

# Great white butterfly

## Your help is needed to stop this major pest



Great white butterfly caterpillars.



Nasturtiums should be checked for great white butterfly caterpillars and eggs.



Male great white butterfly.  
Photo: [www.improvedimage.co.uk](http://www.improvedimage.co.uk)

The great white butterfly poses a major economic and environmental threat. Your help is vital to prevent it becoming established as a serious pest in New Zealand.

Please look for the butterfly's caterpillars and eggs and report any that you find to the Ministry for Primary Industries (MPI) hotline 0800 80 99 66.

The caterpillars and eggs are found in clusters on host plants, particularly nasturtiums, honesty and brassica vegetables, including broccoli and cabbages.

The great white butterfly (*Pieris brassicae*) has been declared an unwanted organism in New Zealand under the Biosecurity Act 1993.

### A serious threat

The great white butterfly is a significant pest of brassica vegetable crops in numerous countries; in some it is known as the large white butterfly. Its caterpillars feed voraciously on host plants, reducing them to a skeleton.

In New Zealand it poses a major threat to commercial and home brassica vegetable crops. (These include cabbage, broccoli, cauliflower, rape, swedes, Brussels sprouts and turnips.) It could also have serious consequences for the survival of many of New Zealand's 79 native cress species.

### Stopping its spread

The great white butterfly has been spreading since it was first found in a Nelson city garden in 2010. The butterfly species can fly long distances—sometimes hundreds of kilometres—so will spread further through New Zealand if not stopped.

A multi-agency attempt is being made to eradicate the great white butterfly while it is still in a relatively limited area. The Department of Conservation (DOC) is leading the eradication programme in conjunction with Vegetables New Zealand, MPI, Tasman District Council, and Nelson City Council. It is being carried out by Entecol Ltd under contract to DOC.

Public help in looking for and reporting great white butterfly infestations is essential if we are to eradicate this pest.

### How to identify the great white butterfly

The adult great white butterfly looks similar to the common small white butterfly, though about twice as big, and it can be difficult to tell the difference between them. It is better to look for the great white butterfly's caterpillars and eggs and report suspected finds of these. The caterpillars and eggs are found mostly in clusters while those of the small white butterfly caterpillar are mostly found singly.

**If you believe you have seen any great white butterfly caterpillars, eggs or pupae please call the MPI hotline 0800 80 99 66.**

**Department of Conservation**  
*Te Papa Atawhai*

**Eggs:** The great white butterfly lays its tiny yellow eggs in clusters of 30 to 100 on host plants. In contrast, the small white butterfly lays its more cream-coloured eggs singly or in pairs.

**Caterpillars:** The great white butterfly caterpillar's appearance changes as it grows. Young caterpillars are tiny and yellowish with a shiny black head. As they mature, dark spots appear on the body.

In later stages, the caterpillars are speckled black and greyish-green with three yellow lines along the body. The larger caterpillars have lots of pale hairs. Fully grown caterpillars are 50 mm long.

The small white butterfly caterpillar, on the other hand, is uniformly green with a faint yellow line along the top of its body.

**Pupae (chrysalises):** The great white butterfly's pupae are 25 mm long and pale green or greyish-white. The pupae are distinctively dotted with yellow and black markings and are ridged with blunt spikes.

Pupae can be found near host plants on vertical structures such as fences, poles and buildings.

People taking trailers, boats and caravans out of the Nelson Tasman region are asked to check there are no great white butterfly pupae on board before they leave home. Any found should be reported to the MPI hotline and removed and destroyed before leaving to avoid spreading the butterfly pest to new locations.

**Adult butterflies:** The upperside of the adult great white butterfly's wings are white. The forewing has a black tip and in females two black dots and a black smear. The male butterfly doesn't have the black spots on the upperside of the forewings. The underside of the wings is pale yellow, dusted with grey. The adult's wingspan is 55-70 mm.

**If you believe you have seen any great white butterfly caterpillars, eggs or pupae please call the MPI hotline 0800 80 99 66.**

### To find out more:

Visit [www.doc.govt.nz](http://www.doc.govt.nz) or contact:

**Department of Conservation**

Motueka Area Office

Cnr King Edward and High Streets, Motueka 7120

PO Box 97, Motueka 7143

Ph: (03) 528 1810

Email: [motuekaao@doc.govt.nz](mailto:motuekaao@doc.govt.nz)



Great white butterfly eggs.



Very young great white butterfly caterpillars.



A fully grown caterpillar.



The great white butterfly has two different coloured pupae: greyish-white, at left, and pale green, at right. Images by Richard Toft.



Ministry for Primary Industries  
Manatū Ahu Matua



**New Zealand Government**