Small Blue Butterfly  *Cupido minimus*

The Small Blue butterfly is particularly vulnerable to the loss of habitat through development of brownfield sites or through scrub encroachment leading to the loss of kidney vetch, its food plant.

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**Legal and Conservation Status**

- UK Protected Species
- UK Biodiversity Action Plan Priority Species and Species of Principal Importance in England

*The Small Blue is protected under:*  
- Section 9 (in respect of section 9(5) only) of the Wildlife and Countryside Act 1981 (as amended) (Schedule 5)

**It is an offence to:**

- Sell or offer for sale a Small Blue butterfly

(This is a summary of the main points of the law, not a complete statement.)

**Habitat**

The Small Blue relies on grassland habitats that have a very specific combination of shelter, to provide a warm micro-climate for the adults, and sparse species-rich grassland or eroding vegetation where kidney vetch, on which the caterpillars feed, can flourish. Most good sites are a mosaic of short and tall grassland with some light scrub.

*Cumbria Key Habitats that are particularly important for the Small Blue include:*

Open mosaic habitats on previously developed land
Ecology

Our smallest resident butterfly is often confined to small patches. Males set up territories in sheltered positions, perching on tall grass or scrub. Once mated, the females disperse to lay eggs but both sexes may be found from late afternoon onwards in communal roosts, facing head down in long grass.

Eggs are laid singly, tucked into the young flower heads of prominent kidney vetch plants. The caterpillars feed on the developing flowers. When fully grown they descend to the ground and pass the winter in soil crevices or under moss. They pupate the following spring also at ground level and emerge in May.

They are poor fliers and do not move far in a year, so if lost from a site they may not re-colonise. Kidney vetch is much more widespread in Cumbria than the Small Blue butterfly.

Distribution

One of the rarest butterflies in Cumbria, it is now confined to coastal grassland between Maryport and Workington, mostly on disturbed post or current industrial sites and railway land. Its current distribution is now limited to the Maryport and Workington area. Occasional individuals are found between these sites.

The nearest Small Blue colonies to these in Allerdale are more than 100 miles distant.

Other historical Small Blue colonies, such as old railway cuttings and embankments in the Carlisle area, were kept clear of vegetation as a fire prevention measure in the days of steam engines and incidentally provided ideal conditions for Kidney Vetch to thrive. These are long extinct with no realistic chance of re-colonisation.

It is unlikely that the Small Blue will re-colonise naturally beyond 5km of the current distribution, with sites within 2km being more likely. Naturally, therefore, this species has a limited but important distribution in Allerdale.

Conservation Issues

Development on previously-used land in this coastal strip and at the Port of Workington, and habitat loss through scrub encroachment and rank grassland conditions reducing the availability of kidney vetch, are the major threats facing the Small Blue. Their low dispersal ability and the small size of colonies in combination with kidney vetch habitat fragmentation can lead to localized extinctions and poor ability to re-colonize and slow population recovery. Habitat destruction from vandalism, motorbikes, fires and human disturbance e.g. through littering, trampling, dog fouling can also be an issue.
Planning Considerations

- The Small Blue is largely dependant upon previously-used land (brownfield sites) in Cumbria.
- Any proposed development within and nearby the current Small Blue area should trigger a Small Blue assessment. Timing for butterfly survey is restricted to May-June, but kidney vetch can be surveyed throughout the year.
- Development proposals should seek to maintain and/or create a mosaic of habitat and Small Blue population throughout the Small Blue distribution area, and its surrounds.
- The Small Blue is sometimes confused with the Common Blue and Chimney Sweeper Moth.

Enhancement Opportunities

- Management of existing habitat and populations can be successful within current developments provided linked patches of kidney vetch grassland are identified and maintained with open, sunny conditions.
- Creation of new species-rich kidney vetch grassland habitat within the Small Blue butterfly distribution area of Allerdale to provide sites for colonisation from nearby populations.
- Breeding conditions for the Small Blue are relatively easy to create by either allowing sites to colonise naturally with kidney vetch or by planting kidney vetch of local provenance; best results are seen on uneven ground with thin calcareous soils.
- Development proposals should seek to maintain and/or create a mosaic of habitat and Small Blue population throughout the Small Blue distribution area, and its surrounds.

Further Information


Status of the Small Blue Butterfly *Cupido minimus* on the West Cumbria Coast, Butterfly Conservation Report No. S07-35, Dr Sam Ellis, November 2007

*Small Blue Fact Sheet, BC*

*Invertebrates: surveys and mitigation for development projects*

*Pre-submission screening service: advice on planning proposals affecting protected species*

*Protected species: how to review planning applications*

Contacts

National:

- Butterfly Conservation, Manor Yard, East Lulworth, Wareham, Dorset, BH20 5QP.
  Tel: 01929 400209. Email info@butterfly-conservation.org
Local:

- Butterfly Conservation (Cumbria) Steve Doyle, 14 The Willows, Durdar, Carlisle, CA2 4UP. Tel: 01228 544059
- Natural England, Juniper House, Murley Moss, Oxenholme Rd, Kendal, Cumbria, LA9 7RL. Tel: 0300 060 3900

Current Action in Cumbria

- Butterfly Conservation undertook a survey of the Small Blue butterfly and its habitat distribution in the core population area, in 2007.
- Butterfly Conservation actively engaged in promoting Small Blue habitat.