Scottish Forestry
Coilltearachd na h-Alba

Expanding the trapping network for early detection of *Agrilus* species in GB by trialling a network of traps in Scotland

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Introduction

Potential threats of exotic *Agrilus* beetles to Scotland's trees has long been identified: 15 *Agrilus* species are listed on the UK Plant Health Risk Register (2026). Examples from the Register posing a serious threat include *Agrilus anxius* - Bronze Birch Borer (BBB) and *A. planipennis* – Emerald Ash Borer (EAB).

BBB has the capability to significantly impact the Scotland's two native birch species (Forest Research 2026). EAB introductions to North America have caused enormous economic and environmental damage. An EAB outbreak identified in Moscow in 2003 has radiated along trunk roads planted with *Fraxinus pennsylvanica*, reaching Luhansk Region of Ukraine by 2017 and over 300km west in Kyiv by 2023 (Meshkova *et al*. 2024) and most recently-reported, parts of Belarus by 2025 (Zviagintsev *et al*. 2025).

Agrilus beetle dispersal has been associated with movement of firewood (Solano *et al*. 2021) but hitch-hiking has been suggested for its 2020 identification in St Petersburg (Selikhovkin *et al*. 2022) and transport of wood packaging material (and some life stages have the capability to survive heat treatment according to ISPM15 standards) (Goebel *et al*. 2010).

Method

Forestry Commission undertook an Agrilus trapping trial in 2024 proving the concept that suitable traps when placed in appropriate locations (including near ports and firewood importers) caught several Agrilus species (Parker and Williams 2025). This work was successfully continued in 2025 and subsequently Scottish Forestry approached Forestry Commission to collaborate by extending the network of Agrilus traps across Great Britain further by establishing traps within Scotland.

Forestry Commission collected, compiled and shared data of firewood importers that brought material directly into Scotland from outside the UK alongside larger English firewood importers that sent firewood directly to Scottish firewood traders active in 2025 (Figure 1).

Scottish Forestry filtered the number of proposed trap locations by the following criteria:

1. Removing importers of non-target firewood (e.g. Eucalyptus sp)
2. Removing import facilities with an absence of suitable host tree species in proximity
3. Utilising climate suitability data for target Agrilus species (Figure 2)

This filtering reduced the quantity to nine potentially appropriate importer sites. Site inspections in Spring 2026 will consider factors such as safe trap installation and geographic distribution to end with a final list of six locations. In addition, traps will be placed in woodland alongside Scotland's principal port at Grangemouth (Figure 3)

Trapping follows the same methodology used by the Forestry Commission (as outlined in Parker & Williams 2025) – i.e. a green sticky prism trap containing a chemical lure (hexanol 3z kairomone) in the canopies of trees close to the targets.

The only deviation from the methodology is that traps will be attached by a line rather than hung from trees to enable placement higher in canopies and facilitate inspections without need for an extending pole.

Traps will be inspected in-situ by entomologists from Forest Research Northern Research Station.

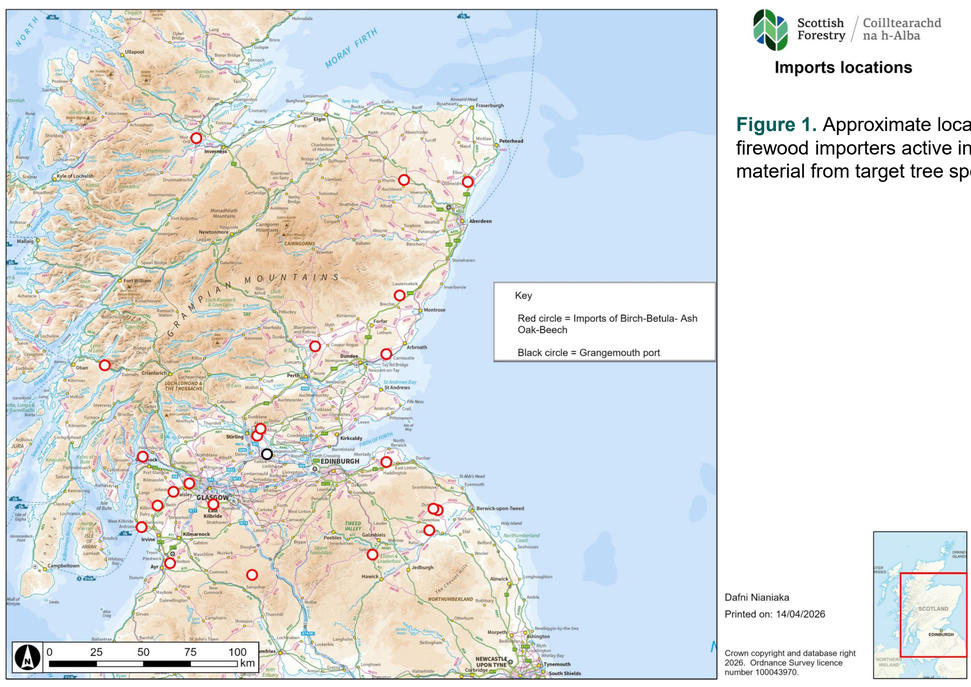

Figure 1. Approximate locations of Scottish firewood importers active in 2025 importing material from target tree species

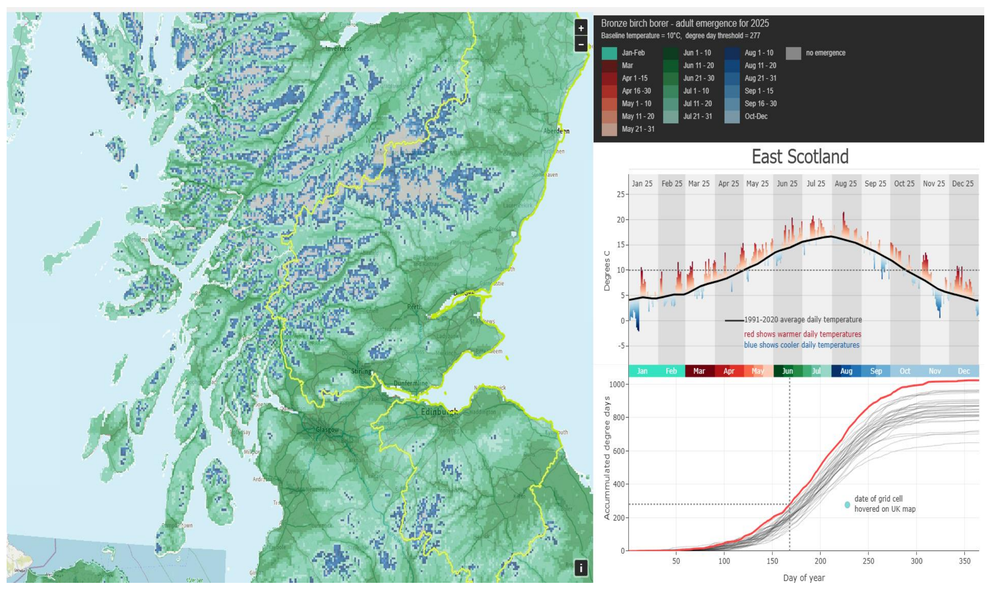

Figure 2. Utilising the UK Climate-Pest Risk Web Tool metoffice.gov.uk/hadobs/biosecurity_uk_hist/ (Met Office 2026) to locate regions more suitable for successful survival and reproduction of *Agrilus* spp. For example, this illustrative data is based on 250 cumulative day degrees above threshold of 10 degrees for *A. anxius*.

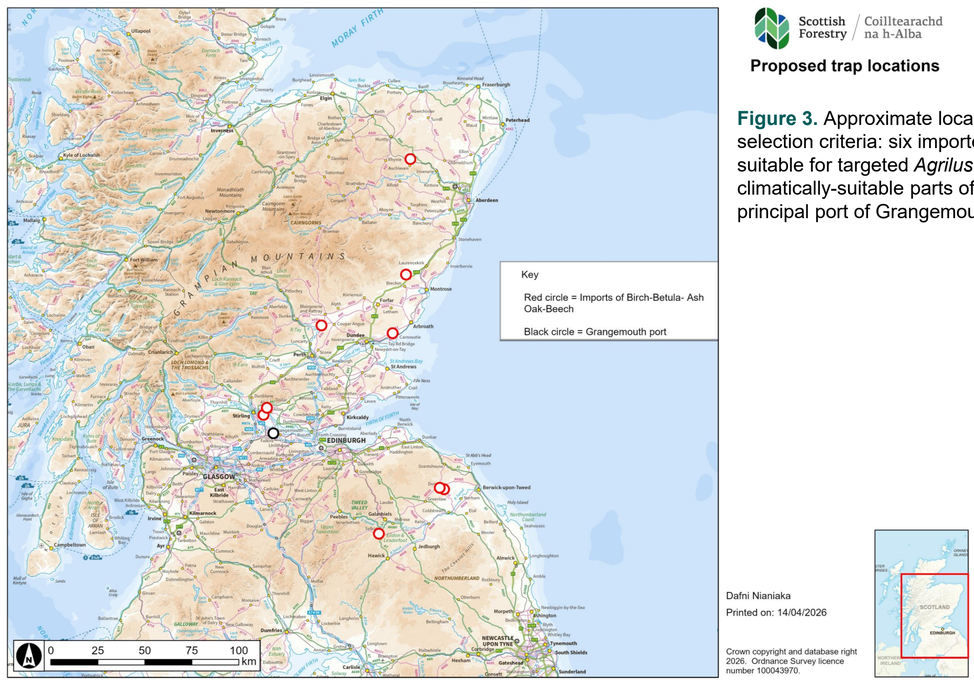

Figure 3. Approximate location of traps following selection criteria: six importers of firewood species suitable for targeted *Agrilus* spp within the most climatically-suitable parts of Scotland and the principal port of Grangemouth

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