

**National Cooperative Agricultural Pest Survey (CAPS) Conference
December 3-4, 2008**

White Papers

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Commodity-like Surveys

Commodity-based surveys have been developed and implemented in the CAPS program as National Surveys. The program has decided that this format is the most efficient and cost-effective way to conduct active survey efforts, and that this format will continue into the foreseeable future.

Currently, commodity-based surveys for citrus, grape, oak, pine, small grains, and soybean are offered, along with an Exotic Wood Boring Bark Beetle survey (more of a habitat- or business-based survey in forests and/or warehouses with wood products, respectively). A cyst nematode survey also is offered. Corn and potato commodity-based surveys are in development. A State surveying for pests in these commodities fulfills the national survey requirement.

The continued development of commodity-based surveys without a plan to manage the offering of these surveys may waste precious time and money. As more commodity-based surveys are introduced, the effect is to dilute their effectiveness as a tool for national surveys. There is only a limited amount of funding to support these surveys, and States will have to pick and choose which surveys are in the best interest of their State. A situation will exist where a particular commodity-based survey will only be conducted in a few States, resulting in a patchwork of survey efforts and defeating the purpose of national surveys.

We have reached a point where we need to have several questions answered, suggestions made, and recommendations put forth on how to proceed with this format of survey. A moratorium on the development of any more commodity-based surveys has been initiated until these questions have been resolved, and a plan to manage these surveys is implemented.

We also have heard feedback that these commodity-based surveys do not fit the agriculture and agricultural businesses of some States, notably, those in the mid-Atlantic and Northeastern U.S., at least not to the degree that fulfills the present 75% requirement in the CAPS Survey Guidelines.

The topic for discussion at the CAPS Conference is to develop an exotic pest survey that would benefit the states in a particular region of the country. These surveys do not have to be based on commodities per se, although they could be. For example, a nut (almonds, pecan, walnuts) or fruit (apples, pears) tree survey. The surveys also could be based on habitat (e.g., aquatic/wetlands), business (e.g., warehouse, nursery), or other commonality (e.g., wood boring bark beetles, snails). The surveys also could be based on region of the country, e.g., an invasive weed or apple survey may contain different target species in the East than in the West. These types of surveys would compliment the traditional commodity-based surveys.

The challenge for the breakout groups (which will be divided by regions of the country) will be to develop in concept, commodity-, habitat-, business/industry-, and/or regional-based surveys suitable for that part of the country, complete with a list of exotic target species. These will serve as recommendations to the NCC, who will prioritize the surveys and request CPHST to develop them.

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Today's topic is the commodity-like survey and it's format; pathway surveys will be addressed in another session.

Questions that need to be answered:

What surveys need to be developed that will address the agriculture, environment, or industry in a particular region of the country?

How are these surveys to be managed?

Do we offer all surveys each year?

Do we only offer a select number of surveys each year to attempt to have real national surveys?

How many per year?

What variety of surveys each year, enough so that every State can do something?

How many years in a row before a survey is rotated off the list?

Do we even want to consider funding surveys not specifically offered that year?

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Analytical Tools to Conduct CAPS Business

The concept of this session is to briefly share with the audience what steps have been taken and what tools have been considered to enable both field staff and program managers to better manage CAPS business. Further, this is an opportunity for both state and PPQ personnel to offer suggestions on what would be helpful to manage CAPS business for them; this includes both planning and reporting needs.

Planning: From the field perspective there is a need to access and consider available data to determine where to survey for target pests. The hotzone or risk-based targeted survey approach has been a focus for training and planning purposes. Currently there are many sources of data that may or may not be accessible to state cooperators. It is therefore contingent on functional state CAPS committees to work together in the sharing of appropriate data and planning of early detection surveys. Current sources being utilized include various databases like the EAN, Pest ID, SITC SNICAS system, NAPPFast, CPHST CAPS target e-alert report, NRRS data sets, and numerous other pest information sites like GPDD, OPIS, etc...

Reporting: The work plan submission process has not advanced in some time. The same is true for the trap and lure procurement process, data entry requirements outlined in the work plans (NAPIS), and semi-annual, quarterly, and year end reports. Currently we rely on e-mails and simple spreadsheets to track and monitor work plans, pest lists, diagnostic information, trap and lure data, and semi annual and year end accomplishment reports. The J-3 appendix was developed to assist in capturing key data in a single document that assists in sharing with NIS, regional and national management teams, and OMB. This is one step towards a future of enhanced tools that will simplify and streamline many of these processes.

Questions that need to be answered:

- 1) What tools are working now?
- 2) What tools are still needed, and to do what function?
- 3) What future tools and/or enhancement to existing tools would you like to see?

Desired Outcome: this session will hopefully capture what the needs and desires are from the states. This type of information will be helpful in planning future systems as well as ensuring whatever is developed meets the needs of PPQ and our cooperators.

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Survey Methodology and Guidelines – What is the Reality?

This session will involve general topics on the practice of planning and carrying out surveys and the methodology of surveying for exotic pests from a field perspective. Discussion will focus on the realities of surveying for exotic pests in the field, and may include topics such as survey techniques, field tactics, planning, procurement of supplies, successes, problems, and/or statistical needs.

Questions that need to be answered:

- Do the commodity survey guidelines facilitate the planning and execution of surveys?
- What information is beneficial, missing and needs to be included, or incorrect?
- Are the survey guidelines realistic as far as the availability of supplies and trapping methodology?
- Are the survey guidelines realistic as far as the availability of funding and staff resources?
 - Can we actually trap and survey at the intensity level recommended in the Guidelines (e.g., number of traps per acre, etc.)?
- Should pests with unavailable lures be part of the commodity survey?
 - If so, is a visual survey sufficient?
- Negative data entry for some exotic wood boring bark beetles has been restricted to approved survey methods;
 - Is this working?
 - Should similar restrictions be placed on other pests?
 - When can we call negative data valid, or should the phrase ‘not observed’ be used when approved methods are not available?
 - Can a visual survey result in valid negative data? In what instances?
- Does the present process of ordering trapping supplies work?
 - If not, what are possible solutions?
- Are the statistical portions of the guidelines too complicated or overwhelming?
- Are there easier protocols that balance the economics or cost of doing a survey with the probability of finding a targeted pest, i.e., what is practical?
- Do we need a training class on how to design a survey/sampling/trapping strategy?

The goals for this session are to provide recommendations to the NCC and CPHST on how to best present the survey guidelines so that they may be used to their maximum potential, and to offer novel ideas and solutions on topics focused on surveying for exotic pests in the field.

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Appropriate Data to Collect and Record

This discussion will focus on what data do we need to collect and record to meet our business needs. This is not a NAPIS/ISIS discussion, nor should it be focused solely on data elements. The focus will be a higher level discussion on what are our business needs, and what data from surveys do we need to support those needs. The discussion should center on the data needed to manage and support our survey efforts. What data would make our efforts more useful? This discussion should answer, or at least guide us, in determining what data is appropriate to collect and record, regardless of the data entry or data management system used. Topics may include summary and observational data; point and county-level data; regulatory and non-regulatory data; and/or new, eradicated, and re-introduced data.

Questions that need to be answered:

- Should we collect, record, and store data if:
 - The pest is native (non regulatory), but new to your state or county (e.g., range expansion); or
 - The pest is exotic, new to your state or county, but NOT a regulatory pest?
- For the situations above, if data is entered, should we enter additional records of those beyond the first detection?
- When do we consider a pest established in an area if it is not under eradication?
 - After three years of capture?
 - Who makes that decision?
 - Is there a set time frame to wait before saying a pest is established?
- For example, WV has EAB, they are not eradicating (cutting down trees) due to the mountainous terrain.
 - Do we consider that pest established there?
 - When is a pest established by survey as opposed to consensus? What are the differences? Is scientifically published data valid for establishment by consensus?
- Should data for a pest or disease that has been eradicated or does not survive (i.e., overwinter) be recorded every subsequent time (every year?) it is found at a new site, county, or state?
- Should it be appropriate and encouraged for States to also enter data about exotic pest detections that were not specific to a cooperative agreement, regardless of the means of detection?
 - Regulatory vs. non-regulatory pests?
 - Survey profile vs. distribution profile?
- Should data concerning regulatory releases of biological control agents be collected and entered?

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The goal of this session is to provide recommendations to the NCC to develop policy and provide direction on data collection and records for CAPS survey efforts.

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Risk-based vs. Commodity-like Surveys

Much discussion has revolved around the difference between risk-based and commodity-based types of survey, yet there has been no clear consensus and communication regarding the differences, similarities, or even the terminology used when discussing this topic. The focus of this discussion session will be to examine various facets distinguishing the different types of surveys, the advantages of each, and how they can be used in concert in a pest detection program.

Questions that need to be answered:

- How do we define the term ‘risk?’
- How do we define risk-based surveys as opposed to commodity-like surveys based on risk?
- Are risk-based surveys actually pathway-based surveys?
- How do these strategies work together?
- How do we manage these for national survey in the CAPS program?
- How do we decide and prioritize what commodity-like or risk/pathway-based survey to develop?

The goal of this session is to provide recommendations to the NCC and CPHST on the definition, development, and management of risk/pathway-based and commodity-like surveys for use in the CAPS program.

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Peer Group Discussions on Topics Relevant to the Various Roles

The purpose of these sessions is to provide an opportunity for the various peer groups that have a direct role in the CAPS program to meet and discuss topics of interest relevant to their perspective in the CAPS program. Each group, SPHD, SPRO, PSS, and SSC, have unique roles in the CAPS program. These sessions provide the opportunity to discuss issues important to their respective point-of-view, and to make recommendations and suggestions on how to improve the CAPS program.

Questions that need to be answered:

What is working in the CAPS program?

What needs improvement?

What topics not covered in this meeting still need to be addressed?

Are there other issues that the NCC needs to consider?

The goal of these sessions is to receive direct feedback, and provide suggestions and recommendations from the various peer groups regarding the status of the CAPS program from their group perspective.

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Managing Cooperative Agreements at the State Level

As government budgets get tighter and the scrutiny from the Office of Personnel Management (OPM) in providing tax payer dollars to agriculture programs increases, the responsibility of managing cooperative agreements is more critical than ever before. The PPQ Regional Directors, as the Authorized Department Official's (ADO) are ultimately accountable for the management of cooperative agreements, but this responsibility has basically been delegated to the state level. The Authorized Departmental Officer's Designated Representative (ADODR) has always been identified with the award of each agreement. The importance of this position, as well as the recipients of the agreement award, has great impact on future funding of a particular project or program. Within the Pest Detection program, the main players within PPQ responsible for the accountability of cooperative agreements are the State Plant Health Director (SPHD), who is commonly designated as the ADODR, and the Pest Survey Specialist (PSS). The positions sharing this responsibility on the cooperators side of the house commonly are the State Plant Regulatory Officer (SPRO), who often serves as the Recipient Organization's Authorized Representative (ROAR), and the State Survey Coordinator. All of these positions are at the state level where the work is being conducted to accomplish common goals. The "roles and responsibilities" of these positions are further outlined and described in the Cooperative Agricultural Pest Survey (CAPS) guidelines.

Each Cooperative Agreement is comprised of several articles and a project specific work plan and financial plan. Within the agreement package is all the information required to perform sound management of the agreement. The articles outline what the cooperator and APHIS's responsibilities are. The work plan outlines very specific details as to how the project will be accomplished within given timeframes. The financial plan outlines very specific costs of conducting the project. There is some flexibility allowed in the agreement, but these documents should be followed fairly closely. These plans, along with semi annual or quarterly progress reports and required data management, allows every key position (SPHD, SPRO, PSS, SSC) to be able to track and manage their portion of the project. Again, refer to the CAPS Guidelines for the "roles and responsibilities" of these key positions. Close and continued communication between all players involved will enable Pest Detection projects to be conducted in an efficient and cost effective manner. This will, in turn, provide confidence to OMB and tax payers that government funds are being utilized correctly.

Discussions that are in progress have indicated that the Farm Bill (FB) monies (at least a portion of them) may be administered through cooperative agreements between PPQ (SPHD) and State Departments of Agriculture (SPRO) or whatever entity is the current CAPS cooperator. If cooperative agreements are the ultimate vehicle by which FB money is distributed to the States, then this will place additional demands and responsibilities on SPHDs and SPROs for the administration, management, report functions, and accountability associated with these new cooperative agreements.

The focus of this session is to ensure that everyone is aware of the current roles and responsibilities that were implemented in the 2008 National Survey Guidelines, and how these

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roles and responsibilities will be brought to bear to handle increased accountability and an increased workload. Points to consider are:

- Importance of accountability (ADODR & ROAR) and performance measures of the program;
- The need to track the Farm Bill dollars separate from the Pest Detection allocated funds;
- Will these moneys require a separate cooperative agreement thus adding to the overall burden;
- Importance of consistent reporting nationally;
- The need/benefit/barriers of incorporating new technologies such as web based work plans, reports, budget documents, and data collection tools;
- May require ADODR/ROAR delegation for states that will have an increased amount of agreements (high risk states, etc); and
- Identify training needed for ADODRs and ROARs.

The goals of the session are to identify what is working well with the current structure, possible barriers, and gaps in the current roles and responsibilities as they pertain to the new environment created by the Farm Bill, and to offer novel ideas and possible solutions that will aid the SPHD and SPRO in carrying out their responsibilities.

The outcomes of this session are to recommend changes (if needed) to the SPHD and/or SPRO roles and responsibilities, possible changes to the cooperative agreement process, and to identify novel solutions to the current and expected level of planning, reporting, and administrative needs.

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Outreach: Sharing Our Mission with Industry and the Public

Outreach, in all its forms, is a vital component of our efforts to detect exotic pests before they become established or otherwise cause economic or environmental harm. Many successful outreach efforts are taking place in the States; however, there is little regional or national coordination that would enable state programs to be extended beyond individual state borders. We also have yet to formulate national messages to involve and garner support from industry and the public. We want to develop and launch initiatives that will inspire and encourage a sense of kinship, and urge the targets of these initiatives to embrace and adopt our mission as their own. To be successful, we will need to find areas where opportunities exist to capitalize upon momentum and credibility of other organizations that have common stakes. In ‘bureaucratic governmentese’ this is: “Engaging with nontraditional stakeholders on broad brush, over-arching issues seeking cross-cutting leveragability.” Several national efforts are under way with branding, messaging, and volunteerism, but these efforts cannot be successful without the input of the CAPS community.

Questions that need to be answered:

- What are our goals for outreach?
 - Increase visibility of the CAPS program, its mission, and successes?
 - Engaging the target audience or urging them to take certain actions?
(e.g., citizens surveying for pests and diseases, reporting pests and diseases)
 - Heighten awareness of the problem of invasive species?
- Who are the target audiences?
 - How well do we know them?
 - What are their connections to agriculture?
(e.g., conservationists, ambassadors of biodiversity, members of industry of agriculture-dominated or influenced communities)
 - Are they involved with any activities that are particularly dependent on native species that are or could be imminently threatened by specific exotic species?
- What can a SPHD/SPRO do to engage industry at the state level to increase participation and support of commodity based surveys?
- What are the talking points that will interest industry to make these talks successful?
- What can states and/or PPQ do to engage industry at the National level?
 - How do we carry that message, and in what venue, to ASTA, ANLA, etc.?

The goal of this session is to capture the thoughts and experiences of the CAPS community in order to provide recommendations and direction to the NCC for developing an outreach component and interacting with other outreach initiatives.

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Data Management Demonstrations

Formal Presentations

PHIS

Todd Schroeder, PPQ – EDP, National Data Management Coordinator, Riverdale, Maryland

Todd is the PPQ National Data Management Coordinator in Riverdale, Maryland, and is the Senior Business Systems Manager for the Plant Health Information System (PHIS). Todd will present the PHIS, highlighting how the integrated systems (ISIS, AQAS – Pest ID, AQAS – EAN) can be accessed through the PHIS interface to allow more efficient operational program work flows, as well as how more data accessibility and overall use can be established through standard tools.

ISIS

Brett Miller, PPQ, Western Region Program Manager, Fort Collins, Colorado

Brett is a Regional Program Manager in the Risk and Data Management "shop" in Fort Collins and is the Primary Business Manager for the Smuggling Interdiction and Trade Compliance (SITC) National Information, Communication, and Activity System (NICAS), as well as the Primary Business Manager for the Integrated Survey Information System (ISIS).

Dave Kowalski, PPQ, Western Region ISIS Data Manager, Fort Collins, Colorado

Dave is a Data Manager for the Integrated Survey Information System (ISIS), and is responsible for Data Management, Quality Control, and Reporting services related to the ISIS application. Together, they will present an ISIS demonstration that focuses on the use of the PDA application. The presentation will be conducted during the IT Expo portion of the CAPS meeting, and will include direct interaction with users who want to participate in a learning environment.

AQAS

Ethan Kane, PPQ – Business Systems Manager (AQAS) (Acting), Riverdale, Maryland

Ethan coordinates the development and maintenance of PPQ's Agricultural Quarantine Activity System (AQAS) which is comprised of six distinct sub-systems:

AQIM – Agricultural Quarantine Inspection Monitoring System

EAN – Emergency Action Notification Database

Pest ID – Pest Interception Database

PPQ280 – Regulated Commodities Database

PPQ264 – Propagative Imports Notification Database

WADS – Work Accomplishment Data System

Along with Bob English and Pete Touhey, Ethan will deliver a presentation that provides an overview of AQAS, while emphasizing specific sub-systems whose data resources are frequently leveraged to support domestic programs.

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Robert English, PPQ-QPAS – AQAS Administrator (EAN, PPQ280), Riverdale, Maryland

Bob manages the technical development and data quality issues associated with the Emergency Action Notification (EAN) and the Regulated Commodities (PPQ280) Databases. He also supports the field by providing EAN reports to various groups within PPQ, including the Pest Survey Specialists. Bob will be assisting with the AQAS presentation and will be available to answer questions related to EAN, PPQ280, and the use of these datasets in addressing domestic program needs.

Peter Touhey, PPQ-NIS – AQAS Administrator (Pest ID), Riverdale, Maryland

Pete manages the technical development and data quality issues associated with the Pest Interception Database (Pest ID). Pest ID is the main system supporting PPQ's diagnostic activities and the associated data is used to support a wide range of PPQ programs. Pete also provides program support by fielding specific dataset requests and consulting on various analytical projects. Pete will be assisting with the AQAS presentation and will be available to answer questions related to Pest ID.

Informal Presentations

NAPIS/Pest Tracker

Susan Schechter, NAPIS Senior User Services Administrator, Center for Regulatory and Environmental Information Services (CERIS)

NAPIS provides information systems support to the CAPS program. The NAPIS database, initiated in the 1980's, stores a standard data set describing pest survey results. The NAPIS web application allows state cooperators to store and report state owned survey data. Standard and ad-hoc report and map generation will be demonstrated. Training sessions are encouraged and individualized web based training can be scheduled.

The Pest Tracker public portal for exotic pest information will be featured. County level survey maps, CAPS contacts, and exotic pest information are a few of the standard elements of this dynamically generated site. Stop by and see what is new that impacts you, and review your state information.

NAPPFST

Daniel Borchert, PPQ- CPHST Entomologist/Risk Analyst, Raleigh, North Carolina

Dan is the project manager for the NAPPFST weather based pest prediction system. Dan, along with other CPHST scientists, work to produce risk maps for the CAPS pests using host and biological information. Since the initial development of the CAPS pest risk maps in 2007, there have been several modifications and improvements made. During the CAPS meeting, Dan will be highlighting improvements to the CAPS pest maps, access, and interpretation.

GIS

Mark Crane, PPQ, Eastern Region GIS Program Manger, Raleigh, North Carolina

Mark manages the PPQ's Eastern Region GIS Program consisting of six GIS technicians spread through the region. His staff works along side the Western Region's GIS Staff, managed by Laura Stretch. In 2007, the Eastern Region produced over 600 maps encompassing a wide range

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of PPQ programs. Marks's staff also handled over 800 technical support calls during 2007. Mark's focus during the CAPS meeting will be to showcase both regions GIS programs and to answer any technical questions that participants might have.

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Taxonomic Demonstrations

Bobby Brown, PPQ Domestic Entomology Identifier, located at Purdue University, West Lafayette, Indiana.

Bobby specializes in forest insect pests, particularly wood-boring beetles of the families Curculionidae (Scolytinae), Buprestidae and Cerambycidae. In addition, he also specializes in Scarabaeidae. For the National CAPS meeting he intends to offer identification workshops to aid in screening bark beetles (Scolytinae) from those beetles that most resemble them (primarily Bostrichidae, Ciidae and cossonine Curculionidae). Bobby will have handouts available and a microscope with monitor at a station to give individual sessions to interested participants.

Julieta Brambila, PPQ Domestic Entomology Identifier, at the Florida State Collection of Arthropods, located in the Division of Plant Industry, Florida Department of Agriculture and Consumer Services, Gainesville, Florida

Julieta's specialty is Lygaeidae, or seed bugs, a family in Heteroptera, or true bugs. She will have some specimens on display and some handouts available for field screening of some seed bugs such as the wheat bug, *Nysius huttoni*, and the cotton bug, *Oxycarenus hyalinipennis*. In addition, as she also works on the identification of moth species included in the CAPS programs, she will also have available for distribution several field and lab screening aids. She will have a microscope station to demonstrate the characters examined during moth identifications, which nearly always demands dissection of internal structures.

Grace O'Keefe, PPQ Domestic Plant Pathology Identifier, Penn State University, University Park, Pennsylvania.

Grace's area of specialty is bacteriology. In addition to classical disease diagnostics, Grace also performs molecular diagnostics, including conventional and real-time PCR, for a variety of plant diseases. Grace will demonstrate AGDIA test strips that can be used in the field for screening various plant diseases. Grace will also demonstrate the proper way to collect and ship disease samples.

Terrence Walters, PPQ – CPHST Identification Technology Program Coordinator, Fort Collins, Colorado.

Terrence coordinates CPHST's Identification Technology Program (ITP). A primary objective for the ITP Team is to develop new and creative methodologies and technologies to support accurate and efficient identifications for PPQ and cooperators. Terrence will demonstrate how to access and use various Internet-based, media-rich, identification tools recently developed using Lucid software, to support CAPS activities. CD versions, to support field surveys, for some of these tools will be available to the participants.

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**Craig Webb, PPQ Domestic Plant Pathology Identifier, Kansas State University,
Manhattan, Kansas**

Craig supports CAPS activities by providing morphological and molecular disease diagnostics for a wide range of plant diseases. Polymerase Chain Reaction (PCR) is one of the most sensitive and accurate tools used by diagnosticians to accurately identify the most challenging plant diseases and insect pests. The CAPS community will have an opportunity to have any & all of their molecular diagnostic questions answered during Craig's 'PCR 101' workshop. This educational display will explain the entire PCR diagnostic process - from sample collection - through DNA extraction - to the PCR test results. Demonstrations of conventional and real-time PCR platforms will allow attendees to see each of the instruments, to learn the fundamental differences between the platforms, and to ask any questions regarding the process.

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Speakers, Presenters, and Chairs

Dan Borchert, USDA, APHIS, PPQ, CPHST, Risk Analyst, Raleigh, NC
John Bowers, USDA, APHIS, PPQ, EDP, National Survey Coordinator, Riverdale, MD*
Julieta Brambila, USDA, APHIS, PPQ, Domestic Entomology Identifier, Gainesville, FL
Bobby Brown, USDA, APHIS, PPQ, Domestic Entomology Identifier, West Lafayette, IN
John Caravetta, Arizona Department of Agriculture, State Plant Regulatory Official, Phoenix, AZ
Ken Carnes, New York State Department of Agriculture & Markets, State Survey Coordinator,
Albany, NY*
Mark Crane, USDA, APHIS, PPQ, ER, GIS Program Manager, Raleigh, NC
Bob Dahl, Wisconsin Department of Agriculture, Central Plant Board, Madison, WI*
Marty Draper, USDA, CSREES, National Program Leader, Washington, D.C.
Dan Fieselmann, USDA, APHIS, PPQ, CPHST, National Science Program Leader, Raleigh, NC*
Joel Floyd, USDA, APHIS, PPQ, NIS, Domestic Diagnostic Coordinator, Riverdale, MD
Phil Garcia, USDA, APHIS, PPQ, Director, Western Region, Ft. Collins, CO
Benny Graves, Mississippi Department of Agriculture & Commerce, Southern Plant Board,
Jackson, MS*
Ethan Kane, USDA, APHIS, PPQ, Business Systems Manager (AQAS), Riverdale, MD
Jeff Knight, Nevada Department of Agriculture, Western Plant Board, Reno, NV*
Steve Knight, USDA, APHIS, PPQ, State Plant Health Director, Des Plaines, IL*
Brian Kopper, USDA, APHIS, PPQ, Eastern Regional Survey Coordinator, Raleigh, NC*
Brett Miller, USDA, APHIS, PPQ, Regional program Manager, Ft. Collins, CO
Grace O'Keefe, USDA, APHIS, PPQ, Domestic Plant Pathology Identifier, University Park, PA
Kristian Rondeau, USDA, APHIS, PPQ, Western Regional Survey Coordinator, Ft. Collins, CO*
Matt Royer, USDA, APHIS, PPQ, EDP, Director, Pest Detection, Riverdale, MD*
Susan Schechter, Purdue University, CERIS, Senior User Services Administrator, West Lafayette,
IN
Todd Schroeder, USDA, APHIS, PPQ, EDP, National Data Management Coordinator, Riverdale,
MD
Adam Silagyi, USDA, APHIS, PPQ, Pest Survey Specialist, Gainesville, FL*
Bruce Shambaugh, USDA, APHIS, PPQ, State Plant Health Director, Cheyenne, WY*
Vicki Smith, Connecticut Agricultural Experiment Station, Eastern Plant Board, New Haven, CT*
Erin Stiers, USDA, APHIS, PPQ, Pest Survey Specialist, Topeka, KS*
Mike Wallace, Arizona Department of Agriculture, State Survey Coordinator, Phoenix, AZ
Terrence Walters, USDA, APHIS, PPQ, CPHST, Identification Technology Program Coordinator,
Fort Collins, CO

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John Weaver, New Hampshire Department of Agriculture, Markets & Food, State Survey
Coordinator, Concord, NH

Craig Webb, USDA, APHIS, PPQ, Domestic Plant Pathology Identifier, Manhattan, KS

*National CAPS Committee