Cooperative Agricultural Pest Survey (CAPS)
2011 National Survey Guidelines
April 20, 2010

PREAMBLE

The 2011 National Survey Guidelines retain the focus, format, policy, and philosophy of the 2010 Guidelines. The Guidelines are centered on the 'bundled survey' concept for efficiency and economy of survey. The emphasis is on surveys based not only on commodities, but also environments, habitats, industries, businesses, and the continuum along pest introduction pathways. The State CAPS Committees are charged with creating bundled surveys that best fit the pest risk, agriculture, and environment of their state or region in their efforts of early detection of exotic pests. A pathway approach to planning and conducting surveys always is strongly encouraged. States are again encouraged to show State contributions to the survey effort on their financial plans. This information is important for reports to Congress.

As we move into the future, the National CAPS Committee will continue to update the National Survey Guidelines in response to discussions with the States and stakeholders. Changes incorporated into the 2011 National Survey Guidelines are the result of discussions with the States during the past year. Some highlights to the 2011 National Survey Guidelines are:

- The 2011 AHP Prioritized List is the same as the 2010 AHP List (Appendices D and G-2). An update to the model to include a pathway / probability of introduction criterion is planned for 2012.
- A Corn Commodity Survey is new for 2011.
- Guidance for taxonomic support in Appendix E-1 has been updated, and guidance for sample submission is included in Appendix E-2.
- Guidance for approved survey methodology to enter negative data has been expanded to include all pests on the Priority Pest List. In addition, this information been developed in html format for ease of navigation and future updating of content, and is available online. The link and supporting information is in Appendix M-1.
- The Pest List Working Group has identified several additions and deletions to the commodity pest lists. These changes can be found in Appendix M-2.
- Guidance is given for reporting positive and negative data for target and non-target pests listed only at the genus level (Appendix N). For one snail family, guidance for reporting negative data at the family level is given in Appendix N-3.

If you have any concern or suggestions to improve the CAPS program, please contact the National Survey Coordinator, Dr. John Bowers at Area Code (301) 734-3769, by email at John.Bowers@aphis.usda.gov, or by correspondence at USDA-APHIS-PPQ, Emergency and Domestic Programs, 4700 River Road, Unit 26, Riverdale, MD 20737, or email the Director of the Pest Detection Program, Dr. Matt Royer, at Matthew.H.Royer@aphis.usda.gov, or contact the Regional CAPS Coordinators- Dr. Brian Kopper (Eastern Region) by email at Brian.J.Kopper@aphis.usda.gov, or Kristian Rondeau (Western Region) by email at Kristian.C.Rondeau@aphis.usda.gov.

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INTRODUCTION

The purpose of these guidelines is to provide direction for the Cooperative Agricultural Pest Survey (CAPS) program. These guidelines are written for State Departments of Agriculture, tribal governments, and Plant Protection and Quarantine (PPQ) personnel and collaborators. These guidelines provide a general overview of the CAPS program. Specific details concerning current or yearly survey activities may be obtained from the Director of the Pest Detection Program, the National Survey Coordinator, PPQ Eastern or Western Regional Survey Coordinators, or PPQ State Plant Health Directors.

MISSION

The mission of the Cooperative Agricultural Pest Survey (CAPS) program is to provide a survey profile of exotic plant pests in the United States deemed to be of regulatory significance to the United States Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), Plant Protection and Quarantine (PPQ), State Departments of Agriculture, tribal governments, and other cooperators through early detection and surveillance activities by:

- Confirming the presence or absence of environmentally and/or economically harmful plant pests that impact agriculture or the environment, and that have potential to be of phytosanitary significance; and

- Establishing and maintaining a comprehensive network of cooperators and stakeholders to facilitate our mission and to safeguard our American plant resources.

**The term "regulatory significance" is defined in Appendix A.*

ROLES AND RESPONSIBILITIES

Central to the success of the CAPS program is clarity about the roles and responsibilities of all parties involved in cooperative surveys. While the focus is primarily on state cooperators, it also extends to universities, tribal governments, and, potentially, to industry partners, non-traditional parties (i.e., environmental groups), and other organizations concerned about the threat of introduced invasive pest species. Appendices B and C list the roles and responsibilities of the State Plant Health Director (SPHD), State Plant Regulatory Official (SPRO), Pest Survey Specialist (PSS), and State Survey Coordinator (SSC) positions within the CAPS program.

At both the national and state-levels, an organized effort to engage industry early in the survey-planning process is required. This is necessary because the CAPS program will continue to shift its strategy from being solely "pest-specific", to a format for surveying

for several pests based on commodities, environments and habitats, industries and businesses, and the continuum along pest introduction pathways, with a few exceptions.

The hosts, commodities, industries, and businesses impacted by pests span PPQ's Eastern and Western Regions, and it is appropriate to address the risks from an agroecosystem perspective. APHIS believes the commodity/ecosystem approach will provide a holistic framework for prevention, preparedness, response, and recovery from invasive pests of regulatory significance. APHIS realizes the value of engaging stakeholders throughout this continuum, especially when communicating about pest risks, jointly setting survey priorities, and leveraging resources across organizational boundaries. It is imperative that the State and National CAPS Committees communicate the goals and objectives of the CAPS program. Open dialogue at the national and state level with industry and other stakeholders is of vital importance for the success of CAPS. In order to facilitate this dialogue, PPQ has provided a ranking of pest threats in the form of a prioritized list (Appendix D), guidance on taxonomic support (Appendix E), and guidance on selecting which pests to survey, given the hosts, climate, and other factors unique to each State (see the NCSU-APHIS Plant Pest Forecasting System (NAPPFAST) website, online at [link not available]).

The National CAPS Committee (NCC) will provide the strategy for identifying pests of "national priority", as well as "state-level" discretionary pest surveys. The NCC will revise the National Survey Guidelines when annually reviewing the policy, strategy, and performance of the CAPS program. The NCC Bylaws contain more information about the NCC and the roles and responsibilities of the SPHD, SPRO, PSS, and SSC within the CAPS program (Appendix F).

The National CAPS Committee will approve annually a "Priority Pest List" that will include the commodity and taxon pests and the pests on the AHP Prioritized List (Appendix G), and be based on input by PPQ, the States, the Center for Plant Health Science and Technology (CPHST) (i.e. pest ranking, feasibility of survey, and pest identification), and commodity organizations. States will select from this list to complete the Priority Survey portion of CAPS.

The NCC also will approve annually a list of additional pests of regulatory concern (radar screen) (Appendix H). The State CAPS Committee will determine and recommend survey priorities for pests of State regulatory concern in their state using this list as a guide. Because the emphasis of the CAPS program generally is moving towards a commodity and industry/business focus, PPQ will be encouraging and approving an increasing number of industry-state partnerships for pest survey.

The National Survey Coordinator (NSC) will provide overall direction for the CAPS program. The NSC is responsible for the Cooperative Agreement with Purdue University, which provides the administrative and financial framework for the National Agriculture Pest Information System (NAPIS) database and related websites.

The NSC also is the chairperson of the NCC. The NSC, with input from the NCC and the National Plant Board (NPB), sets plant pest detection priorities and implements survey and detection activities in the United States. The NSC also coordinates communication between the NCC, PPQ Regional Survey Coordinators (RSC), and NPB on prioritizing pest survey needs, providing information on pest risk, managing the allocation of pest detection funds and resources, and formulating a pest list for future surveys.

The NSC also participates in the annual budget formulation and ensures survey technologies are identified for use by the CAPS community. The NSC has nationwide responsibility to coordinate activities of CAPS through the RSCs and to ensure that NAPIS meets the needs of CAPS. The NSC is responsible for ensuring that CAPS is included in the planning and implementation of national PPQ programs, and also is responsible for the tracking the performance of the CAPS program.

The Eastern and Western Regional Survey Coordinators (RSCs) will be responsible for reviewing State performance, and are accountable for the *administration* of the CAPS program at the PPQ Regional level. The PPQ Regions supervise the SPHDs, who fiscally and programmatically are accountable for periodic and final CAPS reports. The RSCs communicate programmatic issues to the States through the SPHDs, who ensure fiscal and programmatic accountability by reviewing periodic and year-end reports.

The SPHD and SPRO, in consultation with the SSC and PSS and considering the recommendations and advice of the State CAPS Committee, are responsible for the selection of pests that are important to their State. This collaboration will allow flexibility on a state-by-state basis. In order to provide this flexibility, performance measures must be in place early in the planning process so that there is cooperator accountability where Federal funds are provided. These performance measures will enable the assessment of accomplishments made toward pest selection and survey objectives outlined in CAPS cooperative agreements. A summary of activities performed by SSCs that resulted in advancing the overall programs effectiveness will support this assessment process.

The SSC, in collaboration with the PSS, will make use of pest risk information from various sources. Such sources include pest data sheets; pest risk assessments; NAPPFAST; pests ranked through the Analytic Hierarchy Process, as conducted by CPHST (Appendix D); “risk zones” and other information communicated to the SPHDs by the RSCs; pests that need to be surveyed per the PPQ Executive Team’s endorsement of recommendations of the PPQ New Pest Advisory Group (NPAG); industries’ suggestions for coordinated survey/monitoring of pests of mutual concern; changes in patterns of risk or commerce that indicate domestic survey is merited along a risky pest pathway; PPQ-regulated “domestic/emergency program pests”, whenever a PPQ national program coordinator indicates that there is inadequate survey funds to meet national objectives; and select agents that present some threat for potential bioterrorism.

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FUNDING & WORK PLANS

PPQ intends to allocate funds to each State in a fair and transparent manner. Each State needs to be able to predict the minimal level of Federal funding it will receive from year-to-year in order to plan surveys and acquire/retain a resource base. Therefore, PPQ intends and strives to fund each State at a level commensurate with need. However, the CAPS program needs to be sufficiently flexible to address national priorities that may have shifted since pests were first being considered for survey due to new pests that may have been found, or specific direction APHIS may have received in the federal funding appropriations.

Funds to support CAPS are generally provided to State Departments of Agriculture and other cooperators through cooperative agreements, which are administered through the PPQ Regional offices. The annual PPQ Pest Detection "line item" appropriation is the major funding source for CAPS. However, funds from the Pest Detection line item may also be used, in some cases, when programmatic survey activities are inadequately funded through other funding sources and are unable to achieve program objectives. This is particularly true when pests are found that are new to the United States or are found in new areas of the country and PPQ Regional office funds, APHIS Contingency funds, Commodity Credit Corporation funds, or normally appropriated PPQ Emerging Plant Pest funds are inadequate.

The funding allocation process is linked to justifications from each State for: (I) infrastructure, (II) surveys to address national priority pests, and (III) surveys to address pests of state concern.

I. Infrastructure

Tier 1

These base-level funds are provided to each state to support the State Survey Coordinator (SSC), and are capped at $100,000. The funds are to be used to cover expenses related to salary; benefits/fringe; standard support equipment (including but not limited to: desktop computer, laptop computer, cell phone, or other PPQ-recommended equipment); in-state travel (cooperator/industry meetings, outreach, etc.); out of state CAPS related travel (e.g. National CAPS Conference, etc.); and departmental overhead typical for this position. Also, please make sure that equipment requests are needed in the current year and are not being carried over from a previous agreement. **Survey is not allowed in Infrastructure funding.**

Tier 2

Base-level funds may be supplemented up to 50 percent above the Tier 1 level, **provided that the justification is sufficient**. Examples of a justifiable increase include:

- When there is a demonstrated need for data management support, which may include part-time salary/benefits for a data management position and associated standard support equipment;
- When additional outreach beyond Tier 1 funding levels is merited. Outreach should enhance survey and pest detection efforts, and should be linked to an active survey effort in the State in a manner that enhances the CAPS program (see Appendix I for a more detailed explanation of fundable outreach programs) ; and
- When States have very high cost-of-living expenses and other high overhead expenses. States with higher cost of living expenses could be eligible for this increase if the need is clearly justified by the State cooperative agreements officer, the need is confirmed by the APHIS cooperative agreements officer, and the need is supported by known locality costs as determined by the Federal Government's pay schedules.

Note: maximum possible Infrastructure award: $150,000. Written work plans for specific surveys must be provided (see next section). Infrastructure costs will be addressed during the formulation of the total budget for each State.

II. Priority Surveys

Priority Surveys are those survey initiatives that have been identified by the National CAPS Committee as being of high priority to merit a priority survey effort (see Appendix G for the Priority Pest List). **The CAPS program is a national program, and as such, the primary focus is on national priority surveys.** The focus of these surveys is on detecting pests in areas where their presence (or absence) is unknown by focusing on the host(s) and/or environment of given pests, or on location-specific criteria, particularly in situations where a state has evidence of risk from prior emergency actions against certain types of facilities or operations.

In response to comments and suggestions from the states and our stakeholders to provide more flexibility for surveys, the NCC has decided to continue to present a 2-prong approach for Priority Surveys. Priority Surveys may consist of 1) traditional commodity-based and similarly-formatted surveys (e.g., Exotic Woodboring & Bark Beetle Survey) prepared by CPHST as presented in past years (designated Designed Surveys), and/or 2) unique bundled surveys developed by the States (designated Bundled Surveys).

1. **Designed Surveys**: Included in this category are the traditional commodity-based surveys and those surveys not necessarily based on commodities, but have been prepared by CPHST and have the same format for surveying for multiple pests within an environmental niche, business model, or taxonomic group. The intent of these surveys is to detect pests not known to be present in those areas of the nation where a particular commodity is grown, in a particular environment or habitat, or associated

with various business models. A future goal of the CAPS program is to conduct national surveys and obtain a national dataset for exotic pests in commodities, habitats, and businesses of national importance. Current emergency pest programs, or other pest programs for which survey funds are inadequate, may be appropriately included if approved by the National CAPS Committee. However, these surveys are not intended to intensively delimit the extent of spread of a pest around a specific infestation site. The following examples are appropriate for conducting a Priority Survey in 2011, and may be approved at full funding levels.

- Commodity-based surveys:* (Corn, Grape, Oak, Pine, Small Grains, and Soybean);
- Taxonomic group-based surveys:* Exotic Wood Borer and Bark Beetle (EWB/BB) and Cyst Nematodes

* Not all pests listed in a commodity-based, EWB/BB, or cyst nematode survey need be targeted by an individual State. Target only those pests that are important and make biological, environmental, or economic sense to the State. Selecting a portion (e.g., 5 of the ten pests) of the pests listed in a commodity survey guide fulfills the requirement of conducting that survey.

2. **Bundled Surveys**: The intent of the Bundled Surveys is to give the States the flexibility to design their own surveys, within certain parameters. A State may create a bundled survey that is **based on a common factor**, such as site, habitat, environment, business, etc., that makes biological, environmental, and/or economic sense in that State. The survey must include pests from the Priority Pest List (Commodity Pests and/or AHP Prioritized Pests). Pests of importance to a State not on the Priority Pest List, but in common with the other pests, may be included in the bundled survey. However, the survey effort for pests added by the State (including diagnostics, trapping supplies, etc.) must be less than half of the cost of this particular survey. **The survey must concentrate on multiple, high priority pests and efficiency of survey.** States must show justification for the bundled survey. An example of a Bundled Survey is a Nursery Survey with a selection of several pests from the Priority Pest List that are important to the State, with perhaps a pest or two not on the Priority Pest List, but of State importance. The challenge is for the States to decide what works best for the agriculture and environment in their State. See Appendix O for examples.

States are eligible for 75 to 100 percent of their total survey dollars to support Priority Surveys (Designed Surveys and/or Bundled Surveys). Further guidance for determining eligibility and amount available to each State will be determined by the National CAPS Committee, with allocation decisions coordinated among the National Survey Coordinator and Regional Survey Coordinators, in consultation with the SPHD and SPRO.

III. State Discretionary Surveys:

State Discretionary Surveys are surveys that a State may choose to conduct for pests of regulatory significance within their State (see Appendix H for the Additional Pests of Regulatory Concern list). States may choose to survey for a pest or group of pests (a bundled survey is preferred for efficiency) of lower national priority (not on the Priority Pest List), but important in their State for agricultural, environmental, or economic reasons. As in Priority Surveys, the State may focus on the host(s) of given pests or on location-specific criteria, particularly in situations where a state has evidence of risk from prior emergency actions against certain types of facilities or operations. **Justification must be provided identifying why these surveys and pests are of concern to the State, and why this particular survey or pest cannot be included with a priority Bundled Survey as described above with high priority pests. Surveys for pests that are established, endemic, native, or indigenous in that state for the purpose of management, except as noted below, should not be proposed as the survey likely will not be funded.** The State also assures that local/county survey needs are adequately addressed regarding pests of State concern. See Appendix O for examples.

Examples of these pests include:

- Pest of phytosanitary significance in interstate commerce;
- Pests of phytosanitary significance for exports;
- Offshore Pest Information System (OPIS) reported pests;
- Industry partnerships for specific commodities; and
- Pests that otherwise are under "official control." A process currently is being considered whereby APHIS may recognize the latter category of pests but it is not yet available at the time these guidelines were prepared. When no Federal pest quarantine regulations are in place, States should try to be consistent in how they carry out pest management measures. Conversely, where Federal requirements are in place, States should have consistent intrastate regulations prepared;

States are eligible for up to 25 percent of their survey dollars to support State Discretionary Surveys for pests of State regulatory concern (where the other 75 percent would be used to survey for APHIS' high priority pests).

Pathway Approach to Survey:

When planning surveys, the NCC encourages the States to use a pathway approach when deciding on pests and locations to survey. States should plan to survey where the risk is highest. This type of targeted detection survey or risk-based survey enhances the ability of the CAPS Program to identify and target high risk areas, zones, locations, and sites that have the highest potential for exotic pest introductions, and to successfully provide early detection of these pests. This concept can be combined with any survey using sound analytical tools, known risk sites, past history of pest detections in a State, and

other avenues of information. It is understood that risk factors can be examined along a "risk continuum" beginning at offshore sites (points of origin) to points of potential establishment (commodity production areas, natural lands), and numerous risk points in between (wholesale distribution centers, nurseries, intermodal sites, rail yards, etc.). The identification of risk points and development of targeted surveys will maintain the focus of the survey program on our top commodities at risk and the high priority pests as identified through the AHP process. This emphasis will create a flexible system allowing states to package additional pests of concern to their specific states.

Overall Funding Formula

Infrastructure + Priority Surveys (minimum of 75 percent of survey dollars) + State Discretionary Surveys (up to 25 percent of survey dollars) =Total funds awarded.

Funding for the CAPS program is provided by Congress through the Pest Detection line item in the Federal Budget. Pest Detection also funds several other initiatives in support of the CAPS program. Due to Presidential and Congressional priorities, as well as the budget cycle, funds available for the next survey year are not known at the time these guidelines are published. For fiscal year (FY) 2011, we will use FY 2010 totals as a general rule-of-thumb, with a few exceptions. Examples of this formula are as follows:

State 1:
$100,000 Tier 1 Infrastructure
$50,000 Available for survey based on previous year's budget
$37,500 Priority Surveys (75 percent of $50,000)
$12,500 State Discretionary Surveys (25 percent of $50,000)
$150,000 Total cooperative agreement

State 2:
$100,000 Tier 1 Infrastructure
$25,000 Tier 2 Infrastructure
$75,000 Available for survey based on previous year's budget
$56,250 Priority Surveys (75 percent of $75,000)
$18,750 State Discretionary Surveys (25 percent of $75,000)
$200,000 Total cooperative agreement

State 3:
$100,000 Tier 1 Infrastructure
$50,000 Tier 2 Infrastructure
$250,000 Available for survey based on previous year's budget
$187,500 Priority Surveys (75 percent of $250,000)
$62,500 State Discretionary Surveys (25 percent of $250,000)
$400,000 Total cooperative agreement

With the change in the Survey Guidelines to include Bundled Surveys, the challenge to the States is to be creative in the planning of surveys and target pests. Pests of State concern should be incorporated whenever possible into the Priority Surveys. It is hoped that the States will use up to 100% of their survey dollars with Priority Surveys in which pests of State concern have been included. If this challenge to the States is successful, and can be continued into the future, then the present funding ratio will cease to be a factor.

Work Plan Submission

Each state should submit work plans, including detailed financial plans, for the Infrastructure project and each survey they plan to conduct. The survey work plans should be distinguished by Priority Surveys or State Discretionary Surveys. Templates for Infrastructure and Survey can be found in Appendix J. The combined total requested should not exceed the guidance given by the RSC. For 2011, States are asked also to submit an Excel spreadsheet with the list of surveys and pests proposed in the work plans. The format can be found in Appendix J-3. Downloadable files will be available on the CAPS website. States are strongly encouraged to list State contributions to the survey effort on the financial plan. This information will assist the Pest Detection Program answer requests and questions from the Agency, Department, and Congress, and prepare future budget requests

ADMINISTRATIVE REQUIREMENTS

All cooperative agreements are administered through the PPQ Regions, and are the means by which funds are provided to each State and cooperator. APHIS is exploring how it may streamline cooperative agreements, including online electronic forms or other means of expediting the submission of information from potential cooperators, and reporting results. A single system is not yet available at the time these guidelines were prepared; however, electronic forms may be used and submitted per the guidance of the PPQ Regions and provided herein. Note that a synopsis of all grants and agreements provided to a cooperator by the Federal government, including APHIS, are now posted on the Internet (www.USAspending.gov). This was a requirement of the Federal Funding Accountability and Transparency Act of 2006 (FFATA). Likewise, APHIS is required to report accomplishments via "performance measures" in CAPS. Cooperators will be provided guidance on means to adhere to this new level of transparency.

As required by OMB Circular A102 and 7CFR 3016, a final Federal Financial Report (SF-425, replaces SF-269 as of October 1, 2009) and a narrative Accomplishment Report must be submitted within 90 days after an annual Cooperative Agreement (funding period) expires. An extension may be granted if requested by the cooperator, supported by the SPHD and APHIS cooperative agreements officer, and approved by the Regional Director. The SPHD may request semiannual or quarterly reports which, if requested, are due within 30 days of the end of the reporting period.

The SPHD, as ADODR of the cooperative agreement, submits the State's annual report to the Region no later than March 31 (90 days after the cooperative agreement expires). At the same time that the State's annual report is submitted, the SPHD must submit a written evaluation of the State's performance to the SSC, and copied to the NSC and RSC. The evaluation should include input from the PSS, and address each funded project in the cooperative agreement. The evaluation depends upon the work plan and must address the funding criteria previously agreed to by the State and the SPHD, and the performance of the State in carrying out the cooperative agreement. A work plan monitoring tool is available within the NAPIS database to assist in the review of the State's performance (http://napis.ceris.purdue.edu/htbin/mynapis.com (login required)).

By February 1 of each year, the regional offices will submit a CAPS Agreement Allocation Review (compilation of the J-3 appendix) for the current year to the NSC. The report will be listed by State and include the names of proposed projects, including surveys and target pests, amount of funds approved by project, and the total allocations by state (including infrastructure).

The overall annual process involved in conducting effective CAPS activities is lengthy. It includes identifying pest threats; ranking pest risks; engaging scientists and stakeholders to determine the merits of survey to determine a pests status in the United States; allocating funds for surveys at the State level and for special projects; conducting surveys; analyzing the data collected; writing periodic/annual reports; and evaluating the accomplishment of survey and CAPS program annual objectives. A planning calendar is provided in this document, showing significant milestones including administrative deadlines (Appendix K).

DATA MANAGEMENT

All survey data from Federal cooperative agreements involving pest surveys will be entered into the National Agriculture Pest Information System (NAPIS) either directly or through an approved PPQ system (e.g., the Integrated Survey Information System (ISIS)). For 2011 NAPIS will continue to be the APHIS-PPQ approved final repository for all survey data in the CAPS program. However, also in 2011, some states will use the Integrated Plant Health Information System (IPHIS) on a pilot basis for planning, conducting, and reporting survey data for CAPS surveys. Further guidance will be forthcoming in 2010 regarding the use of IPHIS in 2011 and beyond.

The SPHD, or his/her designee, is responsible for assuring data quality. The PSS also reviews the data for quality, and brings discrepancies to the attention of the SSC and/or SPRO and SPHD. Additionally, the NCC encourages States to enter data that may not be a part of a funded survey. Other activities that result in a pest detection is part of the nature and spirit of the CAPS program. In a period of economic austerity, we need to leverage all resources to do more than any one party can accomplish alone.

Each State is responsible for entering complete, accurate, and timely pest survey data into NAPIS using approved protocol. CAPS funds may be used to purchase and maintain the required equipment to ensure this occurs. Data entry guidance appears below.

- First record for the State and/or County will be entered within 48 hours of confirmation of identification by a qualified identifier.
- All records are to be entered into the NAPIS database by December 31 of the year of survey so these data can be included in the yearly Plant Board Report.
- When possible, enter data as it becomes available and do not wait until the end of the year.
- Survey data should be collected with GPS technology (WGS84 datum is the standard).
- A general pest detection worksheet for NAPIS date entry is attached (Appendix L). Data entry worksheets for the commodity surveys will be made available on the CAPS website when completed.
- ISIS templates must contain the required elements/fields for the transfer of data to NAPIS.

In 2011 the CAPS program will pilot the Integrated Plant Health Information System, or IPHIS. For those states using IPHIS on a pilot basis, the data entry requirements will be different from those mentioned above. In IPHIS, data entry will occur as-you-go, with data being entered for every occurrence of an activity as will be explained during state training. Data entry templates will be developed from a national level for the CAPS program. Pending a successful pilot test in 2011 and the ability of the system to meet the needs of the CAPS program, implementation of IPHIS for CAPS surveys will begin in 2012.

Negative Data

The documentation of negative data is extremely important and valuable. Negative data from national surveys support trade and exports, and benefit American agriculture. The CAPS program strives to insure that all negative data is valid, and results from active survey efforts. The CAPS program is developing guidelines to assist in data entry of valid negative data. The result of these efforts is the matrix in Appendix M. This matrix enables one to determine the appropriate pests that can be considered negative for a survey effort based on the survey methodology, trap/lure combination, etc. **Note: Only those pests that are survey targets and actively subjected to screening should be considered negative with a particular trap and lure combination.**

Additional guidance for data entry is given in Appendix N for selected target pests (Exotic Woodboring and Bark Beetles, mollusks, and nematodes) at the genus and species level. Because of incomplete taxonomy, diagnostic difficulty, lack of survey methodology, or other reasons, some target pests are listed only at the genus level. In

certain instances, it may not be appropriate to enter positive or negative data at the genus level. Positive records should be at the species level.

The Integrated Survey Information System (ISIS) is currently used in several programs to collect and manage data collected in cooperative survey efforts. ISIS should be used in cooperative surveys where appropriate. PPQ is striving to assure:

- Survey data and diagnostic results are entered as close to real time as possible, including both positive and negative results;
- Data elements (format, content) are standardized nationally;
- Data will be uploaded into NAPIS as appropriate, and made available per existing protocols in the CAPS program;
- Data management processes and information will be provided nationally.

APPENDICES

Appendix A Regulatory Significance

Appendix B Roles and Responsibilities

Appendix C Roles and Responsibilities - Table Format

Appendix D Analytic Hierarchy Process (AHP) Prioritized Pest List
(from CPHST)

Appendix E Taxonomic Support & Sample Submission Guidelines

Appendix F National CAPS Committee Bylaws & Rotation Schedule

Appendix G Priority Pest List for 2011
(consists of Commodity Pests and AHP Prioritized Pests)

Appendix H Additional Pests of Regulatory Concern for 2011

Appendix I Outreach

Appendix J Infrastructure and Survey Templates with Excel Spreadsheet for Survey and Pest Lists

Appendix K Timeline

Appendix L NAPIS Data Entry Worksheet – General Detection Form

Appendix M CAPS-Approved Survey Methodology for Negative Data

Appendix N Data Entry Guides for Selected Taxonomic Groups

Appendix O Examples of Bundled Surveys