BACK FROM THE BRINK

SPECIES INFORMATION GUIDE

Sap-groove lichen

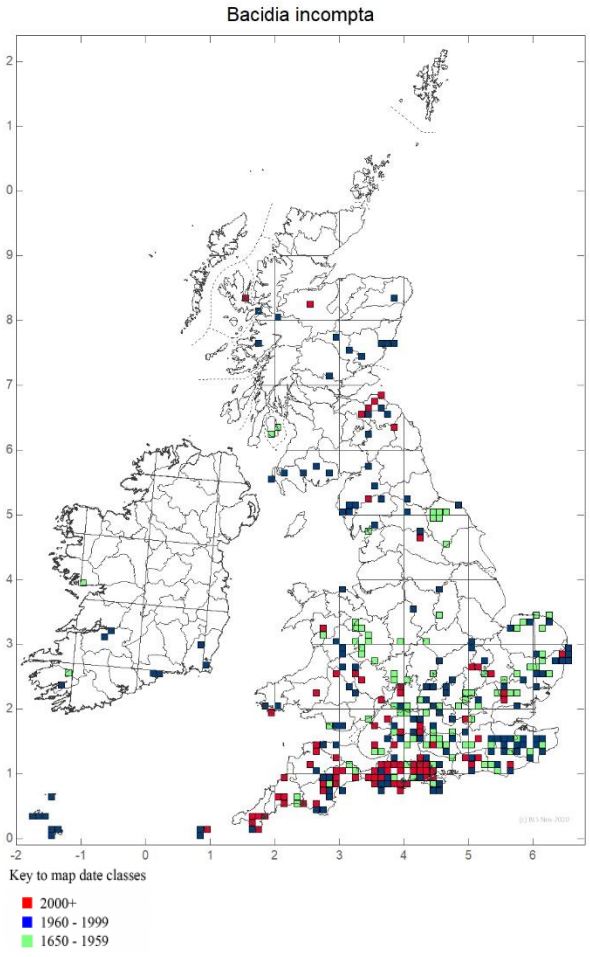
Bellicidia incompta (syn. *Bacidia incompta*)

The Sap-groove lichen is a 'crustose' lichen i.e. one that grows partly immersed in its substrate. It has a green (especially when damp) to grey (especially when dry) granular thallus (the 'body' of the lichen) which is usually dotted with small (to 1mm) black fruiting bodies that look like tiny Pontefract cakes, and can form small patches or extensive streaks when conditions are favourable.

It is a rare lichen in Britain, assessed as Vulnerable in the GB Red List on account of declines in recent decades, and is a S41 Priority Species in England.

Distribution

Prior to Dutch elm disease this species was widespread in GB, especially in the southern half of England. It has declined enormously in recent decades with the loss of elm trees, one of its favoured trees, although new populations are still being found.



Habitat

The Sap-groove lichen is mostly found on the trunks of mature trees with less acidic/base-rich bark and damaged bare wood of e.g. elm, Ash, Sycamore, Field maple, Horse chestnut, and old Beech, Holly and oak where there is a degree of

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natural nutrient enrichment resulting from wounds e.g. sap-runs and wound seepage tracks. Often found inside the hollow trunks of old pollards.

It favours well-lit trees e.g. in parklands and wood pastures, and along boundaries, although is also found in woodland.

A mature horse chestnut with a large green streak of Sap-groove lichen alongside a seepage track from a lost branch

An ancient field maple with Sap-groove lichen

Current threats

Sap-groove lichen requires:

- Veteran trees with less acidic bark e.g. Ash, elm, Sycamore, Field maple, Horse chestnut, old Beech, Holly and oak
- Continuity of habitat i.e. successive generations of suitable trees allowed to age naturally such that natural damage is able to occur to create the right niche
- Well-lit trunks
- Clean air

As such its main threats are:

- Death or collapse of suitable trees e.g. loss of elm to Dutch elm disease and now the loss of Ash to Ash dieback
- Loss of continuity of suitable trees on a site and across the landscape
- Shade as a result of unmanaged regeneration and/or invasive non-native species inc. Ivy which can be a particular issue on boundary trees and in the absence of grazing/browsing or other management
- Air pollution, especially acidification e.g. from nitrous oxides and sulphur dioxide and excessive enrichment from ammonia.

Habitat management

The aim of the following management advice is to ensure the long-term continuity and connectivity of Sap-groove lichen habitat:

- Maintain well-lit conditions in and around mature trees with basic bark in locations that support Sap-groove lichen e.g. by thinning regeneration (whilst being mindful of the need to retain some younger trees) and controlling invasive species, native or non-native e.g. Holly, *Rhododendron*.
- Halo thinning and other thinning works may be required to address understory and shade issues that have developed over time e.g. in response to changes in management.
- Ivy can be a particular problem and should be controlled when young growth is invading trees that support Sap-groove lichen or suitable ones nearby.
- One of the best ways to maintain suitable conditions is with a controlled grazing regime. As with any wood pasture or pasture woodland grazing management this needs to be well considered and well managed to allow pulses of tree regeneration whilst maintaining generally open conditions.
- Avoid 'tidying up' of damaged trees.
- Identify younger suitable trees to become future veterans and manage around them to create the right conditions.
- If no suitable trees exist plant future veterans, selecting species with naturally base-rich bark such as disease resistant elm or Ash (if available), Field maple, Sycamore, Beech and Horse chestnut close to existing populations, although not so close as to cause shade and competition issues.
- Remove or reduce sources of locally generated atmospheric pollutants e.g. by reducing stocking levels if excessive and by limiting fertilising of grasslands.
- Trial management (veteranisation) of younger trees and translocation has been trialled as part of the Back from the Brink Ancients of the Future, but is at too early a stage to report on success or otherwise.
- Creating new pollards out of younger trees and maintaining them by periodic recutting is likely also to be effective in producing new habitat.

A young field maple being 'veteranised' – having features created artifically to replciate those found on older trees – to create habitat for Sap-groove lichen

Survey methods

Surveying for Sap-groove lichen requires a specialist lichen surveyor.

Further information

http://wales-lichens.org.uk/species-account/bacidia-incompta

The Back from the Brink Ancients of the Future project is led by Buglife in partnership with Plantlife and the Bat Conservation Trust.

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