

Life cycles of Small and Large Skippers

Recent research has looked at the evolution of butterflies and found that the most primitive group of butterflies are the **Skippers**. Primitive in this sense means that they are the most closely related to the moths from which butterflies evolved millions of years ago. They look somewhat different to most of the butterflies we are familiar with, and usually have broad bodies, relatively short wings, large eyes and antennae that are hooked toward the end.

In Scotland we have five species of Skippers. One of them (the **Essex Skipper**) is only known here from a small area around Birkshaw Forest near Lockerbie – hundreds of miles from the nearest known colonies in England. Birkshaw Forest was one of the sites used for the burial of hundreds of thousands of culled cattle during the Foot and Mouth disease outbreak in 2001. Soil was apparently brought from elsewhere for the burial, and Essex Skipper larvae might have been brought in on it.

Of the remaining four species, the most widespread are now the Small Skipper and Large Skipper. Populations of both species are expanding from the south and are doing very well in Scotland.

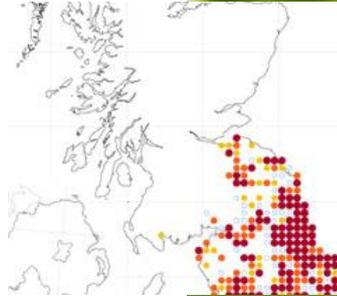
Small Skipper: adults of this species are on the wing here in July and August, when they can be found in areas of tall grass, especially where the main caterpillar foodplant, Yorkshire-fog grass, is found. They are fairly small and have an arrow-head shape, with a wingspan about the size of a 50p coin, but are very brightly coloured. Both sexes are bright orange on the upperwings, with fine black margins to the wings. Males have a diagonal black line across the upperwing, and both sexes are plain brown underneath. The black line on the males wings contains special scent cells he uses in courtship. Adults can be seen taking nectar from a variety of plants, such as knapweed, thistles and ragwort. After mating, the female will lay her eggs in a most unusual way – she will land on a tall grass stem, then walk backwards down the stem, probing it with her abdomen. When she finds an opening, she lays a batch of eggs in the tight area between the stem and the grass blade. The eggs hatch in about three weeks, and the caterpillars eat the egg shell then immediately spin a cocoon around themselves. They remain this way through the winter, and are so reliant on areas of long grass that remain uncut in winter.

The following April the caterpillars emerge and disperse. Each one will find a grass blade and use silk to make a protective tube around itself, where it can go when it's not eating. As they get larger they leave the tube and feed in the open, and after about two months will crawl to the bottom of the tussock and pupate within a cocoon. The pupa is light green at first, but becomes rich red and yellow as the butterfly develops inside. After just two or three weeks the adults emerge.

In Scotland, Small Skippers are mostly found in the Borders and Dumfries and Galloway, but have recently colonised Edinburgh and moved through the city very quickly, and may now be in Fife.



Small Skipper Female,
Peter Eeles



Small Skipper Male,
Iain Leach



Small Skipper underside,
Peter Eeles



Small Skipper caterpillar,
Peter Eeles

Large Skipper: Despite not being closely related, Large Skipper looks similar to Small Skipper and are not much larger than them. The upperwings are orange too, but have suffused dark markings toward the hind edge of the wings (Small Skippers don't have this). The undersides have faint pale speckles, unlike the plain brown undersides of Small Skippers. Males have a diagonal black line going across the top of the wings.

Large Skipper are found mostly in sheltered, damp areas of grassland such as in woodland clearings and glades, and riverbanks and field margins where the grass grows long. They fly earlier than Small Skipper, flying a few weeks earlier but lasting until August. They lay their eggs mostly on Yorkshire-fog, but lay their eggs on the undersides of leaf blades. On hatching, the caterpillars disperse, then each forms a tube by attaching two sides of the leaf blade together using silk. It feeds this way until September, then creates a large protective tube by using silk to draw several grass leaves together. The following spring they continue to feed, then pupate inside a tube formed inside grass stems combined by silk. The pupa is black, and after three weeks the adults emerge.

Large Skippers are mainly found in Southern Scotland, including the Borders, Dumfries and Galloway and Ayrshire. Along the east coast they are expanding north to East Lothian, and may keep expanding north here over time.

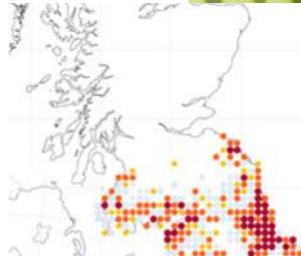
The remaining two Skipper species are the Chequered Skipper and Dingy Skipper. The Chequered Skipper is only found in North-West Scotland – in fact, the entire UK population was restricted to here when the populations in England became extinct in the 1970s. Chequered Skippers were reintroduced to England 2018 and the project seems to have been a success, but Scotland is still very much the stronghold for this species.

Dingy Skipper unfortunately does live up to its name of being fairly drab, but they are so rare in Scotland that it would still be a delight to see one! Here they are found in scattered populations in South west and North East Scotland in sunny sheltered places with bare ground, including forestry tracks and mining bings.

For information on Chequered and Dingy Skippers visit the Butterfly Conservation web pages for them.



Large Skipper female
Allan Drewitt



Large Skipper male
Iain Cowe



Chequered Skipper
Bob Eade



Dingy Skipper
Iain Leach

