus cervus
- Vertebrates: Coracias garrulus, Dendrocopus medius, Dryocopus martius, Ficedula albicollis, Pernis apivorus, Picus canus



Habitat interpretation and designation

91F0 – riverine forests

91H0 – steppe oak woods

- not problematic, clearly identifiable (esp. along big rivers)
- old plantations show typical structure and species composition (e.g. mansions parks)
- correlates well with the forestry register

- rather problematic, more transitions with other habitats (e.g. 91H0)
- lot of secondary and degraded stands
- correlates moderately with the forestry register (e.g. autoregenerated stands on abandoned pastures)



Physiognomy

91F0 – riverine forests

91I0 – steppe oak woods

- mostly linear features (along big rivers) – upper part of the floodplains (ancient << recent floodplains)
- now stands are scattered and fragmented by forest plantations, arable lands, etc.
- mostly patchy, fragmented features (entire forest blocks are infrequent)
- with mosaics of other elements of forest-steppe vegetation (e.g. thickets, steppe grasslands)

Related habitats (HD):

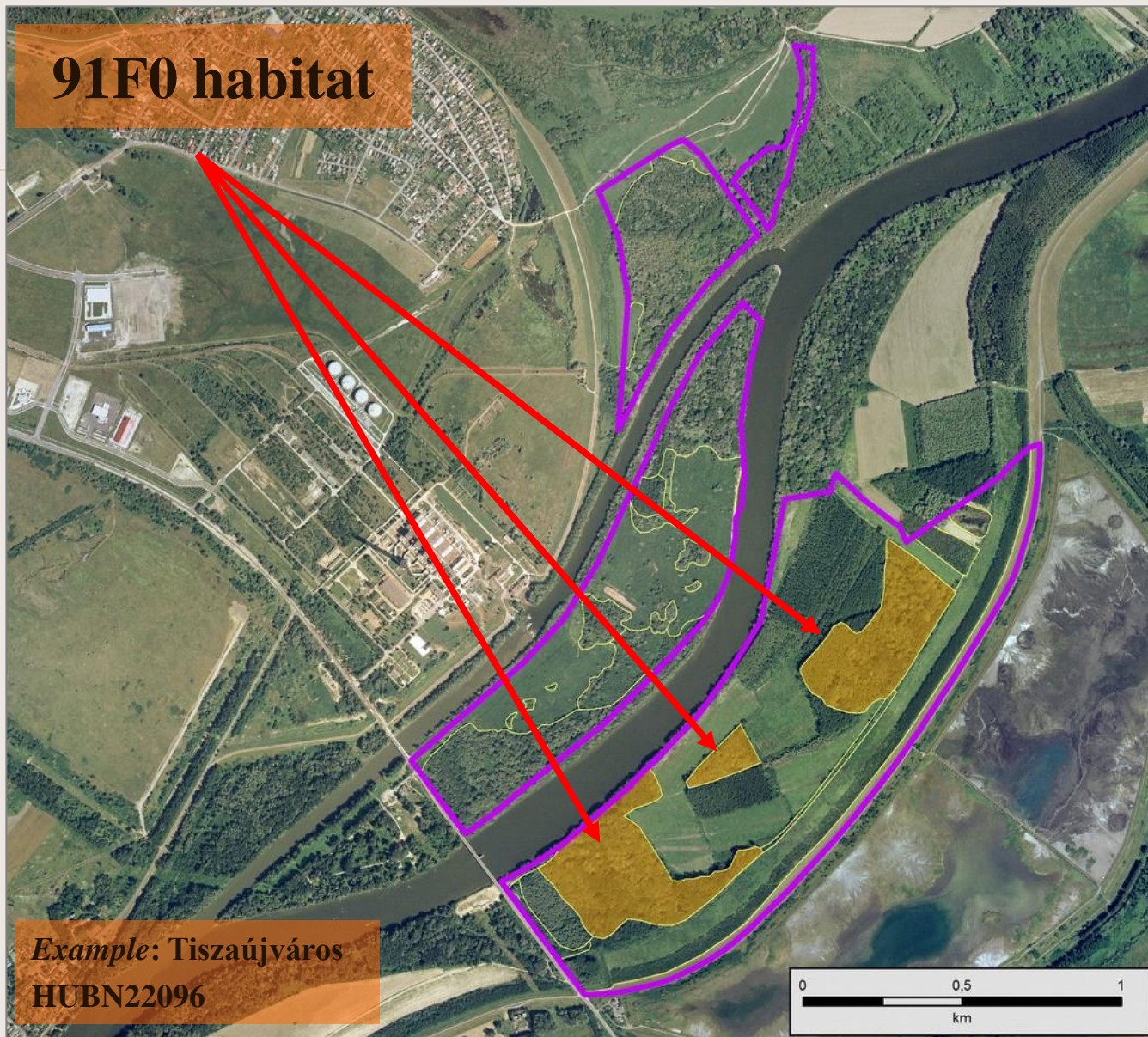
- 91E0, 6440, 6510 – not in a mosaic structure (water conditions + landuse!)

Related habitats (HD):

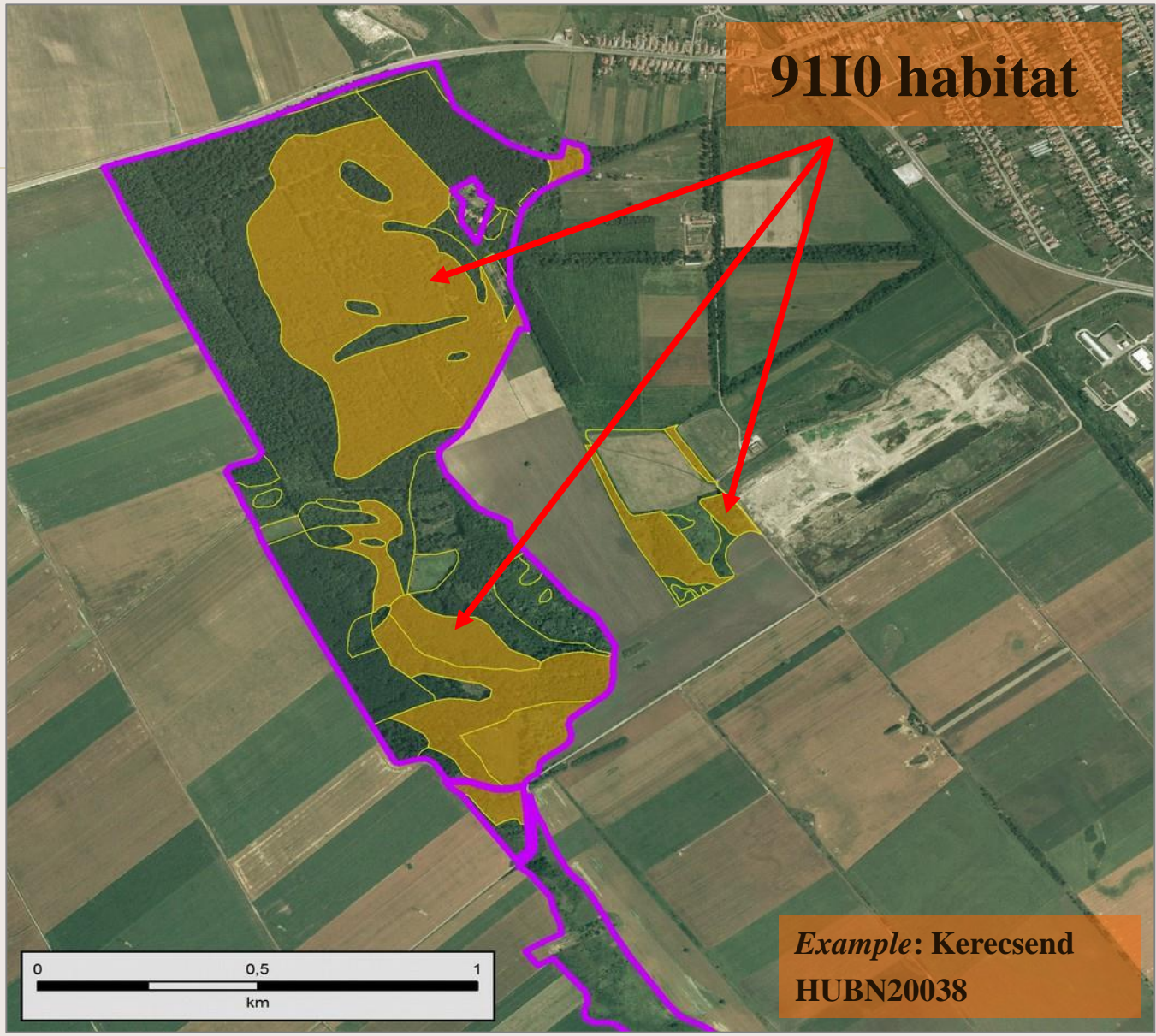
- 40A0, 6210, 6240, 6250, 6260, 91N0 – mostly in a mosaic structure (landuse!)



91F0 habitat



Example: Tiszaújváros
HUBN22096



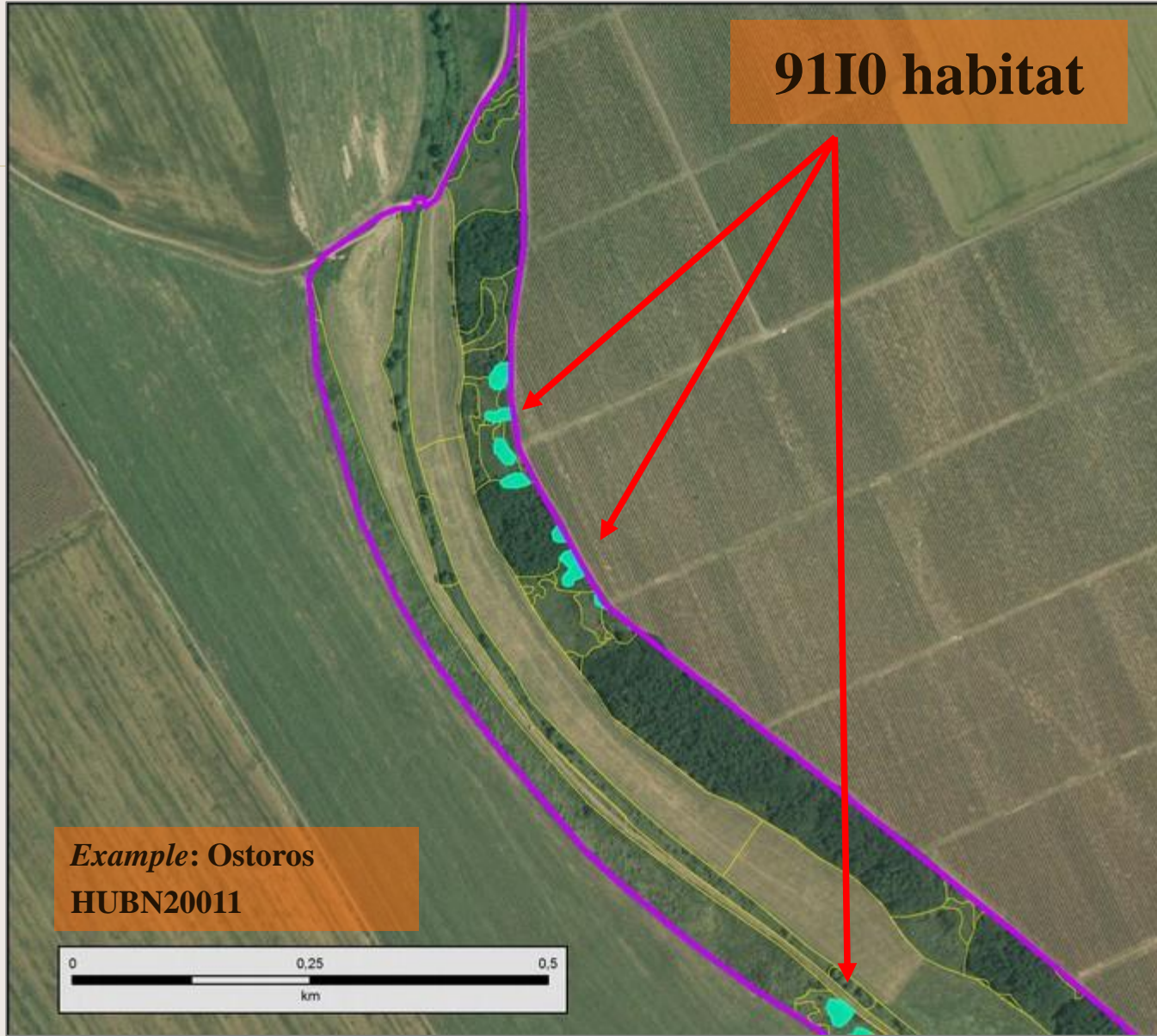
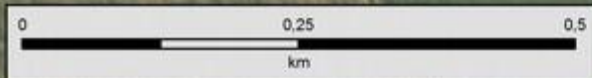
91I0 habitat



Example: Kerecsend
HUBN20038

91I0 habitat

Example: Ostoros
HUBN20011



Invasivibility

91F0 – riverine forests

91I0 – steppe oak woods

- Significant, after cutting of the main tree species, the sun-tolerated invasive species spread (e.g. *Acer negundo*, *Fraxinus pennsylvanicus*, *Amorpha fruticosa*)
- Floodplains are threatened by the continuous propagulum of invasive species → obstacle of successful management
- Different from stands to stands (mostly *Robinia pseudo-acacia*, *Ailanthus altissima*, *Acer negundo*, *Celtis occidentalis*, *Prunus serotina*)
- The mechanical and chemical treatment applied and tested in several projects



Ownership

(background for management)

91F0 – riverine forests

91I0 – steppe oak woods

- | | |
|--|--|
| <ul style="list-style-type: none">• Mostly state owned and managed by the forestry enterprises (100% state owned)• Nature conservation bodies (e.g. NP Directorates) has only few stands• Nearly all of the stands are under forestry planning | <ul style="list-style-type: none">• Variable tenure conditions (private, state enterprises, NPDs, former cooperative and unsettled ownership, etc.)• The fragmented (autoregenerated) stands are often beyond the forestry planning system → very significant threat! |
|--|--|





Example: Ostoros
HUBN20011



Example: Ostoros
HUBN20011

Framework of management

91F0 – riverine forests

91I0 – steppe oak woods

- Regulation of management and forest use is only possible via the district forestry planning (10 years intervals)
 - Natura 2000 management plans serve only suggestions (more sites are affected)
 - Infringement cases (Sajólád forest - infringement 2008/2011 and Girincs forest - infringement 2010/4112)
- Not all of the stands should be regulated by the district forestry planning process
 - The fragmented (auto-regenerated) stands are registered by meadows or pastures – it needs different management strategy (...Natura 2000 management plans should be good solutions)





Girincs forest infringement case



Tiszaújváros forest – a new compensation site (2011)

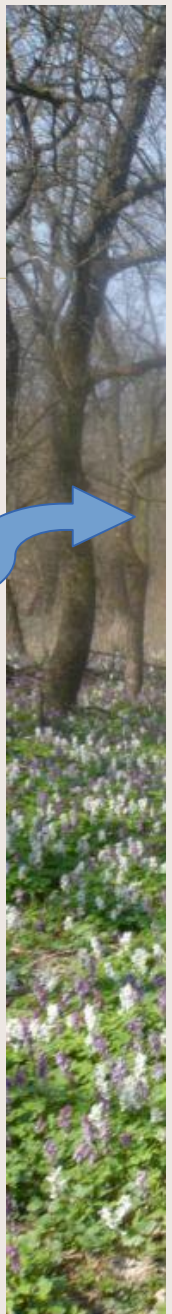
Management possibilities

91F0 – riverine forests

91I0 – steppe oak woods

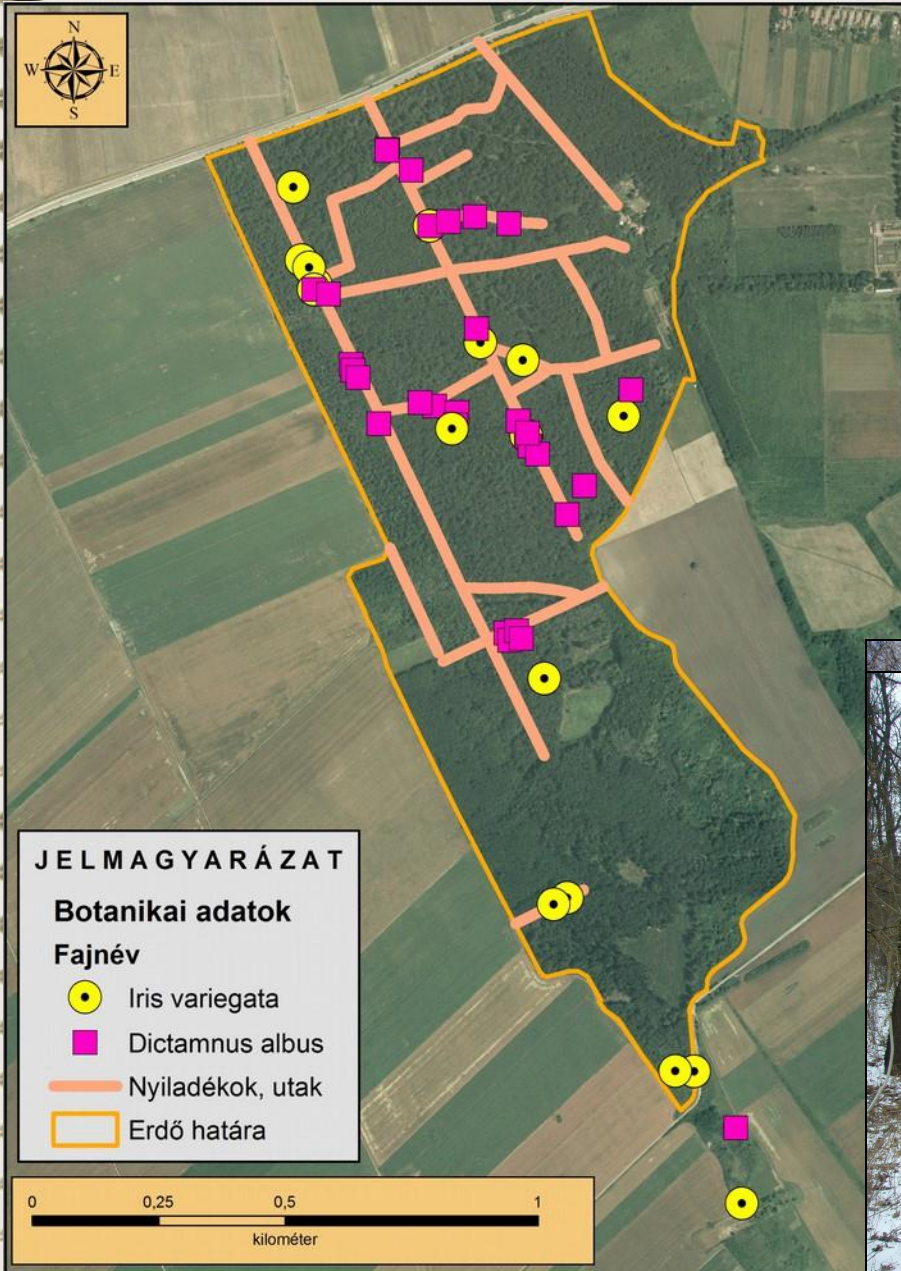
- The new scheme for district forestry planning has the possibility for legal protection
- Not a typical target habitat for nature conservation projects
- The ongoing processes cause further degradation and decline (e.g. clear-cutting; lack of natural regeneration, drying out, game and invasive species, modification of hydrographic functioning)

- As a very valuable pannonic habitat more management actions were carried out by NPDs.
- Timber production is not so preferable
- Degradation is derived mostly by the fragmented structures (insufficient ecological network, lack of propagulum) and changes in ground water (esp. sandy habitat subtype)



Practical small management *forest line clearance*

- Bükk NPD has started the property management on the site in 2010
- much more possibilities for implement the nature conservation goals (e.g. operational programmes, public employment programmes)





Thank you for the attention!