Visegrad Group- Nature conservation workshop

Habitats 91F0 and 91I0* in Romania

focus on Pannonian biogeographical region

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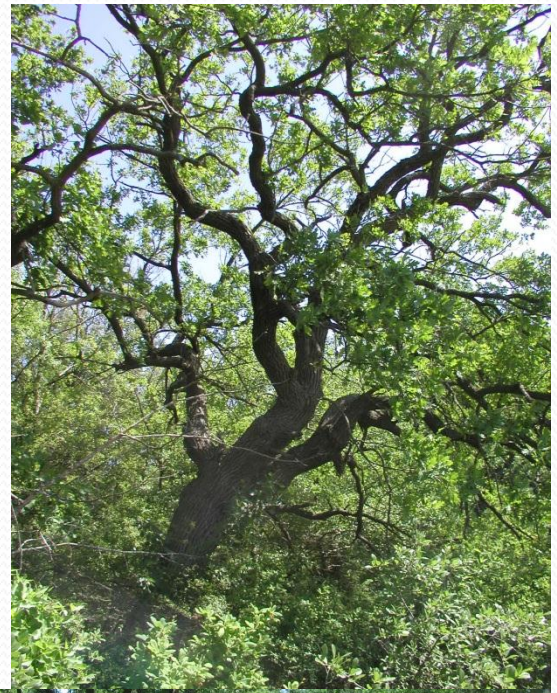
91F0 Riparian mixed forests of *Quercus robur, Ulmus laevis* and *Ulmus minor*, *Fraxinus excelsior* or *Fraxinus angustifolia*, along the great rivers (*Ulmenion minoris*)

Description and identification. Distinctive phytocenosis for this habitat are forests from the river meadow, on alluvial soil, subject of flooding and composed from hardwood species: oak (*Quercus robur*), narrow-leafed ash (*Fraxinus angustifolia*), common ash (*F. excelsior*), Field Elm (*Ulmus minor*), European White Elm (*U. laevis*) and in different percents some softwood species. This forests develop on recent alluvial soil. The soil can be drained between the floodings or it can remain flooded. Due to this specific hydrologic changes, the dominant species belongs to the *Fraxinus, Ulmus* or *Quercus* genus. The underwood is well developed, composed by *Cornus sanguinea, Sambucus nigra, Frangula alnus, Coryllus avellana, Crataegus monogyna, Prunus spinosa, Lygustrum vulgare*. The undergrowth is alse, well developed with dominant species *Rubus caesius, Galium aparine, Aegopodium podograria.*

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

Description and identification. Phytocenosis represented by the Submeditaranean, Continenatal or Caucasian European species. The tree species of these forests are dominated by species of thermophilic-xerophylous oaks (Quercus robur, Q. cerris, Q. pubescens and Q. pedunculiflora), alone or in mixture with the lower floor of Tatar maple (Acer tataricum), maple (Acer campestre), elm (Ulmus minor, U. procera), pear (Pyrus pyraster) etc. Developed shrub layer is strongly represented, generally by Crataegus monogyna, Prunus spinosa, Viburnum lantana, Rhamnus cathartica, Ligustrum vulgare, Euonymus verrucosus, E. europaeus, Rosehips, Sambucus nigra, and local Cotinus coggygria; in glades may occur patches of Prunus fruticosa, P.tenella. Grasses and undergrowth layer is well developed and consists both forest species and steppe species in larger glades.



Key species

91F0:

Quercus robur, Ulmus laevis, U. minor, U. glabra, Fraxinus excelsior, F. angustifolia, Populus nigra, P. canescens, P. tremula, Alnus glutinosa, Prunus padus, Humulus lupulus, Vitis vinifera subsp. *sylvestris, Tamus communis, Hedera helix, Phalaris arundinacea, Corydalis solida, Gagea lutea, Ribes rubrum*.

91I0:

Quercus cerris, Q. pubescens, Q. robur, Q. pedunculiflora, Q. petraea, Acer campestre, A. tataricum, Sorbus torminalis, Tilia tomentosa, Cornus sanguinea, Crataegus monogyna, Euonymus verrucosa, Ligustrum vulgare, Prunus spinosa, Pyrus pyraster, Rhamnus cathartica, Ulmus minor, Buglossoides purpurocaerulea, Carex michelii, Dactylis polygama, Galium dasypodum, Geum urbanum, Lathyrus niger, Polygonatum latifolium, Pulmonaria mollis subsp. *mollis, Tanacetum corymbosum, Tulipa biebersteinniana, Vincetoxicum hirundinaria, Viola jordanii*.

Plant community types (associations/alliance)

91F0:

Fraxino danubialis-Ulmetum Soó 1936 corr. 1963; *Quercetum roborispedunculiflorae* Simon 1960 (syn.: *Fraxino angustifoliae-Quercetum pedunculiflorae* Chifu *et al*. (1998) 2004); *Fraxino pallisae-Quercetum pedunculiflorae* (Popescu *et al*. 1979) Oprea 1997; *Fraxinetum pallisae* (Simon 1960) Krausch 1965 (syn. *Ulmeto minoris-Fraxinetum pallisae* Borza ex Sanda 1970).

91I0*:

Aceri tatarici-Quercetum roboris Zólyomi 1957; *Quercetum pedunculifloraecerris* Morariu 1944; *Quercetum pedunculiflorae* Borza 1937; *Convallario-Quercetum roboris* Soó (1939) 1957.

Typical species

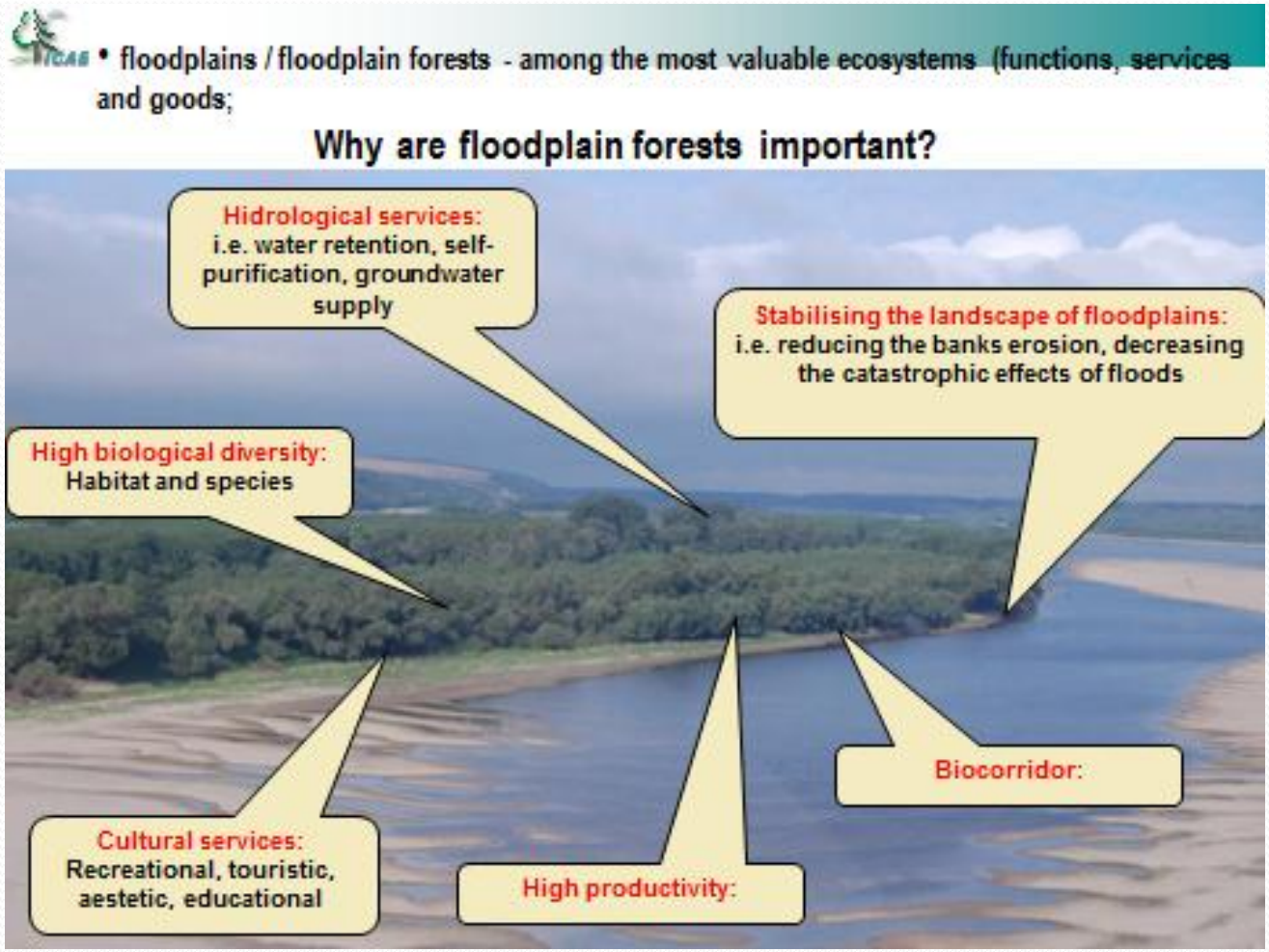
91F0

- Lutra lutra
- Castor fiber
- Bombina sp.
- Triturus sp.
- Cerambyx cerdo
- Lucanus cervus
- Angelica palustris

91I0

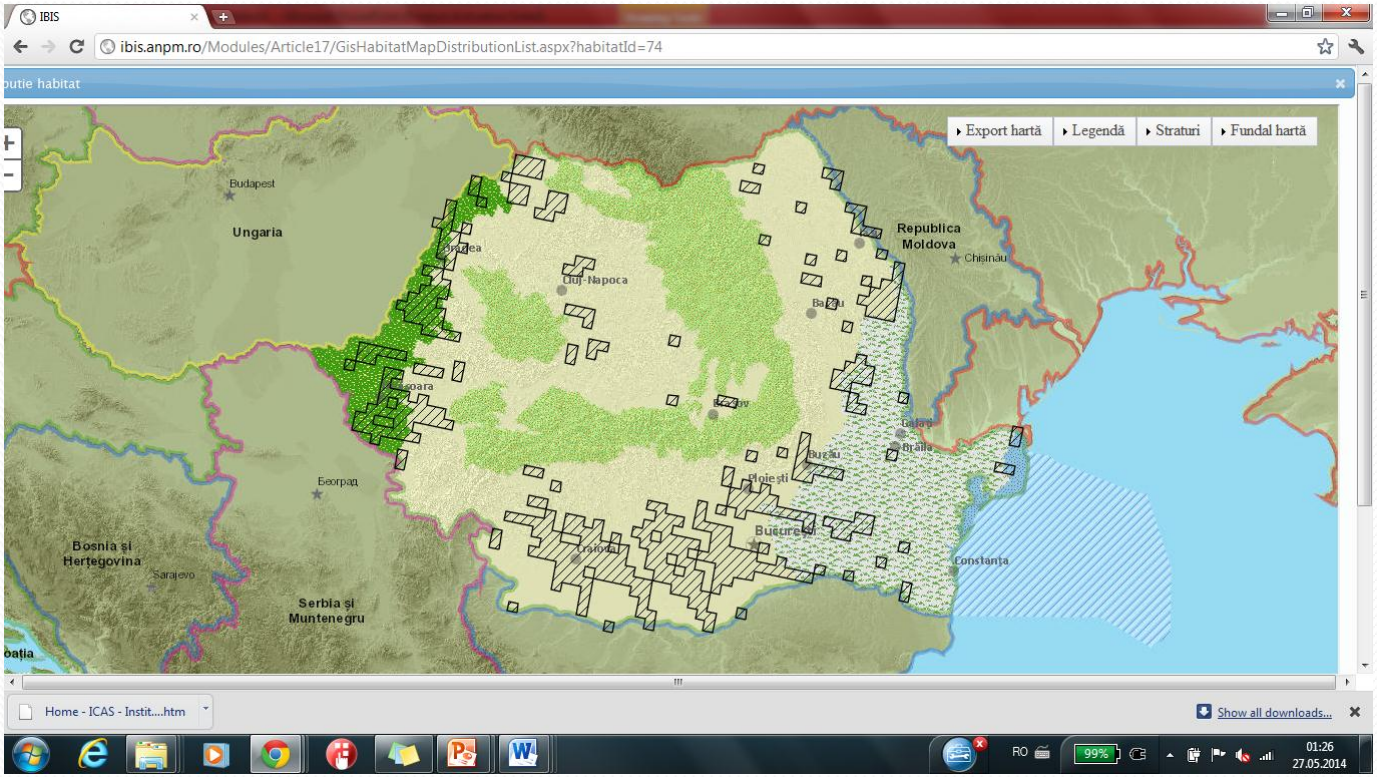
- Cerambyx cerdo
- Lucanus cervus
- Spermophilus citellus

Ecosystem services:



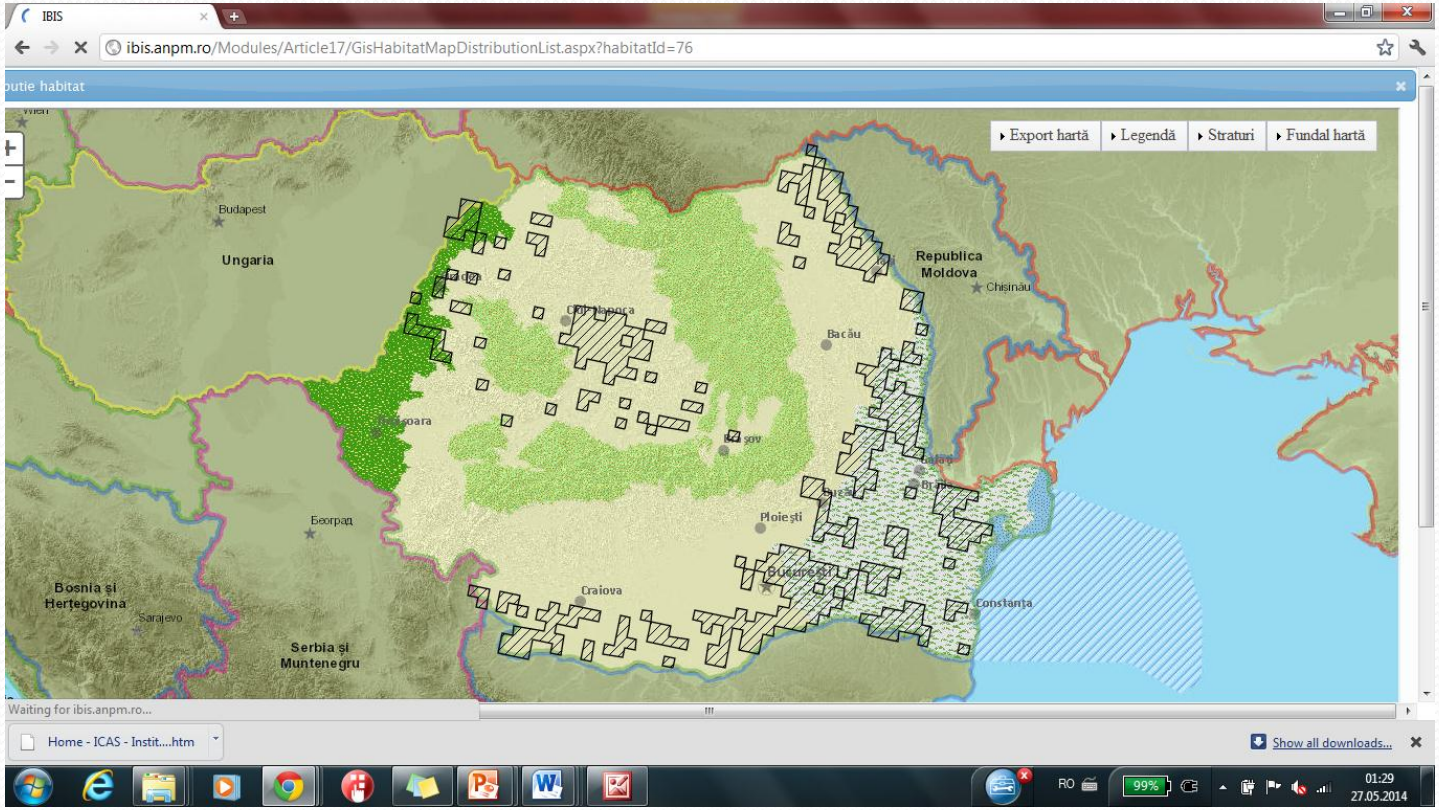
Distribution and occurrence (91F0):

This type of habitat appears in interior river meadows from the plains and hills (Mureş, Crişuri, Someş) and their affluents. It also appears in high grounds, on more evolved soils, which are subject of less flooding and on short periods of time. The habitat distribution is fragmented, discontinuous, due to the factors which had influenced their existence and stability (deforestation, water course regulation, hydrologic changes, habitats degradation, changing of riparian forests composition.).

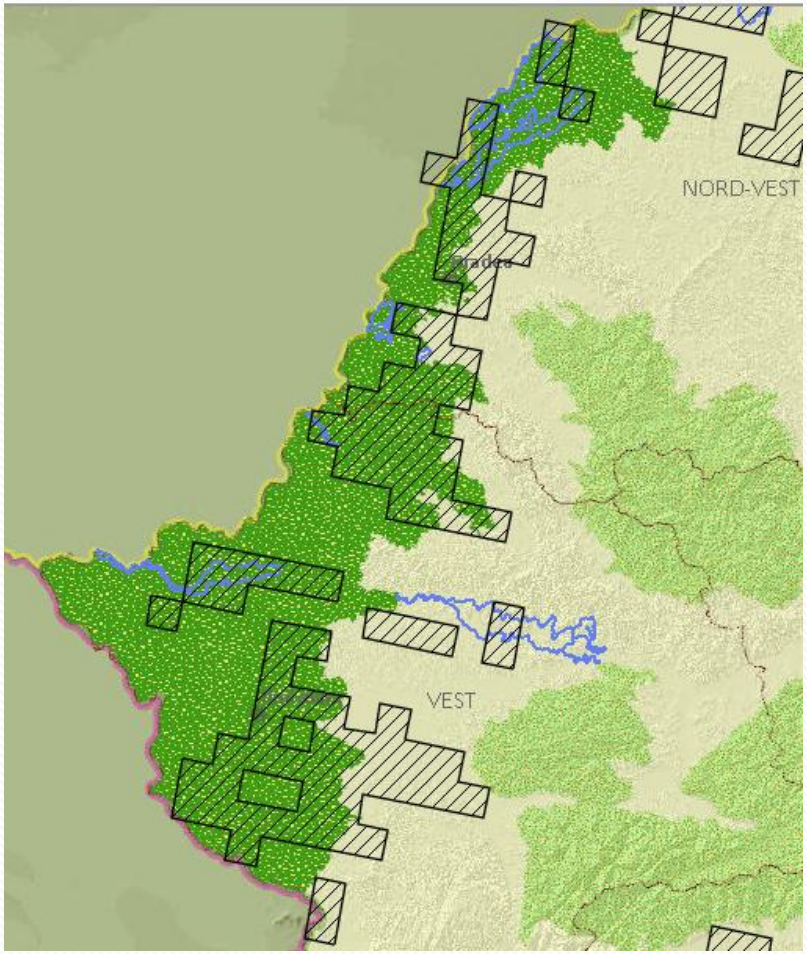


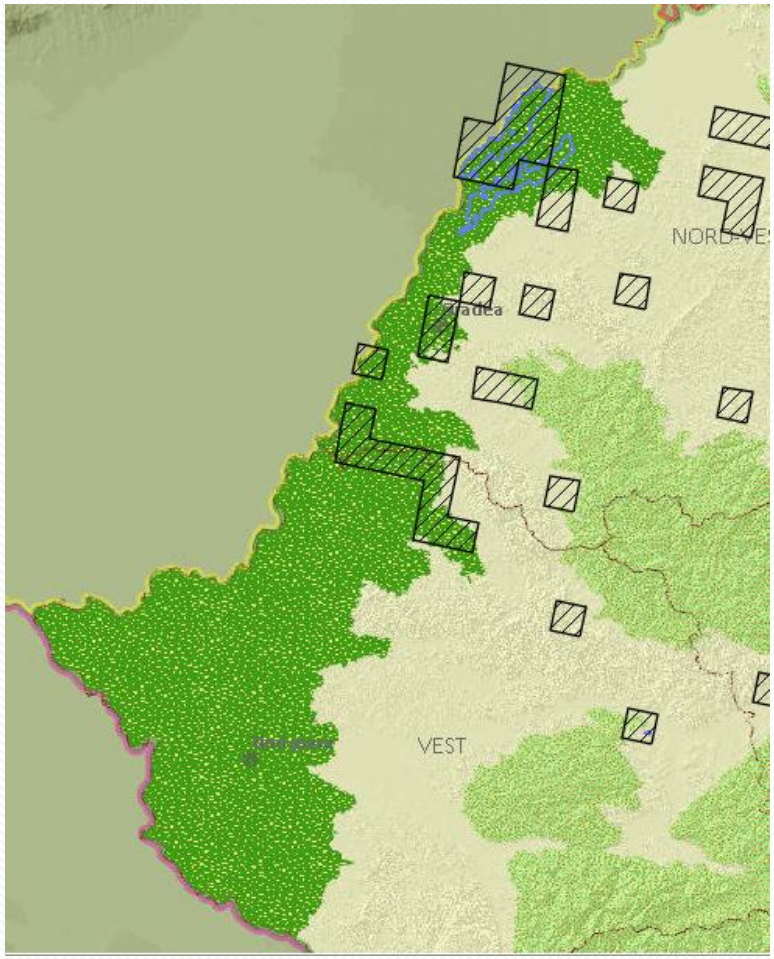
Distribution and occurrence (91I0*):

This type of habitat, that in the past represented the natural vegetation of silvosteppe and steppe zones, is currently very fragmented, with a very high degree of dispersion. The habitat is present in the area of south silvosteppe (submediterranean), whit xerophylous oaks (Quercus pubescens, Q. pedunculiflora), as Southern Moldovian Plateau , Dobrogea, the Danube Plain), the northern silvosteppe with mesophilic oak (Quercus robur), as (Moldavian Plain), as well as in Plateau Transylvania (Somes Plain) and Western Plain.



Distribution in Natura 2000 sites:





Conservation status

						Areal						Suprafata						Str & proc		Perspectiva						
Ver. rap.	Val. rap.	Stat.	Ver. ret.	Val. ret.	Bio.	Supr.	Met	Tend. ts.	Ref.	Eval.	Tend. eval.	Supr.	Met	Tend. ts.	Ref.	Eval.	Tend. eval.	Eval. str.	Tend. eval.	Eval. pers.	Tend. eval.	Tot. cal.	Autor	Com.	Data modif.	Op.
-	-	Nou	-	-	PON	400	3	0	≈	FV		22	3	0	≈	FV		FV		FV			Miruna Bădescu	0/0	2013	
Y	Y	Nou	-	-	CON	42400	3	0	>	U1	=	500	3	0	>	U1	=	U1	=	U1	=	=	Miruna Bădescu	0/0	2013	
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Y	Y	Nou	-	-	ST	34409	3	0	≈	FV		104	3	0	≈	FV		U1	=	U1	=	=	Miruna Bădescu	0/0	2013	

						Areal						Suprafata						Str & proc		Perspectiva						
Ver. rap.	Val. rap.	Stat.	Ver. ret.	Val. ret.	Bio.	Supr.	Met	Tend. ts.	Ref.	Eval.	Tend. eval.	Supr.	Met	Tend. ts.	Ref.	Eval.	Tend. eval.	Eval. str.	Tend. eval.	Eval. pers.	Tend. eval.	Tot. cal.	Autor	Com.	Data modif.	Op.
Y	Y	Nou	-	-	CON	56800	3	0	≈	FV		600	3	0	>	U2	=	U1	=	U1	=	=	Miruna Bădescu	0/0	2013	
Y	Y	Nou	-	-	ST	34400	3	0	≈	FV		750	3	0	>	U2	=	U1	=	U1	=	=	Miruna Bădescu	0/0	2013	
Y	Y	Nou	-	-	PAN	5800	3	0	≈	FV		50	3	0	>	U1	=	FV		FV		=	Miruna Bădescu	0/0	2013	

Pressures and threats

91F0

- Forest exploitation without replanting and natural regeneration
- Droughts and gravel quarries
- bank erosion
- discontinuous urbanization, urbanized areas, human habitation
- roads and motorways
- Invasive species

91I0*

- Forest replanting with non native species
- Grazing in forests
- Dispersed habitation
- Defoliators and pathogens
- Droughts and less precipitation
- Habitat shifting alteration
- Changing in habitat conditions

Conservation requirements:

91F0

- Avoid fragmentation
- Retain deadwood
- Establish non-intervention areas
- Applying close-to-nature forestry
- Control of invasive species (Amorfa fruticosa, Fraxinus pensilvanica, Acer negundo, etc.)
- Promoting natural regeneration
- Restoration of degraded habitats (exotic species plantations, hybrid poplar plantations)
- Restoration of river hydrology

91I0*

- Avoid fragmentation
- Retain deadwood
- Establish non-intervention areas
- Applying close-to-nature forestry
- Promoting natural regeneration
- Restoration of degraded habitats (non-native species plantations)

Forestry management rules:

- Use of natural regeneration;
- Use of natural succession process;
- Strict regulations of forestry machines and equipment use;
- Minimum disturbance of soil in the forestation process;
- Establishing a minimum production cycle;
- Careful planning of forestry roads;
- Protection of biotope specific elements, for example individual trees;
- Integration of nature protection measures in the production forests;
- Preserving the woodside ecological functions;
- Usage limitation for pesticides, erbicides and other chemical substance;
- Maintaining of an adequate game density;
- Avoiding GMOs;
- Avoiding the nitrates;
- Reducing the clear cutting to small areas;

Current or potential barriers that impede the implementation of conservation measures

- Economic impacts/restrictions for some economic activities
- Development pressures
- Climate changes
- Rivers regulations rules/standards
- Conflicting policies
- Missing of subsidies
- Uncontrolled development of constructed areas

Thank you for your attention!

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