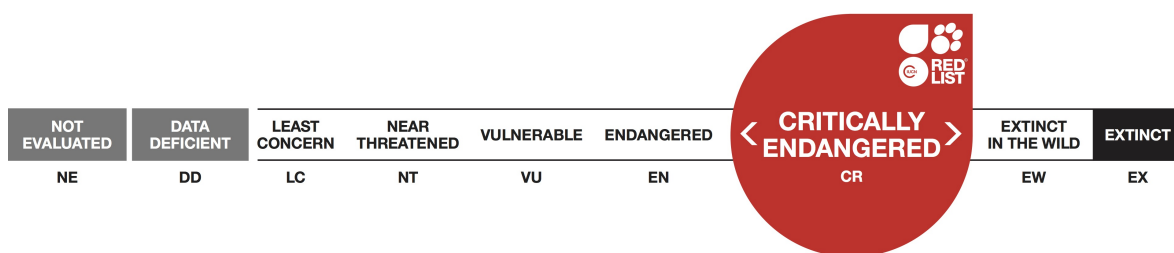


## *Pieris wollastoni*, Madeiran Large White

Assessment by: van Swaay, C., Wynhoff, I., Verovnik, R., Wiemers, M., López Munguira, M., Maes, D., Sasic, M., Verstrael, T., Warren, M. & Settele, J.



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## Taxonomy

Kingdom	Phylum	Class	Order	Family
Animalia	Arthropoda	Insecta	Lepidoptera	Pieridae

**Taxon Name:** *Pieris wollastoni* (Butler, 1886)

### Common Name(s):

- English: Madeiran Large White

### Taxonomic Notes:

This species is considered as a subspecies of *Pieris brassicae* by some authors.

## Assessment Information

**Red List Category & Criteria:** Critically Endangered (Possibly Extinct) B1ab(v) [ver 3.1](#)

**Year Published:** 2010

**Date Assessed:** January 29, 2009

### Justification:

This species is restricted to the island of Madeira. It has not been reported since the 1970s despite several visits of lepidopterists to its former habitat. An adequate survey is needed to define if the species is extinct or not. It is therefore assessed as Critically Endangered (Possibly Extinct).

**Date last seen:** 1970s

### Previously Published Red List Assessments

2000 – Critically Endangered (CR)

## Geographic Range

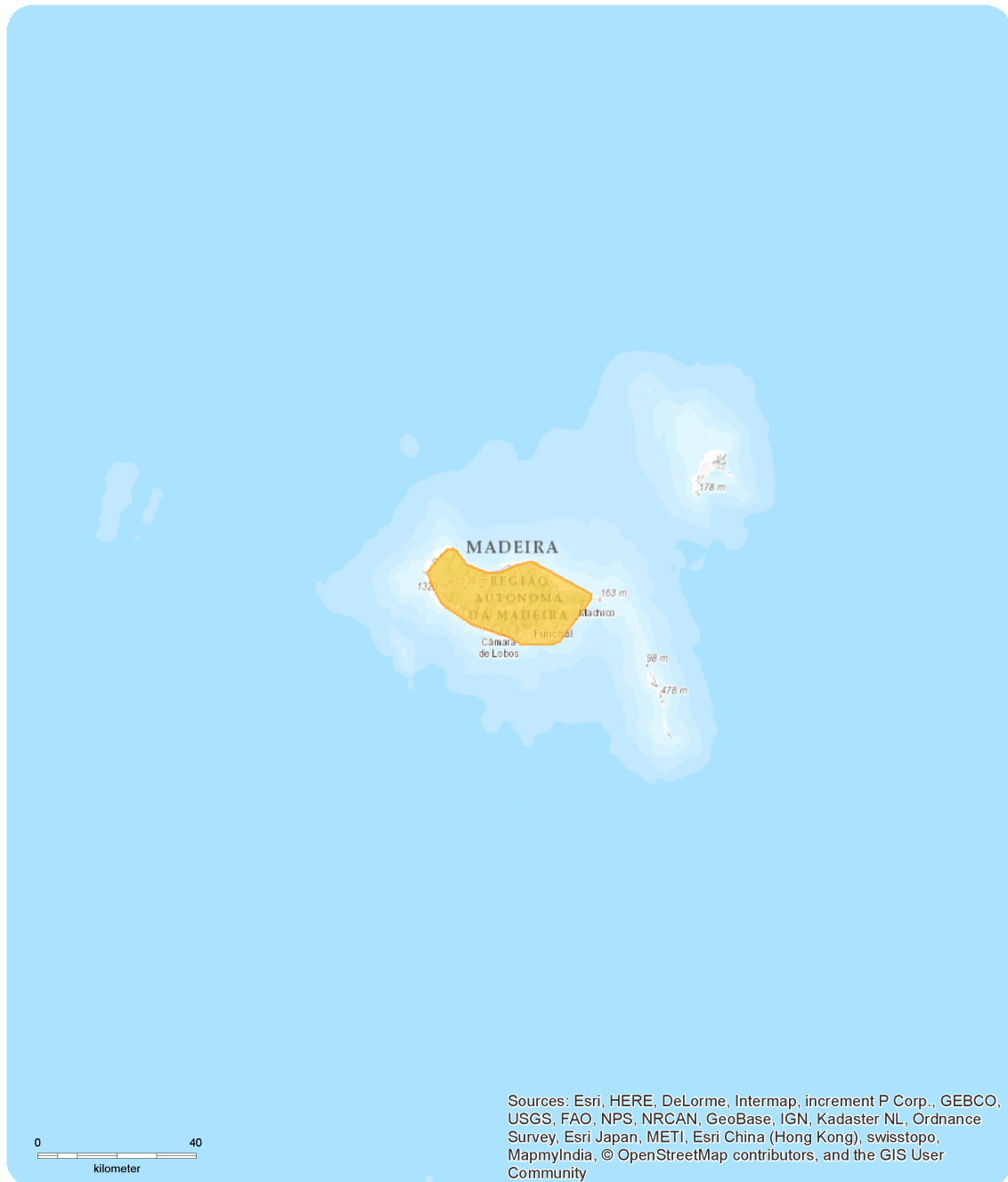
### Range Description:

This species is restricted to the island of Madeira. This is a European endemic species.

### Country Occurrence:

**Possibly extinct:** Portugal (Madeira)

# Distribution Map



## *Pieris wollastoni*

Range

■ Extant (resident)

Compiled by:  
Butterfly Conservation Europe  
2009



The boundaries and names shown and the designations used on this map do not imply any official endorsement, acceptance or opinion by IUCN.



## Population

The Madeiran Large White is an extremely local species, restricted to the island of Madeira. In the 1970s, it was considered rare. There are some reports from the 1980s, in which lepidopterists reported it to be widely distributed, but searches for this species in the early 1990s were unsuccessful. As the species has not been seen on this relatively small island for at least 20 years, it is believed to probably be extinct.

**Current Population Trend:** Unknown

## Habitat and Ecology (see Appendix for additional information)

This butterfly was mostly found in north-exposed valleys in the Laurisilva forests on Madeira. They occurred in many habitat types where the larval hostplant grows in abundance and where many nectar-rich plants, such as thistles and knapweed, were available as a source of nectar. The females deposited the eggs in batches on the leaves of diverse genera and species of crucifers, such as Caper (*Capparis spinosa*) and *Tropaelum majus*. The caterpillars lived in small groups, dispersing in the later instars, when they were ready to pupate. Hibernation took place in the pupal stage. This butterfly produced several generation a year and could be found from March until late October. Detailed habitat descriptions are not available.

**Systems:** Terrestrial

## Use and Trade

All butterflies are collected to some extent, but only for the extremely rare species it can be a problem and the trade in Europe is generally at a low level compared to other continents. There is no specific trade information for this species.

## Threats (see Appendix for additional information)

The causes for the decline of *Pieris wollastoni* are unknown, but Gardiner (2003) proposed the introduction of diseases and Lozan *et al.* (2008) the introduction of the alien parasitoid *Cotesia glomerata* as possible causes.

## Conservation Actions

A well coordinated search for the species should be conducted to make sure that there is not a population left somewhere on the island. If a remaining population is found, immediate research on the ecology and conservation should be carried out.

## Credits

**Assessor(s):** van Swaay, C., Wynhoff, I., Verovnik, R., Wiemers, M., López Munguira, M., Maes, D., Sasic, M., Verstrael, T., Warren, M. & Settele, J.

**Reviewer(s):** Lewis, O. (Butterfly RLA) & Cuttelod, A. (IUCN Red List Unit)

## Bibliography

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## External Resources

For [Images and External Links to Additional Information](#), please see the Red List website.

# Appendix

## Habitats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Habitat	Season	Suitability	Major Importance?
1. Forest -> 1.4. Forest - Temperate	-	Suitable	-
3. Shrubland -> 3.4. Shrubland - Temperate	-	Suitable	-

## Threats

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Threat	Timing	Scope	Severity	Impact Score
7. Natural system modifications -> 7.3. Other ecosystem modifications	Ongoing	-	-	-
	Stresses:	1. Ecosystem stresses -> 1.2. Ecosystem degradation		
8. Invasive & other problematic species & genes -> 8.1. Invasive non-native/alien species -> 8.1.1. Unspecified species	Ongoing	-	-	-
	Stresses:	2. Species Stresses -> 2.3. Indirect species effects -> 2.3.2. Competition		
8. Invasive & other problematic species & genes -> 8.1. Invasive non-native/alien species -> 8.1.2. Named species (Cotesia glomerata)	Ongoing	-	-	-

## Research Needed

(<http://www.iucnredlist.org/technical-documents/classification-schemes>)

Research Needed
1. Research -> 1.1. Taxonomy
1. Research -> 1.2. Population size, distribution & trends

## Additional Data Fields

Population
Population severely fragmented: No

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