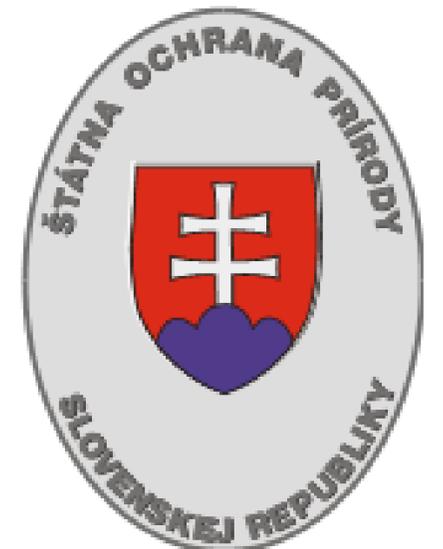


# Draft list of invasive alien species of the Carpathian region (2014) and relevant activities of the Carpathian Wetland Initiative

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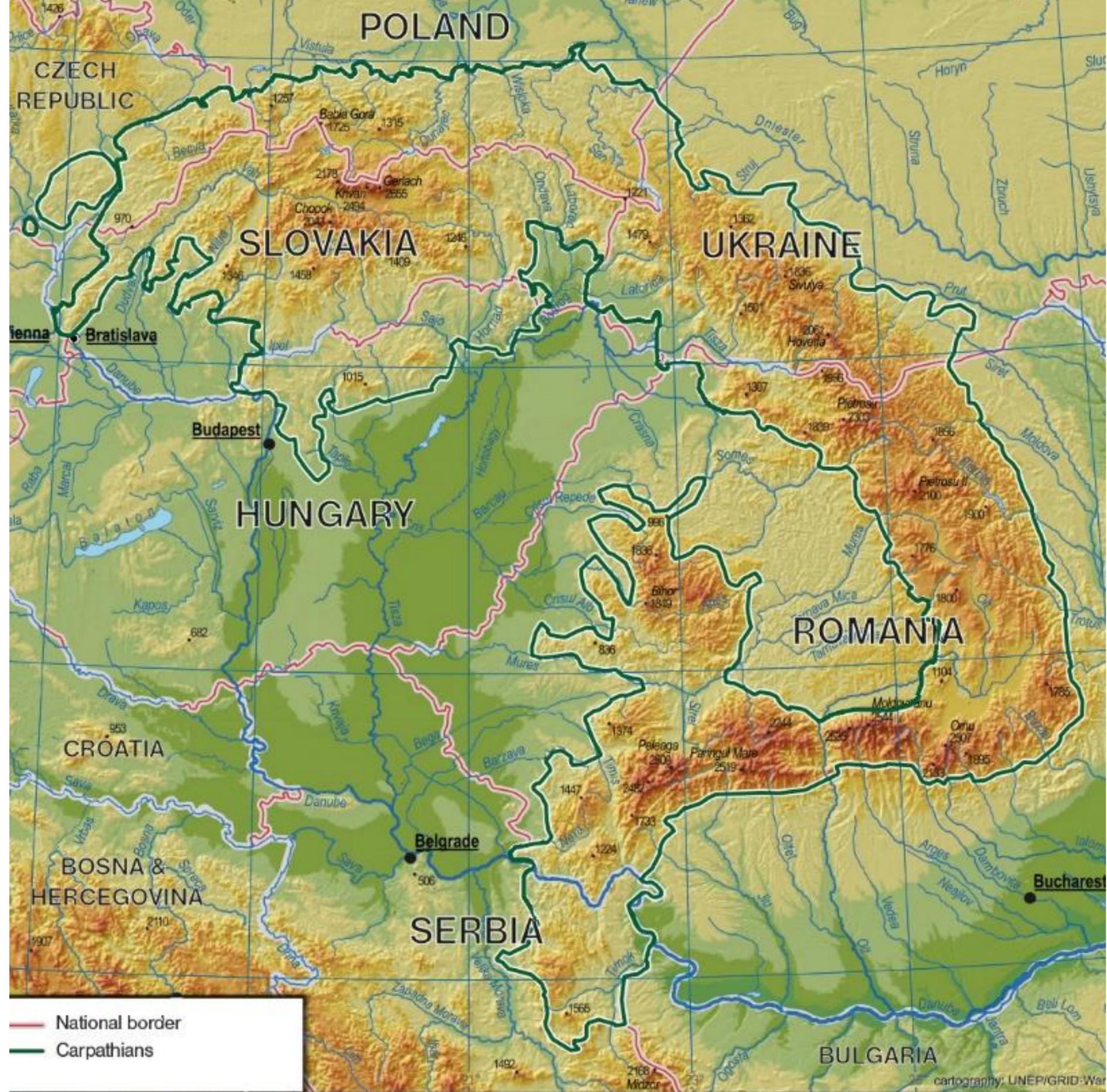


# Draft Carpathian list of invasive alien species (IAS)

The draft Carpathian List of IAS was developed within the project *Integrated management of biological and landscape diversity for sustainable regional development and ecological connectivity in the Carpathians* (BioREGIO Carpathians).

Project was funded from the *South East Europe Transnational Cooperation Programme* and supported also by the *Carpathian Wetland Initiative*, the regional initiative of the Ramsar Convention on Wetlands.





# Draft Carpathian list of invasive alien species (IAS)

The Carpathian arc stretches across seven countries:

**Czech Republic, Slovak Republic, Poland, Hungary, Ukraine, Romania and Serbia**

BioREGIO project had 7 work packages.

The Work Package on development of the *Carpathian Red List of Habitats and Species* and the *List of IAS* was lead by the State Nature Conservancy of SR as a partner of the project, in cooperation with other partners from all seven Carpathian countries (2011 – 2014).

More information about the project can be found in the final publication available at:

[https://www.cwi.sk/wp-content/uploads/2025/10/BioREGIOCarpathians\\_FINALPublication\\_web.pdf](https://www.cwi.sk/wp-content/uploads/2025/10/BioREGIOCarpathians_FINALPublication_web.pdf)

# Draft Carpathian list of invasive alien species (IAS)

## Assessment method - Guideline

Based on available data and within limited time and resources available in the project there was no ambition to provide complete list of IAS in the Carpathians with the information on their status.

The task was to prepare the list of IAS already causing problems in the Carpathian region.

Sources for the list: flora and fauna databases  
published catalogues or lists of alien species/IAS  
published papers on some systematic groups  
unpublished data of experts involved

Collected data were fed into the project on-line form supported by maps.

# Draft Carpathian list of invasive alien species (IAS)

## Assessment method - Guideline

Country proposed species were classified according to their status in categories:

- casual alien species (cas)
- naturalized alien species (nat)
- invasive alien species (inv)
  
- not found in the country Carpathian region (notfd)
- not known when no information about the particular species was available (notkn)
  
- native (ntv) to one of the project countries but alien to the others

# Draft Carpathian list of invasive alien species (IAS)

## Assessment method - Guideline

Species identified as **invasive** in one of the Carpathian countries were assessed as **candidates** for the Carpathian List. In some cases species with invasive potential were taken into account.

The expert team evaluated candidate species according to other criteria:

- number of countries/orographical units/area occupied by the species
- impact on biodiversity
- impact on human health/economy – optional

Experience and knowledge of experts played important role in the evaluation process, too.

# Draft Carpathian list of invasive alien species (IAS)

Taxonomic groups assessed for the Carpathian List of IAS followed the scope of the Carpathian Red List species assessment.

However, IAS were not identified in some of selected taxonomic groups, e.g.

- spiders (*Araneae*)
- dragonflies and damselflies (*Odonata*)
- birds (*Aves*)

The List covers: Vascular plants, Vertebrates and some of the selected groups of Invertebrates

# Draft Carpathian list of invasive alien species (IAS)

The List comprises 77 species

Groups assessed	Vascular plants	Mollusca	Malacostraca	Orthoptera	Hemiptera	Lepidoptera	Coleoptera	Osteichthyes	Reptilia	Mammalia
Number of species	37	11	1	1	2	6	4	10	1	4

- 37 plant species - 32 herbs and 5 woody plants are listed
- 40 animal species - majority are Invertebrates: 14 arthropods and 11 molluscs are listed; the most numerous group of Vertebrates are fishes, 10 species are on the list.

# Draft Carpathian list of invasive alien species (IAS)

From 40 animal species  
21 are aquatic or semiaquatic

Taxon	SK	CZ	HU	PL	RO	RS	UA	Carpathians
<b>Mollusca</b>								
<i>Corbicula fluminea</i>	inv	inv	inv	notfd		inv		inv
<i>Dreissena polymorpha</i>	inv	inv	inv	inv	inv	notfd		inv
<i>Dreissena rostriformis bugensis</i>	inv	notfd	inv	notfd	inv	notfd		inv
<i>Ferrissia clessiniana</i>	inv	inv	inv	notfd		notfd		inv
<i>Physella acuta</i>	inv	inv	inv	nat		inv		inv
<i>Potamopyrgus antipodarum</i>	inv	inv	inv	nat	inv	inv		inv
<i>Sinanodonta woodiana</i>	inv	cas	inv	notfd	inv	inv		inv
<b>Arthropoda, Crustacea, Malacostraca, Decapoda</b>								
<i>Orconectes limosus</i>	inv	inv	inv	inv	inv	inv		inv
<b>Osteichthyes</b>								
<i>Ameiurus melas</i>	inv	notkn	inv	notfd		inv	inv	inv
<i>Ameiurus nebulosus</i>	nat	inv	inv	inv		inv	inv	inv
<i>Carassius gibelio</i>	inv	inv	inv	inv		inv	inv	inv
<i>Lepomis gibbosus</i>	inv	nat	nat	notfd		inv	inv	inv
<i>Neogobius fluviatilis</i>	inv	notfd	notfd	notfd		inv		inv
<i>Neogobius gymnotrachelus</i>	inv	notfd	notfd	ntv		inv		inv
<i>Neogobius kessleri</i>	inv	notfd	notfd	notfd		inv		inv
<i>Neogobius melanostomus</i>	inv	inv	notfd	notfd		inv		inv
<i>Proterorhinus marmoratus</i>		notkn	inv	notfd		inv	inv	inv
<i>Pseudorasbora parva</i>	inv	inv	inv	cas	inv	inv	inv	inv
<b>Reptilia</b>								
<i>Trachemys scripta</i>	inv	cas/inv?	inv	inv	inv		inv	inv
<b>Mammalia</b>								
<i>Mustela vison</i>	inv	inv	notkn	inv			nat	inv
<i>Ondatra zibethicus</i>	nat/inv?	inv	nat	inv			inv	inv

# Draft Carpathian list of invasive alien species (IAS)

In the Carpathian region majority of listed **plant IAS** occupies man-made habitats:

- road and railway sides
- waste dumps
- abandoned arable land
- urban areas
- forestry plantations.

The most infested natural and seminatural habitats are:

- various types of wetlands (water bodies and their banks, marshes, floodplain forests)
- grasslands.

Forest habitats in general resist IAS, however, natural disturbances (fire, wind), as well as human activities open the space for invasive plant species.

# Draft Carpathian list of invasive alien species (IAS)

In the Carpathian region listed **animal IAS** first of all represent serious threat to the Carpatian native species, e.g.

- fishes and amphibians in general are the most threatened groups
- birds nesting in wetlands, European mink and otter are threatened by American mink



*Neogobius (Ponticola) kessleri*  
Photo: Juraj Hajdu, SNC SR

# Draft Carpathian list of invasive alien species (IAS)

## Results/challenges

Proposed list of IAS:

- gives the first picture of the status of some alien species in the Carpathian region;
- brings inspiration (and need) not only for completing the missing data for some of listed species but also for future projects and studies on alien species in the region: inventory of alien flora and fauna, detailed distribution (trends) and adverse impacts of already listed invasive species, detection of new alien species;
- opens space for cooperation and effective coordinated management of invasive species, as IAS do not respect borders.

# Draft Carpathian list of invasive alien species (IAS)

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## *Carpathian Wetland Initiative (CWI)*

CWI is the regional initiative of the **Ramsar Convention on Wetlands** dedicated to the conservation and wise use of wetlands in the Carpathian region and beyond (across wider catchment areas).

Activities started on 2 February 2024 – World Wetlands Day.

The mission is to protect unique wetland ecosystems of the Carpathians through local, national, regional, and international cooperation, ensuring their long-term sustainability and ecological value.

CWI is also important part of the **Carpathian Convention on Conservation and Sustainable use of Biological and Landscape Diversity**.

**Carpathian Convention was signed in Kyiv in 2003.**

CWI supports and promotes implementation of the **Ramsar Convention** and **Carpathian Convention** based on **Memorandum of Cooperation signed on 13 December 2006.**



## *Carpathian Wetland Initiative (CWI)*

### **Protocol on Biodiversity to the Carpathian Convention:**

#### **Article 13:**

- **Each Party shall pursue policies aiming at the prevention of introducing or releasing IAS as well as implementing early warning systems for new IAS.**
- **Each Party shall take measures in their national territory with the objective to prevent introduction or release of IAS and, if need be, to control or eradicate them.**

**Draft Carpathian List of IAS is a step towards implementation of Article 13.**



## *Carpathian Wetland Initiative (CWI)*

The Carpathian Convention Implementation Committee – it consists of national coordinators nominated by contracting parties.

CWI helps protect wetlands through shared knowledge, joint projects, and international partnerships.

One of the most popular activities is the ***International training course on river and wetland restoration*** organized in Czech Republic (6th edition in 2025).

The course is organized by the Ministry of the Environment of the Czech Republic and the Centre for Theoretical Studies in cooperation with the Czech Ramsar Committee, and the CWI.



THANK YOU FOR YOUR ATTENTION  
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**CARPATHIAN RED LIST  
OF FOREST HABITATS  
AND SPECIES  
CARPATHIAN LIST OF  
INVASIVE ALIEN SPECIES  
(DRAFT)**

THE STATE NATURE CONSERVANCY  
OF THE SLOVAK REPUBLIC

2014