

An Allotmenteer's Guide to

Butterflies and Moths

This PDF, which is a continuation of the leaflet of the same name, as produced by Brighton and Hove Allotment Federation provides you with useful tips on how to attract and support Butterflies and Moths. Allotments are an important habitat, which have great potential to support many of our species. Our Sussex branch of Butterfly Conservation has a plot at Roedale Valley Allotment and works closely with tenants, we monitor the species that use the site in the North of Brighton. We hope other Allotments will follow us in becoming greener by creating wildlife friendly habitats.

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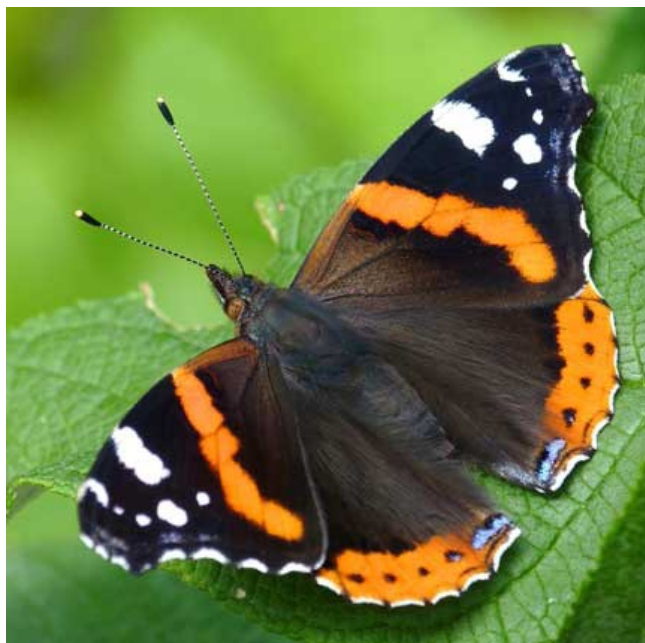
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Photos shown aid you in identification. To access further information and photos of all Butterflies and Moth species covered on this page.

Top 10 Butterflies (to look out for)

Butterflies are shown alongside their caterpillar and subsequent caterpillar foodplants, these support their longest lived stage in the butterfly's life cycle. To prevent losses and to ensure the longevity of populations, all plants should remain in situ, as the same plants may be used in consecutive years. Field Studies Council fold-out portable identification charts are available to buy, ideal for use when you're on the allotment, "[Butterflies of Britain](#)" and "[Caterpillars of butterflies of Britain and Ireland](#)"

Red Admiral:



Red Admiral
Photo: Neil Hulme



Red Admiral The caterpillar has various colour forms, a pale form is pictured. They live within tents formed from the nettle leaves.
Photo: Vince Massimo

Peacock:



Peacock
Photo: Neil Hulme



Peacock Young caterpillars form communal webs, maturing black caterpillars later disperse to new plants, constructing new webs.
Photo: Vince Massimo

Comma:



Comma
Photo: Neil Hulme



Comma When young the caterpillar feeds on the underside of leaves, as it mature it will become visible feeding on the upperside.
Photo: Vince Massimo

Small Tortoiseshell:



Small Tortoiseshell
Photo: Neil Hulme



Small Tortoiseshell Young caterpillars form communal webs, later dispersing to new plants, constructing new webs.
Photo: Bob Eade

Foodplants:



Hop (including Golden): fed on by the caterpillars of **Red Admiral, Peacock & Comma**

Wants sun, train shoots to climb up string. In early winter cut down to ground level in preparation for the following year. New plants should be established using mulch, compost or manure.
Photo: Jamie Burston



Common Nettle: fed on by the caterpillars of **Red Admiral, Peacock, Comma & Small Tortoiseshell**

Needs to be in a position of full sun, which is growing where sheltered from the wind. Ladybirds, a great ally which tackles pests, also have a preference for egg laying on Common Nettle. Propagate from cuttings. Take healthy new growth.
Photo: Jamie Burston

European Swallowtail (*Papilio machaon* ssp. *gorganus*):



European Swallowtail
Photo: Neil Hulme



European Swallowtail The young caterpillar appears black with a white marking, closely resembling a bird dropping. Later developing a bold strip and spot pattern.
Photo: Michael Blencowe

Foodplants:



Wild Fennel: Low maintenance. Don't plant near to Coriander, neither will grow well. Good repellent for Whitefly and attracts allies to tackle large numbers of aphids. Caterpillars need the leaves. Propagate from seeds.
Photo: Jamie Burston



Wild Carrot: Low maintenance biennial, flowers produced after the second year of growth. Deadhead the flowers once gone to seed, which resembles a bird nest. Selectively keep seeds for further growth.
Photo: Colin Knight

Orange-tip:



Orange-tip
Photo: Neil Hulme



Orange-tip Feeding mainly on the seed pods, the caterpillars blend in when at rest, demonstrating it's great camouflage.
Photo: Vince Massimo

Foodplant:



Garlic Mustard: Grows best in shade and damp situations, also sheltered amongst shrubs. Propagate from seeds.
Photo: Colin Knight

Brimstone:



Brimstone
Photo: Dan Danahar



Brimstone Caterpillar openly rests on the upperside of leaves, evidence of feeding reveals their presence.
Photo: Vince Massimo

Foodplant:



Purging Buckthorn: Provides sanctuary to a variety of wildlife. Minimise pruning unless needed, such as with height regulations. Only prune during early spring or early winter. Suitable for a wildlife friendly hedge.
Photo: Simon Melville

Common Blue:



Common Blue
Photo: Neil Hulme



Common Blue A secretive caterpillar, feeding on the underside of leaves, evidence of feeding may go unnoticed.
Photo: Vince Massimo

Foodplant:



Bird's-foot Trefoil: May be grown in hanging baskets. Needs warmth so don't allow to be shaded out. Propagate cuttings in late spring and water well to encourage root development.
Photo: Jamie Burston

Holly Blue:



Holly Blue
Photo: Neil Hulme



Holly Blue Feeds on the developing flower buds of Ivy, leaving tell tale holes. Green colour for camouflage, some may show a varying degree of pink.
Photo: Neil Hulme

Foodplant:



Ivy: If pruning is needed it should not be cut back before mid October, to allow **Holly Blue** caterpillars to pupate in safety near the ground. Propagate by hardwood cutting.
Photo: Jamie Burston

Long-tailed Blue:



Long-tailed Blue
Photo: Neil Hulme



Long-tailed Blue The young caterpillar eats hidden within the flowers and consequently, as it matures, on and within the seedpods. The full grown caterpillar displays a pinkish hue, becoming quite mobile and stops eating prior to settling down to pupate.
Photo: Mark Colvin

Foodplant:



Broad-leaved Everlasting Pea (*Lathyrus latifolius*): In autumn, once died off, cut back to ground level allowing new growth to rejuvenate the following year. Climber, ideal for coverage over frames, fencing, sheds or slopes. Plant in sunny situations or partial shade. Propagate from seed.
Photo: Jamie Burston

Migrant Species

The **Painted Lady** butterfly and Humming-bird Hawk-moth arrive from Africa and southern Europe most years. Flowering Globe Artichoke is great plant for pollinating insects, an impressive and large member of the thistle family, this family of plants supports the **Painted Lady**. The Humming-bird Hawk-moth is a day flying moth which hovers while collecting nectar from flowers, egg laying whilst it's over here, planting Lady's Bedstraw or Hedge Bedstraw will support this species. Please report your sightings to "Migrant watch"™ by clicking on the following link - [Migrant Watch](#)

Painted Lady:



Photo: Jamie Burston

Humming-bird Hawk-moth:



Photo: Bob Eade

Top 5 Moths (to look out for)

The most frequently observed life cycle stage has been illustrated, whether adult or caterpillar.

Moths will feed on the same plants as butterflies, however night-scented plants are found to be particularly alluring. Their night-time perfume evolved to attract moths, in doing so they pollinate their flowers. These summer flowering species do just that, Jasmine, Honeysuckle, Evening Primrose, Sweet Rocket and Night-scented Stock.

Field Studies Council fold-out portable identification charts are also available to buy, covering "**Day-flying moths**" and "**Hawkmoths of the British Isles**"

Garden Tiger:



Garden Tiger caterpillar: can be seen from August to late June the following year. Given the nickname "Wolly Bear" for its bountiful hairs. When fully grown it may be seen rapidly moving across bare ground, at times it may bask in sunshine. Not to be touched.

Photo: Richard Roebuck

Mullein:



Mullein caterpillar: Bold black and yellow markings against a white body, openly feeds on leaves. Caterpillars seen from late May to the end of July.

Photo: Jamie Burston

Small Purple and Gold:



Small Purple and Gold A small sized moth. Flies both during the day and at night.
Photo: Colin Knight

Eyed Hawk-moth:



Eyed Hawk-moth caterpillar: seen from June to September. Typically seen resting upside down, with a pointed tip at it's rear end, adorning a blue hue. The green caterpillar can vary in colouration, displaying either a blue (pictured) or yellow hue.
Photo: Julian Dowding

Raspberry Clearwing:



Raspberry Clearwing: A small day flying moth, adults may be found resting on Raspberries and nearby plants. Seen mainly from July to early August.
Photo: Keith Alexander

How To Help

There are two ways in which our Butterfly and Moth species use plants; for nectar, which gives them energy, and as a nursery for their eggs and caterpillars. Designating a small area of your plot for the caterpillar foodplants and nectar sources listed and shown on this page will help attract and sustain populations, and will mean allotments will become havens for these important creatures.

It doesn't have to take up much space, Window Boxes and Hanging Baskets are great places. Other options would be to use large pots, around 30cm X 30cm or larger is ideal. You may like to designate an area for wildflowers on your plot, alternatively use the edge of the beds to create a insect friendly border. Planting the same types of plants in blocks together will increase it's lure factor. Unless stated otherwise, plants will want to grow in sunny spots, where protected from the potential of chilling winds.

Dead-heading flowers when needed will prolong flowering, watering your plants well will keep them healthy, allowing them to produce far more nectar, for longer. This being especially beneficial for butterflies come autumn.

Herbicides & Pesticides

Using herbicides and pesticides will kill Ladybirds, ground beetles and spiders, which are the very insects you want to keep as they naturally target the pests! They could also have a detrimental impact on our butterflies, moths and other pollinating insects. East Sussex County Council have banned all neonics on Council owned land. (2015)

Top 10 Nectar Sources



Buddleia Buzz (Red and Purple Varieties): dead-head flowers, beneficial for autumn butterflies, prune well in spring. Attracts a wide variety of species. If in the vicinity it may attract **European Swallowtail**.
Photo: Jamie Burston



Erysimum 'Bowles's Mauve' (Wallflower): full sun is essential for this species, evergreen foliage, long flowering. May be propagated by softwood cuttings in spring or early summer as short lived. Enjoyed by **Orange-tip**, **Red Admiral**, **Small Tortoiseshell** and **Painted Lady** amongst others.
Photo: Alan Buckingham



Verbena bonariensis: a tall growing plant ideal for borders, prune after the flowering period. Regular visitors may be **Red Admiral**, **Comma** and **Large White**.
Photo: Howard Carless



Wild Marjoram: a widely enjoyed plant, regularly visited by **Common Blue**, **Gatekeeper** and **Meadow Brown**. Also known as **Oregano**, it has aromatic foliage.
Photo: Jamie Burston



Red Valerian: good drought resistance, needs full sun to flower well. Deadheading flowers will produce secondary bloom, after which cut back to help overwinter. Short lived plant, divide by root every one to three years in spring or autumn. Visitors may be the **Painted Lady**, **Small Tortoiseshell** and Hummingbird Hawk-moth.
Photo: Andrew Steele



Field Scabious: used by migrant species like the **Painted Lady** and Clouded Yellow. Enjoyed by downland Marbled White, Chalk Hill Blue and Skippers. Deadheading will encourage further flowering, to keep mature plants healthy propagate in March-April by root division. May be grown in pots.
Photo: Jamie Burston



Lavender: if a lack of space, hardier English varieties do well in large pots once established, protect during winter. Prune every year to avoid a build up of old wood. Attracts Whites, Gatekeeper, **Common Blue** and Skipper species.
Photo: Jamie Burston



Hyssop: may be grown in large pots to accommodate developing root systems. Grow in areas with full sun and well draining soils. Keep away from radishes, neither will grow well. Liked by the **Painted Lady**, **Small Tortoiseshell** and **Peacock**.
Photo: Alan Buckingham



Greater Knapweed: deadhead flowers to avoid self-seeding. No pruning required, low maintenance. Attracts a wide variety of species including **Painted Lady** and **Common Blue**. Given a location near the downs, you might see Marbled White.
Photo: Jamie Burston



Privet: refrain from cutting during the flowering period. Prune early winter or early spring. Used by a variety of species, most notably the White-letter Hairstreak.
Photo: Monika Heinrichs

Where the option of seeds is available, the following are most reliable - Johnsons: Sarah Raven's (Brilliant for Bees and Butterflies) and (Cut Flowers and Gorgeous Gardens) range. Mr Fothergill's (RSPB Give nature a home) range. Thompson & Morgan/ Kew Mix & Match (Wild Flower Patch) range.

Important Seasonal Plants

Spring - Willow/Salix Catkins, Blackthorn Flowers, Dandelion, Primrose, Honesty and Hawthorn.

Autumn - Sedum Spectabile (Ice Plant), Aster (Michaelmas Daisies), Ivy, Hemp Agrimony, 'Sungold' Buddleia, Blackberries & fallen fruit such as apples.

Winter - Ivy is used as a refuge by hibernating butterflies.

Grass, to cut or not to cut?

Some butterflies which including 'Brown' and 'Skipper' species lay their eggs on a variety of grasses, grassland is an important habitat which allows the caterpillars of these species to safely overwinter. It's advised if grass is to be cut, only cut parts in rotation each year, not before late September. At the very least allow tall grass to grow beneath hedges, shrubs and trees. Additional benefits of tall grass may be the increase in the number of natural allies, which helps against pests.

Cabbage White?

Small White:



Female Small White
Photo: Vince Massimo



Small White caterpillar
Photo: Jamie Burston

Large White:



Female Large White
Photo: Vince Massimo



Large White caterpillar
Photo: Jamie Burston

Foodplant:



Nasturtium low maintenance. Lures various pests like aphids away from your crops. Propagate by seed or cuttings from favoured varieties.

Photo: Jamie Burston

The Difference?

Cabbage White actually refers to two species, the **Small White** and **Large White** butterflies. The females of the two species as pictured above resemble each other closely, to separate them attention should be focused on examining the wing tips. **Large Whites** black wing tips are extended and far more bold, carried over into the male. Compared **Small Whites** have reduced markings, appearing more grey in colouration, again carried over into the male. Both the females feature two pairs of spots, seen on open wings. **Large White** males as viewed with wings open have no sets of spot, adorning only black wing tips. Whilst male **Small Whites** have one set of spots, the boldness of the spots can vary greatly, in some cases it's almost unnoticeable.

Importantly **Small Whites** only lay their eggs singly, causing less of an impact in comparison to the **Large White**, which lays it's eggs together in batches. A species called Green-veined White may be confused with these two species, as the name suggests this species has green outlined veins, viewed on the underside when wings closed. This species is harmless to your vegetables.

Why do Small Whites and Large Whites choose members of the brassica family?

The simple answer is because these plants contain mustard-oil glycosides.

When the caterpillars eat from these foodplants the toxic mustard oil glycosides get stored into their bodies as they eat, as a direct result it dictates their colouration, this then acts as a warning signal (aposematic) advertising their distastefulness to predators such as birds.

Furthermore mustard-oil glycosides dictates their eating behaviour, as a type of stimuli it naturally produces the biting responses associated with eating, aiding survival rates, focusing on the plants which contain the appropriate nutrients to aid caterpillar development.

Deterrent

These species will lay their eggs on Nasturtiums and Garlic Mustard. Planting them around your brassicas will lure them away. You can directly protect your plants by transferring any unwanted guests to these decoy plants and they'll happily continue feeding.

Another option to protect the Brassicas you do want to grow, maybe to plant alternative species including members of the brassica family which you don't intend to harvest, plants like this are sometimes called sacrificial plants because they're prepared to suffer in order to protect their companions. The following are known to be used by either **Small White** or **Large White** butterflies, Cabbage, Cauliflower, Curly Kale, Brussels Sprouts, Horseradish (Ally to Potatoes), Radish (Ally: Nasturtium, Enemy: Hyssop), Turnip, Swede, Rapeseed, Kohlrabi (Enemy: Tomato), Broccoli, Calabrese and Sweet Rocket.

Share your Butterfly and Moth sightings

We would greatly appreciate sightings from your allotment, share what species you see, even send us some photos via email. Please include with your email, the location and allotment name, your first and last name, the species you see, how many and the date of your sightings. If you've taken photos of a species you can't identify, we will help to identify once posted.

From allotment sites within Sussex, please use the following guidelines to submit your sightings: **Submission Guidelines**. They will be available to view here: **Sussex Butterflies - Sightings**

If you are a visitor to this web page from outside Sussex, you can find your local Butterfly Conservation branch here: **Butterfly Conservation - in your area**

Roedale Valley Allotments

Our flagship site produced a total of twenty-one different butterfly species during the first half year of surveying, most notably was the sighting of a White-letter Hairstreak seen flying around the canopy of an Elm tree, it's caterpillar foodplant. Perhaps not surprising as Brighton holds the national Elm collection, but the habitat and it's status for priority conservation is significant. The development of Sussex Butterfly Conservations plot is ongoing and species will continue to visit the site. To keep up to date with what's being seen and going on at Roedale Valley Allotments you can visit the created Flickr page, illustrating the work and range of wildlife you can find on an allotment habitat - [flickr.com/photos/roedalevalleyallotments](https://www.flickr.com/photos/roedalevalleyallotments)

Content approved by:

