

A National Survey of Selected Federal Noxious Weed Specimens in U.S. Herbaria

-Survey plan-

Purpose statement and objectives

History:

The last national survey of herbaria was conducted in 1992. Many collections have grown considerably since then, and there have been additional weeds added to the Federal list as well. Results of the last national survey directly contributed to detection and eradication activities of FNW infestations in North and South Carolina, Georgia, and Virginia.

Objectives:

Identify where FNWs have been collected in the United States.

Ensure that voucher specimens are safeguarded in order to prevent accidental dispersal of FNWs.

Encourage the development of a working relationship between local PPQ personnel and herbarium curators at major institutions in each state.

Purpose statement:

To investigate the occurrence of Federal noxious weed (FNW) specimens through a survey of U.S. herbaria. These voucher specimens will serve to collect accurate data on the distribution of FNWs that are subject to the Plant Protection Act of 2000.

Currently, 100 taxa of foreign plants have been designated as FNWs by the US Department of Agriculture. Several of these species are said to occur in the United States, and eradication programs are under way for some of these. This survey will help to identify collection sites that might have gone unreported to the USDA. Subsequent field surveys will take place to determine the existence of an infestation, and if so, to what extent. In order to prioritize species which are not known to be present in the US, or have very limited distribution, the list has been divided into three groups. The first two groups (A1 and A2) will be the main focus of the survey, but as time and resources allow, the C1 list should be consulted as well to identify possible new infestations.

Steps for survey coordinator

Prior to survey:

Identify herbaria to be surveyed (I've done this using the info provided by NYBotGarden)

Seek assistance in creating the survey data collection template in IPHIS

Develop survey guide materials, which will include:

Introduction w/ purpose, objectives, guidelines

Include an opportunity for curators to report species in their collections that are not FNWs, but they believe are exotic in origin or harmful that we ought to consider for listing. Mention the soon to be released Not Allowed Pending Risk Assessment (NAPRA) group.

Link to fact sheets or herbarium sheets

List of herbaria

Herbarium information form

Voucher specimen collection forms

List of FNWs – arranged by priority group

Present brief presentation at National Plant Board Meeting on the intention of the survey and what will be involved as far as cooperation from field staff, resources, etc.

Introduce survey to Regions during a bi-weekly WR and ER SPHD call prior to emailing the info

Draft and send letter or email to selected herbaria

Initiating the survey:

Email to Regions (for fwd'ing to SPHDs) with info, timeline, expectations

Schedule informational conference calls with Assistant Regional Directors' subgroups of SPHDs/SOSOs (if necessary)

Encourage the collaboration between PPQ and State Dep't of Agriculture staff. This will be important when deciding who will perform site visits for geographical reasons, as well as an attempt to get inspectors with experience in botany or just a high interest in the field and survey.

During the survey:

Provide support to the field

Finalizing survey and follow up:

Analyze data for quality and completeness

Check survey data for FNW occurrences and determine need for follow up surveys

Steps for local PPQ

Prior to survey:

SPHD or their designee reviews survey information and attends orientation conference call (if held)

Communicate with SPRO and exchange ideas on how the survey will be performed in the state.

Review of herbaria for survey within state. Check with State's weed authority on their thoughts on the selected herbaria for possible additions or omissions.

Assign staff for contacting/reviewing herbarium collection lists/site visits and forward information with timeline, data collection requirements, etc.

Initiating contact and fact gathering:

Local PPQ contacts herbarium curators for introduction, survey purpose, and inquires about their collections. The curator should have received an email or letter from the national survey coordinator prior to this call.

If collection is available digitally, or a listing of holdings can be provided to PPQ, request this and perform a search via this. If not, set up an appointment to visit the herbarium.

Inquire about FNW specimens on loan to other institutions. If there are, relay this info to survey coordinator.

Conducting the survey:

Depending on resources, survey should be performed using the priority list of FNWs.

Voucher specimens should be recorded using the data sheets, and later entered into the IPHIS survey database.

If the specimens are collected from another country and held as an exchange, no data collection is necessary.

FNW specimens should be examined and determined whether they are adequately safeguarded. If not, a fact sheet or specimen sheet can be added as a placeholder while the FNW specimens are placed in a safeguarded location at the herbarium. (work with curator on this)

Finalizing survey and follow up:

Notify institution that the survey is complete.

Verify that data is properly entered into IPHIS

Notify survey coordinator that work is complete

Survey coordinator analyzes data and determines if field visits are needed to investigate possible infestations. If so, these are coordinated with the SPHD for assistance.