

FEDERAL INTERAGENCY COMMITTEE ON INVASIVE TERRESTRIAL ANIMALS AND PATHOGENS



PLANT PATHOGENS SUBCOMMITTEE

**2017-2021
STRATEGIC AND WORK PLAN**

**LAST UPDATED:
NOVEMBER 25, 2019**

MISSION

Coordinate, facilitate, and promote the proactive protection of natural and agricultural resources from plant pathogens.

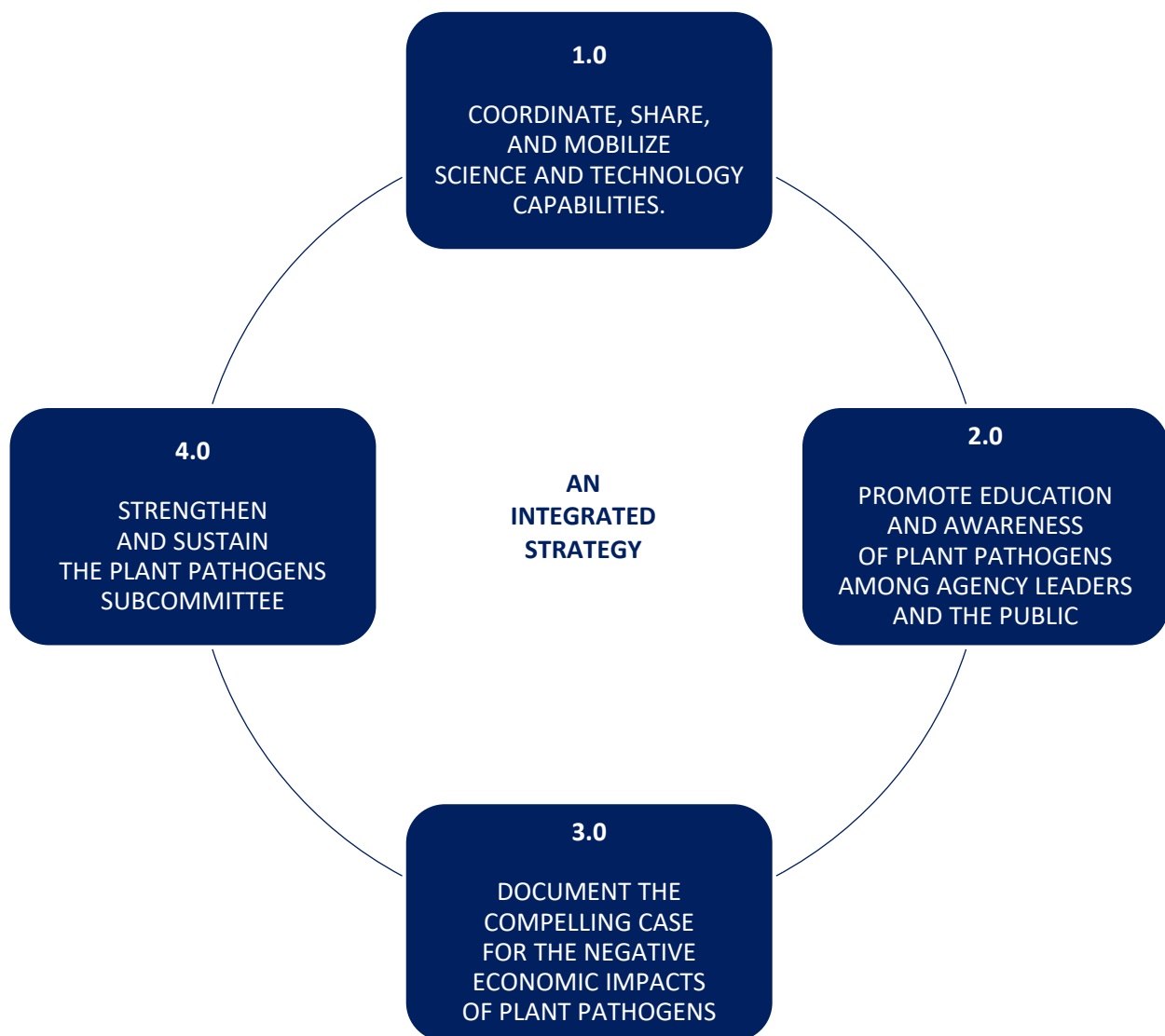
VISION

A nation in which we know, anticipate, and mitigate emerging and existing plant pathogens.

TAGLINE

KNOW new pathogens.

STRATEGIC GOALS



1.0 COORDINATE, SHARE, AND MOBILIZE SCIENCE AND TECHNOLOGY CAPABILITIES.

1.1 Identify and communicate the most important existing and emerging plant pathogens to agency heads and the public.

- Produce and share a prioritized list of the next 25 (#51-75) most important plant pathogens data sheets for the next two years. (FY20 Q3, L: Julius, Rose, Tim)
 - Q3 – preliminary list of ~15 (for funding purposes); Q4 – list updated based on APS conference and funded by August.
- Identify funds to finance the next 25 data sheets. (FY20 Q4, L: Hilda and Co-Chairs)
- Continue to identify appropriate contacts at APHIS, Homeland Security, US Fish and Wildlife Services, Forest Service, and other agencies to whom the Plant Pathogens SC should be communicating knowledge. (FY20 Q4, FY21 Q4; L: Julius, Rose, Tim)
- Continue to communicate plant pathogens knowledge to APHIS, Homeland Security, US Fish and Wildlife Service, Forest Service, and other agencies at every opportunity. (FY20 Q4, FY21 Q4; L: Julius, Rose, Tim; PP#054)
- Produce and share a prioritized list of the 50 most important plant pathogens for the next five years. (FY18 Q2; L: Co-Chairs of PPSC, S: Joyce Bolton; PP#052) **[Complete]**
- Identify groups of plant pathogens that are inherently difficult to manage and obtain information about, and are potentially harmful. (FY18 Q4; L: Lisa Castlebury, S: JoAnne Crouch; PP#053) **[Complete]**

1.2 Enhance coordination to address pathways with interagency action plans for five of the top 50 plant pathogens, or for a pathway and all associated pathogens.

- Revisit/clarify the concept of completing interagency plant pathogen action plans and determine appropriate next steps. (FY20 Q3; L: Russ)
- Complete at least one interagency plant pathogen action plan per year, if appropriate based on assessments. (FY20 Q4, FY21 Q4; L: TBD)

1.3 Enhance science and technology and mobilize technology transfer for high consequence plant pathogens.

1.3.1 Develop systematics knowledge and diagnostic capabilities for five of the top 50 pathogens.

1.3.1.1 Emphasize knowledge and diagnostic capabilities for ports.

- Identify five of the top 50 pathogens and determine what ports can do (not conducive to molecular diagnostics yet). (FY19 Q4; TBD) **[Parking Lot]**
- Emphasize the NEED for the knowledge, e.g. Plant Inspection Stations (PPQ) and Custom and Border Protection (DHS), and identify who to contact for each. (FY19 Q4; TBD) **[Parking Lot]**
- Identify what crops to look at more carefully that host invasive pathogens. (FY19 Q4; TBD) **[Parking Lot]**
- Write a proposal for Farm Bill 2021 to address diagnostic capabilities for ports. **[Parking Lot]**
 - Communicate the opportunity for funding from the Farm Bill.

1.3.2 Develop and evaluate mitigation options for five of the top 50 pathogens.

- *Select five pathogens to propose mitigation options (recovery plans) using the APHIS prioritization system. (FY20 Q4, L: Tim)*
- *Propose mitigation options (recovery plans) for each of the five selected pathogens and inform APHIS authors/leads. (FY21 Q4, L: Tim)*
 - *Connect with Doug Luster – ARS POC; Russ Bulluck – APHIS POC.*
- *Note: Mitigation can occur as part of recovery or response (APHIS) and mitigation. A number of agencies are involved. Consider interagency action plans and response frameworks, e.g. Pramorum.*

1.3.3 Transfer new science and technology among federal agencies as developments mature.

1.4 Identify and promote the development of data and information needs among agencies.

- *Note: Dependent on the availability of data and capabilities.*
- *Identify and prioritize gaps in data and information to make recommendations to agencies. (Ongoing; L: Co-Chairs of PPSC/NPL ARS Plant Pathologist; PP#056) [Parking Lot]*
- *Conduct a meeting or use online assessment tool to catalyze linkage mechanisms among agencies to fill gaps. (FY18 Q4; L: NPL ARS Plant Pathologist; PP#057) [Parking Lot]*
- *Identify gaps and ERS to determine losses and what impacts will be regarding risk, and make recommendations to ARS, APHIS, and any interagency groups. (FY19 Q4; TBD) [Parking Lot]*

1.5 Enhance and communicate to Agencies the knowledge within existing national inventories such as CAPS, IPHIS, NPDN, and NCPN.

- *Recommend additional plant pathogens to be inventoried in the National CAPS Surveys. (Ongoing; L: Co-Chairs of PPSC; PP#058) [Parking Lot]*
- *Communicate the need for documentation (such as voucher specimens, deposition of cultures, or publications) to agencies and experts. (Ongoing; L: Lisa Castlebury, S: Megan Romberg; PP#059) [Parking Lot]*
- *Determine if the State Department of Agriculture (Land Grant) has a national inventory of plant pathogens (there is the widely prevalent NAPHIS) in cooperation with APHIS, NPDN, and NAPHIS. (FY19 Q3, TBD) [Parking Lot]*

1.6 Identify and enhance international inventory information with select regional groups, countries, and partners.

- *Coordinate with partners to identify currently available international inventory information. (FY20 Q4; L: Russ Bulluck)*
- *Identify and select at least three partners to coordinate international inventory efforts. (FY19 Q2; L: Russ Bulluck; PP#060) [Parking Lot]*
- *Identify groups in other regions of the world such as EPPO, NAPPO, the EU inventory of nematodes, EUPHRESO, Pacific one, Caribbean safeguard initiative, and Asia. (FY19 Q4, TBD) [Parking Lot]*
- *Coordinate with select partners to develop and share survey methods for other countries to conduct inventories. (FY18 Q2; L: Russ Bulluck; PP#061) [Parking Lot]*
- *Analyze available international inventory information for domestic impacts. (FY19 Q4; L: Russ Bulluck; PP#063) [Parking Lot]*

2.0 PROMOTE EDUCATION AND AWARENESS OF PLANT PATHOGENS AMONG AGENCY LEADERS AND THE PUBLIC

2.1 Communicate ITAP activities and findings to scientific societies, cooperative extension agents, and communications staff of appropriate federal and state agencies (including FICMNEW and ANSTF).

- Update the PPSC flyer (existing flyer plus the new 33 data sheets) and provide the information to international plant health events including the APS, ESA, and others. (FY20 Q1-Q4, L: Co-Chairs)
 - Flyers in Q1, distributed throughout the year.
 - Nina Shishkoff is a great graphic artist and can help with layouts, formatting, and artistry.
 - Hilda and Rose will lead the effort to create the 33 data sheet flyer.
- Participate in the 2020 APS Denver Conference's provisional workshop on plant disease recovery system and use to write recovery plans for plant pathogens. (FY20 Q4, L: Julius, Rose, Tim)
- Participate in the 2020 APS Denver Conference's special session on destructive non-native forest pathogens. (FY20 Q4, L: Julius, Rose, Tim)
- Present PPSC materials and data sheets at the NAPPO Conference. (FY21 Q1, L: Tim)
- Promote ITAP and the PPSC materials and data sheets at the Entomology Conference. (FY21 Q1, L: Co-Chairs)
- Communicate the research gaps identified by the subcommittee to the public (e.g. scientific societies, cooperative extension agents, and communications staff of appropriate federal and state agencies including FICMNEW and ANSTF). (FY18 Q1; L: Co-Chairs of PPSC, S: Communications Subcommittee – Iris Velez; PP#065)
[Complete]

2.2 Sustain liaisons across ITAP Subcommittees, FICMNEW, and ANSTF to inform each of Plant Pathogen activities and explore opportunities for collaboration.

- Leverage Hilda, ITAP Exec Sec, as the liaison to FICMNEW and ANSTF to share PPSC report announcements with these committees. (Ongoing, L: Co-Chairs)
 - Hilda sits on these committees already; she will provide documentation of all information shared. If something occurs in FICMNEW and ANSTF which will impact or be relevant to the PPSC, Hilda will report this back as well.

2.3 Publish briefings for agency leaders and policy makers to highlight accomplishments, case studies, and key issues facing the nation.

3.0 DOCUMENT THE COMPELLING CASE FOR THE NEGATIVE ECONOMIC IMPACTS OF PLANT PATHOGENS

3.1 Complete and communicate the results of five economic studies documenting the impacts of plant pathogens.

- Write one-page communication documents and summary talking points on each of the 14-plant pathogen economic impact studies, share in appropriate forums (e.g. APS, ESA, other), and post on websites (e.g. APS Public Policy and Standing Committees, ITAP). (FY20 Q4, Co-Chairs)
- Identify gaps in existing economic, societal, and cultural cases of plant pathogens. (FY19 Q2; L: Co-Chairs of PPSC, S: Uptal Vasavada ERS; PP#071) **[Parking Lot]**
- Contact ERS regarding how to identify the gaps (ERS, APHIS Economic Analysis and Modelers, NPS). (FY19 Q2; Co-Chairs of PPSC) **[Parking Lot]**
- Develop studies to inform each the top five gaps in existing economic, societal, and cultural cases and communicate results. (FY19 Q4; L: Co-Chairs of PPSC; PP#072) **[Parking Lot]**
- Compile list of economic, societal, and cultural cases that have already been made about plant pathogens. (FY17 Q4; L: Co-Chairs of PPSC, S: Hilda Diaz-Soltero, Betsy Randall-Schadel, Uptal Vasavada ERS; PP#070) **[Complete]**

4.0 STRENGTHEN AND SUSTAIN THE PLANT PATHOGENS SUBCOMMITTEE

4.1 Recruit new and retain active Plant Pathogen Subcommittee members with the appropriate expertise.

- Participate in two ITAP-wide and webinars per year to share progress reports, discuss ongoing activities, and raise issues as needed. (FY20 Q2, FY20 Q4, L: Co-Chairs)
- Host two PPSC webinars to share progress reports, discuss ongoing activities, raise issues, and invite guest attendees and speakers as desired. (FY20 Q2, FY20 Q4, L: Co-Chairs)
 - Invite members from other agencies to five talks at subcommittee meeting.
- Provide mentoring opportunities (“buddy system”) for PPSC members to connect with longer-term members to answer questions about the SC, specific roles (e.g. Chairs, Exec Secs), and opportunities to engage and participate in ITAP actions and objectives. (FY20 Q2, L: Rose)
- Provide quarterly high-level overviews about ITAP, the PPSC and other SCs, their goals, and the wider roles and contributions across federal agencies (DOI, NPS, USDA, etc.). (FY20 Q1-4, L: Co-Chairs)
 - Invite all members and external people at related agencies.
- Engage directly with existing members, share the new work plan, and reinvigorate participation. (FY20 Q2, Lead: Co-Chairs)
- Identify gaps in SC expertise and pursue new member to meet these needs. (FY20 Q3, L: Co-Chairs)
- Update annual membership of Subcommittee rosters and participation in tasks. (FY20 Q4; L: Co-Chairs)
- Recruit at least three new sub-cellular pathogen scientists. (FY17 Q4; L: Co-Chairs of PPSC; PP#075) **[Complete]**
- Note: Website overhaul badly needed; consider contractor or ORISE opportunity to tackle this issue more immediately (fed hire will take too long).

4.2 Maintain effective Strategic Plan and Work Plan management.

- Prepare an Annual Plant Pathogens Subcommittee Report and updates on Work Plan progress as needed to ITAP. (Ongoing; L: Co-Chairs)

FY20-21 CONSOLIDATED ACTION LIST

Goal 1: Coordinate, share, and mobilize science and technology capabilities.

Actions	FY20 Q1	FY20 Q2	FY20 Q3	FY20 Q4	FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
<p>1. Produce and share a prioritized list of the next 25 (#51-75) most important plant pathogens data sheets for the next two years. (FY20 Q3, L: Julius, Rose, Tim)</p> <ul style="list-style-type: none"> Q3 – preliminary list of ~15 (for funding purposes); Q4 – list updated based on APS conference and funded by August. 			●					
<p>2. Revisit/clarify the concept of completing interagency plant pathogen action plans and determine appropriate next steps. (FY20 Q3; L: Russ)</p>			●					
<p>3. Identify funds to finance the next 25 data sheets. (FY20 Q4, L: Hilda and Co-Chairs)</p>				●				
<p>4. Coordinate with partners to identify currently available international inventory information. (FY20 Q4; L: Russ Bulluck)</p>				●				
<p>5. Select five pathogens to propose mitigation options (recovery plans) using the APHIS prioritization system. (FY20 Q4, L: Tim)</p>				●				
<p>6. Continue to identify appropriate contacts at APHIS, Homeland Security, US Fish and Wildlife Services, Forest Service, and other agencies to whom the Plant Pathogens SC should be communicating knowledge. (FY20 Q4, FY21 Q4; L: Julius, Rose, Tim)</p>				●				●
<p>7. Continue to communicate plant pathogens knowledge to APHIS, Homeland Security, US Fish and Wildlife Service, Forest Service, and other agencies at every opportunity. (FY20 Q4, FY21 Q4; L: Julius, Rose, Tim)</p>				●				●
<p>8. Complete at least one interagency plant pathogen action plan per year, if appropriate based on assessments. (FY20 Q4, FY21 Q4; L: TBD)</p>				●				●
<p>9. Propose mitigation options (recovery plans) for each of the five selected pathogens and inform APHIS authors/leads. (FY21 Q4, L: Tim)</p> <ul style="list-style-type: none"> Connect with Doug Luster – ARS POC; Russ Bulluck – APHIS POC. 								●

Goal 2: Promote education and awareness of plant pathogens among agency leaders and the public.								
Actions	FY20 Q1	FY20 Q2	FY20 Q3	FY20 Q4	FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
<p>10. Leverage Hilda, ITAP Exec Sec, as the liaison to FICMNEW and ANSTF to share PPSC report announcements with these committees. (Ongoing, L: Co-Chairs)</p> <ul style="list-style-type: none"> Hilda sits on these committees already; she will provide documentation of all information shared. If something occurs in FICMNEW and ANSTF which will impact or be relevant to the PPSC, Hilda will report this back as well. 	●	●	●	●	●	●	●	●
<p>11. Update the PPSC flyer (existing flyer plus the new 33 data sheets) and provide the information to international plant health events including the APS, ESA, and others. (FY20 Q1-Q4, L: Co-Chairs)</p> <ul style="list-style-type: none"> Flyers in Q1, distributed throughout the year. Nina Shishkoff is a great graphic artist and can help with layouts, formatting, and artistry. Hilda and Rose will lead the effort to create the 33 data sheet flyer. 	●	●	●	●				
<p>12. Participate in the 2020 APS Denver Conference's provisional workshop on plant disease recovery system and use to write recovery plans for plant pathogens. (FY20 Q4, L: Julius, Rose, Tim)</p>				●				
<p>13. Participate in the 2020 APS Denver Conference's special session on destructive non-native forest pathogens. (FY20 Q4, L: Julius, Rose, Tim)</p>				●				
<p>14. Present PPSC materials and data sheets at the NAPPO Conference. (FY21 Q1, L: Tim)</p>					●			
<p>15. Promote ITAP and the PPSC materials and data sheets at the Entomology Conference. (FY21 Q1, L: Co-Chairs)</p>					●			

Goal 3: Document the compelling case for the negative economic impacts of plant pathogens.								
Actions	FY20 Q1	FY20 Q2	FY20 Q3	FY20 Q4	FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
<p>16. Write one-page communication documents and summary talking points on each of the 14-plant pathogen economic impact studies, share in appropriate forums (e.g. APS, ESA, other), and post on websites (e.g. APS Public Policy and Standing Committees, ITAP). (FY20 Q4, L: Co-Chairs)</p>				●				

Goal 4: Strengthen and sustain the plant pathogens subcommittee.								
Actions	FY20 Q1	FY20 Q2	FY20 Q3	FY20 Q4	FY21 Q1	FY21 Q2	FY21 Q3	FY21 Q4
17. Provide quarterly high-level overviews about ITAP, the PPSC and other SCs, their goals, and the wider roles and contributions across federal agencies (DOI, NPS, USDA, etc.). (FY20 Q1-4, L: Co-Chairs) <ul style="list-style-type: none"> Invite all members and external people at related agencies. 	●	●	●	●				
18. Prepare an Annual Plant Pathogens Subcommittee Report and updates on Work Plan progress as needed to ITAP. (Ongoing; L: Co-Chairs)	●	●	●	●	●	●	●	●
19. Provide mentoring opportunities (“buddy system”) for PPSC members to connect with longer-term members to answer questions about the SC, specific roles (e.g. Chairs, Exec Secs), and opportunities to engage and participate in ITAP actions and objectives. (FY20 Q2, L: Rose)		●						
20. Engage directly with existing members, share the new work plan, and reinvigorate participation. (FY20 Q2, L: Co-Chairs)		●						
21. Participate in two ITAP-wide and webinars per year to share progress reports, discuss ongoing activities, and raise issues as needed. (FY20 Q2, FY20 Q4, L: Co-Chairs)		●		●				
22. Host two PPSC webinars to share progress reports, discuss ongoing activities, raise issues, and invite guest attendees and speakers as desired. (FY20 Q2, FY20 Q4, L: Co-Chairs) <ul style="list-style-type: none"> Invite members from other agencies to five talks at subcommittee meeting. 		●		●				
23. Identify gaps in SC expertise and pursue new member to meet these needs. (FY20 Q3, L: Co-Chairs)			●					
24. Update annual membership of Subcommittee rosters and participation in tasks. (FY20 Q4; L: Co-Chairs)				●				