Forest Research

Risk-based strategies to prepare for and manage invasive tree borers

PREPSYS

PREPSYS (**P**est **R**isk **E**valuation and **P**est management **SYS**tems) is a new project, under the Euphresco initiative, to address the increasing risks from global movement of damaging tree boring beetles in the family Buprestidae. The project focuses on two species that can kill their respective host trees - Emerald ash borer (EAB)(*Agrilus planipennis*) and bronze birch borer (BBB)(*Agrilus anxius*).

EAB, in particular, has moved in international trade and caused extensive tree mortality in North America and in European Russia.

BBB is native to North America and has the potential to cause major damage to birch in Europe.
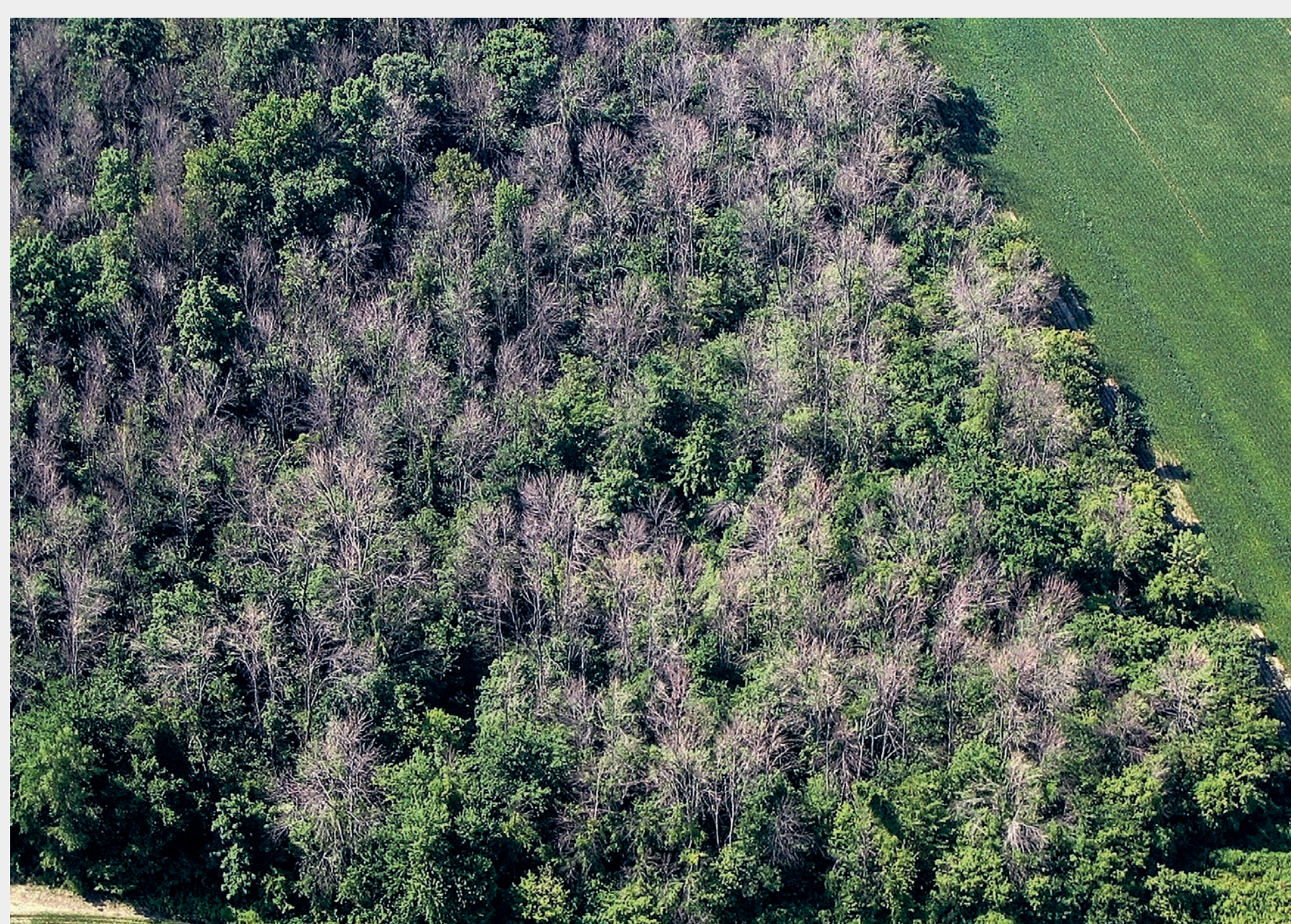
Objectives
To provide evidence to underpin contingency planning, policy development and policy communication through assessing the entry, establishment, spread, impact and management of EAB and BBB.

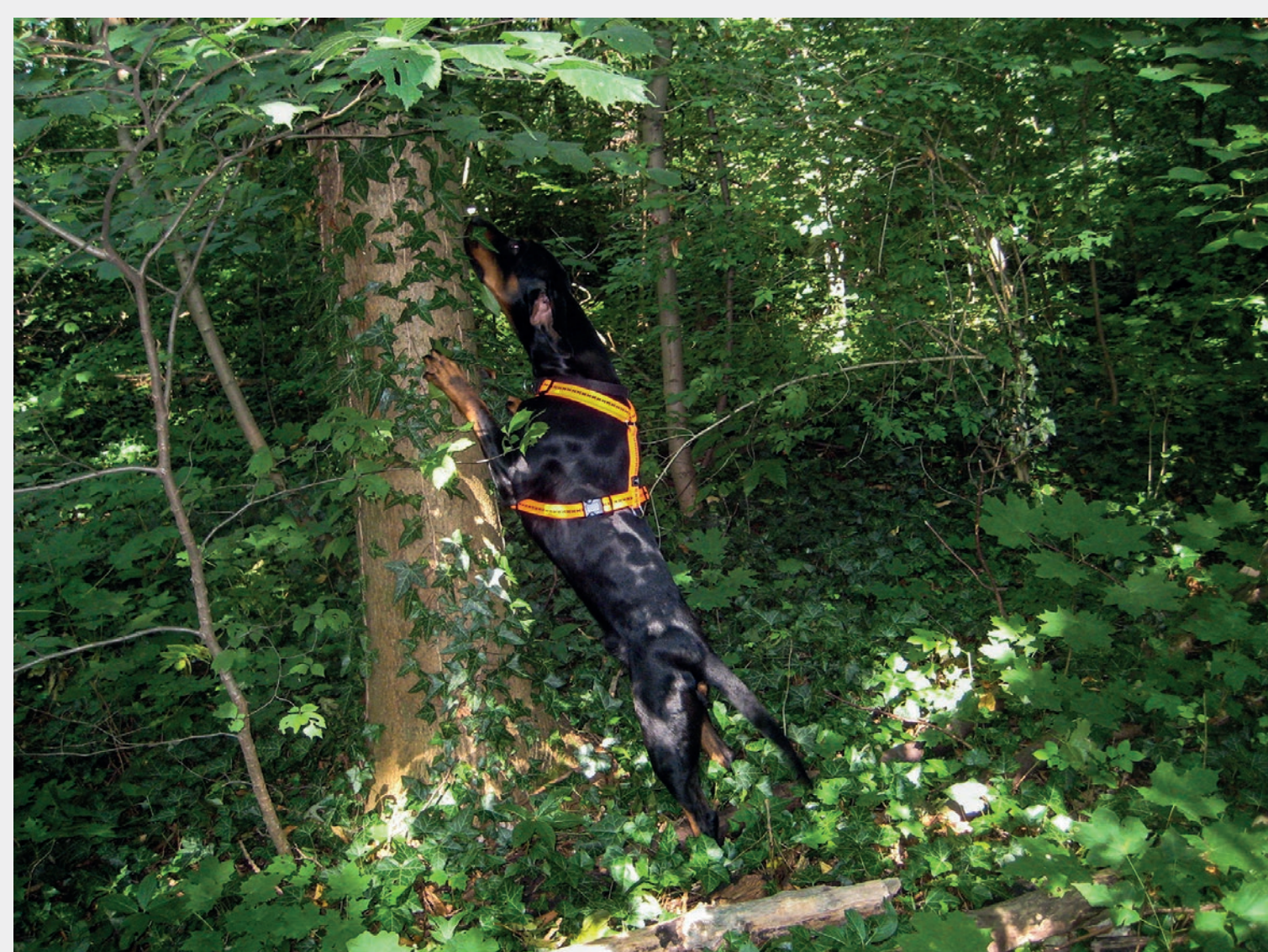Photograph (below) courtesy of Houping Liu, Michigan State University, Bugwood.org

Photograph (far left) and (below) courtesy of David Cappaert, Bugwood.org

Photograph (above) courtesy of Troy Kimoto, Canadian Food Inspection Agency, Bugwood.org

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Photograph courtesy of Ute Hoyer

Photograph courtesy of Steven Katovich, USDA Forest Service, Bugwood.org

PREPSYS is an international, multi-partner project under the Euphresco initiative:

- Forest Research (lead partner) – UK
- National Reference Centre (NRC) – Netherlands
- Federal Research and Training Centre for Forests, Natural Hazards and Landscape (BFW) – Austria
- United States Department of Agriculture (USDA) – USA
- Teagasc (Agriculture and Food Development Authority) – Ireland

Key research questions:
The project addresses key questions and gaps in our knowledge on the biology, control, dispersal and economic and environmental impacts of the two pests:

- What are the pathways for movement and the potential risks and impacts?
- How can we improve early detection and better protect against the risk of introduction?
- What characteristics are likely to lead to successful breeding and establishment in a new location and how rapidly could spread occur?
- How can we improve management and control approaches and ensure their social acceptability?
- How can we best support policy and engage with stakeholders to limit future impacts?

Keep up to date with project developments
Join our mailing list to hear about our latest research findings and workshops by emailing **mariella.marzano@forestry.gsi.gov.uk**

Further Information
Please visit our website **www.forestry.gov.uk/fr/prepsys** for full details of the project work packages or contact **mariella.marzano@forestry.gsi.gov.uk**

Duration of the project
The project will run from 1st October 2016 until 30th September 2019.

Join our Expert Panel
PREPSYS is currently recruiting a panel of experts to share experiences in dealing with EAB and BBB, particularly to identify successful measures and learn from past mistakes. Please get in touch (hugh.evans@forestry.gsi.gov.uk) if you would like to get involved and to collaborate with the PREPSYS team and other panel members.

The Euphresco Research Initiative
PREPSYS is funded through the international EUPHRESCO network, with funding provided by each participating country. Euphresco's main objective is to coordinate national programmes on phytosanitary research. The liaison with other national, European and international initiatives ensures a coherent strategy for setting priorities and avoiding overlaps among projects funded under different mechanisms.

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