



Ministarstvo
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National Overview: Invasive Alien Species in Montenegro

Forestry potential of Montenegro

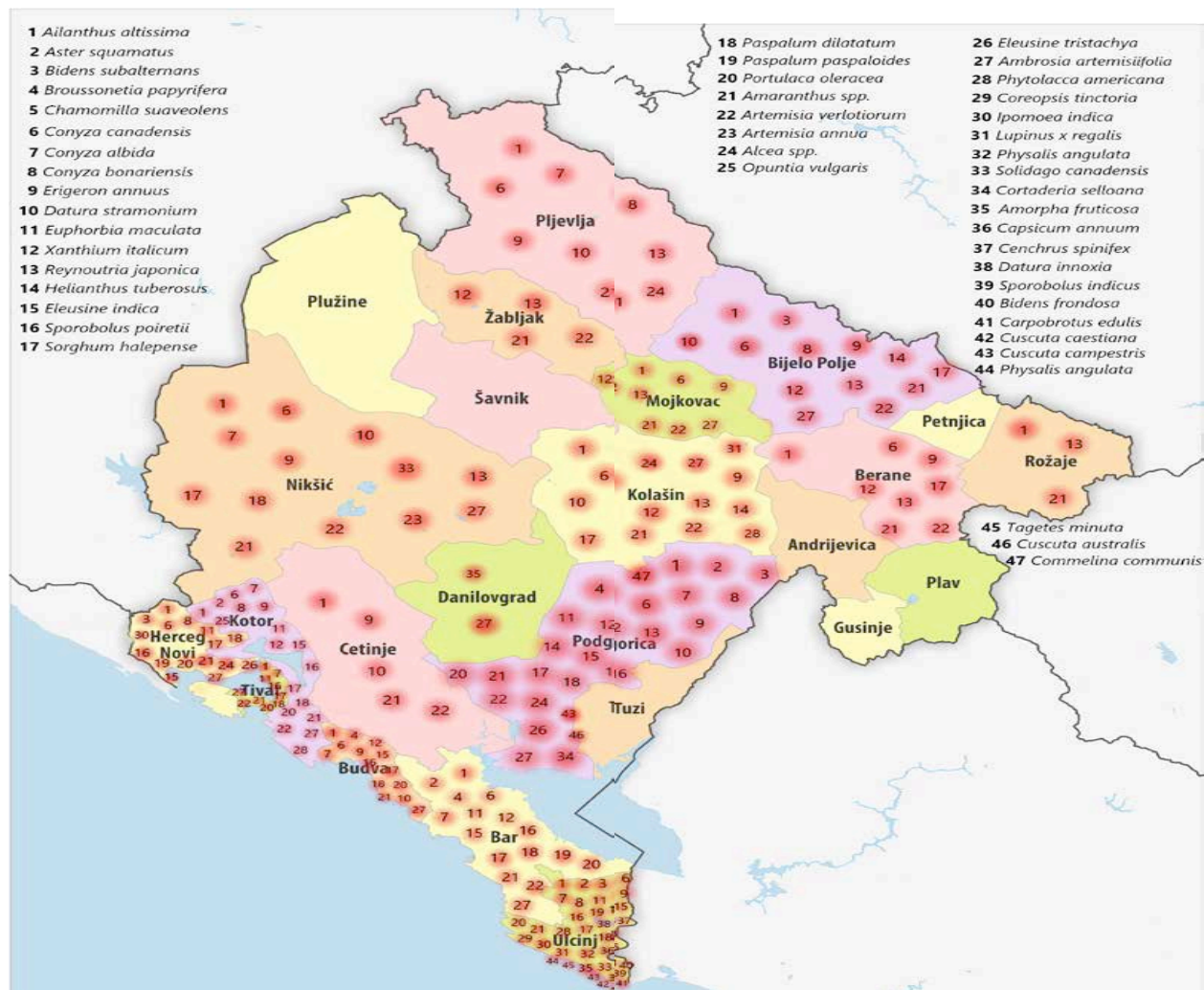
- ▶ -According to data from the National Forest Inventory (NFI), forests cover 826,782 hectares (59.5%), and forest land covers 9.9% (137,480 hectares) of Montenegro's area. In total, forests and forest land cover 69.4% (964,262 hectares) of the country's total surface area (1,388,581 hectares).
- The National Inventory recorded 68 species of trees (57 deciduous and 11 coniferous), indicating the great diversity of Montenegro's forests.
- Ownership structure: 50.9% belongs to the state, while 49.1% is in private ownership.
- In Montenegro, there are five national parks, which occupy 5% of the forests and forest land, while a total of 22.2% of forest land is under some form of protection (Emerald zone, nature parks, etc.).

Invasive Alien Species in Montenegro - General Overview

- ▶ Invasive alien species are organisms introduced outside their natural range that are able to spread successfully, often causing ecological, economic, and social damage.
- ▶ In Montenegro, about **73 alien and invasive plant species** have been recorded so far, which indicates that, although the country is small, it has a wide range of potentially vulnerable habitats. Among these are species recognized at the European level, such as **tree of heaven (*Ailanthus altissima*)** and **common milkweed (*Asclepias syriaca*)**, both listed as invasive species of Union concern, as well as **Japanese knotweed (*Reynoutria japonica*)**, included among the world's 100 worst invasive alien species.
- ▶ Montenegro adopted the **Law on Alien and Invasive Alien Species** in 2019, which has been in force since 2021. This law defines measures for **prevention, early detection, control, and eradication** of invasive species, establishing the basis for a systematic approach to their management. In addition, since **2018 Montenegro has been a member of the European and Mediterranean Plant Protection Organization (EPPO)**, which facilitates international cooperation, data exchange, and risk assessment related to new invasive species.

Distribution of Invasive Species in Montenegro

- ▶ Although invasive species are present in different parts of Montenegro, their highest concentration has been recorded in **urban and peri-urban areas**, along **transport corridors**, **riverbanks**, and **coastal zones**. These areas are the most exposed to the spread of alien species due to intensive human activity, transportation, and horticultural practices.
- ▶ In **forest ecosystems**, invasive plant species are currently present to a **lesser extent**, mostly on forest edges and in degraded areas where they find favorable conditions for spread. This situation indicates that **urban environments** and **river systems** serve as the main sources and “entry points” for invasive species into natural habitats.
- ▶ This spatial pattern highlights the need for **targeted monitoring** and **timely management measures** in high-risk zones, in order to prevent further invasion of these species into **forest ecosystems** and **protected areas**.



Top Five Invasive Forest Species in Montenegro

1. Tree of heaven (*Ailanthus altissima*) - spreads rapidly along roads, riverbanks, and abandoned areas. It increasingly invades forest edges, suppressing native species and disrupting natural succession processes.

2. Black locust (*Robinia pseudoacacia*) - originally used for land rehabilitation, it now shows invasive behavior in lowland and hilly areas. It forms dense stands that reduce biodiversity and hinder the regeneration of natural forests.





3.Box elder (*Acer negundo*) - invades river corridors and moist forest habitats, outcompeting native species such as ash and willow.

4.False indigo-bush (*Amorpha fruticosa*) - a shrub species forming dense communities in floodplain and lowland forests, limiting the natural regeneration of trees and altering the structure of riparian ecosystems.



5.Paper mulberry (*Broussonetia papyrifera*) - most often found in urban and peri-urban zones, from where it spreads toward forest margins and disturbed habitats.

These species represent one of the **main challenges for conserving Montenegro's forest biodiversity**, as they have a strong capacity for expansion and can significantly alter ecological processes and habitat structure.

Management Measures and Challenges

- ▶ Management of invasive species in Montenegro is still in the development phase, but key legal foundations have been established and national priorities clearly defined.
The main progress has been achieved in the **identification and recording of invasive species**, while field-level management measures remain limited.
- ▶ **Activities implemented so far include:**
 - ▶ removal of the most problematic species, such as ragweed and tree of heaven, at the local level,
 - ▶ prohibition of introducing and planting species listed on the EU and national lists,
 - ▶ involvement of research institutions and nature parks in the identification and monitoring of invasive populations,
 - ▶ international cooperation through **REUFIS** and **EPPO** networks aimed at knowledge exchange and coordinated approaches.

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- ▶ **The main challenges remain:**
 - ▶ lack of **systematic monitoring** and a central database on species distribution,
 - ▶ limited financial and human capacities,
 - ▶ spread of invasive species from **urban and horticultural areas** into natural habitats,
 - ▶ need for stronger involvement of the **forestry sector** in invasive species management.

Conclusions and Future Steps

- ▶ Although Montenegro is not yet facing widespread invasions in forest ecosystems, the presence and gradual spread of certain species indicate the need for **timely and coordinated action**. The highest risk still comes from **urban and riverine areas**, which serve as entry points for invasive plant species into natural habitats.
- ▶ In the coming period, priorities should include:
- ▶ establishing a **permanent monitoring system and national database**,
- ▶ strengthening cooperation between **institutions, the forestry sector, and local communities**,
- ▶ implementing **targeted control measures** and prohibiting the use of invasive species in horticulture,
- ▶ continuing participation in international networks such as **REUFIS**, to promote knowledge exchange and joint initiatives.

Thank you for your attention!

