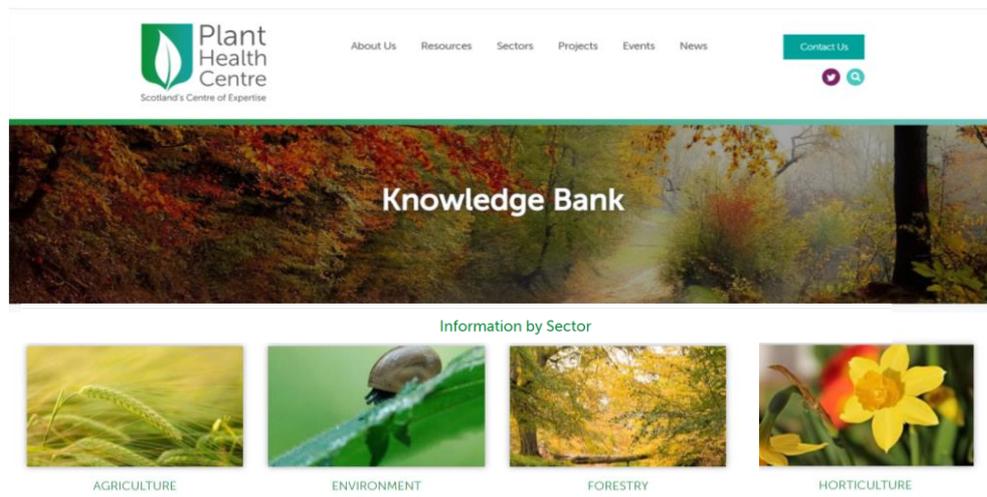


## Expansion of PHC Online Plant Health Resources

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### Project Final Report



[www.planthealthcentre.scot](http://www.planthealthcentre.scot)



Royal  
Botanic Garden  
Edinburgh

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## 1 Executive Summary

Information about plant health is plentiful online, but its quality and relevance to Scottish interests are not always clear. The Plant Health Centre website now offers a curated list – a Knowledge Bank – signposting to reliable, online plant health information relevant to each of our 4 sectors.

Expanded online resources were compiled with the aims of extending the PHC’s Natural Environment online Knowledge Bank to the Agriculture, Forestry and Horticulture Sectors; to signpost users and practitioners to relevant and reliable information; and to address a broad spectrum of plant health topics, from diagnostics and control to outreach and education.

Information sources were compiled, evaluated, and a Knowledge Bank relevant to each sector is now online at the PHC website. One hundred fifty unique, reliable sources were drawn from governmental, non-governmental/charitable (NGO), and private sectors, as well as other knowledge networks like news media and research extension hubs. The criteria for inclusion were accessibility, applicability, impartiality, and quality. The information sources have been organised by sector and can be searched by keyword or by type of resource.

These resources are an expansion on the Knowledge Bank previously developed for the Natural Environment Sector (PHC2018/11). As for the Natural Environment, a ‘Getting Started’ section recommends sources for basic disease diagnostics within each Sector, to aid usability and highlight especially recommended sources.

The webpages are found on the PHC website: [www.planthealthcentre.scot/knowledge-bank](http://www.planthealthcentre.scot/knowledge-bank).

## 2 Introduction

This project represents an expansion of PHC2018/11, Development Of An Online, User Friendly Plant Health Resource Bank For The Scottish Natural Environment (Hayden and Taylor 2019). Briefly, in Project PHC2018/11 we identified knowledge exchange and information access as key stakeholder priorities to be addressed by the Plant Health Centre, with a particular gap in online resources for information directly related to the Natural Environment. In response, we compiled an online knowledge bank (Plant Health Centre 2019) of existing, reliable resources relevant to plant health threats to the Scottish natural environment. We further produced new content where existing guidance was lacking, generating pages with practical guidance for biosecurity and control.

Project 2019/07 expands this online knowledge bank to the Agriculture, Horticulture, and Forestry Sectors. In contrast to the Natural Environment, for these sectors there is no shortage of online resources regarding specific threats, biosecurity, or control, though sources can be difficult for non-specialists to evaluate and some excellent sources may be overlooked. Thus, our aim was to produce a webpage for each sector, signposting stakeholders to relevant and reliable information addressing a broad spectrum of plant health topics.

## 3 Outcomes

A Knowledge Bank relevant to each of its 4 sectors is now online at the PHC website ([www.planthealthcentre.scot/knowledge-bank](http://www.planthealthcentre.scot/knowledge-bank), Plant Health Centre 2019). One hundred and fifty unique, reliable sources of information have been identified, evaluated, and listed. These have been categorised and labelled so that users may narrow the listings by subject matter or by searching keywords (Figure 1).

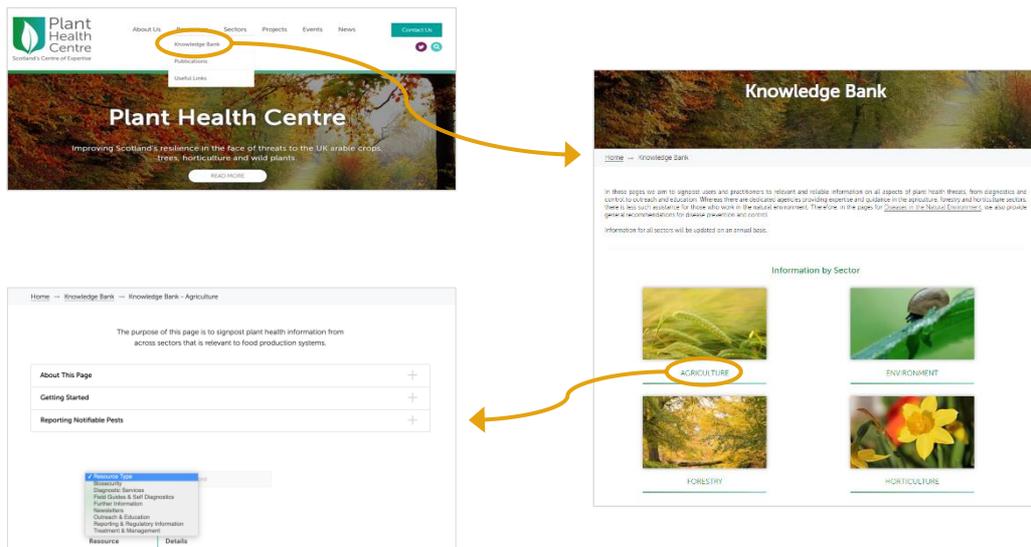


Figure 1. Layout and flow of the Knowledge Bank on the Plant Health Centre website. The banks can be accessed through the Resources menu, and then by choosing the sector of interest, or through each Sector’s primary page.

Each sector’s Knowledge Bank has three header sections. The first two, ‘About This Page’ and ‘Getting Started,’ are customised to the sector, and these guide users to the best sources for diagnostics and management. The third header section is the same across all sectors and provides contacts for reporting notifiable organisms.

Sources were drawn from governmental, non-governmental or charitable (NGO), and private sectors, as well as other knowledge exchange networks like news media and research extension hubs (Figure 2). Sources were evaluated for accessibility, applicability, impartiality, and quality of information before inclusion. Most were governmental in origin, with the second largest group drawn from knowledge exchange networks.

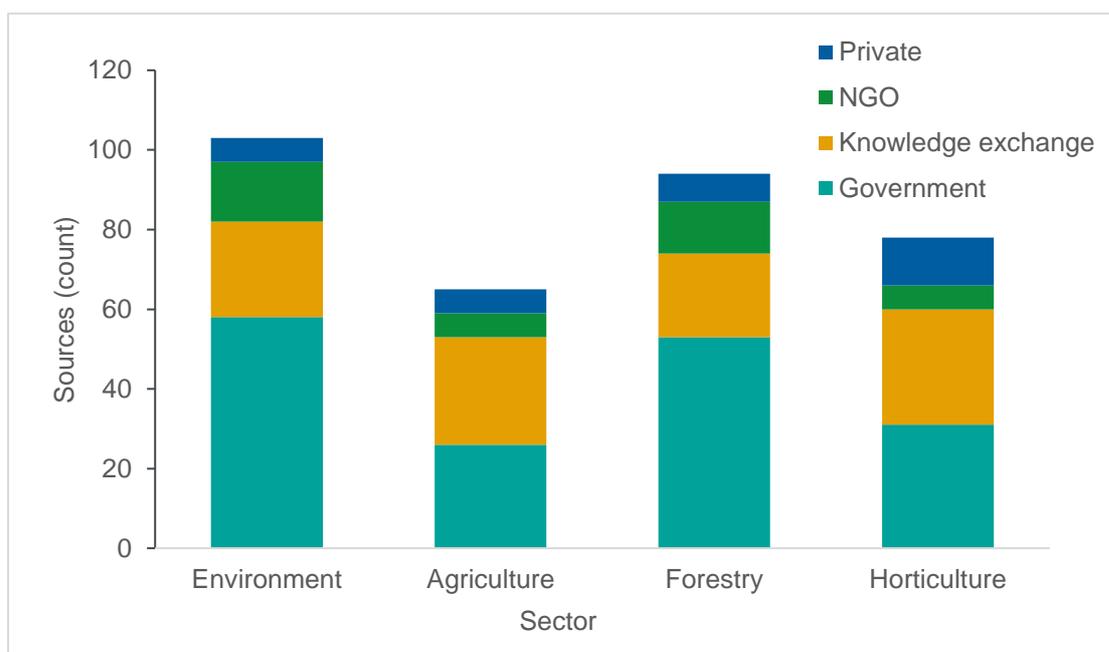


Figure 2. Information origin. Sources within the Knowledge Bank were drawn from governmental; knowledge exchange (e.g. news media and extension hubs); charity or non-governmental (NGO); and private-sector organisations.

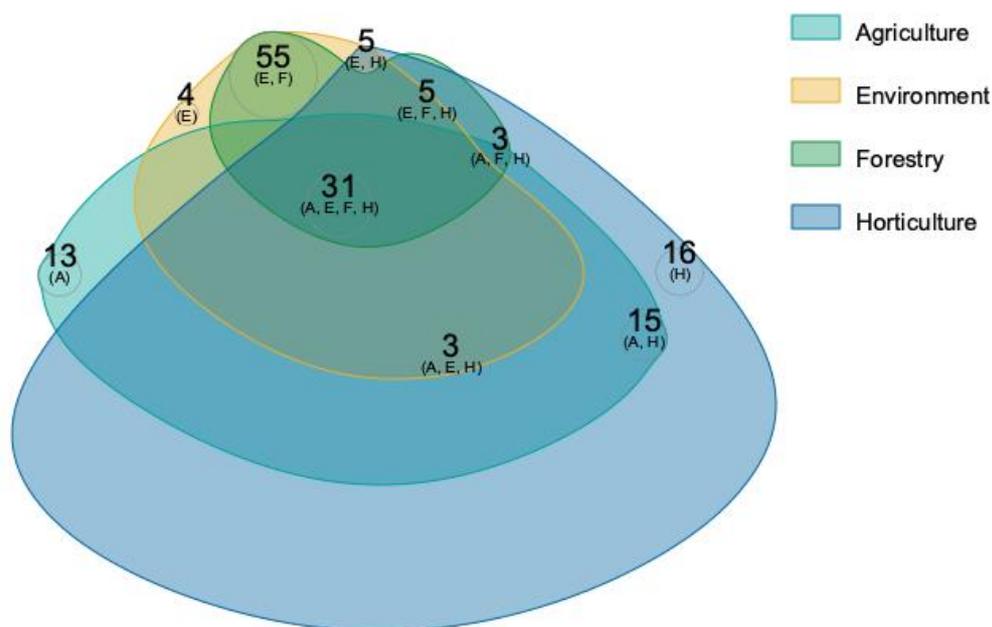


Figure 3. Applicability of information sources across PHC sectors. Numbers represent the count of sources tagged to each sector, as indicated by colour and initials in brackets. Figure created using the package *nVennR* (Quesada 2018) in R v3.5.0 (R Development Core Team 2018).

While each Knowledge Bank was tailored to its sector, information sources were commonly shared among them. There was especially high cross-relevance between the Environmental and Forestry sectors, in which we linked 91 sources to both Environment and Forestry, and 15 were tagged to one or the other but not both. Of the total 150 sources, 78% were marked relevant to at least two sectors, while 33 were tagged to only one (Figure 3).

The Knowledge Banks represent a response to stakeholders' priorities: a source for reliable plant health information. It is also an opportunity, in that it provides a structure that can be populated with new research from across sectors. In its current form, users have been directed to already-existing resources. However, as new research and knowledge exchange media are developed, the knowledge bank can be updated with research products from Scotland's Plant Health Centre and beyond.

## 4 References

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