

Invasive alien species in Polish forests 2025

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The SF manage more than **7.6 milion hectares of forest.**

We focus on sustainable development, nature protection and restoration of these areas.

The State Forests National Forest Holding is a Polish governmental organization that manages state-owned Polish forests on behalf of the Polish State Treasury (established in 1924).

The SF are supervised by the Minister of Climate and Environment of Republic of Poland



Polish law

ACT of August 11, 2021 on alien species
(Journal of Laws of 2021, item 1718)

Regulation of the Council of Ministers on the list of invasive alien species posing a threat to the Union and the list of invasive alien species posing a threat to Poland, remedial actions and measures aimed at restoring the natural state of ecosystems of December 9, 2022 (Journal of Laws of 2022 item 2649)

Obligations of foresters under the law:

- performing tasks related to preventing the spread in the environment of IAS s posing a threat to the Union or IAS posing a threat to Poland or IAS that probably meet the criteria for recognizing them as posing a threat to the Union, to the extent specified in the Act on Alien Species
- determining species results in the obligation to carry out remedial actions "in an appropriate manner and to the extent appropriate to the nature, scope and extent of the negative impact of the alien species on the species or natural habitats"

Precautionary principle

- ▶ Monitoring
- ▶ Observations
- ▶ Remedial actions
- ▶ Reducing occurrence through active control

- ▶ Remedial actions for this category of species do not have to lead to elimination, and their goal may be to "control" the species. Entities carrying out remedial actions are obliged to monitor the effectiveness of the actions and their impact on unnecessary species.

Flora ~17000

- Alien plants 28%
- IAS plants 2,5 %

Fauna ~ 34500

- Alien 0,8 %
- IAS 0,2 %

Forest Habitat degradation IAS

- ▶ Black cherry (*Prunus avium*) - This species widely occupies areas under the canopy of pine stands. It has a negative impact on these forests by excessively absorbing rainwater, which leads to a decrease in forest floor plant patches. It spreads through seeds and root suckers.

The area of tree stands covered by bird cherry accounts for over 20% of the forest area.



Forest Habitat degradation IAS

Peat bog

Spiraea tomentosa->

The spread of the meadowsweet is a serious threat to species found in peat bogs, moist meadows, swampy forests and on the edges of ponds and drainage ditches.

- dominance of the species of peat bogs in western Poland



IAS Species in forest

Box elder (*Acer negundo*)
fast-growing tree alters the habitat
structure of riparian forests.
It displaces native species like poplars
(*Populus*) and willows (*Salix*), changing
the forest composition.



IAS Species in forest

Black locust (*Robinia pseudoacacia*)
invasive alien species on forest edges, it is
used for reclamation of degraded areas.
There is a significant conflict with
beekeepers. It alters soil properties by
nitrogen fixation, which reduces the
diversity of native forest floor plants. It
spreads through seeds and root suckers.



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IAS Species in forest

Giant hogweeds (*Heracleum* spp.) - They form almost monocultural communities that displace and replace natural vegetation. They are difficult to control due to the blistering properties of their sap, posing a threat to tourists and forest workers.



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How does the biomass of invasive trees shape plant biodiversity and forest functioning?

Invasive species (black cherry and black locust) pose a major threat to forest ecosystems, and this study focused on their quantitative impact across a gradient of their aboveground biomass.

The research assessed the neophytes' effects on understory biodiversity and the natural regeneration and biomass increment of native oaks and Scots pines in western Poland's nutrient-rich and nutrient-poor habitats.

A statistically and biologically insignificant impact of both invasive species was found on the biomass increments of the native pines and oaks.

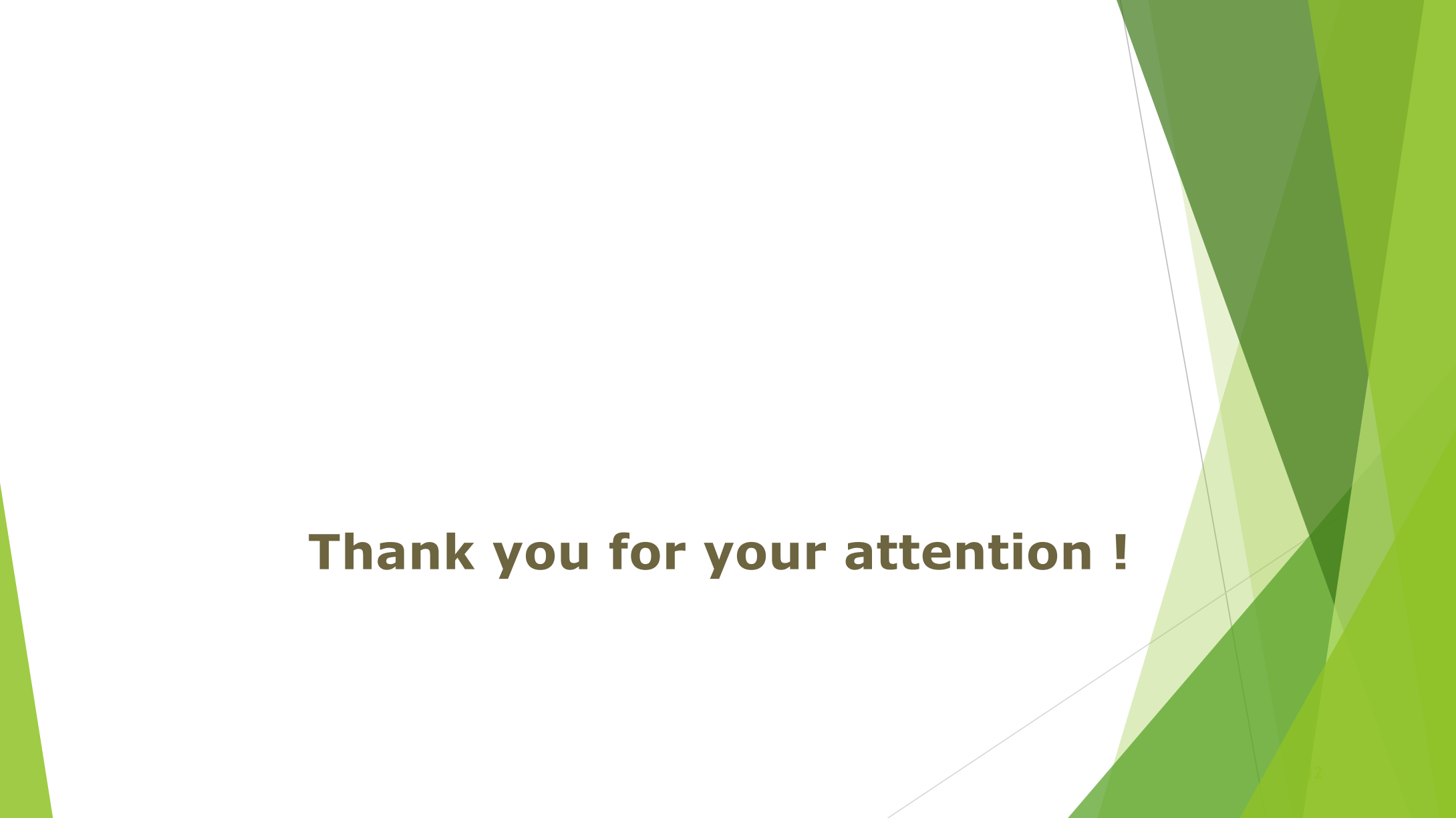
However, the impact on biodiversity was observed to be larger in coniferous forests (nutrient-poor) than in nutrient-rich oak-hornbeam forests.

Crucially, the studied neophytes were shown to limit the ability of currently dominant tree species to self-regenerate, an effect that was species- and habitat-specific.

The findings provide quantitative data intended to support the improvement of invasive tree population management in forests under different protection regimes.

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The background features abstract green geometric shapes. On the left, a small green triangle points upwards. On the right, a large, complex shape composed of overlapping translucent green triangles and polygons is visible. A thin, light gray line extends from the bottom right towards the center of the slide.

Thank you for your attention !