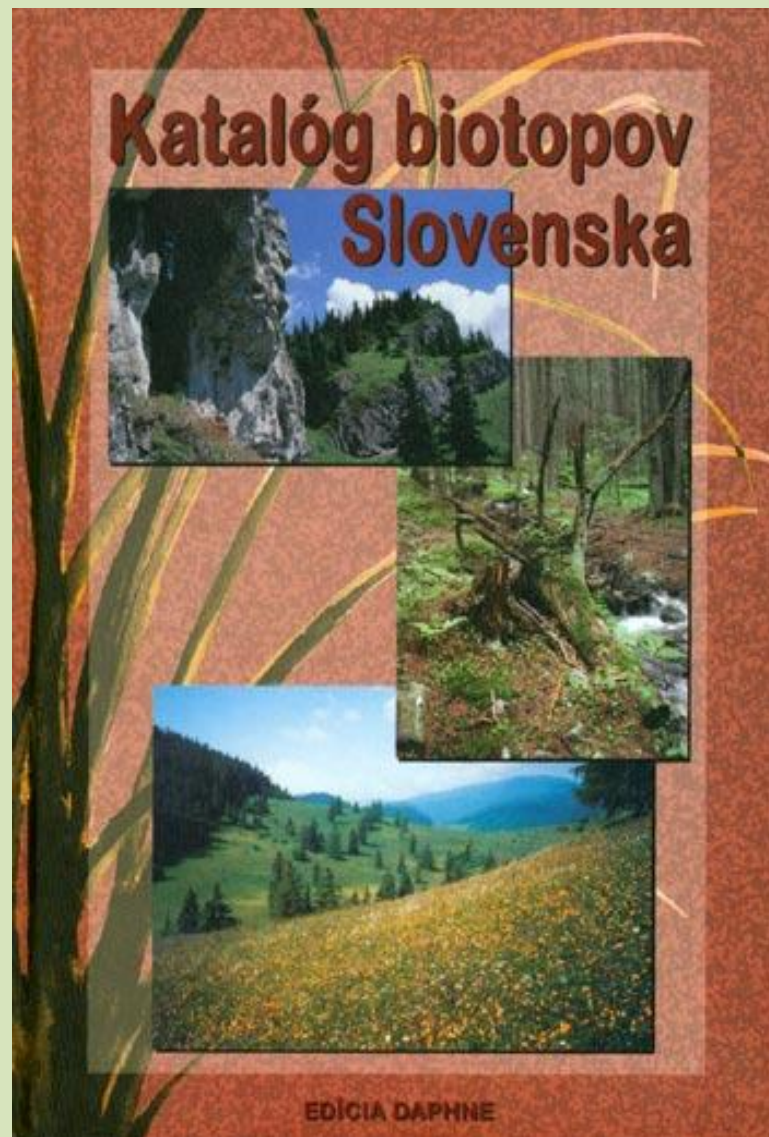


91F0, 91I0 – situation in Slovakia

Ing. Peter Hradňanský

Ing. Libor Ulrych PhD.



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

Alnion incanae Pawlovski in Pawlovski et al. 1928:

Fraxino-Populetum Jurko 1958

Fraxino pannonicae-Ulmetum Soó in Aszód 1963

Ficario-Ulmetum campestris Knapp ex Medvecká-Komas 1952

Quercu pedunculiflorae-Populetum tremuli Šomšák et Háberová
1979

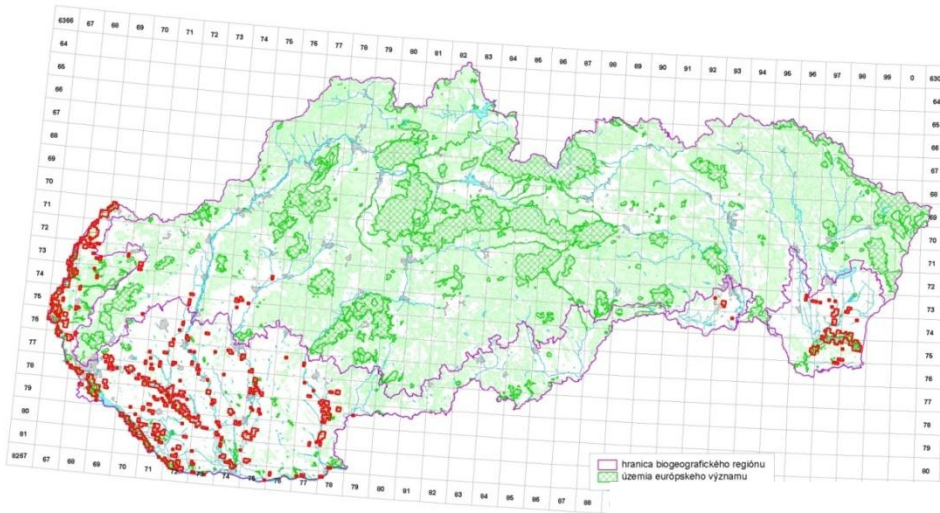
Lithospermo-Ulmetum carpinifoliae Džatko 1972

LTP: *Querceto-Fraxinetum* (0931, 0932), *Ulmeto-Fraxinetum carpineum* (0951, 0952, 0953, 0954-part), *Ulmeto-Fraxinetum populeum* (0941, 0942, 0943)

91F0 – Dominant species, diagnostic (characteristic, differential) species

Dominant species: *Quercus robur*, *Fraxinus angustifolia* subsp. *danubialis*, *Ulmus minor*, *Padus avium*, *Aegopodium podagraria*, *Alliaria petiolata*

Diagnostic species: *Acer campestre*, *Ulmus laevis*, *Fraxinus excelsior*, *Populus nigra*, *Tilia cordata*, *Crataegus monogyna*, *Allium ursinum*, *Anemone ranunculoides*, *Campanula trachelium*, *Clematis vitalba*, *Corydalis cava*, *Ficaria bulbifera*, *Gagea lutea*, *Galium aparine*, *Glechoma hederacea*, *Humulus lupulus*, *Lamium maculatum*, *Leucojum vernum* subsp. *carpaticum*, *Phalaroides arundinacea*, *Rubus caesius*, *Vitis sylvestris*

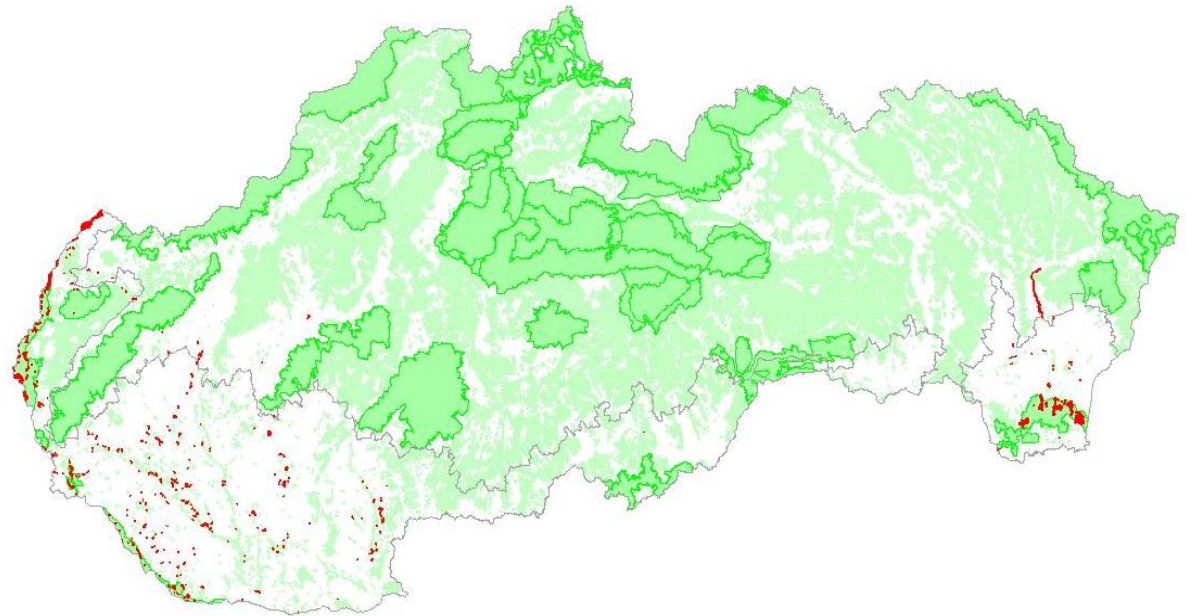


Mapa pripravená pre reportng Európskej komisii v zmysle čl. 17 smernice o biotopoch
Použitá údaje aktuálne k 31. 12. 2006

Reporting – distribution 2004-2006, 2007-2012

67 sq. km

U2



FCS, management recommendation

- <http://www.sopsr.sk/natura/index.php?p=4&sec=6&biotop=91F0>

FCS – based on the presence of dominant and diagnostic species, age structure, possibility of native regeneration, vertical structure, presence of old trees, occurrence of negative features – invasive plants, expensive plants

Management – keeping, improving FCS

Threats

- Invasive plants – *Negundo aceroides*, *Fraxinus pennsylvanica*, *Parthenocissus* sp., *Robinia pseudoacacia*
- Low level of ground water
- Rare *Quercus* fructification
- Fragmentation, island effect
- Practically impossible native regeneration

9110 Euro-Siberian steppe oak woods

Ls 3.2 *Aceri tatarici-Quercion* Zólyomi 1957:

Quercetum pubescenti-roboris (Zólyomi 1957) Michalko et
Džatko 1965

Convallario-Quercetum roboris Soó 1934

Carici fritschii- Quercetum roboris Chytrý et Horák 1997

Festuco-Quercetum roboris Soó 1934

LST: *Carpino-Quercetum* (1307 part), *Ulmetum* (0961, 0962)

Ls3.3 *Potentillo albae-Quercion* Jakucs in Zólyomi 1967:

Frangulo alni-Quercetum roboris petraeae Michalko 1968

LST: *Betulo-Quercetum* (0004 part), *Fageto-Quercetum* (2313
part)

91I0 Euro-Siberian steppe oak woods

Ls 3.5.2 – part B

Quercion petraeae Zólyomi et Jakucs ex Jakucs 1960:

Genisto pilosae-Quercetum petraeae Zólyomi et al. ex Soó 1963

LST: *Quercetum* (1111), *Fagetum quercinum* nst (2101)

9110 – Ls3.2 – Dominant species, diagnostic (characteristic, differential) species

Dominant species: *Quercus robur* agg. (esp. *Q. pedunculiflora*), *Q. virgiliana*, *Convallaria majalis*

Diagnostic species: *Acer campestre*, *Acer tataricum*, *Quercus cerris*, *Q. frainetto*, *Ulmus minor*, *Cornus mas*, *Lonicera xylosteum*, *Carex michelii*, *Cruciata laevipes*, *Dactylis polygama*, *Dictamnus albus*, *Festuca heterophylla*, *F. rupicola*, *Iris variegata*, *Lathyrus lacteus*, *Lithospermum purpurocaeruleum*, *Melica picta*, *Serratula tinctoria*, at sandy sites *Carex fritschii*

9110 – Ls3.3 – Dominant species, diagnostic (characteristic, differential) species

Dominant species: *Quercus robur*, *Quercus petraea*, *Frangula alnus*, *Potentilla alba*

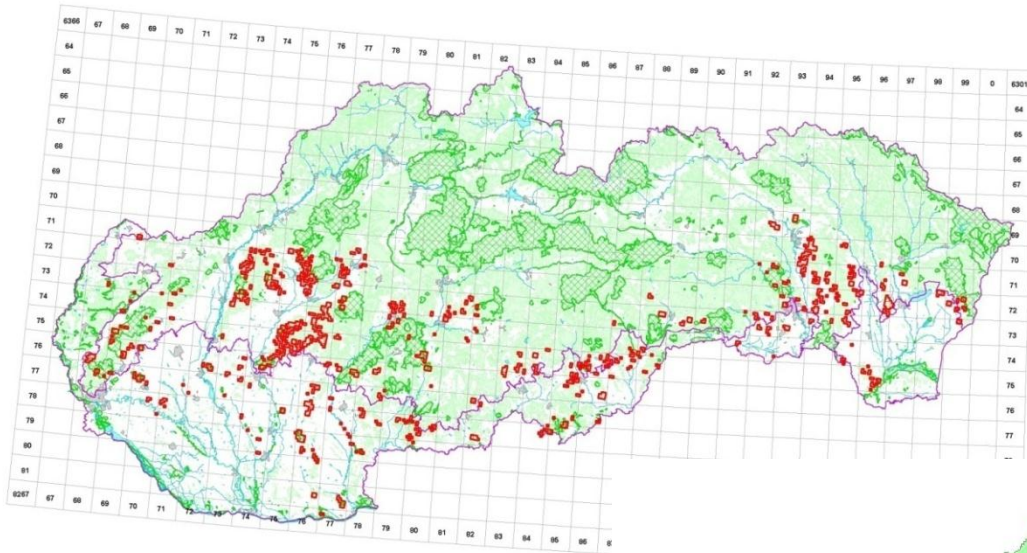
Diagnostic species: *Coryllus avellana*, *Pinus sylvestris*, *Picea abies*, *Betonica officinalis*, *Carex montana*, *Dianthus superbus*, *Galium boreale*, *Lathyrus niger*, *Luzula luzuloides*, *Melica picta*, *Molinia arundinacea*, *Pulmonaria murini*, *Ranunculus polyanthemos*, *Serratula tinctoria*, *Vicia cassubica*

9110 – Ls3.5.2 – Dominant species, diagnostic (characteristic, differential) species

Dominant species: *Quercus petraea* agg., *Avenella flexuosa*,
Festuca ovina, *Genista pilosa*, *Luzula luzuloides*

Diagnostic species: *Betula pendula*, *Pinus sylvestris*, *Fagus sylvatica*, *Acetosella multifida* agg., *Agrostis vinealis*,
Anthericum ramosum, *Calluna vulgaris*, *Dianthus carthusianorum*, *Jasione montana*, *Linaria genistifolia*,
Melampyrum pratense, *Pilosella officinarum* agg., *Sedum sexangulare*, *Teucrium scorodonia*, *Thymus praecox*, *Steris viscaria*

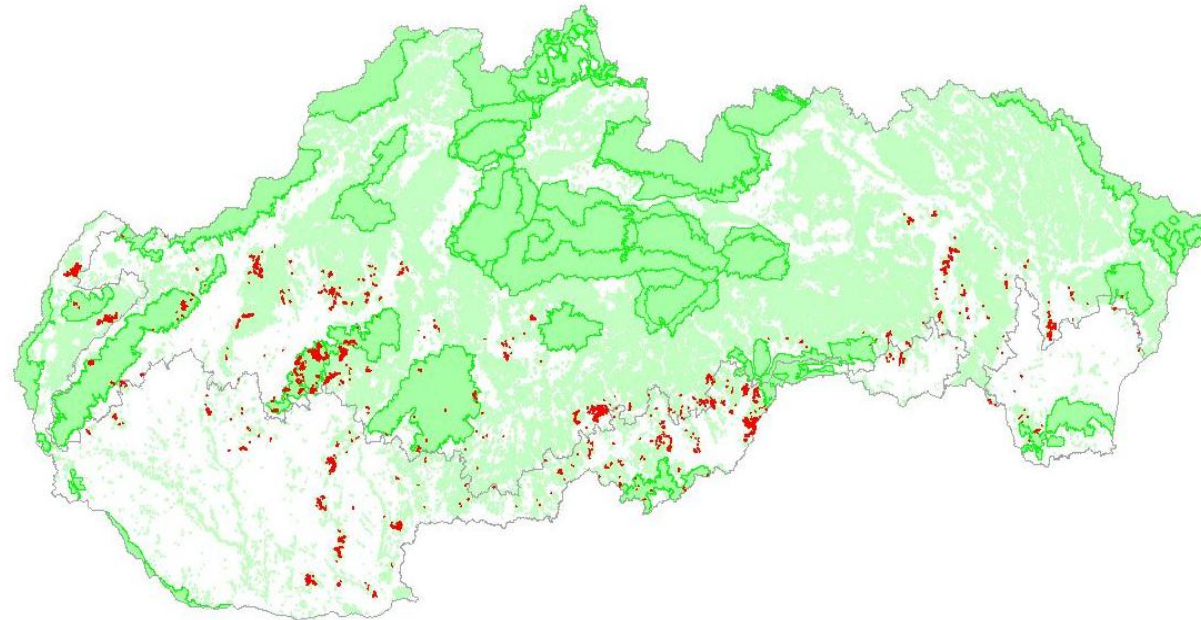
910 - Eurosibírske dubové lesy na spraši a piesku - výskyt



Mapa pripravená pre reporting Európskej komisii v zmysle čl. 17 smernice o biotopoch
Použitá údaje aktuálne k 31. 12. 2006

10 sq. km
U 2

Reporting –
distribution
2004-2006,
2007-2012



FCS, management recommendation

- <http://www.sopsr.sk/natura/index.php?p=4&sec=6&biotop=9110>

FCS – based on the presence of dominant and diagnostic species, age structure, possibility of native regeneration, vertical structure, presence of old trees, occurrence of negative features – invasive plants, expensive plants

Management – keeping, improving FCS

Threats

- Invasive plants – *Ailanthus altissima*, *Robinia pseudoacacia*, *Solidago* sp., *Asclepias syriaca*, *Gleditsia triacanthos*, *Celtis occidentalis* ...
- *Carpinus betulus* expansion
- Rare *Quercus* fructification
- Fragmentation, island effect

Current or potential barriers that impede the implementation of conservation measures (both 91F0, 91I0)

- Ownership – economic interests (Robinia ?)
- Climatic changes?
- *Quercus* fructification
- Invasive plants
- Water regime
- Fragmentation – island effect

Typical ecosystem services (both 91F0, 91I0)

- System of ecosystem services not yet well developed in Slovakia

<http://www.minzp.sk/sekcie/temy-oblasti/ochrana-prirody-krajiny/ekosystemove-sluzby/>

Concept of forest functions (about 50 years old) was not successful

Functions like protection of water, soil, providing recreation, oxygen production - only wood production 😊...

Suggestion for priority issues to discuss at the workshop concerning the 91F0, 91I0 habitats

- Harmonisation of habitat explanation ?
- Problems of invasive plants
- Problems of native regeneration
- Economic interests versus habitat protection
- Fragmentation

Literature, links

- <http://www.sopsr.sk/natura/index.php?p=6&lang=en>
- <http://www.sopsr.sk/natura/index1.php?p=9&c=16&lang=en>
- <http://www.sopsr.sk/natura/index1.php?p=9&c=8&lang=en>

Thank you for your attention

- peter.hradnansky@sopsr.sk
- libor.ulrych@sopsr.sk