

Brimstones & Buckthorn Project

Butterfly Conservation want to increase the spread of Brimstone butterflies across Suffolk. To do this we are offering the butterfly's foodplant (a small bush) to people and groups who are interested in helping us to increase the population of this beautiful butterfly by planting this bush, the Buckthorn.

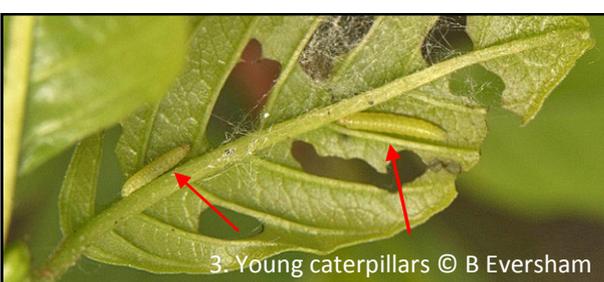
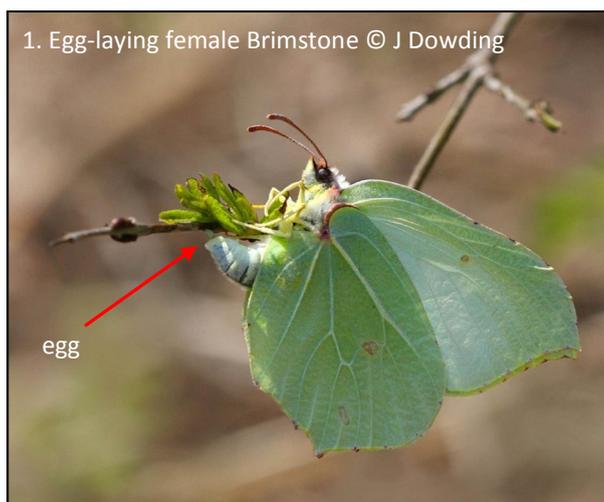
Brimstones have an amazing ability to find the bush due to their incredible sense of smell, so any bushes planted should soon be found by female Brimstones. If you would like to help us by growing a small bush (or bushes), please contact us and we will provide you with free bushes for planting this winter. We have 500 bushes to donate, so this will be done on a first come first served basis. In return, we ask that you look after your bushes and let us know how they're doing and when you first get visited by Brimstone butterflies. Any plantings and sightings can then be recorded on an interactive map on our website: www.suffolkbutterflies.org.uk

Brimstones information and life cycle

Brimstones are the longest lived of all UK butterflies, living for about a year as adults, hibernating through the winter months and waking the following spring. The bright yellow males are usually the first to be seen, sometimes in February. Females emerge slightly later. After hibernating, they seek out flowers for nectar and the males find females to mate with them.

Eggs and egg-laying In spring and summer, from late April - May onwards, look out for a large greenish white butterfly fluttering about your Buckthorn (see photo 1. below right). If it stops on the bush for a few seconds, curling its body around, then it's a female Brimstone laying an egg. She will lay anything from 1-100 eggs, and repeats the procedure for each egg. Eggs are laid on either the upper or under side of the leaf and very occasionally upon a small stem. When freshly laid, eggs are a pale green colour, but after a day or two, they turn yellow. They look a bit like a miniscule version of an old fashioned milk bottle (see photo 2).

Caterpillars The eggs hatch into caterpillars after about 10 -14 days, depending on the weather and temperature. After hatching, the young caterpillars usually take up a position on the underside of the leaf alongside a leaf vein (see photo 3). After a few days, they spin a white silk pad on the midrib of the upper-side of the leaf, venturing out to eat other parts of the leaf, and then return to their silk pads to rest (photo 4).



Chrysalis After about 6 weeks, and having shed their skin several times as they grow, the caterpillars wander off to find some suitable twig, stem or another leaf upon which to form a chrysalis. There it spins another silk pad to hold onto and also a silk girdle around its middle, before shedding its skin for the last time and turning into a chrysalis. It will remain in its chrysalis for roughly 2-3 weeks before hatching into a butterfly.

Adult butterfly The adults can be seen throughout summer and autumn but in winter hibernate among leaves, such as ivy or bramble (perfectly camouflaged) until they emerge early the next spring, when warmed by sunshine. Male Brimstones are a sulphur-yellow colour and it is believed that this colouration gives rise to the English word for butterfly, i.e., butter - coloured fly! Females are a very pale yellow - green, almost white and because of this, they can be mistaken for 'Cabbage Whites'. Both males and females like to drink nectar from all sorts of flowers including Bluebell, Dandelion, Lavender, Scabious, Red Deadnettle, Aubrietia, Primrose, and Jacob's ladder.

Buckthorn

2 species of Buckthorns are native to Britain: Alder Buckthorn and Common Buckthorn. These two species are the only caterpillar food plants for Brimstones. The two species are different in appearance and prefer slightly different soils but in gardens or cultivated areas, both do equally well. The principal differences are outlined in the table below right.

Buckthorn planting and preparation.

- 1. Choose a warm sunny site** *if possible*. Brimstones lay more eggs on bushes in full sun but will use them in the shade too.
- 2. Dig hole!** This should be a little deeper than the length of the roots, then add some well-rotted compost to the base of the hole to provide nutrients in the early stages of growth.
- 3. Offer up the bush** to the hole and ensure that the base of the stem (where the roots join) is level with the top of the hole and centred. Adjust as necessary, then gently backfill the hole and firm down with your foot.
- 4. Prune the top 1/3** of your bush with clean secateurs and if grazing animals are near, put a tree guard around the Buckthorn.

Aftercare - early years. Common and Alder Buckthorn require care in their early years so please take note of the following:

- 1. Guard against competition** from other plants, like Hawthorn, Hazel, Nettles and Brambles and ensure your Buckthorn is given space.
- 2. Apply good thick mulch** as bushes can suffer drying out. In summer, it is important to **water** your young bushes.
- 3. Prune** bushes in autumn/winter if you wish to shape them.

Aftercare - later years. Depending on space or personal preferences, bushes can be coppiced (cut back to just above ground) once they reach a height of around 4 - 6ft. They re-grow very quickly once coppiced. Brimstones will lay eggs on bushes of any height, from 6 inches up to 12 feet, so whether to prune or coppice is up to you.

Contact with Suffolk Butterfly Conservation. As mentioned, please keep in touch with us and let us know once you have Brimstones. You can find out more about us online at: www.suffolkbutterflies.org.uk

Or to find out more about Brimstones & Buckthorn, email [redacted] or [redacted]



Common Buckthorn	Alder Buckthorn
likes neutral to alkaline soil	neutral to acid soil but not pure sand
stems are a shiny mid-grey to bronze colour	stems reddish brown, with pale or white spotting
has thorns (hence Buck)	does not have thorns
roots are black	roots reddish brown to black
leaves with finely toothed edges	edges of leaves entire or un-toothed
forms dense twiggy bush	forms a sparser bush

