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# **Latvian Biodiversity Clearing-House Mehanism**

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# **Biological Diversity 4**

Forest Biodiversity

Agricultural Biodiversity

Mire Biodiversity

Inland Water Biodiversity

Marine and Coastal Biodiversity

Invasive species

Threatened and protected

# Hogweed and its distribution in Latvia

Primarily in Latvia the Hogweed was introduced as a cultivated plant. Great expectancy was put on it as a cultivated fodder and a nectar plant. Nowadays, the distribution of the Hogweed is out of human control and the species has spread almost all over Latvia, mainly in unmanaged land areas and near ditches.

In <u>The National Programme of Biodiversity</u> it was acknowledged that the Hogweed *Heracleum sosnowskyi* is a very expansive species that can invade and maintain not only in weedy places and on road margins but also in natural plant communities. It means that when starting to the growth of this plant for fodder, the most elementary precaution principles were not followed. The Hogweed is very dangerous for humans and causes skin and mucous membrane burns and is particularly dangerous for children.

To extinguish the Hogweed that has been growing for a longer time is almost impossible. Therefore, individual attempts have not given considerable results. The present results testify that to extinguish the Hogweed (not only to limit) all the possible complex of agricultural, technical and biological methods must be applied.

Recognising the seriousness of the established situation, Ministry of Agriculture of the Latvian Republic has provided financial support to elaborate <a href="Provisional Recommendations to localise the Hogweed in Latvia">Provisional Recommendations to localise the Hogweed in Latvia</a> (only in Latvian).

### **Characteristics of the Hogweed species**

Heracleum sibiricum L. is a native species Latvian flora, in English - Sibirian Hogweed. It is common all over the country on road margins, meadows, forests and as a weed in fields. Heracleum sibiricum is a morphologically variable species.

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species and habitats in Latvia

Lists of Latvian species

Vegetation of Latvia

# Biological diversity monitoring programme in Latvia

Why do we need it?

Developed methods for biological diversity monitoring

Natura 2000 monitoring methodology in Latvia

Monitoring reports

Reporting on Article 17 of the Habitats Directive

# Links <

Governmental organizations

Non-governmental organisations

Legislation

Specially Protected Nature Territories in Latvia

Universities and scientific institutes

On-line databases

Financial resources

Later in Latvia have arrived the other species *H. persicum* Desf. ex Fischer, H. pubescens (Hoffm.) Marsch. - Bieb., *H. villosum* - and *H. mantegazzianum* Sommier et Levier - Giant Hogweed that is a decorative plant. There are also many hybrids between the Hogweeds.

According to the herbarium data of the Institute of Biology, University of Latvia, investigations and literature data, its possible to conclude that in the Baltic region in natural habitats two well distinguished taxa have spread - more common *H. sosnowskyi*, much more rare is *H. mantegazzianum*. Further research is needed to make the final conclusions. More rare in Latvia is the Giant Hogweed - *H. mantegazzianum* Sommier et Levier. This species of the Hogweed grows in Riga in the Bastejkalns park area. The origin of Giant Hogweed is in the Caucasus region. Already in the thirties of the last century it was introduced in Latvia as a decorative plant. Although there have not been more detailed observations, the botanists consider that in natural habitats this species occur rarely. The Sibirian Hogweed and the Giant Hogweed can be separated due to the different leaves.

Heracleum sosnowskyi Manden.appeared in Latvia in at the middle of the previous century as a cultivated plant and its origin is in the Caucasus region. Several botanists consider Heracleum sosnowskyi only as a subtaxa of H. mantegazzianum or H. pubescens. Therefore, Heracleum sosnowskyi does not appear in the lists of weedy flora of many West-European countries. For the first time Heracleum sosnowskyi as a species was described by I. Mandenova in 1944. More detailed studies were carried out by I. Saciperova. In Latvia Heracleum sosnowskyi was introduced in 1948 and has found a favourable environment for its distribution and nowadays actively spreads in the natural habitats becoming an unwanted and aggressive weed. At the same time it is also dangerous for the human health.

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Photo: Normunds Rustanovics

There is a contradictory opinion about the life span of this species in Latvia. One view is that it is a biennial plant - in the first year it forms a large rosette and strong root system, on the second - great size and inflorescence with a considerable number of seeds. After fruiting the plant dies. Hogweed is a perennial plant. One of the supposed reasons of *Heracleum sosnowskyi* being a perennial plant is based on the different rate of seed germination in the period post- mature. It can last between 2 - 4 years. The second reason for being perennial can be that in the situation of mutual concurrence between the Hogweeds part of the plants are not able to produce inflorescence 2 - 5 years one after another. Therefore, the seed production and life span lasts between 3 - 6 years, sometimes even longer.

Investigations in which the seeds were not allowed to mature due to moving before the inflorescence was formed were carried out. The results showed on the second and the following years the species was able to pass the winter and produce seeds on the next year and then die after flowering. Many practical workers consider that even when the mother plant dies, the off-root buds are able to produce shoots giving rise to new plants and in such a way being perennial plants.

The new shoots *Heracleum sosnowskyi* are rather cold resistant and can bear 4 -7 degrees below zero. It is found out that starting from the second year in a snow less situation they can survive up to 25 degrees below zero and below the snow even up to 45 degrees below zero. *Heracleum sosnowskyi* is a light demanding plant and at the beginning of their growth do not bare shade. When the Hogweeds have taken roots then with their giant shape, fast growth and green mass they oppress the other plant species and form their own community.

#### **Distribution in Latvia**

Heracleum sosnowskyi was introduced in Latvia between 1950-1960. At the end of the 80-ties and beginning of 90-ties, its distribution in Latvia went out of human control. The Hogweed rapidly invaded not only in the open areas but also spaces along water-basins, roads and forests. Nowadays the distribution of the Hogweed is out of control and it has spread almost all over Latvia, mainly in unmanaged land areas and near ditches. Its distribution is favoured due to abandoned land, where earlier land management activities took place.

Already in 1986 plant protection specialist and botanist A. Rasins called it as a botanical "racoon" and considered it as especially dangerous quarantine weed.

Most of the specialists also now admit that the Hogweed is a dangerous plant whose growth is difficult to extinguish. The Hogweeds in Latvia is not a nature catastrophe, but a disturbing phenomenon that must be limited. A conclusion can be driven that the Hogweed becoming wild has become a weed difficult to limit.

Distribution of *Heracleum sosnowsky* in Latvia, 2005 (according to data from Institute of Biology, University of Latvia)

#### **Activities**

The analysis of the Hogweed distribution areas testify that the weed is most widespread in areas where 50 years ago there was an attempt to introduce as a perspective fodder plant. In open areas the struggle with the Hogweed is more an economic and agriculture managerial problem, rather than a technological one. More complicated is the elimination of its distribution at the watersides of water-basins, near ditches, on road edges, where the use of herbicides is restricted or not allowed. The variety of land ownership types in the Hogweed distribution areas witnesses that the elimination of the Hogweed in Latvia is not anymore only a problem of farmers and Ministry of Agriculture. To limit the distribution of the Hogweed co-ordinated activities of Ministry of Nature

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Conservation and Regional Planning and the Ministry of Traffic and Municipialities is needed.

Distribution of the Hogweed is favoured by production of many seeds that are distributed by wind, water, birds, etc. It is also thanks to the fact that the Hogweed germinates very fast, it exceeds in growths any other plant shading it and forcing out of the habitat. In the places where still 2 years ago wild plants were typical, nowadays only a 3 - 4 m long Hogweed growth occurs. This process is incredibly fast.

There is a conclusion of experts (scientists and practical workers) that the minimum increase of the weed in a year is  $\sim 10$  % and the future prognosis for 2007 could cover 18271 ha land area.

### **Publications**

- Latvāņi. // Lauksaimniecības enciklopēdija. Liesma, R., 1966.
- Rasiņs A., Fatare I. 1986. Sosnovska latvānis *Heracleum sosnowskyi* Manden. bīstama nezāle Latvijas florā. Grām.: Retie augi un dzīvnieki. Rīga, 8. 10.lpp.
- Enciklopēdija "Latvija un latviesi" Latvijas daba Nr. 3., 1995, Rīga, 89. 90. lpp.
- Flora of the Baltic countries 2., 1996, Eesti Loodusfoto AS Tartu, 230p.
- Latvijas PSR flora. 1957., 3., LVI, Rīga, 416.-417. lpp.
- Latvāņi, to izplatības ierobežosana // Pagaidu rekomendācijas. Ozolnieki, LLKC, LLU, 2002.- 17 lpp.

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в соответствии с гербарийными данными института биологии, латышского университета, исследованиями и литературными данными, можно сделать вывод, что в балтийском регионе в естественных средах обитания распространились

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