Plant Health Professional Register
Guidance for applicants

This document provides guidance on the competency framework used for assessing candidates' applications for inclusion on the Plant Health Professional Register together with information on the application process.

The Plant Health Professional Register has been created in response to the Department of Environment, Food and Rural Affairs (Defra) and Government Office of Science reports[1,2] recommending development of plant health skills and creating opportunities for a wider community of trained plant health professionals.

The Department is working with professional bodies to embed greater awareness of plant health as a key competency and component of continuous professional development. The register was created in 2016 for government inspectors and related officials, enhancing their official training programme to provide a better and more professional service. In 2018, a pilot exercise engaged with the Horticulture sector to extend the register to all relevant horticulturalists and is now being incorporated into the plant health assurance scheme being developed by the HTA. Work with all other relevant sectors is ongoing.

Inclusion on the Plant Health Professional Register is about having an in-depth understanding and knowledge of how your role fits with and supports 'Protecting Plant Health – A Plant Biosecurity Strategy for Great Britain'.
https://www.gov.uk/government/uploads/system/uploads/attachment_data/file/307355/pb14168-plant- health-strategy.pdf

You will recognise that plants and trees are an essential economic, environmental and social asset making a vital contribution to our food and timber supply, rural economy and provide important ecosystem services.

For all applicants, it is about focusing your contribution on the activities which will help in protecting agriculture, forestry and the natural environment both nationally and internationally whilst recognising the need and importance of international trade in plants and plant products. You will understand that threats to plant biosecurity have increased with the globalisation of trade and travel and that predicted climate change effects may influence the impact of damaging pests not yet present in the UK, but also ones that are present and have associated management practices. The level of your involvement and influence will range from local, regional, national to international and short term to long-term with increasing responsibility and competency level from associate, to registered, to senior plant health professional.

Assessors will be looking for evidence for the following areas in tree health and plant biosecurity:
Understand:

- What plant biosecurity is, the principles of good practice and why it is important

[1] *Defra/GoS (Dec 2014) Animal and Plant Health in the UK: Building our science capability* *Defra (April 2014) Protecting Plant Health-a Plant Biosecurity Strategy for Great Britain* *A Vision and high- level Strategy for UK Animal and Plant Health Research To 2020 and* *Beyond (2016)*

- The range of plant pests and diseases that can cause damage, how they may be introduced and/or spread
- The value of the accurate identification of both hosts and pests and the approaches used to achieve this
- Impacts of pests and diseases on agriculture, forestry and horticulture throughout the entire supply chain and the impact on landscape, amenity and the wider environment
- Principles of protecting plant health through risk based decision making and the appropriate use of international Phytosanitary legislation
- Factors that can influence risk such as globalisation of trade and predicted climate change
- Responsibility for reducing risk sits with those who benefit from the reduction of those risks (where appropriate)
- Diversity of organisations affected by plant health
- Impact of pests and diseases on health and safety particularly in relation to trees e.g. Oak Processionary Moth or Tree /limb falls due to cankers etc.
- Principles, implementation and impact of control strategies and measures

The level of knowledge and evidence will increase with the competency level from associate, to registered to senior plant health professional.

Competency framework

The application for inclusion on the Plant Health Professional Register is based on a competency framework. The assessors will therefore be looking for examples of how your knowledge and expertise is applied to each of the required areas.

Applications should be written in the first person. If you are applying for registered level, you should address competencies listed for associate and registered levels, similarly senior level applicants should address competencies listed for all levels.

Applicants may wish to use a STAR approach in providing evidence for each competency as this may help you to focus on your specific role/knowledge rather than a more general knowledge. The STAR approach is described below, but it is not essential to use this approach:

Situation: A brief explanation of the context in which the problem/challenge is defined. **Task:**

A description of what the applicant needed to achieve within the given situation to include the desired outcome.

Action: A description of what the applicant did and the reasons why

Result: A description of the outcomes of the applicant's action.

The table below provides an overview of the type of evidence that the assessors will be looking for in relation to each competency. This is followed by more detailed examples of the type of evidence that could be provided at each of the three levels – Associate, Registered and Senior.

Competency	Assessment
1. Understand how Plant Health Services operate in the UK	Assessors will need to see how your specialist practical knowledge contributes to the operation of UK Plant Health Services
2. Understand the key set of guidelines and regulations that must be followed: a) International Plant Health Standards, e.g. International Plant Protection Convention (IPCC), WTO-SPS, ISPM b) European and National Plant Health Standards e.g. EPPO standards and EU Plant Health regimes, Plant Health and Plant Health (Forestry) Orders and associated powers	Assessors will need to see an explanation of your understanding of the significance of standards and regulations connected to UK plant health in relation to your role
3. Understand the plant Biosecurity Continuum	Assessors will need to see an explanation of your understanding of surveillance and inspection regimes and the use of different surveillance, detection and identification approaches in relation to your role
4. Demonstrate communication of risks and plant health policy	Assessors will need to see examples of how you communicate your specialist practical knowledge to support Plant Health Services in the UK

5. Understand the roles and responsibilities that are required: a) within your organisation b) outside your organisation with stakeholders and officials	Assessors need to see that you understand the roles and responsibilities of all parties that support the National Legal Plant Health framework and examples of how you utilise this knowledge
6. Understand risk-based decision making and the use of the UK Risk Register	Assessors will need to see examples of your knowledge of the risks posed by pests and the reasons why they are a risk
7. Understand: a) the range of notifiable pests and pathogens that threaten the UK b) which pests and pathogens are high risk within your area of work c) Sampling strategies for surveillance of plant pests and pathogens	Assessors will need to see examples of your knowledge of the breadth of species that are of concern to UK plant health and how and why sampling strategies contribute to UK plant health
8. Understand how trade provides pathways of introduction for pests and pathogens and the control measures that can reduce risk	Assessors will need to see examples of your understanding of how trade affects introduction and spread of pests and the measures that can be taken to reduce this risk
9. Demonstrate knowledge of good biosecurity practice within your work area	Assessors will need to see examples of how you implement biosecurity practices in your work area

10. Understand contingency planning and outbreak management	Assessors will need to see examples of your knowledge of contingency planning in your work area and how this is implemented
11. Understand the impact and consequences of control strategies and measures on: a) economic losses b) social and environmental impact c) health and safety	Assessors will need to see examples of your knowledge of control strategies and measures in relation to your work area

OVERVIEW FOR ALL LEVELS

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For all colleagues, it is about focusing your contribution on the activities which will help in protecting agriculture, forestry and the natural environment both nationally and internationally whilst recognising the need and importance of international trade in plants and plant products. You would understand that threats to plant biosecurity have increased with the globalisation of trade and travel and that predicted climate change effects may influence the impact of damaging pests not yet present in the UK but also ones that are present and have associated management practices. The level of your involvement and influence will range from local, regional, national to international and short term to long-term with increasing responsibility and competency level from associate, to registered to senior plant health professional.

Assessors will be looking for evidence for the following areas in tree health and plant biosecurity:

Understand:

- What plant biosecurity is, principles of good practice and why it is important.

- The range of plant pests and pathogens that can cause damage, how they may be introduced and/or spread

- The value of the accurate identification of both hosts and pests and the approaches used to achieve this

- Impacts of pests and pathogens on agriculture, forestry and horticulture throughout the entire supply chain and the impact on landscape, amenity and the wider environment

- principles of protecting plant health through risk-based decision making and the appropriate use of international Phytosanitary legislation

- factors that can influence risk such as globalisation of trade and predicted climate change

- responsibility for reducing risk sits with those who benefit from the reduction of those risks (where appropriate)

- diversity of organisations affected by plant health

- impact of pests and pathogens on health and safety particularly in relation to trees e.g. Oak Processionary Moth or Tree /limb falls due to cankers etc.

- principles, implementation and impact of control strategies and measures

The level of knowledge and evidence will increase with the competency level from associate, to registered to senior plant health professional.

Competency	Assessors will be looking for evidence that you know / do / take an active part in:		
	Associate	**Registered**	**Senior**
1. Understand how Plant Health Services operate in the UK	Be able to describe the different government departments responsible for Plant Health and Forestry in the UK	Describe how information on plant health is communicated in your organisation Understand the range and diverse nature of sectors that could be affected by biosecurity e.g. trade and natural environments	Describe how you initiate the flow of information and decision making within your organisation and communicate with counterparts in other UK organisations
2. Understand the key set of guidelines and regulations that must be followed: a) **International** Plant Health Standards, e.g. International Plant Protection Convention (IPCC), WTO-SPS, ISPM b) **European and National** Plant Health Standards e.g. EPPO standards and EU Plant Health regimes, Plant Health and Plant Health (Forestry) Orders and associated powers	Be able to explain the basic principles of the guidelines and regulations that you use in your role and how it helps protect plant biosecurity	Provide the detail for a specific area and an appreciation of differing practices Show an appreciation of the global spread of pests and pathogens and opportunities for improved biosecurity Demonstrate a working knowledge of: • prohibited, controlled and unrestricted classifications • Use of phytosanitary certificates and plant passports	Actively contribute to national and international initiatives to improve practices Dissemination of good practice internationally
3. Understand the plant Biosecurity Continuum	Be able to explain the concept of pre-border, border and post-border surveillance	Give an appreciation of border activity and opportunities for improved biosecurity	Demonstrate implementation of surveillance and detection methodologies as they become available, and control strategies and

	Be able to give examples of different types of surveillance, inspection or identification approaches (select at least 1)	Understand different technologies and their benefits/limitations for surveillance, inspection, diagnosis and identification	enhanced intelligence with stakeholders
4. Demonstrate communication of risks and plant health policy	Demonstrate how you explain your job to others and its role in UK biosecurity	Demonstrate how you explain the principles of plant biosecurity to a wider audience

Explain how you make use of existing networks of communication and/or develop new ones | Show how you lead, negotiate and support regional, national and international plant health policy and campaigns to enhance Plant Biosecurity |
| 5. Understand the roles and responsibilities that are required:

a) *within* your organisation

b) *outside* your organisation with stakeholders and officials | Be able to explain who is responsible for surveillance, monitoring, containment/eradication and reporting pests and pathogens:

• within your organisation

• and reporting to statutory bodies in your organisation | Understand the need to escalate potential plant health concerns

Work with sectors to develop good practice e.g. plant health management or certification schemes with industry

Describe the process for notification of listed and high-risk pests and pathogens.

Understand the implications on international trade of submitting quarantine pest/pathogen notifications | Understand how changes in plant health legislation will affect your work

Show how you disseminate good practice; understanding and overcoming barriers to plant health regulations amongst stakeholders |
| 6. Understand risk-based decision making and the use of the UK Risk Register | Be able to explain the principles of Risk (Hazard x Likelihood)

Describe what the UK Risk Register | Understand risk-based decision making and knowledge of the principles of risk assessment and the UK Risk Register

Give examples of how you have used | Describe how you have informed colleagues of the results of horizon scanning and changes to the Risk Register ensuring they are upskilled as required |

	is and how you can use it	the Risk Register for 'horizon scanning' for new and emerging problems relevant to your business	Show how you: • monitor, manage and review performance in dealing with high risk pests and pathogens and contribute to strategy for their control • Influence policy following identification of new plant health risks • Communicate risks appropriately and follow up action where needed
7. Understand: a) the *range* of notifiable pests and pathogens that threaten the UK b) which pests and pathogens are *high risk within your area* of work c) Sampling strategies for surveillance of plant pests and pathogens	Be able to give named examples of the range of pests (e.g. invertebrates and nematodes) and pathogens (e.g. bacteria, viruses, fungi) that are detrimental to plant health; common symptoms to help recognise them and examples of common hosts they affect Be able to describe taking different types of samples and packaging for plant pest and disease diagnosis	Be aware and able to explain that not all organisms are harmful Demonstrate awareness of new and emerging problems within and threatening the UK Show how you design and develop surveillance and sampling strategies on a local basis and review effectiveness	Be able to explain the significance of accurate identification and the consequences of taxonomic revision Show how you design, develop and critically assess surveillance and sampling strategies and effectiveness on a regional and national basis
8. Understand how trade provides pathways of introduction for pests and pathogens and the control measures that can reduce risk	Demonstrate awareness of the significance of different origin of plants, wood, wood products and bark and other materials capable of harbouring pests and pathogens	Explain how pests and pathogens spread naturally such as via air, water, soil and via vectors	Demonstrate an understanding of different pest and pathogen lifecycles and survival strategies and the significance on control strategies

9. Demonstrate knowledge of good biosecurity practice within your work area	Be able to define "biosecurity" Give examples of how you carry out biosecurity practices to prevent spread of plant pests and pathogens within your work area	Understand good biosecurity practice Use and improve biosecurity protocols to deal with pest and disease management within your organisation	Show how you develop biosecurity protocols to deal with pest and disease management on a national basis Demonstrate an awareness and adoption of international protocols
10. Understand contingency planning and outbreak management	Be able to describe what a contingency plan is and why it is needed	Describe the steps you take to prepare in the case of an outbreak (policy, surveillance or lab preparedness as appropriate)	Show how you test new ways to enact speedier, effective methods of outbreak control Demonstrate knowledge and adoption of industry best practice as applicable Have processes for and undertake resilience testing of contingency plans
11. Understand the impact and consequences of control strategies and measures on: a) economic losses b) social and environmental impact c) health and safety	Give examples of how the introduction of a pest or pathogen may impact upon economic, social, environmental and health and safety issues. Give examples of who else might be affected across various sectors and the impacts on their work	Understand the impact and consequences of an outbreak and management practices at a regional level	Understand the impact and consequences of an outbreak and management practices at a national and international level

Continuing Professional Development (CPD)

Once on the register, individuals are expected to demonstrate 50 CPD points per year and to enter their CPD on the MySociety page. RSB guidelines on CPD points are provided here. The Plant Health Professional Register is intended to complement and not duplicate any work-based CPD programme.

The application process

Applications are made via the MySociety page of the Royal Society of Biology website (www.rsb.org.uk). Persons applying for the Plant Health Professional Register must have membership of the Royal Society of Biology of at least the Affiliate grade. You must first apply for affiliate membership, once you have submitted your membership application you can then apply to join the register. Your affiliate membership application to the Royal Society of Biology will then permit your application to the Plant Health Professionals register on the website in My Society.

There are two routes to applying depending on your circumstances:

1. If applying individually, please apply to join in MySociety at the affiliate level where payment will be requested. You may wish to join the RSB at a higher level (Associate, Member or Fellow) according to your circumstances. Contact the RSB for further information at membership@rsb@org.uk.

2. You may be invited to join affiliate membership if part of a group within your institution. If this is the case, please liaise with your nominated mentor who can organize a group application and payment for membership.

Once your application for affiliate membership has been completed and submitted, you can proceed with your application to the register.
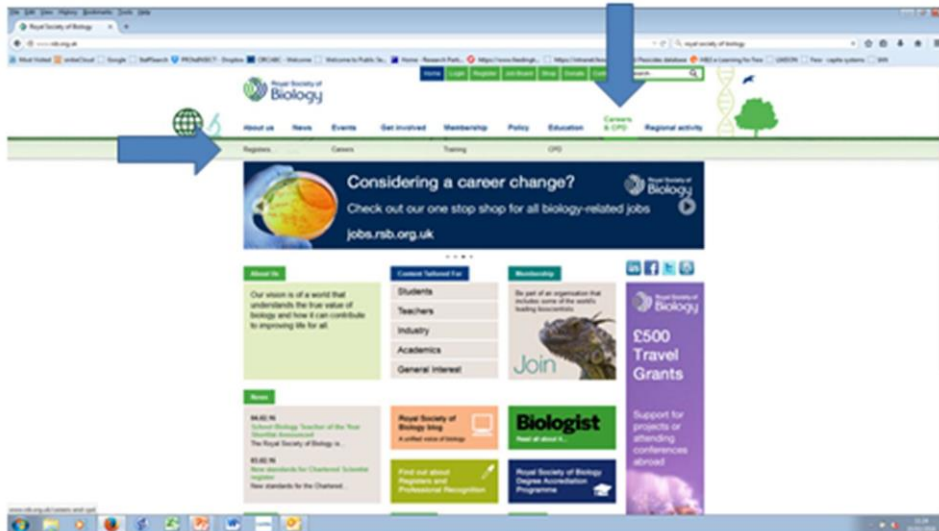
The location of the Plant Health Register application page is shown below.
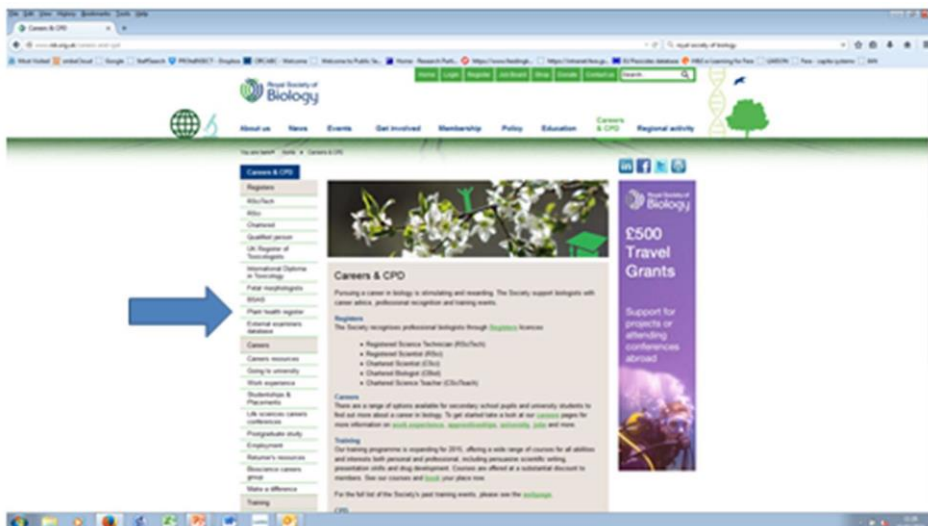
Either:

Login directly to the MySociety area
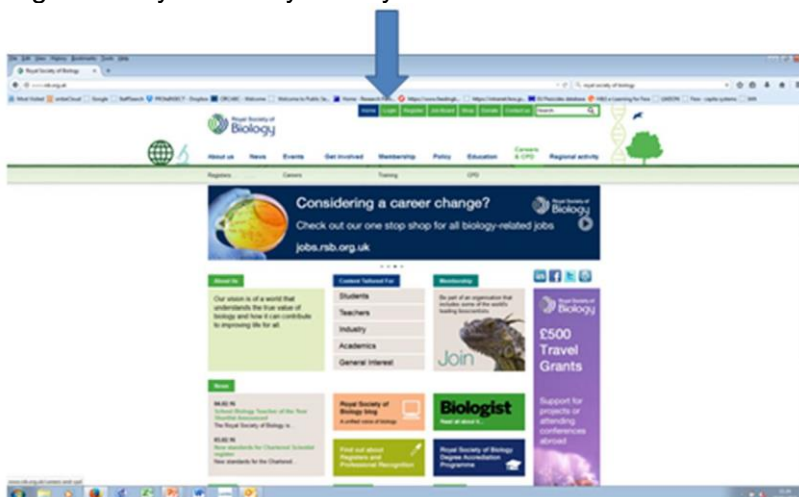
Alternatively go to Careers and CPD and then Register
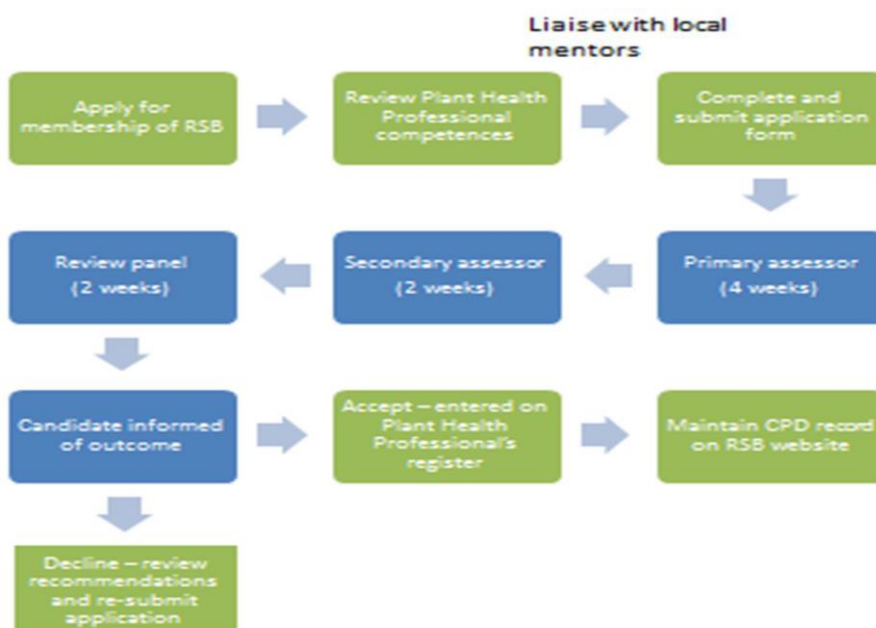

Go to Plant Health Register

Towards the bottom of the page click on MySociety

Login to the MySociety page, then go to Professional Registers on the drop down menu

Applications to the Plant Health Professionals register should be completed in full in all sections and submitted electronically in MySociety to be considered by assessors.

The diagram below shows an overview of the application and assessment process. The tasks in green boxes are for completion by the applicant. The tasks in blue boxes indicate the assessment procedure.

If you are already on the Plant Health Professionals register but wish to increase your registration level, please contact php@rsb.org.uk.

Appendix: Guidelines for MySociety application of the register

1. Applications are made through MySociety. Check all sections are complete and correct, and submit the application. Ensure payment is made in **MyTransactions** if paying individually.
2. Submitting an application, on submission:
   a. An automatic confirmation email is sent to say the application is received
   b. An automated referee request is sent to two referees (if two are included on the form)
3. Applications to join the register are considered quarterly. The deadline for receipt of applications is on 1st April, 1st July, 1st October and 1st January. Applications received after the deadline will be considered at the next meeting
4. Applications are sent to assessors the following week (to allow 1 week grace for any references to be returned)
5. Primary assessors receive application by auto email. Primary assessor has 4 weeks to complete application review using shared review template.
6. Primary assessor sends application to secondary assessor with their review form. Second assessor has 2 weeks to review.
7. Secondary assessor sends the completed review with primary and secondary assessor comments to RSB who follow up on any discrepancies between assessors.
8. Teleconference is organized by RSB to discuss applications
9. Successful applicants are put on register at next election
10. Non-successful applicants are given individual feedback on what they need to go do get on the register
    a. Resubmission of evidence may be requested – applicant is advised to resubmit this via the RSB who will pass it on to the assessors
11. All successful registrants will receive an automatic welcome email confirming acceptance onto the register and enrollment in the CPD programme.

Checklist for applying:
Common Pitfalls

1. Applying without submitting the application – RSB cannot process until the application is fully clicked through to submit. You will receive confirmation via email if your application is successfully submitted.
2. Check junk mail - Ensure all information provided is correct and check your junk folder for the automated emails.
3. Payment – applications can't be registered without payment – ensure that payment has been made. If your organization is being invoiced, payment request can be ignored.
4. Referees – RSB requires at least one reference to process an application. Ask your referees to check their inbox for requests.