



Butterfly Conservation

Square-spotted Clay

Xestia rhomboidea

Conservation status

Priority Species in UK Biodiversity Action Plan.

Larval feeding damage on Oxlip

Both the English name and species name of this medium-sized moth partly refer to the black, square-shaped markings on the forewings; '*rhomboidea*' meaning 'rhombus-shaped'. It is possible that the name 'Clay' refers to the general clay-coloration of this and other related species. Formerly more widely recorded over much of mainland Britain, except for the far north of Scotland, the Square-spotted Clay is now primarily found in eastern and south-eastern England, particularly East Anglia and the East Midlands, but with a scattered distribution northward to northern England and western Scotland.

Foodplants

Larvae have recently been observed in the wild feeding on Common Nettle *Urtica dioica*, Oxlip *Primula elatior* and Dog's Mercury *Mercurialis perennis*. A range of other foodplants is accepted in captivity and may or may not be used in the wild. They include Common Chickweed *Stellaria media*, dock *Rumex* spp., Goat Willow *Salix caprea*, Primrose *Primula vulgaris*, birch *Betula* spp., Bramble *Rubus fruticosus* agg. and Ribwort Plantain *Plantago lanceolata*. The adults use nectar sources such as the flowers of burdock *Arctium* spp., Wood Sage *Teucrium scorodonia*, Ragwort *Senecio jacobaea*, Black Knapweed *Centaurea nigra*, and willowherb *Epilobium* spp..

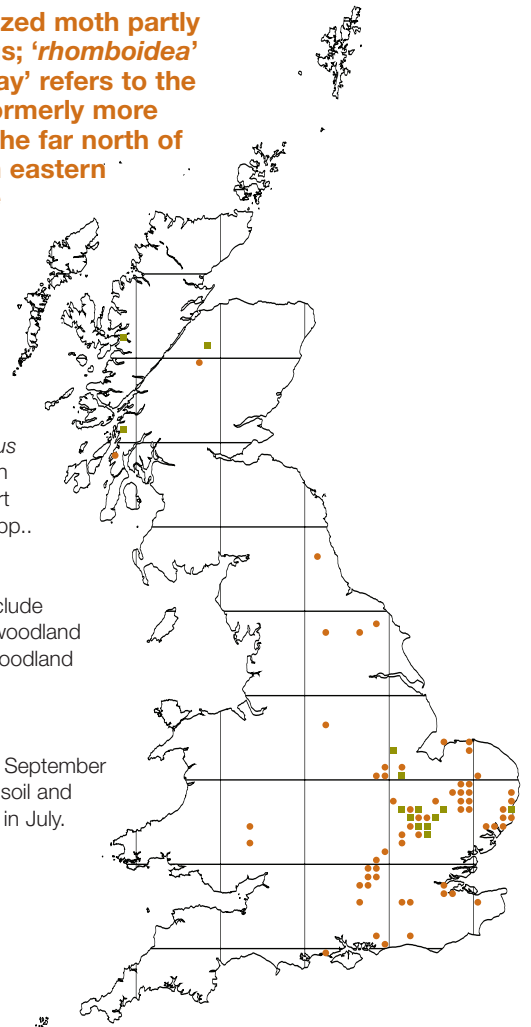
Habitat

The Square-spotted Clay has been recorded in a wide range of habitats. These include open meadows adjoining old gravel workings, scattered open woodland, ancient woodland with a dense coppice understorey, patchy oak, birch and pine scrub, dense elm woodland and mature conifer plantation with a broadleaved understorey.

Life cycle

The species is single-brooded. The eggs are laid in August and the larvae hatch in September and overwinter. In June of the following year the fully-grown larvae burrow into the soil and remain dormant for several weeks (a process known as diapause) before pupating in July. The adults fly at night in late July and August.

- Larval record 1999 to 2004
- Adult record 1999 to 2004



	J	F	M	A	M	J	J	A	S	O	N	D
Egg								■				
Larva	■	■	■	■	■	■			■	■	■	■
Pupa							■					
Adult							■	■				

Habitat management for the Square-spotted Clay

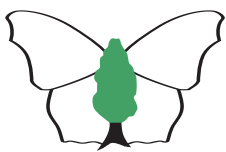
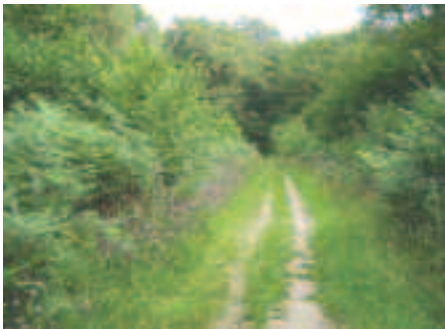
The wide range of different habitats used by the species means it is difficult to provide anything more than generic advice.

- ◆ On sites where the Square-spotted Clay is known to occur, management should aim to maintain the present range of vegetation structure and plant diversity year on year.
- ◆ Where the species occurs in woodlands, aim to maintain the existing open areas, suitable for the larval foodplants and adult nectar plants.

How to survey/monitor

The best method is searching for adults on flowerheads, such as flowering burdock. Light-trapping for adults and larval searches in March and April are also useful techniques.

right top Square-spotted Clay larva
right bottom Ideal woodland habitat
below Suitable habitat can occur in open woodland rides



**Butterfly
Conservation**

Saving butterflies, moths and their habitats

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Registered Office: Manor Yard East Lulworth Wareham Dorset BH20 5QP.

Registered in England No. 2206468 - Registered Charity No. 254937

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