National Plant Board Update

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What is the National Plant Board?

- A non-profit organization of the plant pest regulatory agencies in each of the states, the Commonwealth of Puerto Rico, and Guam
In general, members of the NPB have responsibility for:

- Pest Detection
- Regulation and Quarantine
- Response
- Communication and Outreach

Some 2016 landmarks:

- Japanese beetle harmonization plan revisions effective Jan. 1, 2017
- SANC Pilot Phase II for Nursery/Greenhouse Operations underway
- A variety of new/recently detected diseases of agricultural crops keeping some members very busy!
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The remainder of this talk will focus on how members of the NPB, and by extension, the State Departments of Agriculture, have been involved with non-native forest pest detection, regulation & quarantine, & response.

States have been dealing with non-native forest pests for quite a while…
Number of Non-Native Forest Pests

Spread related to pathway and forest diversity

History of industrialization
Host tree diversity
Forest fragmentation

Promote pest arrival & establishment

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- Each member state has **varying** plant pest concerns, organizational structures, and authorities, rules, and regulatory tools at their disposal

Based on an anonymous survey of NPB members, with 42 (80%) responding…
State plant protection laws/statutes usually require legislative approval.

Regarding a revision to your plant laws/statutes (not individual quarantines) would that require sending through your legislature?

- Yes (37)
- No (4)
- I am not sure (1)
Quarantines can vary in time required for implementation.

Knowing that states vary widely in the amount of time needed to enact a quarantine, approximately how long does the process take in your state (i.e. from the time a quarantine is drafted until it becomes official)?

- Less than 1 week
- About 2 weeks
- 2 weeks to 1 month
- 1-3 months
- 3-6 months
- 6 months to 1 year
- 1 year or more

# of responses
States have a wide range of personnel resources

How many staff members do you have in the field? The idea behind this question is to highlight the wide range of capabilities that states have to quickly respond to introduced pest problems.
Retirements have led to a high replacement of SPRO’s within the last 5 years.

How long have you been the SPRO for your state?

- Less than 1 year: 12
- 1 to 5 years: 15
- 5 to 10 years: 8
- 10 to 15 years: 3
- 15+ years: 4
What is the National Plant Board?

- A non-profit organization of the plant pest regulatory agencies in each of the states, the Commonwealth of Puerto Rico, and Guam
- Each member state will have **varying** plant pest concerns, organizational structures, and varying authorities, rules, and regulatory tools at their disposal
- However, each member state has **a common** responsibility for plant health and plant pest regulatory issues, and coordinates with **state**, **federal**, and **industry** partners to achieve goals
Pest Detection

- Survey for plant pests of national and state concern
- Participate in CAPS program and Farm Bill suggestion process
- Funding availability for surveys for forest pests
- Participation in and inclusion of pests for survey based on:
  - Host availability/resources at risk
  - Likelihood of pest establishment / suitability
  - Likelihood of introduction / pathway
  - Ability to conduct survey / infrastructure
  - Coordination of resources with other state and federal entities
- PPQ staff in the state may also conduct forest pest surveys
Data Gathering:

- Examined NAPIS data for all *planned* Farm Bill & CAPS-funded surveys, 2013-2016
- Looked for forest pests in 17 different named commodity and/or pathway surveys
- Investigator bias (mine!) led to removal of palm commodity surveys, and any pest not primarily a forest pest
- Examined states planned forest pest surveys each year, 2013 – 2016
- Examined forest pests included in survey plans each year, 2013 - 2016
In general:

- 48 State Departments of Agriculture planned to participate in CAPS and Farm Bill surveys for forest pests
- On average, participating states planned surveys for 8 ± 1 forest pests
In general:

- Across the country, about 60 – 65 insects and diseases were targeted for survey by State Departments of Agriculture
- These were primarily beetles, moths, and pathogens
- On average, each pest was included as a survey target by $7 \pm 1$ SDA
- The frequency distribution of states looking for each target pest was skewed
- Some “high value” targets were included in survey plans by 15 or more states
Skewed distribution, with several targets included for survey by only 1–5 states, and some targets included for survey by 15+ states.
Most popular targets for SDA included in any given year, 2013 - 2016:

- *Monochamus alternatus*: 32 - 45
- *Ips typographus*: 32 - 39
- *Ips sexdentatus*: 28 - 36
- *Tomicus destructor*: 29 - 32
- *Platypus quercivorus*: 18 - 26
- *Agrilus biguttatus*: 22 - 25

- *Lymantria dispar asiatica*: 14 – 26
- *Lymantria mathura*: 18 - 22

- *Phytophthora ramorum*: 15 – 19
- *Adelges tsugae*: 2 - 3
“Compiled species list to assess accumulation rates of nonindigenous forest insects and pathogens established in the United States” 1860 - 2006

When broken down by feeding guild:
- Establishment of sap feeders declined over time
- Establishment of foliage feeders declined over time
- Establishment of pathogens was low and stable
- Establishment of phloem and wood borers increased since 1970’s

Targets included in state surveys appropriately emphasize phloem and wood borers.
Regulation and Quarantine

- Many states are wholly or partially within federal quarantines for forest pests
  - Federal forest pest quarantine programs for: gypsy moth, emerald ash borer, Asian longhorned beetle, and pine shoot beetle
  - Asian longhorned beetle has successfully been eradicated from some states, but the states with eradicated populations are included in the graphic because the state has had historical experience with the federal Asian longhorned beetle quarantine
Many states are wholly or partially within federal quarantines for forest pests

- These are for gypsy moth, emerald ash borer, Asian longhorned beetle, and pine shoot beetle
- Asian longhorned beetle has successfully been eradicated from some states, but they are included in the graphic as the state has had experience with the federal Asian longhorned beetle quarantine
- Individual State Departments of Agriculture may have authority to enact quarantines for forest pests and/or propose requirements which would allow trade in various products that pose a risk to spreading forest pests of concern
Data Gathering:

- Summaries of state’s plant pest quarantines are available on the National Plant Board website: [www.nationalplantboard.org](http://www.nationalplantboard.org). It is up to the state to ensure that these regulations are up-to-date and accurate.
- I reviewed these summaries for forest pest-related quarantines, requirements, or specific mentions.
- For each state, I summarized the number of quarantines/requirements/mentions of forest pests.
In general:

- 38 States published some regulatory reference for non-native forest pests
- The states with requirements mentioned between 1 and 8 non-native forest pest-related requirements/references
- Per state: mean: 2.9, median: 2.5, mode 1
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- 38 States published some regulatory reference for non-native forest pests
- The states with requirements mentioned between 1 and 8 non-native forest pest-related requirements/references
- Per state: mean: 2.9, median: 2.5, mode 1
- Across the country, about 20 different pests or firewood had some state-based quarantines/restrictions
5 states have stand-alone firewood regulations; 3 states mention firewood in a stand-alone regulation and in additional quarantines; 22 states include firewood as a regulated article in a quarantine for a specific pest.
Response:

- Slow the spread and trapping programs for European gypsy moth
- Trace forwards of Sudden Oak Death host material
- Unusual pathways in 2016:
  - Laminated pine outdoor furniture from China. States, PPQ, CBP, the industry & general public participated in this response that involve 40 states. Involved live brown fir longhorned beetle.
  - Imported hickory furniture with velvet longhorned beetle. On-going effort complicated by bankruptcies.
  - Imported wooden chew toys.
In conclusion:

- NPB members and by extension, state departments of agriculture, actively survey for forest pests
- NPB members cooperate and coordinate with state, federal & industry partners on forest pest outbreaks that have the potential to impact state forest resources
- NPB members are involved with regulations - federal and state - relating to forest pests
- NPB members are involved in response to pest introductions
- NPB members know that outreach & communication enhance other activities & either actively do forest pest outreach, or coordinate with partners to get the job done

Thank you for your attention!