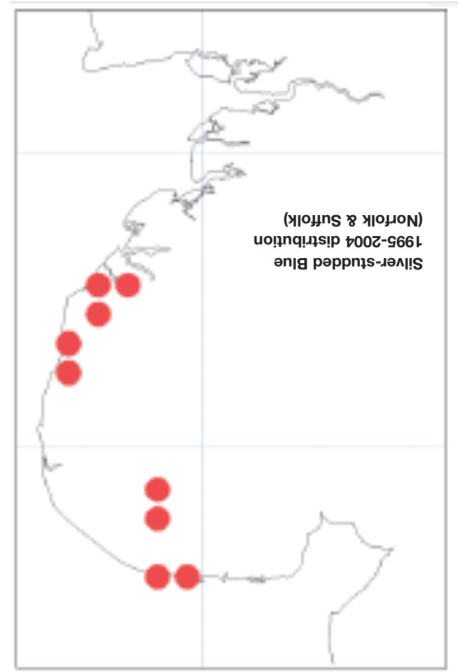


The UK government has listed Silver-studded Blue as a UK Biodiversity Priority species.

Lowland Heath is one of the East of England's most important landscapes and is valuable to both people and wildlife. However, the heathland landscape has declined and fragmented and the Silver-studded Blue is unable to move between small, isolated heather blocks and the populations are vulnerable to extinction.

Future

Butterfly Conservation in collaboration with other agencies, including English Nature, RSPB and The Wildlife Trusts work to maintain existing populations and manage adjacent heathland to enable natural re-colonisation. There are proposals to continue to look for opportunities to extend the area of suitable habitat in Norfolk and Suffolk and to provide a network of sites for the butterfly. It is often used as a flagship species for heathland restoration projects.



Where can you see Silver-studded Blue in the East of England?

Suffolk

Silver-studded Blue currently only exists at 4 sites in Norfolk. It has not been seen in the Norfolk and Suffolk Brecks since the 1940's. This site near the north Norfolk coast is now one of the best places to see Silver-studded Blue in Norfolk. The main entrance is west off the Weybourne to Bodham Road near Sheringham. Park beside reception at grid reference TG 110415. Maps to show butterfly areas on the heath are available from reception but they are usually seen in the vicinity of the level crossing and beside the railway line. Contact Jenny Lumb at Kelling Heath Holiday Park on 01263 589912.

Norfolk

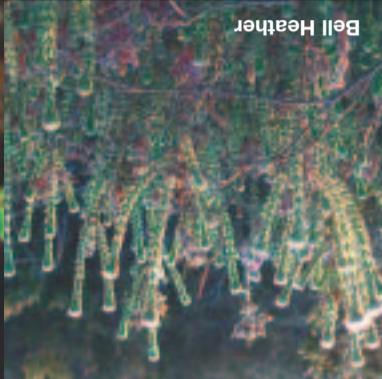
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Weston Common

This is a strong colony to be found in gently sloping heathland. The common is owned by the people of the village and is maintained with help from Suffolk Wildlife Trust. There is limited parking at the edge of the heath at TM443687 (landranger map 156) and in the village which is only 5 minutes away.

The Silver-studded Blue is a typical butterfly of lowland heath fluttering and shimmering over purple heather and yellow gorse through the hottest days of high summer. The Silver-studded Blue is a special and fascinating species known to have a close relationship with ants at all stages of its lifecycle. The size of colonies is very variable and ranges from less than 100 to several 1000 adults but most colonies are small.

conserving Silver-studded Blues in Eastern England



silver-studded blues in eastern england



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Produced by Butterfly Conservation with support from Awards for All, Heritage Lottery Fund www.awardsforall.org.uk

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Photographs by Paul Pugh and Bernard Watts.

Registered in England No 2206468 Registered Charity No 254937
Designed and produced by cellcreative 01942 681648

Butterfly Conservation needs your help if we are to **protect them** in Eastern England

c1490 February 2006



Common Blue male

Common Blue female

Common Blue pair

know your blues

identification tips



Common Blue male



Silver-studded Blue showing silver-studs on underside

Silver-studded Blue female

Silver-studded Blue male

Initially the differences may seem small and confusing but with experience it soon becomes second nature to notice them. The male Silver-studded Blue bears a resemblance to the Common Blue and the Holly Blue. The latter has a quite different pastel blue underside with small black spots and flecks.

The Silver-studded Blue has a row of black dots just within the margin of the upper-hindwing, which the Common Blue does not have, and usually the Silver-studded Blue has a broader black border to the uppersides of the wings. The ground-colour of the female upperside is brownish, and it may be confused with a brown form of the female Common Blue. On the underside of both sexes, the black marks near the margin of the hindwing have a variable number of brilliant blue scales in them. If seen these 'silver studs' make identification certain. Another distinguishing feature separating either sex of the Silver-studded Blue from the Common Blue is the absence in the former species of two black spots near the base of the under-forewing.

What can you do to help us?

Site Safeguard

Look out for development proposals at heathland sites. Where development cannot be prevented appropriate mitigation measures such as planning conditions may help. The aim should be to retain key habitat already occupied by the butterfly and compensate for losses by creating new areas within colonising distance of existing colonies.

Survey and Monitoring

Monitoring work is vital to help assess the success of management work. Ideally adult counts should be made once a week in good weather conditions throughout the flight period but annual one off counts are also very useful. Training days and guided walks are organised by Butterfly Conservation in Norfolk and Suffolk. Contact Butterfly Conservation for further details.

Habitat Conservation

There are several opportunities to join conservation groups to help with practical conservation work on heathland in Norfolk and Suffolk. Butterfly Conservation can provide more information.

Join Butterfly Conservation

If you are not already a member of Butterfly Conservation, why not join us? Join Butterfly Conservation and you'll receive our wonderful 'Butterfly' magazine 3 times a year, which is packed full of fascinating articles and stunning photographs. You will automatically become a member of your regional branch who organise a range of field trips, talks and events. There are branches in Norfolk and Suffolk.

Further information on the Silver-studded Blue can be found at www.butterfly-conservation.org

How Silver-studded Blues live

The Silver-studded blue is usually single-brooded, flying from late June to early August. The adults live about 4 - 5 days. They are poor explorers and hardly ever venture more than 20 metres from their birth place where they mate, feed and lay eggs. They have a slow flight seldom more than a few centimetres above the heather. In the afternoon adults congregate to roost on heather, sheltered bushes and grass tussocks. Females lay their eggs in places frequented by ants, usually on heather only 10cms above the ground, but also on gorse, bracken or even stones. The eggs remain out over winter, to hatch in March or April, the larvae generally feeding on fresh heather.

Living with ants

Silver-studded Blues require the presence of one of two species of black ant which tends the butterflies' caterpillars, in order to take a sugary secretion produced from a special gland in the caterpillars' bodies. To ensure they have a good supply, the ants take the caterpillar into the nest chamber where they are protected from predators. The chrysalis remains underground in the ants nest until the adult emerges.

What Silver-studded Blues need ?

Bell Heather *Erica cinerea*, is chosen in preference to the more widespread Ling *Calluna vulgaris*, and only the early successional stage, "pioneer" heather provides the right habitat. Pioneer heather is short lived so all sites become less suitable for the butterfly as the heather ages. Ageing heathland is characterised by dense stands of heather which has a closing canopy and allows little light to penetrate to the ground below. Heather takes 40 years to mature typically involving 3 stages; solitary pioneer plants, small clumps of young heather, mature heather and thinning woody degenerate plants. It is the first stage of pioneer heathland where the sun bakes the ground which is vital for the Silver-studded Blue.

Ant nests should occur every 2-3 square metres so caterpillars can be easily discovered. If the ants disappear the butterfly will disappear too.

Re-introductions

Perilously low numbers in Norfolk and Suffolk led to a number of introductions to restore populations in conjunction with habitat management. Translocations have been successfully accomplished to re-start lost colonies for example at Buxton Heath in Norfolk and Aldringham Walks in Suffolk.

How to manage sites for Silver-studded Blues on Heathland

Habitat management for the silver-studded blue involves maintaining and creating bare soil and short vegetation with a high proportion of bell heather, the favoured food plant of caterpillars and adults, to produce a warm microclimate for the ants and caterpillars. It is important to remember that heathland supports a wealth of other wildlife and that their needs have to be considered as well.

Cutting

Cutting and mowing can maintain areas for Silver-studded Blue in the absence of grazing by keeping vegetation short and exposing areas of open ground. Forage harvesting of mature heather areas can produce suitable habitat if the debris is removed.

In Norfolk and Suffolk Silver-studded Blue eggs have been found on Bracken but dense areas of Bracken may need to be cleared to create good conditions for the butterfly.

below **Ideal habitat with a mosaic of short and taller heathland vegetation**

Burning

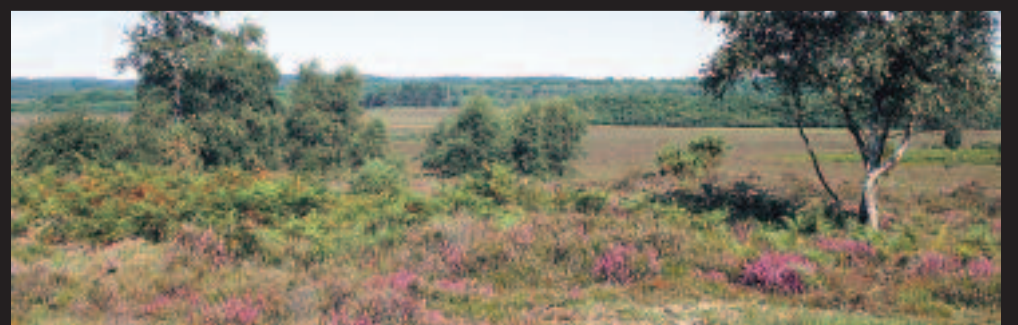
Accidental and intentional fires can create ideal conditions for Silver-studded Blues after 2-5 years and was one of the traditional ways of managing heathland in Suffolk. Periodic, patchy/small scale burning can be beneficial but needs to be considered carefully because of the risks involved and can be disastrous for some wildlife.

Grazing

Grazing can prolong suitable conditions on heathland and the presence of large herbivores may also help by providing some local soil disturbance. Re-instating grazing alone, however, is unlikely to be sufficient to restore conditions for Silver-studded Blue.

Ground Disturbance

Disturbance of the ground, especially if the topsoil is removed, can produce suitable conditions and may be useful when restoring former sites. However, care should be taken not to damage other interests on the site and small-scale trials should be conducted before applying to a wider area. Rotovation of sandy soil will re-create suitable conditions but may not be sufficient on more nutrient-rich soils. Stripping top soil may be a valuable tool in the restoration of former sites after removal of scrub and bracken.



Butterfly Conservation

Saving butterflies, moths and their habitats