



# Silver-washed Fritillary

*Argynnis paphia*

## Conservation status

Regional priority in some England regions.

The swooping flight of this large and graceful butterfly is one of the most beautiful sights to be found in woodland during high summer. It is named after the silver streaks on the underside which can be viewed as it stops to feed on flowers such as Bramble. Although the butterfly is seen mostly in sunny glades and rides, it actually breeds in the shadier parts of adjacent woodland. In southern England, a small proportion of females have wings that are bronze-green, known as the form *valezina*. The Silver-washed Fritillary declined during the twentieth century, especially in England and Wales, but has spread noticeably during recent decades.

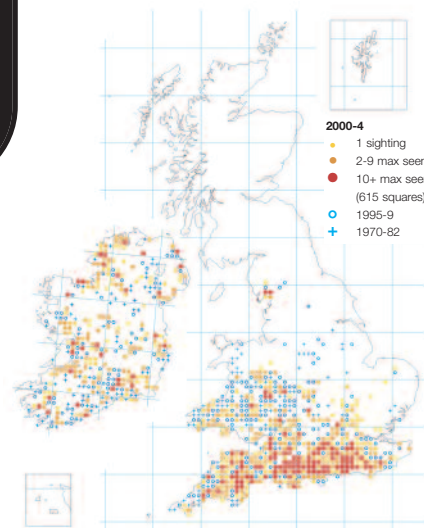
## Life cycle

The Silver-washed Fritillary is single-brooded with adults flying from mid-June until late August. When egg-laying, the females fly into semi-shady woodland and flutter slowly around the bases of trees, alighting to explore violet growth on the woodland floor. The eggs are laid singly in the crevices of tree bark or amongst moss, usually on the north or west side of the trunk. Most eggs are laid 1–2m above the ground but may be laid as high as 6m up a tree, or on other substrates such as dead Gorse. Both broadleaved and coniferous trees are selected, but smooth-barked trees are avoided. The larvae hatch after a few weeks but immediately enter hibernation. In the spring, they drop or crawl to the ground where they move over sparse vegetation seeking out violets on which to feed. During the day, they bask in patches of sunlight amongst the leaf litter, and when warm can move rapidly across the ground. Although they bask openly, they are well camouflaged and difficult to find, especially in hot sunshine. The few pupae that have been found in the wild have been 1–2m above the ground, suspended from leaves or twigs.

## Colony Structure

Silver-washed Fritillary adults are highly mobile and fly rapidly between clearings, including over the woodland canopy. In most regions the butterfly forms discrete but loose colonies within individual woods. However, individuals have been seen considerable distances from known breeding areas in several regions, especially in south-west Britain where they are regularly seen flying along wooded lanes. The butterfly appears to undergo periodic expansions and is colonising new areas including some over several kilometres.

	J	F	M	A	M	J	J	A	S	O	N	D
Egg												
Caterpillar												
Pupa												
Adult												



## Foodplants

The main foodplant is Common Dog-violet *Viola riviniana* growing in shady or semi-shady positions on the woodland floor, amongst pockets of leaf litter and other sparse vegetation.

## Habitat

The butterfly occurs in broadleaved woodland, especially oak woodland or woods with sunny rides and glades. Some types of woodland, notably Ash (*Fraxinus excelsior*) and Beech (*Fagus sylvaticus*) are generally unsuitable.

Other habitats used include mixed broadleaved and conifer plantations, especially where these have been thinned to promote a broadleaved understorey. In parts of south-west England and Ireland, wooded hedgerows and sheltered lanes near to woods are also used.

## Habitat management for the Silver-washed Fritillary

**Aim to maintain open canopy deciduous woodland with flower-rich, sunny rides and glades.**

### High Forest and Coppicing

Occasional thinning of deciduous high forest woodland, combined with the maintenance of sunny rides and glades provides suitable conditions. Opening up the canopy too much will promote excessive coarse grass and bramble growth to the detriment of the violets, although winter bramble cutting and raking can maintain suitable conditions for at least a few years. Traditional coppicing also provides some suitable breeding habitat at the shady edges of recently cut areas or around standard trees.

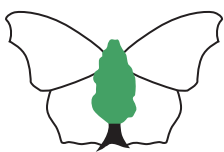
### Ride Management

Rotational cutting of clearings and rides is most beneficial as it adds variety to vegetation structure. The length of rotation will depend on the individual site but can be anything from 3-10 years. Cutting in autumn and winter months is preferable with ride sides managed alternately. Rides which are one and a half times as wide as the height of the bordering trees and of east-west orientation are the sunniest. A range of vegetation structures should be encouraged with a shorter flower-rich central zone, a zone of taller herbs and grasses and a scrub margin adjacent to the mature trees. Scallop and box junctions can also be created to provide more open habitat. Management should be planned in sections to avoid disrupting large areas at any time. Leaving scattered brash on scallop edges discourages deer from excessive browsing.



**top right** Flower-rich, open, sunny rides and glades provide nectaring habitat for the adult Silver-washed Fritillary

**bottom right** Breeding takes place in shadier woodland than used by other violet-feeding fritillaries



# Butterfly Conservation

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