

Caterpillars keep volcanic slopes bare

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AN INFESTATION of very hungry caterpillars is holding back the revegetation of land destroyed by the eruption of Mount St Helens in Washington state 25 years ago.

Caterpillars of gelechiid moths, of the genus *Filatima*, are preying on prairie lupines (*Lupinus lepidus*), which are nitrogen-fixing plants critical for enriching the bare soil and making it fertile enough to support other plants, such as grasses.

The lupine was one of the first plants to recolonise the pumice plain, and Bill Fagan of the University of Maryland in College Park and his colleagues have been following its progress ever since (*New Scientist*, 19 May 1990, p 53). "Our ballpark estimate is that the vegetation would be spreading four times faster were it not for these caterpillars," says Fagan.

The caterpillars make it difficult for lupines to spread because they target isolated plants, rather than denser, more established colonies. This might be because isolated plants are richer in nutrients and less likely to have been noticed by predators of the caterpillars (*The American Naturalist*, DOI: 10.1086/497621).

It could be hundreds of years before the region is reforested, but Fagan says the caterpillar invasion is a natural process and there are no plans to interfere with it.

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