Advice note on *Cydalima perspectalis* Box Moth (sometimes referred to as the Box Tree Moth, Boxworm Moth or Box Tree Webber)

**Background**

This moth has been accidentally introduced to the UK, being first recorded in Kent in 2007. In recent years this species has become firmly established and is building in numbers and spreading, particularly in the Middlesex, Hertfordshire, Surrey and Essex areas where it is expanding out from London. It is also resident more locally in parts of southern England as far west as Gloucestershire. To date, the species has occurred in the following counties: Cornwall, Devon, Somerset, Dorset, Hampshire, Isle of Wight, Surrey, East & West Sussex, Kent, Essex, Gloucestershire, Buckinghamshire, Berkshire, Oxfordshire, Hertfordshire, Middlesex, Bedfordshire, Cambridgeshire, Suffolk, Norfolk, Northamptonshire, Lincolnshire, Warwickshire, Worcestershire, Nottinghamshire, Cheshire, Yorkshire, Co Durham and Northumberland. In Wales, it has recently been found in Monmouthshire, Glamorganshire, Carmarthenshire and Denbighshire, and in 2018 it was recorded new to Scotland from Fife. It is probably not resident in all of these counties, however, it could also potentially occur elsewhere. There are increasing numbers of records from along the south and south-eastern coast; these records are likely to be the result of primary immigration from the Continent. The moth was also recorded on Guernsey in 2014.

As the name indicates, this species is associated with various species of Box, of which it is considered a serious pest in parts of Europe. There appear to be two generations in Britain, the adult found from mid-June to early August and again in September to October/November. However, it is the larval stage which can cause damage to Box plants. The larva has been found in May, June and from August to early October, overwintering as a small larva between leaves spun together. Larvae produce webbing over the feeding area. Box plants can become disfigured by a loss of leaves and the presence of this webbing, which is especially apparent on trimmed plants. Plants can sometimes be completely defoliated.

The species is thought to be native to China and Korea, and is possibly invasive in Japan and the Russian Far East. First found in Europe in 2007 from Germany. It has spread rapidly in some countries, and has now been reported in Spain, France, Belgium, Netherlands, Denmark, Italy, Switzerland, Austria, Hungary, the Czech Republic, Slovakia, Slovenia, Croatia, Bulgaria, Romania, Greece and Turkey. In south-west Germany two or three generations per year have been noted.

Further information can be found on the Royal Horticultural Society website at: https://www.rhs.org.uk/advice/profile?pid=760
Butterfly Conservation Guidance

This species has become established and is spreading, and has the potential to have an impact on native populations of Box and disfigure ornamental Box hedgerows and topiary. However, where control is being considered, the use of pesticides should be avoided. Where bushes are small we encourage the removal of the larvae by hand. However, it is realised that this approach is unlikely to be appropriate where large, older topiary bushes are involved. In these circumstances the mixed nematode biological control which is sold as Fruit and Vegetable Protection should be tried in the first instance and may have some impact, being careful to follow the instructions. As a last resort spraying, using a pesticide, may well be considered, although we strongly advise against using any neonicotinoid pesticides currently available. Bear in mind that pesticides available will not be specific to Box Moth and will kill other non-target species of invertebrate, including butterflies and moths. Therefore, if spraying is considered the only option then this should be undertaken with extreme care. Still weather conditions should be selected, with just the target bush sprayed, avoiding any spray falling to the ground or any spray drift to neighbouring plants or grasses. Bushes in flower should not be sprayed as this could be harmful to pollinating insects.

Where large numbers of larvae have occurred, vigilance is likely to be required as re-infestation is quite likely. Ultimately, consideration should be given to plantings other than Box.

Finally, new plantings of Box should be carefully considered and, where this is planned within the range of this moth, alternative plants (preferably native) should be considered.

July 2017 (updated November 2018)