

EU LIFE Programme project **"Optimising the Governance and Management of the Natura 2000 Protected Areas Network in Latvia"** (LIFE19 IPE/LV/000010 LIFE-IP LatViaNature)

NATURE PARK "ABAVAS SENLEJA"

Natura 2000 site: Abavas senleja (LV0302100) Area: 14858 ha Established: 1957 Conservation Significance:

protected area was designated for the Abava River Valley conservation, region a renowned for its exceptional diversity of habitats, including several of high conservation value and rarity. Notable examples include calcareous fens hosting Carex davalliana (Davall's sedge), and juniper stands thriving in calcareous grasslands. The site is also recognized for its outstanding scenic and geomorphological values, featuring a mosaic of



river valley, meadow landscapes, and slope formations.

The nature park encompasses several significant geological features such as the Sudmali Waterfall, dolomite cliffs of the Imula, Īvande Waterfalls, Muižarāji Cliffs, Langsēde Cliffs, and the Abava Devil's Cave (Velnala). The Abava Valley Nature Park is also home to various invasive plant species, which present ongoing management challenges for habitat conservation.

As part of the LIFE-IP LatViaNature project, methods for eradicating the invasive alien species Canadian goldenrod *(Solidago canadensis)* are currently being tested. Overall, the activity aims to test various eradication methods for invasive species across an area of 110 hectares. Nature park "Abavas senleja" is one of 13 pilot sites within the LIFE-IP LatViaNature project.

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<u>Pilot site area</u>: 6,15 ha <u>Land ownership</u>: State (Nature Conservation Agency), Private individuals <u>Planned implmentation period</u>: 2023 – 2026 <u>methods</u>: **Mowing** – By cutting multiple times during the

vegetation season can be eradicated within a few years. **Mulching** – Covering stands with mown grass approximately twice a year. The mulch layer blocks sunlight, preventing photosynthesis.



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DAUGAVPILS







Canadian goldenrod (Solidago

canadensis)

Description:

- Annual herb, 70-210 cm high
- Stem is erect, sparsely hairy or nearly glabrous in its lower parts, occasionally bearing fine bristles and hairs.
- Stem leaves are narrowly lanceolate to ovate-lanceolate, measuring 5–19 cm in length and 0.5–3.0 cm in width, with three prominent veins.
- Upper surface of the leaf blade is nearly glabrous, while the underside bears scattered hairs and bristles.
- Compound inflorescence is paniculate, with long, arching lower branches, comprising 150 to over 1,300 capitula (flower heads).
- Flowering occurs from August to October.
- In Europe, a single plant can produce more than 10,000 seeds.

Distribution:

- One of the earliest ornamental species introduced to Europe from North America.
- Widespread across many European countries.

Impact:

- Significantly reduces native biodiversity, quickly becoming dominant and outcompeting low-growing herbaceous species.
- Its robust root system and dense stands deplete soil nutrients more aggressively than native vegetation.
- The species exhibits allelopathic properties, releasing biochemical compounds that inhibit germination, growth, and survival of surrounding plant species.
- Alters the chemical and microbiological composition of soil.
- Leads to landscape transformation.
- A single plant can produce over 10,000 seeds and spreads effectively via both seeds and root fragments.
- Tends to form dense, monodominant stands.

Eradication methods:

- 1. Inflorescence Removal Cutting flower heads before or at the onset of blooming to prevent seed formation and dispersal.
- 2. **Mowing or Cutting** Repeated cutting weakens the plant over time. While a single cutting does not kill the plant, multiple cuts during the vegetation season can lead to eradication within a few years
- **3. Digging or Pulling** Particularly effective in early-stage invasions or in small, localized populations. In larger invaded areas, soil can be plowed and reseeded with native plant species.
- **4. Mulching** Covering dense stands with materials such as black plastic sheeting can suppress photosynthesis and gradually kill the plants. This method is cost-intensive and best suited for small, dense populations.
- 5. Grazing Sheep and cattle grazing is considered an effective control method.

For more information about the Nature Park "Abavas senleja" please see the conservation plan: <u>https://www.daba.gov.lv/lv/abavas-senleja</u>



Report invasive plants In the Invasive Species Manager www.invazivs.lv



