



Butterfly
Conservation

breckland moths

a guide

Places to visit to see moths in the Brecks

King's Forest The wide rides maintained by Forest Enterprise support a good assemblage of moths particularly in the Wordwell area.

Maidscross Hill A local nature reserve near Lakenheath is managed by Forest Heath District Council. Access to the car park from Cemetery Road in Lakenheath.

Cavenham Heath National Nature Reserve Rabbit-cropped heath managed by English Nature at Tuddenham near Mildenhall.

Barnhamcross Common This site is an important example of Breckland grass heath with both acidic grassland and more calcareous grasslands. Access from A134 just south of Thetford.

Rampart Field, Icklingham This site can be found off the A1101, 5 miles north of Bury St Edmunds and 1 mile south of Icklingham.

Cranwich Heath A Forest Enterprise site where restoration from pine plantation is underway.

Knettishall Heath Country Park Suffolk County Council has waymarked trails through heather and woodland. 6 miles east of Thetford and signposted from the A1066, B1088 in Euston village and B1111 in Barningham.

c1504 April 2006



Butterfly
Conservation

Saving butterflies, moths and their habitats



JACK PATSTON
CHARITABLE TRUST

Contact Sharon Hearle c/o Busy Bee 21 High Street Newmarket Suffolk CB8 8LX
shearle@butterfly-conservation.org Tel: 01638 731648

Head Office Manor Yard East Lulworth Wareham Dorset BH20 5QP
info@butterfly-conservation.org Tel: 0870 774 4309 www.butterfly-conservation.org

Find out more about the natural and cultural heritage of the Breckland with leaflets and booklets published by the Brecks Countryside Project. Contact local tourist information centres or visit the Brecks website www.brecks.org
Text edited by Sharon Hearle.
Photographs by Rob Dyke, Liz Goodyear, Dave Green, Sharon Hearle, Tony Prichard, Paul Pugh and Neil Sherman.

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

The Breckland area of Norfolk and Suffolk is home to over a **1000 different species** of moths including some that are not found anywhere else in the UK



Grey Carpet



Basil Thyme Case-bearer



Marbled Clover



Tawny Wave



Lunar Yellow Underwing

breckland habitats

Breckland is a unique area of countryside supporting a range of habitats across Norfolk and Suffolk in the heart of Eastern England, which, until the planting of shelter belts and coverts in the 18th century, had been described as 'an almost treeless waste'. Major tree planting took place from the 1920's onwards to create the vast area of commercial conifer plantations now known as Thetford Forest.



Today's heaths are only small remnants of the vast tracts that once existed. In many areas, as a result of the ice age, both acid heath and chalk grassland can be found in close proximity, adding to the special interest. Breckland is famous for its dry heaths that support a characteristic wildlife, with rare plants and scarce birds, such as Stone Curlew and Woodlark, and many unusual invertebrates, including a wide variety of scarce and threatened moths. Rabbits have a vital role in helping to maintain short turf and disturbed ground.

Moths play an important role in Breckland ecosystems with many birds and small mammals relying on moth caterpillars for food. Some birds catch moths on the wing, such as the Hobby and Nightjar, and moths make up a large part of the diet for bats. Moths are an important part of our natural heritage and their study has been popular for over 300 years. This leaflet covers a few species of moth that reflect the special nature of the Breckland, and several of these are confined to this area alone.

Marbled Clover

This beautiful moth, which has particularly attractive hindwings with a marbled pattern of black and cream, flies rapidly in sunshine in June and July darting from place to place, visiting flowers of plants such as Viper's-bugloss, Kidney Vetch and clovers. It can be seen at many sites in Breckland, especially the wide flowery rides of King's Forest and Cranwich Heath.

Stronghold in Breckland

Tawny Wave

Also occurring along parts of the Suffolk coast, Breckland is, perhaps, the breeding stronghold for this dainty moth where it is found along forest rides and open heathland sites. With two generations per year, this moth flies between mid June and mid July and again from mid August to early September, when it can be disturbed from its resting place by day, although it more usually flies at night.

Only found in Breckland

Grey Carpet

This aptly named moth is confined as a breeding species in the British Isles to Breckland. It is closely associated with its caterpillar food-plant Flixweed which grows on recently turned calcareous soils. The moth can occasionally be disturbed by day from late May to early July and seen along forest rides in the King's Forest and a few other sites.

Basil Thyme Case-bearer

The Basil Thyme Case-bearer is restricted to the Breckland of Norfolk and Suffolk. The moth is closely linked to its food-plant, Basil Thyme, which is irregular in appearance and subject to rapid population change which itself has a consequence for the moth. Frequent soil disturbance has been shown to benefit the food-plant, and the moth, despite its small size, appears to be surprisingly mobile.

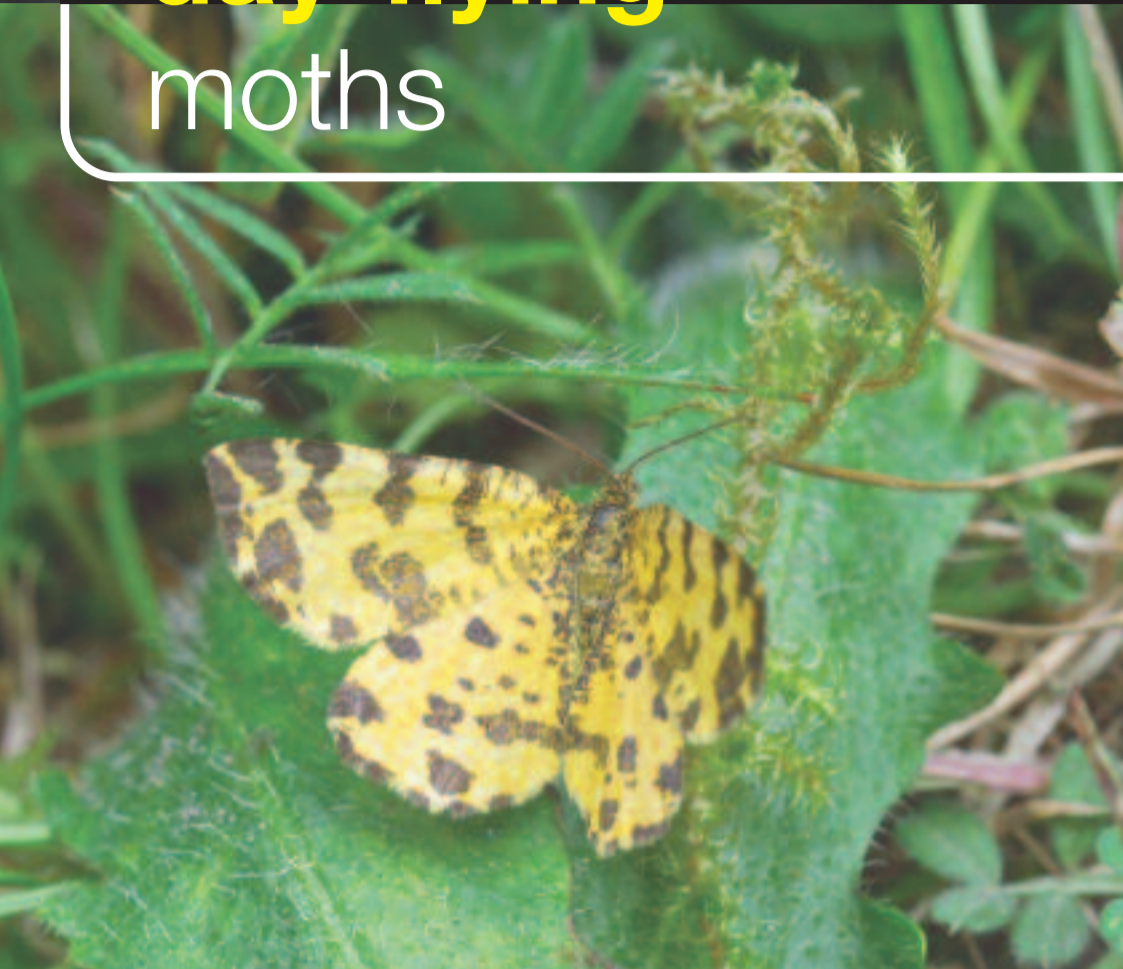
Lunar Yellow Underwing

Recent survey work has identified that this scarce moth is found throughout Breckland on open grasslands or heath where fine-leaved grasses grow in well-drained soils. This species used to be more widespread nationally, however the Brecklands and Suffolk Sandlings area of East Anglia are now national strongholds of the Lunar Yellow Underwing. Studies have concluded that the moth disappears if its open grasslands are close mown or heavily grazed by sheep or cattle, particularly during the period November to March. At this time the caterpillars are present and these need short tussocks of grass to remain over winter. This beautiful moth will also be lost if grassland sites are neglected and covered in shrubs or planted with trees.



day-flying moths

Although the majority of moths are nocturnal, there are a large number of day-flying species and Breckland is a great area to see these moths in abundance. Many of the day-flying moths featured occur in suitable habitat outside Breckland too.



The **Speckled Yellow** is found along wide forest rides in May and June particularly where its caterpillar food-plant, Wood Sage grows.



The **Cream-spot Tiger** is active at night but can often be found resting by day.



The **Forester** is an unmistakable metallic green moth often seen sitting on purple flowers in June and July.



The **Mother Shipton** is named for, and readily identified by the shape of a witches face on each forewing. However, it can occasionally be mistaken for the Grizzled Skipper butterfly. Found from May to early July.



The **Latticed Heath** is a common day-flying moth of open grassy areas during May and June, though can be seen until September.



Caterpillars of moths are also very varied and many are very colourful. In some cases it is easier to find the caterpillar of a moth than the adult.

Fox Moth s

This large hairy caterpillar, up to 70mm long, can be seen in open grassland in late summer. It is covered in long dark brown hairs when fully grown, younger caterpillars have short hairs and conspicuous yellow bands. It feeds on a variety of different plants including heather and bramble.

True Lover's Knot s

These attractive caterpillars feed on heather in late autumn and early spring but they are often only seen at dusk or after dark by torchlight.

Broad-bordered Bee Hawk-moth s

With transparent wing patches and a furry body the Broad-bordered Bee Hawk-moth resembles a large bumblebee. However, the moth is more agile, flies straighter and hovers when nectaring, whilst a bee lands on flowers to feed.

The moth may be seen on sunny days in May and June at flowers such as Bugle, Ground Ivy or Honeysuckle. The caterpillar feeds on Honeysuckle and leaves distinctive feeding signs.

Breckland moths in decline

Lowland heath is one of the most threatened landscapes in Europe and is a valuable habitat for many Breckland moths. However, the heathland landscape has declined and fragmented threatening the long term survival of many species. There have been two significant losses to the Breckland moth fauna over the last 50 years. These are the Spotted Sulphur (last seen in 1960) and the Viper's Bugloss moth (last recorded in 1968), neither species occurs elsewhere in the country, and both are now lost to these shores. Other moths are known to have suffered a significant decline in numbers., for example the Four-spotted has not been seen in Breckland since the 1990's and may now have gone. Several Breckland moths have been listed on the UK Biodiversity Action Plan as Priority species in need of urgent conservation action.

Habitat restoration

Heaths are being re-created by 'Tomorrows Heathland Heritage' with funding from Heritage Lottery Fund, by a partnership including Forest Enterprise, English Nature, Norfolk Wildlife Trust, local graziers and others. On former forestry land at Cranwich, East Harling, Hockwold Heath and Warren Hills, conifers have been removed and sheep introduced to help grassland to re-establish and create new heathland habitats. Heathlands are often managed for multiple, and sometimes conflicting wildlife interests, but the larger the area of heathland the more successful this will be.

What can you do to help

Field observations are always welcome and can greatly add to our knowledge of moths in Breckland. Take part in an evening moth recording session organised by one of the local groups (see below).

Help us to make a difference by joining Butterfly Conservation.

Butterfly Conservation's website www.butterfly-conservation.org has many more details about moths and butterflies as well as a set of colour factsheets for UK Biodiversity Action Plan Priority moths including several moths that can be found in Breckland.

Further reading

Waring, P., Townsend, M. & Lewington, R. 2003 **Field Guide to the Moths of Great Britain and Ireland.** British Wildlife Publishing, Hook.

Skinner, B. 1998 **The Colour Identification Guide to Moths of the British Isles.** Viking, Harmondsworth. 2nd edition.

Porter, J. 1997 **The Colour Identification Guide to Caterpillars of the British Isles.** Viking, Harmondsworth.



For further information about moths and moth recording in Breckland:

Norfolk Moth Survey <http://website.lineone.net/%7Edavid.hipperson/index.htm>

Suffolk Moth Group www.suffolkmoths.org.uk This web site has an online guide to the larger moths of Suffolk.