



## Europarc Central and Eastern Europe Section

# „Managing invasive plant and animal species in the protected areas of Central and Eastern Europe”

Workshop for experts, 02-06 May 2016  
Hortobágy National Park, Hungary



## Programme

### 02.05.2016

**18:00**

**Welcome – practical informations (Environmental Education Center, Hortobágy-Máta) – serving of a traditional Hungarian herdsmen meal**

**18:10**

**Dr. David Bogyó  
Hortobágy National Park Directorate, Hungary  
The Hortobágy National Park and its Directorate**

The Hortobágy is an 800 km<sup>2</sup> national park in eastern Hungary, rich with folklore and cultural history. The park, a part of the Alföld (Great Plain), was designated as a national park in 1973 (the first in Hungary), and elected among the World Heritage sites in 1999. The Hortobágy is Hungary's largest protected area, and the largest (semi-)natural grassland in Europe. Until recently it was believed that this alkaline steppe was formed by the clear cutting of huge forests in the Middle Ages, followed by measures to control the course of the Tisza River, allegedly resulting in the soil's current structure and pH. However, Hortobágy is much older, with alkalization estimated to have started ten thousand years ago, when the Tisza first found its way through the Great Hungarian Plain, cutting off many streams from their sources in the Northern Mountains. The formation was finished by grazing animals during the Ice Age, followed by domesticated animals.

**18:45**

**Dr. András Kelemen  
Department of Ecology, University of Debrecen, Hungary  
Plant invasions in spotlight**

In the upcoming presentation we are going to discuss the traits which make plant species capable to invade new habitats outside their native areas. Afterward we highlight the importance of the evidence-based studies in the conservation processes and also mention some example of the invasions happening before our eyes.

**19:20**

**Dr. László Gálhidy  
WWF Hungary, Hungary  
Black locust (*Robinia pseudo-acacia*) in Hungary: threat or treasure?**

Black locust (*Robinia pseudo-acacia*) is recently the most abundant tree species in Hungary. Its 300 years old history is followed by professional debates related to its economic importance and potential threat on site conditions.

In an evening session we can discuss basic statistics about black locust, economic and social values, and ecological problems. How can we tackle the huge problem of its eradication on a practical and policy level as well, and also use it as an economically important tree species? How can we communicate about regulation measures to the general public and also to the decision makers? Solutions can have a precedent role, which can influence our strategy against other non-native, invasive species in Hungary and Europe as well.

**03.05.2016**

**9:00**

**Welcome – practical informations (HNP Visitor Center, Hortobágy village)**

**9:10**

**Ágnes Csiszár, Márton Korda**

**University of West Hungary, Faculty of Forestry, Department of Botany and Nature Conservation, Hungary**

**Account of European Workshop on Control and Eradication of Invasive Alien Plant Species**

The presentation gives a short account of the main experiences of European Workshop on Control and Eradication of Invasive Alien Plant Species: main issues, problems, most important invasive species, future tasks and cooperation possibilities. We also would like to present the new Rosalia Handbook titled "Practical Experiences in Invasive Alien Plant Control."

**9:35**

**Miroslav Jarný, Ing.**

**Poľana Protected Landscape Area, State Nature Conservancy of the Slovak Republic, Slovakia**

**Invasive plants and legislation in Slovakia**

Changes in legislation with respect to invasive plants and their impact on the spread of invasive plants. Practical experience with the spread of invasive plants and their elimination.

**10:00**

**Livia Kisné dr. Fodor, dr. Vera Gáspár, Rozália Érdiné dr. Szekeres, Kinga Bata, Dr. Ildikó Varga, Zoltán Czirák & Dr. Olivér Váczi**

**Ministry of Agriculture, Hungary**

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

**10:25**

**Zoltán Sallai, Csaba Bereczki**

**Hortobágy National Park Directorate, Hungary**

**The current status of invasive fish species in Hungary - recommendations, case studies**

Here we present the actual situation of the invasive fish species in the Hungarian freshwater bodies. The presentation will focus on the chinese sleeper, the prussian carp, the pumpkinseed, the stone moroko, the black bullhead, the silver carp, the bighead carp, the grass carp and the rainbow trout. We will also show some examples of the possible solutions to reduce the populations of this species.

**11:00-11:20**

**Coffee break**

**11:20**

**Dr. Miklós Heltai**

**Institute for Wildlife Conservation, Gödöllő, Hungary**

**The experiences of the Bioregio Carpathians project - focusing on the invasive species listing; the case study of the golden jackal (*Canis aureus*)**

16 international, national, and local authorities, organizations and scientific institutions have joined forces to contribute to the protection and development of the Carpathian mountain region, situated in the heart of Europe. They are convinced that protection and regional development in the Carpathians can go hand in hand if natural assets are managed in an integrated way and relevant stakeholders are involved.

**11:45**

**Tomáš Lorenc**

**National Park Šumava, Czech Republic**

**General overview of occurrence of invasive animal species in National Park Sumava**

National Park Šumava is mountain area on south-west border of the Czech republic. There has been monitoring of large mammal species with special focus to *Lynx lynx*, but as a side effect it gives us also information of occurrence of *Nyctereutes procyonoides* (raccoon dog) or *Mustela vison* (american mink).

12:10

**Dr. Béla Csányi**

**Hungarian Academy of Sciences, Danube Research Institute, Department of Restoration and Animal Ecology, Hungary**

**Invasive and non-native Mollusca and Crustacea in the Danube Basin**

Several taxa are known from Hungarian waters that are belonging to Mollusca and Crustacea group. Four aquatic snails, five mussels and twelve Crustaceans are investigated focusing on their taxonomic relations, origin and present distribution. Their way of living together with reproductive strategy and an assessment method is analysed also in order to demonstrate the invasiveness of them to the native Fauna.

12:35-13:15

**Lunch**

13:15

**András Schmotzer**

**Bükk National Park Directorate, Hungary**

**Mapping of invasive alien plants along the common middle section of the Ipoly River (Hungary / Slovakia): methodology, management, evaluation**

An invasive alien species survey was carried out along the Ipoly river (Danube catchment area) at the borderline of Hungary and Slovakia in 2005 and 2010-2011. It included 52 stream kilometres between the municipalities of Ipolytarnóc / Kalonda and Balassagyarmat. Altogether 32 neophytes were detected in the Middle-Ipoly valley (4.636 dot-mapped records collected), from among which 7 species are regarded as having casual, 12 species as naturalized, and 13 as invasive status. The distribution maps show the origins of the spreading of each species: some elements originated from the headwater (e.g. *Reynoutria x bohemica*, *Solidago canadensis*, and recently *Impatiens glandulifera*) while others spread from a southern direction from the Danube confluence (e.g. *Amorpha fruticosa*, *Asclepias syriaca*, *Solidago gigantea*).

13:40

**Katerina Machalova, Romana Roučková**

**National Park Šumava, Czech Republic**

**Invasive plant species in National Park Šumava – practical experience since 2009**

National Park Šumava is mountain area on south-west border of the Czech republic. Main plant invasive species which occurs in large densities in the National park is *Lupinus polyphyllus*. It creates dense cover along the paths and streams.

National Park administration deals with *Lupinus* since 2009. There has been shift in occurrence, we can see large reduction on some places, however there has been spreading elsewhere. In general, it seems that early and repeated cut of the whole plant results in reduction of occurrence in term of years.

An important aspect of reduction of *Lupinus* is communication with public, especially residents and tourists who can be very helpful in pointing out new findings or even reducing the occurrence on their own properties.

14:05

**Dr. Csaba Vadász**

**Kiskunság National Park Directorate, Hungary**

**Selective (yet labour-intensive) methods for controlling invasive plant species**

During the last years, various methods have been developed for controlling the most abundant invasive plant species (*Asclepias syriaca*, *Solidago spp.*, *Ailanthus altissima*, *Acer negundo*, *Celtis occidentalis*, *Prunus serotinus*). Even these methods require considerable handwork, can be used in a species-rich environment due to their selectivity. Resource demands and efficiency of these methods have been quantified.

14:30

**Coffee break**

14:50

**László Demeter**

**Hortobágy National Park Directorate, Hungary**

**Eradication of invasive alien plants in the southern Nyírség area of the Hortobágy National Park Directorate**

The presentation contains an account of experiences gathered from eradication efforts on three species: black locust (*Robinia pseudoacacia*), black cherry (*Prunus serotina*), and common milkweed (*Asclepias syriaca*). Eradication of these species is justified on the grounds of both habitat protection and species conservation given that these invasive alien plants play an integral role in the degradation and transformation in the habitats of sand steppe oak woodlands and sand grasslands. Experiences of mechanical and chemical methods will be discussed.

**15:15**

**Kristina Vugrek Petljak, M.Biol., Marijan Ocvirek, Mr.sc.For.,  
Public Institution Nature Park Medvednica, Croatia  
Invasive plant species in Medvednica Nature Park, Croatia**

Within the Medvednica NP 29 invasive plant species are recorded which is 40% of total invasive Croatian flora. These species are widespread on almost entire area of the Park, but have low density and reduced number of individuals. Invasive plant species are not a big threat to habitats and biodiversity in Medvednica NP for now, although the Park is frequently visited and located on the edge of the capital of Croatia, Zagreb. Management of invasive plant species is necessary, especially in some habitats such as abandoned arable land and meadows, border ruderal areas and places along the roads and paths that show an increased entry of invasive plants.

**15:40**

**Gábor Takács**

**Fertő-Hanság National Park Directorate**

**Eradication of invasive alien plants under operating and experimental conditions in the sandy grasslands near Győr**

Within the framework of the Hungarian Little Plain Life+ project we examined the efficiency of invasive plant control treatments under experimental and operational conditions, and we managed to find a technology for all target species (black locust, tree of heaven, common milkweed) which can successfully control them in sandy habitats. Tests carried out under experimental conditions showed that there is no exclusive application technology, but methods need to be applied in certain combinations. Based on our observations, the treatment needs to last at least 3 years under operating conditions for each species examined. In the case of common milkweed and tree of heaven, however, a 5-year treatment is more favourable. Following the "first" treatment the treated areas should be monitored at least once every two years, and all newly appearing or surviving plants should be eradicated.

**16:05**

**Coffee break**

**16:20**

**Jaroslav Ponikelský, Martin Valášek**

**Podyjí National Park Administration, Czech Republic**

**Managing invasive species in the Podyjí National Park**

**16:45**

**Gábor Tihanyi**

**Hortobágy National Park Directorate, Hungary**

**Invasive plants in the Hortobágy NP – a short overview of the species and treatments against them**

Hortobágy National Park is situated on the Great Plain in the neighbourhood of river Tisza, which latter is a possible source of incoming living creatures. There is not many areas covered by forests, but unique plant associations exist, for example open salt steppe oak forests (*Galatello-Quercetum roboris*). Particularly – but not exclusively - tree species cause serious problems and alteration of native vegetation. Staff of Hortobágy National Park Directorate is to reduce effects of invader expansion. Either mechanical or chemical weapons are used.

**17:10**

**Tomas Gorner**

**Nature Conservation Agency, Czech Republic**

**Actual topics in managing invasive species in Czech protected areas**

This presentation focuses on general problems of invasive species management in Czech protected areas (PAs). Invasive species legislation and subsidy programmes will be briefly mentioned, also as new Czech blacklist of invasive species. Situation about energetic plants plantations (established also in PAs) will be presented because some of these plants are suspected to be a potentially invasive in Central Europe (e.g. *Paulownia* tree).

**17:35 – Closure of the conference day**

**18:20-19:00 Dinner - Environmental Education Center, Hortobágy-Máta**

**20:00-20:30 - Environmental Education Center, Hortobágy-Máta**

**Gábor Tihanyi**

**Hortobágy National Park Directorate, Hungary**

**Presentation about the sites of the field trip on the 4th of May**

## **04.05.2016**

**7:00-8:00**

**Breakfast - Environmental Education Center, Hortobágy-Máta**

**8:30**

**Field trip to the Hortobágy National Park, several stops – packed lunch served during the trip**

**Around 17:00 arrival to the Environmental Education Center, Hortobágy-Máta**

**18:30 -19:15 Dinner at the Environmental Education Center, Hortobágy-Máta**

**19:15-19:45**

**Introduction of the Podyjí National Park, Czech Republic**

**19:45-20:15**

**László Demeter**

**Hortobágy National Park Directorate, Hungary**

**Presentation about the sites of the field trip on the 5th of May**

**20:15-20:45**

**István Gyarmathy**

**Hortobágy National Park Directorate, Hungary**

**Introduction of the Hortobágy Dark Sky Park – possibility for astronomical observation tour (depends on the weather conditions – might be on the 05.05.2016)**

## **05.05.2016**

**7:00-8:00**

**Breakfast - Environmental Education Center, Hortobágy-Máta**

**8:30**

**Field trip to the Hajdúság Landscape Protection area and other protected areas, several stops – packed lunch served during the trip**

**Around 17:00 arrival to the Environmental Education Center, Hortobágy-Máta**

**18:30 -19:15 Dinner at the Environmental Education Center, Hortobágy-Máta**

**19:15-19:45**

**Introduction of the Poľana Protected Landscape Area, Slovakia**

**19:45-20:15**

**Introduction of the National Park Šumava, Czech Republic**

**Social evening – opened for other presentations**

## **06.05.2016**

**7:00-9:00**

**Breakfast - Environmental Education Center, Hortobágy-Máta**

**9:00**

**Departure**