

### WHAT IS *IPS TYPOGRAPHUS*?

*Ips typographus* is an approx. 5 mm long (when adult) beetle, also known as the larger eight-toothed European spruce bark beetle (picture 1). Historically present in mainland Europe, *Ips typographus* overwinters in galleries on host trees, in stumps, litter or soil. When temperature rises above 20°C, usually in late spring or early summer, males fly in search of host trees where to reproduce. The host trees almost exclusively belong to *Picea* genus, i.e. spruces, particularly Norway spruce.

After mating, *Ips typographus* females lay 30 to 80 eggs in the inner bark of the host tree along a maternal gallery, from which radiate the larvae galleries, drawing typical patterns that are a key feature to identify this insect (picture 2).



Stanislaw Kinelski, Bugwood.org

Picture 1



Stanislaw Kinelski, Bugwood.org

Picture 2

## WHAT IS *IPS TYPOGRAPHUS*? (continued)

The beetles are attracted by volatile substances emitted from stressed trees, that's why they preferably target weakened and stressed trees (e.g. windblown, drought-stressed, recently felled trees). However, under favorable conditions, the populations can increase dramatically, with several generations developing within one year. The favorable conditions are usually met when the weather is warm and dry enough to allow a quick succession of generations with high survival rates, and an abundant availability of stressed trees. Spruce monoculture also amplifies the risks. During these outbreaks, the beetles are so numerous that they can successfully overcome healthy trees defenses, leading to large-scale diebacks.

In the past few years, in Central and Western Europe, a succession of windstorms and intense droughts has led to dramatic Norway spruce diebacks resulting in hundreds of millions of cubic meters of dead or dying trees being felled, with devastating impacts on landscapes, forest owners and the wood industry.

## WHAT ABOUT *IPS TYPOGRAPHUS* IN ENGLAND?

The insect has first been found in Kent in 2018 on Norway spruce. Further populations have since been found in woodlands in West Sussex, East Sussex, Surrey and Kent, although these don't appear to relate to the original outbreak site. The beetles found in England have probably been blown over the Channel but so far did not settle into breeding colonies.

Even if spruce is not a strategic species in Southern England (though it can be an essential part of some woodlands and hence be an important species for some forest owners), the risk that permanent populations colonise the rest of the country from there is a real matter of concern, especially in the context of climate change.



## WHAT ARE THE REGULATIONS IN ENGLAND?

To mitigate the risks of *Ips typographus* being introduced and spreading in England, several measures have been taken that affect both woodland management in our country and the importation of susceptible material in the UK.

Concerning woodland management, *Ips typographus* is regulated as a Quarantine Pest and the Forestry Commission developed a contingency plan to set out the steps to be taken if an outbreak is discovered in Great Britain.

The Forestry Commission has introduced a Plant Health Notice that demarcates an area around the confirmed outbreak sites. This **Demarcated Area** has been extended in July 2022 and now covers parts or the entirety of Berkshire, Buckinghamshire, Hertfordshire, Hampshire, Surrey, City and County of the City of London, Greater London, East Sussex, West Sussex, Kent and Essex.

*Ips typographus* Demarcated Area – July 2022 – Forestry Commission



## WHAT ARE THE REGULATIONS IN ENGLAND?

In every instance, in the Demarcated Area:

- Landowners must require the Forestry Commission authorisation before felling or moving spruce susceptible material, in addition to the regular felling licence,
- No susceptible material can be left in situ unless authorised by the Forestry Commission,
- Only authorised processors can use susceptible material from the demarcated area. Some low risk material can still be authorised to be exported outside of the Demarcated Area.

Furthermore, where *Ips typographus* outbreaks will be identified, **Statutory Plant Health Notices** (SPHN) will be issued by the Forestry Commission, outlining instructions that must be followed by woodland owners. These SPHNs will define the timescales, the geographical extent and the method for the removal of infested and at-risk material, e.g. by felling, chipping, or burning the susceptible material.

It is also recommended to landowners within the Demarcated area to:

- Inspect windblown, damaged and recently felled trees as well as larger harvesting residues to monitor the presence of bark beetle, and alert Forest Research through the TreeAlert portal,
- Urgently identify and remove storm damaged spruce (fallen or snapped), wherever possible, to reduce the availability of susceptible trees in the area,
- Progressively remove all spruce in the Demarcated area, especially stressed and weakened stands but also healthy ones, and replace it by less susceptible species.

*Forestry Commission guide on the movement restrictions of spruce trees originating within the Demarcated Area*

**Forestry Commission**

*Ips typographus*

A quick and easy guide on the movement restrictions of spruce trees originating within the Demarcated Area (DMA)

The eight-toothed spruce bark beetle (*Ips typographus*) is a serious pest of spruce trees and we need your help to deal with it. Damaged, stressed and dying spruce trees are especially susceptible. If you think you have spotted signs of this beetle, please report it to the Forestry Commission.

Any spruce material originating from within the DMA is classified into **one of two** categories:

**Low risk**

Any spruce material originating in the DMA, unless specified as high risk via a Statutory Plant Health Notice (SPHN):

The vast majority of the volume of spruce trees felled in the DMA will not be an incursion sites and will therefore be low risk. If you have received an SPHN this will define areas of high risk but it may also define areas of low-risk material depending on the outcome of the survey and the extent of the woodland.

**High risk**

Any spruce material that is known to be infested, likely to be infested or suspected of being infested.

**How do I know if I have high risk material on my land?**

You will know if that is the case if you do as you will have received a Statutory Plant Health Notice (SPHN) from the Forestry Commission. This will also outline the extent of the infestation and actions to take.

**SPHN**

## AVAILABLE GRANTS

If you own spruce stands in the Demarcated Area, grants are available under the Tree Health Pilot scheme to support you:

- Felling infected or at risk trees,
- Improving permanent infrastructures such as roads, tracks and loading areas to facilitate the harvesting of infected or at risk trees,
- Restock the felled areas and maintain the planted trees,
- Acquire biosecurity items.

## HOW CAN MAYDENCROFT LIMITED SUPPORT YOU?

**Maydencroft's experienced forestry team can support you by:**

- **Assessing if your woodland is located within the Demarcated Area,**
- **Identifying grants, regulations and recommendations that apply to your woodland,**
- **Assessing the feasibility and organising the removal, destruction or selling of damaged, stressed or healthy spruce in your woodland (proactively or under a SPHN), including assisting you with the application for the authorisations to fell or kill susceptible spruce material**
- **Develop a restocking strategy including design and implementation where needed and provide guidance on managing your woodland in the future.**

If you would like us to assist you, or for any further information, please contact our team: [forestry@maydencroft.co.uk](mailto:forestry@maydencroft.co.uk)

## USEFUL RESOURCES

- [Forestry Commission guide for landowners and managers - Eight-toothed spruce bark beetle \(\*Ips typographus\*\)](#)
- [Forestry Commission guidance on the movement restrictions of spruce trees originating within the Demarcated Area](#)