



Opportunities of implementing the EU Regulation on combating invasive alien species in Hungary

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DEPARTMENT OF NATURE CONSERVATION



REGULATION (EU) No 1143/2014 OF THE EUROPEAN PARLIAMENT AND OF THE COUNCIL

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on the prevention and management of the introduction and spread of invasive alien species

- Chapter 1: General provisions (definitions, List of invasive alien species of Union concern, Risk Assessment...)
- Chapter 2:

 Prevention

 Chapter 3:

 Early Detection and Rapid Eradication
- Chapter 4: Management of established IAS

detection, rapid eradiction...)

(restrictions, permits, action plans, emergency

(surveillance system, early

(management, restoration...)

- Chapter 5: Horizontal provisions (cost recovery, cooperation and coordination...)
- Chapter 6: Final provisions (reporting and review, public participation...)

Implementation of EU regulation

- Legal harmonisation
- Species list of <u>Union</u>, <u>regional</u> and <u>MS</u> concern
- Collect the relevant information, establish the system of information exchange
- Establish the Hungarian surveillance (early detection) system
- · Communication, public awareness-raising

Legal harmonization of EU regulation



- No comprehensive and dedicated law against IAS (regulations and restrictions spreaded in sectorial Acts and Decrees).
- •Legislation process and modifications of existing law (on the level of acts, governmental decrees and ministerial decrees).
- Very complex task, so harmonized actions needed
 Two phases:
 - ·Basic regulations (acts and governmental decrees)
 - · Detailed regulation (ministerial decrees and ordinances)
- 1. Current status: the Ministry of Agriculture has drafted the main proposals for amendment that will be submitted to the Government and subsequently to the Parliament.

Authorities competent in IAS issues (draft, not accepted yet)

- No new, independent authority will be established for IAS issues.
- The Regional Government Authorities (RGA) will be responsible for most authoritative tasks.
- Within the RGAs, the chief authority for IAS will be the Department for Environment and Nature Conservation.
- •.Other departments of RGAs and some other authorities will also have certain responsibilities for IAS, in line with their own competencies.

Kormányhivatalok

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List of IAS of Union concern

Dynamic list

IAS of regional concern

IAS

 Based on standard criteria: alien, spreadable, negative effect on biodiversity, transboundary actions needed, listing helps control

IAS of
Union
concern

- · Risk Assessment required
- Member States may propose species on the list
- Priority for not yet present or in early stage of invasion IAS and IAS with most significant adverse impact
- First list are under proclamation





1. Plant species on the list of EU concern

** Known to occur in Hungary even in natural habitats, at least occasionally

^{*}Known to occur in Hungary, but not in natural habitats

1. Animal species on the list of EU concern
Hungarian name Csinos tarkamókus Házi varjú Kínai gyapjasollósrák ** lávai mongúz in Hungary even in natural habitats, at least occasionally

*Known to occur in but not in natural habitats

Regional lists

- ·. Species of regional concern
- . Regional action helps to prevent introduction or spread
- Regional action, transboundary co-operation helps to control or manage IAS
- ·. Helps early detection in a Member State
- IAS appearing in a Member State => potential IAS in the neighbouring countries -> increased attention
- IAS will be discussed bilaterally or multilaterally e.g. at the next V4 meeting - CONCORDANCE NEEDED!



National list(s)

- . To be based on consensus with other sectors
- •. Focus on biodiversity protection, thus coordinated by state nature conservation
- 1. Different aspects e.g. type of distribution, risk, impact, cultivation

2. More then one different lists (all black lists)

3. With different measures



National (black) list(s)

 List A - Not yet present (potential) or early stage of invasion
 Restrictions as EU list

List B - Widely spread

 Focus on protected areas
 No general restrictions

Lists C, D, E... - ???



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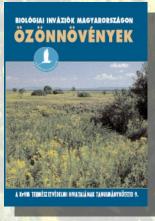
Collect the relevant information, establish the system of information exchange

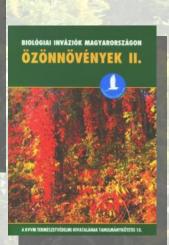
- Publications
- · Data surveying programmes
- Monitoring systems
- Practical management experience and project implementation

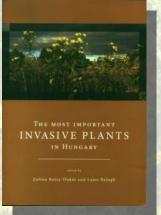
Publications

- > Books on invasive alien plant species in Hungary:
 - > chapters present the most important invasive plant species in Hungary
 - > distribution data
- > Practical management information

 Hungarian translation of the European Strategy on Invasive Alien Species

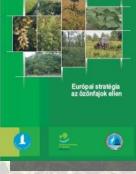




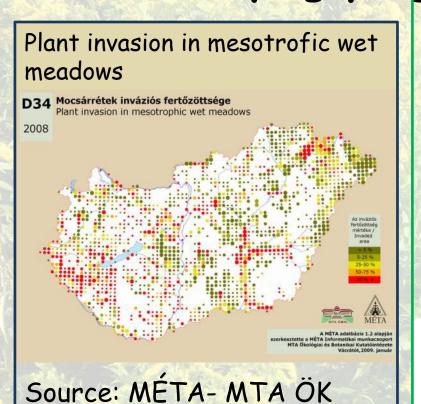








Data surveying programmes



Distribution of Reynoutria japonica in Hungary

Source: Hungarian Flora Mapping Programme - West Hungarian University

D34 - Colline and lowland eu- and mesotrophic meadows:

One-third of its area is threatened by plant invasion. Stands in the south-western part of the country and along the Tisza river are the most highly endangered. Although many alien species can occur in this habitat, the most important ones are goldenrod species (Solidago spp.) and false indigo (Amorpha fruticosa). The former prefers the more humid climate, while the latter is most abundant along the river Tisza.

Hungarian Biodiversity Monitoring System (HBMS) - since 1998

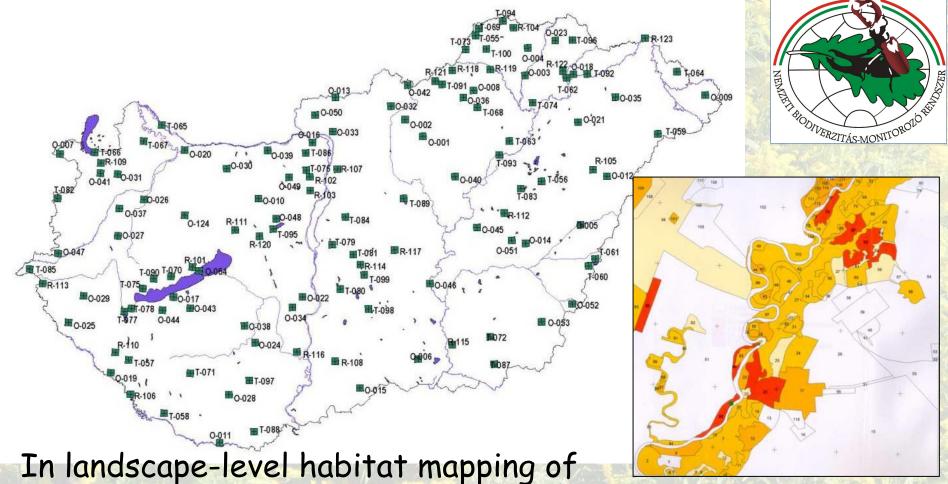


Monitoring projects:

- I. Monitoring of protected and threatened species
- II. Monitoring of wetland habitats and their communities
- III. Surveying, mapping and monitoring of habitat types in Hungary

IV. Monitoring of invasive species

- V. Monitoring of forest reserves and managed deciduous woodlands
- VI. Monitoring of plant and animal species in the Kis-Balaton
- VII. Monitoring of wildlife communities of the River Dráva
- VIII. Monitoring of saline habitats
- IX. Monitoring of dry grasslands
- X. Monitoring of montane meadows
- XI. Monitoring of species and habitats of community importance (Natura 2000)



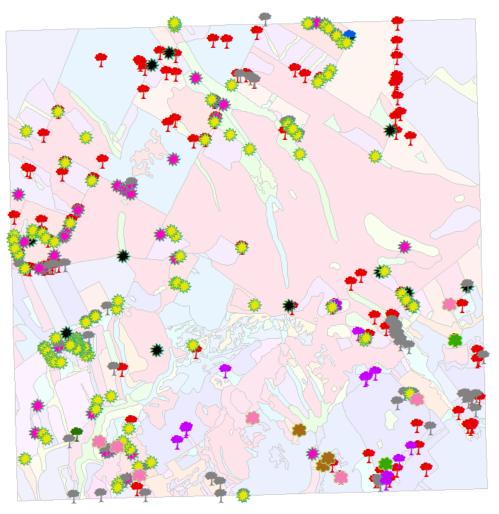
In landscape-level habitat mapping of HBMS, 125 sample areas of 5X5 km 5 selected IAS:

Ailanthus altissima, Aclepias syriaca, Amorpha fruticosa, Solidago canadensis, S. gigantea

Density of *S. gigantea* in different habitats (in Alsódobsza)



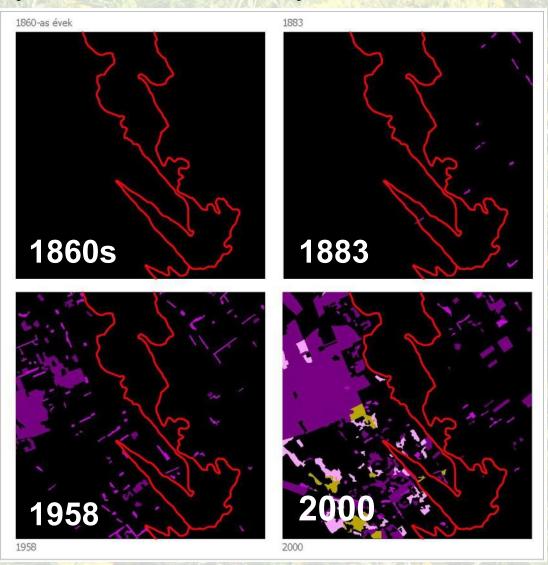
Point maps of invasive species in HBMS quadrans



Jelmagyarázat

- 📍 bálványfa
- 📍 keskenylevelű ezüstfa
- kései meggy
- nyugati ostorfa
- 👚 zöldjuhar
- 🌼 gyalogakác
- 🌼 orgona 👛 japánkeserűfű faj
- 🌲 ördögcérna
- selyemkóró
- aranyvessző faj
- 🜞 ürömlevelű parlagfű

Interpretation of historical maps (Molnár et al.)





Practical management experience

- · Technological experiences
- The results of treatments
- Implemented projects
 (primarily in protected areas)

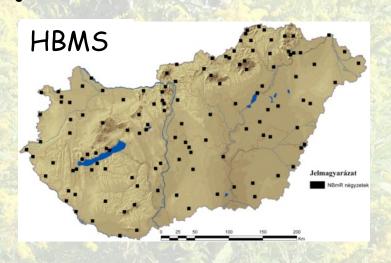


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Existing monitoring systems in Hungary

- Hungarian Biodiversity
 Monitoring System (HBMS)
- Forestry Monitoring System, Hungarian Forestry Light Trap Network (forest health)
- · Plant health, plant protection
- Ranger service
- Professional hunters
- Municipally field guards
- Voluntary guards
- · Etc.





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Public awareness

- Information leaflets
- Posters
- Citizen science













EYE ON EARTH

Kuldés Mégse

European Environment Agency



The most important sectorial laws which contain regulations dealing with IAS

- Act. No. LIII. of 1996 on Nature Conservation
 - Article 13 (4). Preliminary authorisation of the Minister of Rural Development is needed to introduce any non-native living organism or to reintroduce any living organism to Hungary, except in the specified case in paragraph (2).
 - Article 14. It is prohibited to introduce any non-native fish species into natural or semi-natural waters, or to transfer such a species from fish farms into any other wetland.
- Act 53/1995 on the General Rules of Environmental Protection;
- Act 55/1996 on the Protection of Game, Game Management and Hunting;
- Act 37/2009 on Forests and the Protection of Forests during 2009;
- Act 102/2013 on Fish Farming and the Protection of Fish;
- Act 154/1997 on Public Health;
- Act 46/2008 on the Foodchain and its supervising authorities.

Regulations setting out rules concerning subsidies (some examples)

- Ministerial Decree 45/2007 (11 June) of the Ministry of Agriculture and Rural Development which lays down detailed rules regarding the <u>establishment of</u> <u>energy plantation of arboreal species</u>: in particular, Article 2 (4) establishes that introduction of *Robinia pseudoacacia* must not be authorised for planting in protected natural areas and non-protected Natura 2000 sites.
- Ministerial Decree 72/2007 (VI. 27.) sets out rules for obtaining EAFRD subsidy for the establishment of short rotation bioenergy plantation of woody plant species. Applicants are required to have all necessary permits from the authorities (e.g. permission of nature conservation authorities if the plantation is situated in a protected area and/or Natura 2000 site), which determines among others the selection of species applied.
- Ministerial Decree 71/2007 (VI. 27.) sets out rules for obtaining EAFRD subsidy
 for the establishment of perennial herbaceous energy plantation. Article 4 (8)
 establishes that the applicant has to prevent (localise) the spontaneous spread of
 individuals from plantations of the genera Agropyron, Elytrigia or Miscanthus.

The Rural Development Agency (operating under supervision of the Ministry of Rural Development) is responsible for monitoring and carries out 'on-the-spot' controls.

Specific regulations containing lists of the relevant invasive species (some examples)

- 346/2008 (XII. 30.) Governmental Decree on the protection of arboreal plants listing 6 arboreal IAS (Robinia pseudoacacia, Fraxinus americana, Ailanthus altissima, Amorpha fruticosa, Prunus serotina, Acer negundo except their cultivars) which are prohibited to plant in public places;
- 269/2007 (X. 18.) Governmental Decree on land use prescriptions of the Natura 2000 grassland areas listing 9 arboreal and 6 non-arboreal IAS (Robinia pseudoacacia, Fraxinus americana, Ailanthus altissima, Elaeagnus angustifolia, Pinus nigra, Pinus silvestris, Amorpha fruticosa, Prunus serotina, Acer negundo, Phytolacca americana, Fallopia spp., Solidago canadensis, Solidago gigantea, Ambrosia artemisiifolia, Asclepias syriaca, Echinocystis lobata), against whose spread and settling farmers have to take preventive measures.

Proposals for amending acts

1. Amending acts: Nature conservation, Fish arming and the protection of fish, Foodchain and its supervising authorities, The recognition of plant varieties, and on the production and marketing of planting materials

2. Establishment of the main regulations concerning IAS:

- •. Definitions, empowering provisions
- ·Procedure of elaborating and endorsement of various species lists,
- ·Establishment of the legal basis of issuing permits and obligations
- •Establishment of the system of derogation permits, exemptions and approvals
- ·Provisions relevant to landowners,
- ·Foundations of the sanction system



Proposed Government Decree and amendment to an existing decree



- Government Decree on the prevention and management of the introduction and spread of invasive alien species
- Amendment to an existing decree on the designation of authorities and administrative bodies in the field of environment and nature conservation

Establishment of the main regulations concerning IAS:

- Designation of competent authorities and co-operating authorities.
- Regulations on authoritative procedures and on the roles, competencies and co-operation of different authorities.
- Regulations on communication, public and stakeholder involvement as well as information exchange.
- Regulations on the extent and imposition of sanctions.

Ministerial decrees

- Self-standing ministerial decree on the national list of IAS of MS concern, and on the regulations pertaining to them.
- In addition, the amendment of certain sectorial ministerial decrees will also be necessary in order to harmonise all activities concerning IAS and to integrate the new regulations into the existing systems.
- Administrative fees, consultancy fees and laboratory costs also have to be laid down.





Examples the most important publications

- Balogh, L., Botta-Dukát, Z. (2008): The most important invasive plants in Hungary. Institute of Ecology and Botany of the Hungarian Academy of Sciences, Vácrátót. 255 pp.
- Balogh, L., Dancza, I., Király, G. (2008): Preliminary report ont he grid-based mapping of invasive plants in Hungary. In: Rabitsch, W., Essl, F., Klingenstein, F. (Eds.): Biological Invasions from Ecology to Conservation. NEOBIOTA 7: 105-114.
- Botta-Dukát, Z., Mihály, B. (2006): Biológiai inváziók Magyarországon. Özönnövények II (Biological invasions in Hungary, Invasive Plants II). A KVVM Természetvédelmi Hivatalának Tanulmánykötetei 10. TermészetBÚVÁR Alapítvány Kiadó, Budapest. 412 pp. (in Hungarian) http://www.termeszetvedelem.hu/_user/downloads/invazios_fajok/ozonnovenyek.pdf
- Botta-Dukát, Z. (2009): Invasion of alien species to Hungarian (semi-)natural habitats. Acta Botanica Hungarica 50(1): 219-227.
- Csiszár, Á. (szerk) (2012): Inváziós növényfajok Magyarországon, Nyugat-magyarországi Egyetem, Kiadó, 364 pp.
- Genovesi, P., Shine, C. (2007): Európai stratégia az özönfajok ellen (European strategy on invasive alien species, Nature and environment, No. 137 Council of Europe), Hungarian edition. Directorate of the Fertő-Hanság National Park and Ministry of Environment and Water. 58 pp.
- Király, G., Steták D., Bányász D. (2008): Spread of invasive macrophytes in Hungary. In: Rabitsch, W., Essl, F., Klingenstein, F. (Eds.): Biological Invasions from Ecology to Conservation. NEOBIOTA 7: 123-130.
- Mihály, B., Botta-Dukát, Z., (eds.) (2004): Biológiai inváziók Magyarországon. Özönnövények (Biological invasions in Hungary, Invasive plants). A KVVM Természetvédelmi Hivatalának Tanulmánykötetei 9. TermészetBÚVÁR Alapítvány Kiadó, Budapest. 408 pp. (in Hungarian) http://www.termeszetvedelem.hu/user/downloads/invazios_fajok/%F6z%F6nn%F6v%202.pdf
- Csiszár Ágnes és Korda Márton (szerk.) (2015): Özönnövények visszaszorításának gyakorlati tapasztalatai. Rosalia kézikönyvek 3. Duna-Ipoly Nemzeti Park Igazgatóság, Budapest, 239 pp.

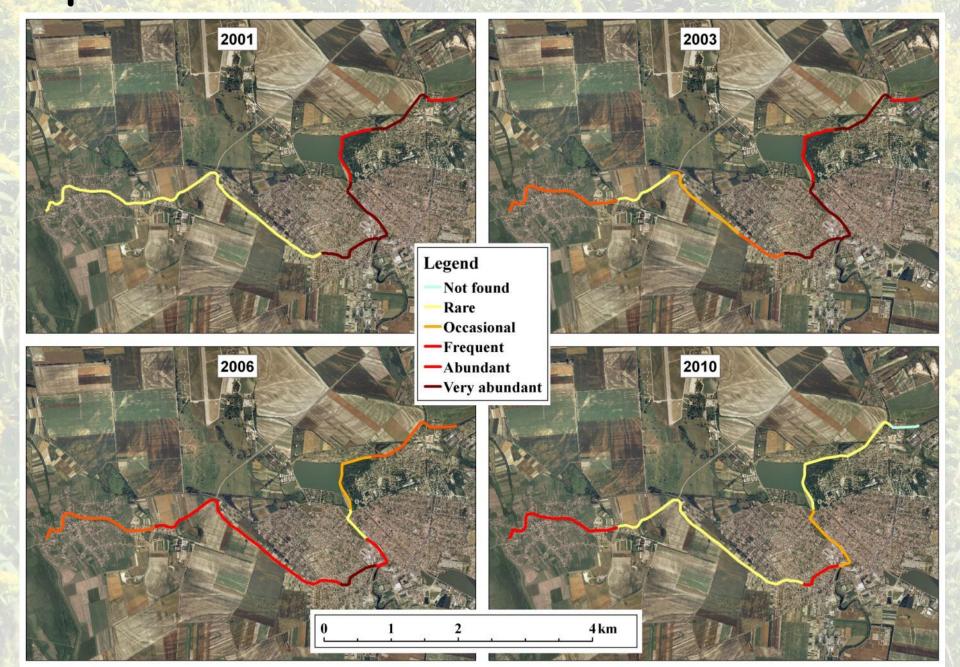
1. Elaboration of a future list of IAS of national concern

Several draft lists exist already, initiated by state nature conservation and elaborated by experts:

- · 1999 Aggtelek NP first draft list
- 2006 Volume on IAS plants in Hungary
- · termeszetvedelem.hu



Spread of Cabomba caroliniana 2001-2010



The results of previous meeting suggest the cooperation in connection with IAS between existing surveillance systems.

The data gathering protocol may be completed with IAS

Collected data may also be analyzed regarding to IAS

To elaborate the details of co-operation is required!

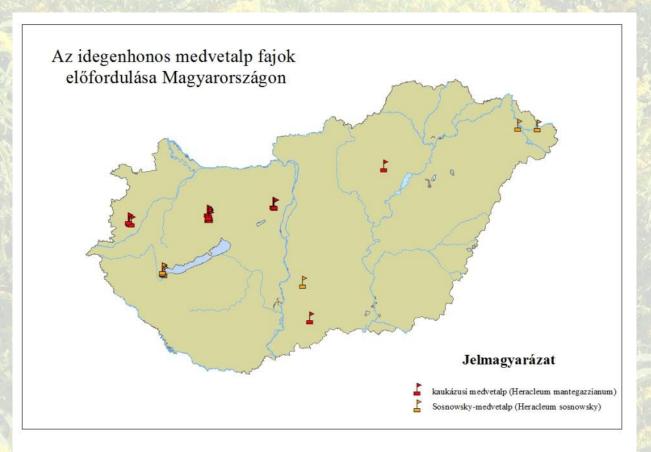
Data collection has to be carried out on strict protocols integrated into existing protocols.

Determine is required:

- List of the species, on wich data will be collected
- Method of data collection
- The method of information flow

Proposed eradication actions

against Heracleum species





Support the implementation of regulation

- Focusing on topic of IAS in ongoing programmes is essential
- · Allocation of available sources
 - -e.g. LIFE biodiversity (technology, communication)
- · Ensure further sources

EU regulation in Hungarian:

http://www.termeszetvedelem.hu/ user/browser/Fi le/IAS/IAS rendelet 1143 2014 hivatalos magyar. pdf

Information on activities, initiatives in connection with IAS:

http://www.termeszetvedelem.hu/ozonfajok-magyar orszagon

Characteristics of the systems:

- Existing systems, with long-term operation in the past
- Based on legislation
- · Many participants in the operation
- · Countrywide surveys
- IAS are non-targeted species (except some occasion)
- · Permanent presence on the field



