

THE WANDERER (MONARCH) BUTTERFLY

The case FOR and AGAINST

The Wanderer or Monarch butterfly *Danaus plexippus* is a favourite amongst Adelaide residents since its introduction to South Australia in the mid 1800's. The plants that the caterpillars of this butterfly feed upon however, are considered a weed in reserves and roadsides.

A foreign butterfly eats an introduced food

In Australia the caterpillar of this butterfly are the introduced cotton bushes, *Gomphocarpus cancellatus* (syn. *Asclepias rotundifolia*) Broad-leaf Cotton-bush, *Gomphocarpus fruticosus* Narrow-leaf

Cotton-bush and *Asclepias curassavica* Red-head Cotton-bush. As these plants are weeds, they are often removed from nature and road reserves.

The caterpillars of the native Lesser Wanderer *Danaus petilia* also eat introduced Milkweed plants. However this native butterfly also feeds on *Cynanchum floribundum* Desert Cynanchum, *Marsdenia australis* Native Pear and *Rhyncharrhena linearis* Bush Bean in the north of South Australia.

The lesser Wanderer

The caterpillars of these two butterflies look similar.

The Wanderer caterpillars are larger with black, white and yellow stripes. The Lesser Wanderer caterpillars also have black and white stripes. However the yellow areas are elongated spots in broad, black stripes that span the body.

Both pupa look similar too. Both can be green with gold decorations, turning darker as the butterfly is near to emerging. However the Lesser Wanderer pupa can also be pink and is smaller than the Wanderer pupa.

The case FOR the Wanderer

This butterfly has been in Adelaide since the mid 1800s. It is probably one of the favourite and most recognised butterflies in South Australia, indeed in the world. If all of this caterpillar's food plant is removed, then this butterfly will become extinct in South Australia and as the Lesser Wanderer also relies on the introduced swan plant and milk weed this species may also become extinct.

Adult Wanderer butterfly (*Danaus plexippus*) photo Jan Forrest and its caterpillar photo Lindsay Hunt.

Adult Lesser Wanderer butterfly (*Danaus petilia*) photo Robert Fisher and its caterpillar photo Lindsay Hunt and pupae of the Wanderer (left) photo Jan Forrest and Lesser Wanderer, photo Robert Fisher.



To retain the Wanderer butterfly in Adelaide, you could plant their host plant in your garden.

Cotton-bushes look quite attractive in urban gardens, although the milky sap can cause irritation if touched.

If you are concerned about the plant escaping into a native reserve nearby then remove the seed-pods before they germinate. You will then retain one or two plants, thus providing food for the wanderer caterpillar, but no more will grow around the area. The presence of this butterfly also acts as a biological control of this non-indigenous plant.

The caterpillars are easy to rear. When a caterpillar turns into a butterfly it makes a green pupa case with gold spots around one end. The case can be suspended by the silken web from a curtain rod or in any suitable place. When the wing colour can be seen through the case it is nearly time for the butterfly to emerge.

Perhaps you could look for caterpillars of the Wanderer butterfly to see if you can find any that are feeding on a native South Australian plant. We do have native milkweeds in South Australia (*Cyanthum* and *Sarcostemma* spp.) and Wanderers eat plants belonging to these two genera in the Americas. However no records exist in Australia of this butterfly feeding on these plants and unfortunately the chances of finding a native host plant for this butterfly are considered remote.

Contact the Discovery Centre of the South Australian Museum if you have recorded the caterpillars of the Wanderer butterfly feeding on plants other than the introduced Cotton-bush or Swan Plant.

The case AGAINST the Wanderer

The Wanderer is not a native butterfly. Its foodplant, the milk-weed is a non-indigenous plant which has become a pest in many areas of the coast and the foothills. This problem is compounded by people who grow this plant to encourage these spectacular butterflies to breed. In this way both the butterfly and the plant have been spread to areas of the state where neither of them occurred in the past.

The milkweed is named because of its poisonous sticky sap. It can cause eye and skin problems in adults if they come in contact with it. The sap, if eaten or chewed is poisonous to children and family pets.

It is doubtful we will ever get rid of this undesirable plant from our bushland areas and therefore the butterfly will always have a food source. The fad for growing milkweed plants to attract the Wanderer may be responsible for the spread of this plant.

The question that those of us who are proud of our Australian native bushland ask is: should we let a plant loose in the bush, simply so an introduced butterfly (albeit a pretty one) can survive?

This article was written originally by members of BCSA for the SAMuseum exhibition 'Bringing the Butterflies Back' and is available on the Museum website: www.samuseum.sa.gov.au (~~What's on Online Exhibitions~~ **Butterfly Watch**).



Cotton bush, *Gomphocarpus cancellatus*
(syn. *Asclepias rotundifolia*) Photo: RHFisher