

Norway's New Invaders: The Garden Lupin

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In 2004, there were more than 873 alien species of plant in Norway, the majority of which are simple garden species. Next week, Museum PhD Candidate Malene Nygård will take us through some of the introduction pathways and problems that garden plants present. But now, we look at one of Norway's most ubiquitous plant invaders, the Garden Lupin.

What are they?

The Garden Lupin *Lupinus polyphyllus* can grow up to 150cm, but their most distinctive feature is probably their large blue inflorescence (though they can also be pink or white). They can often be found lining roads throughout the entire country, as they have now reached every state in Norway. They are mainly pollinated by bumblebees, and disperse seeds ballistically (yes, that's exactly what it sounds like).

How did they get here?

Another native from North America, they were brought over as an ornamental species to Scandinavia in the 1800s, having escaped from cultivation and become well established in Norway by the early 1900s. Hagelupin's seeds can be unintentionally transported via vehicles, and the disposal of garden refuse often brings large numbers of seeds into completely alien environments. However the main vector has been intentional sowing of the Lupin in certain areas as a soil stabiliser, in recent times mainly by road workers, who will sow it after conducting roadwork nearby.

What do they do?

The Lupin is essentially an ecosystem engineer, capable of transforming entire communities. It has pronounced negative effects on local plant diversity, transforming ecosystems from diverse herbaceous areas to a monotonous spread of the plant. This also cascades upwards through trophic levels, reducing arthropod diversity. They even alter mineral levels in their soil, forming Nitrogen high environments while reducing Potassium and Phosphorus stocks.

How do we stop them?

Local communities have recently started initiatives to deal with invasive garden plants like the Garden Lupin, with special disposal units now being used for garden refuse by the Trondheim Renholdsverk. You can read more about this [here](#). Organised clearing of Lupin patches has also been shown to have gradual results in restoring invaded ecosystems.

However the main problems presented by the Lupin appear when it is in its densest quantities, ie. when it

has been deliberately introduced as a stabiliser. Awareness of the Lupin's effects on ecosystems need to be raised to the point that its use as a stabiliser is no longer warranted.

For more information on the Lupin, we invite you to read the following studies:

[Invasive Alien Species Fact Sheet](#) [3] – *Lupinus polyphyllus* by the Online Database of the North European and Baltic Network on Invasive Alien Species.

[Hagelupin Faktaark](#) [4] by Artsdatabanken (in Norwegian).

[The invasive herb *Lupinus polyphyllus*](#) [5] attracts bumblebees but reduces total arthropod abundance by Satu Ramula and Jouni Sorvari.

 [lupin.jpg](#) [6]

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