

Animal and Plant Health Inspection Service

Plant Protection and Quarantine

Draft Action Plan
for the
Noxious Weeds Program

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Draft for external review

Draft Action Plan for the APHIS Noxious Weeds Program

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INTRODUCTION

This draft document presents an action plan for updating the noxious weeds program of the Animal and Plant Health Inspection Service (APHIS). If the plan presented in this draft document is accepted as a whole, some changes to our noxious weeds regulations at Title 7, Part 360 of the Code of Federal Regulations, as well as some changes to our noxious weeds policy, will be necessary. We would propose the necessary changes to the regulations in the Federal Register.

This draft document was prompted by recent developments and follows a review of the 1993 APHIS weed policy, last revised in 1994. Over the past five years, under our current weed policy, APHIS has implemented many new strategies for preventing the introduction into and spread within the United States of noxious weeds. For example, we developed risk assessment guidelines to support regulatory decisions, updated the Federal noxious weeds list, added interstate movement restrictions to the regulations, and improved coordination with other Federal agencies. With new authority under the Plant Protection Act (7 U.S.C. 7701-7772), APHIS is poised to further improve the noxious weeds program.

This draft document describes the components of the current APHIS noxious weeds program and recommends goals and strategies for 2001-2002. The following recommendations for updating the noxious weeds program are discussed in detail in this draft document:

Recommended Regulatory Changes

Adopt regulations governing:

- Emergency action to prevent the introduction into or spread within the United States of a noxious weed before that weed is listed in the regulations,
- The petition process to add or remove a weed from regulation, and
- Specific treatments, developed through improved pathway analysis, for commodities associated with Federal noxious weeds

Recommended Policy Changes

Changes to the APHIS Noxious Weeds web site (Home page located at <http://www.aphis.usda.gov:80/ppq/weeds/weedhome.html>):

- Separate the list of Federal noxious weeds (i.e., weeds that meet the definition of quarantine pest and that are listed in the regulations at 7 CFR 360.200) into two categories (A1 and A2) according to distribution,
- Add information on known U.S. distribution for each weed listed in new category A2 and on relative threat for each weed listed in new categories A1 and A2, and
- Add a category of widespread weeds for which APHIS would cooperate with other agencies for control as resources allow.

Other program recommendations:

- Develop integrated pest management plans for Federal noxious weeds,
- Issue civil penalties for noncompliance with the regulations, and
- Increase public awareness about Federal noxious weeds.

In addition, although this draft document offers a complete plan for updating our noxious weeds program, resource allocation would determine to what extent each option could be developed.

IMPORTANT RECENT DEVELOPMENTS

The following recent events require APHIS to reevaluate the policies and actions by which it prevents the introduction into and spread within the United States of invasive plant species, including noxious weeds:

- Enactment of the Plant Protection Act
- Release of the Safeguarding Review
- Receipt of public comments on an advance notice of proposed rulemaking for the noxious weed regulations
- Issuance of the Invasive Species Executive Order (E.O. 13112)
- Conclusions of International Trade Agreements

The Plant Protection Act

Congress passed the Plant Protection Act (PPA) on May 25, 2000, and President Clinton signed it into law on June 20, 2000. This law consolidates most of APHIS's statutory authorities concerning plant protection and significantly enhances the Agency's ability to address noxious weed problems.

Under previous authority (i.e., Federal Noxious Weed Act of 1974), APHIS's ability to deal with noxious weeds was limited by definition to weeds that are of "foreign origin" and "new to or not widely prevalent in" the United States. In contrast, the PPA defines a noxious weed as "any plant or plant product that can directly or indirectly injure or cause damage to crops (including nursery stock or plant products), livestock, poultry, or other interests of agriculture, irrigation, navigation, the natural resources of the United States, the public health, or the environment." Therefore, in addition to eliminating the criteria that noxious weeds must be "of foreign origin" and "new to or not widely prevalent in" the United States, this definition adds the idea that a noxious weed is a weed that "can directly or indirectly injure or cause damage to . . . the natural resources of the United States, . . . or the environment." As such, the PPA definition of noxious weed offers much a much wider and more flexible set of criteria for identifying and regulating noxious weeds. However, although the noxious weed definition is greatly expanded, the legislation uses "new to

or not known to be widely prevalent in” language in two sections: (1) Remedial measures to destroy or dispose of noxious weeds moving into or through the United States or interstate, and (2) declaration of an extraordinary emergency. Therefore, for import or interstate movement of noxious weeds, “new to or not widely prevalent in” still applies.

The PPA also authorizes, among other things, the Secretary of Agriculture to:

- 1) Prohibit or restrict the importation, entry, exportation, or movement in interstate commerce of any plant, plant product, biological control organism, noxious weed, article, or means of conveyance to prevent the introduction into the United States or dissemination within the United States of a plant pest or noxious weed;
- 2) Issue regulations that require that any plant, plant product, biological control organism, noxious weed, article, or means of conveyance imported, entered, to be exported, or moved in interstate commerce be accompanied by a permit and a certification of inspection and be subject to remedial measures necessary to prevent the spread of plant pests or noxious weeds;
- 3) Require a plant or biological control organism to be grown or handled under post-entry quarantine conditions to determine whether that plant or biological control organism may be infested with plant pests or may be a plant pest or noxious weed;
- 4) Publish, by regulation, a list of noxious weeds that are prohibited or restricted from entering the United States or that are subject to restrictions on interstate movement within the United States;
- 5) Allow anyone to petition the Secretary to add or remove a weed from regulation;
- 6) Hold, seize, quarantine, treat, apply other remedial measures to, destroy, or otherwise dispose of any plant, plant pest, noxious weed, biological control organism, plant product, article, or means of conveyance moving into or through the United States, or interstate, or moved into or through the United States, or interstate, that the Secretary has reason to believe is a plant pest or noxious weed, is infested with a plant pest or noxious weed, or is in violation of the PPA. This authority includes action on the progeny of any plant, biological control organism, plant product, plant pests, or noxious weed;
- 7) Develop a classification system to describe the status and action levels for noxious weeds, including current geographic distribution, relative threat, and actions initiated to prevent introduction or distribution;
- 8) Develop, in conjunction with the noxious weed classification system, integrated management plans for noxious weeds for the geographic region or ecological range where the noxious weed is found in the United States;
- 9) Use extraordinary emergency action for weeds threatening plants or plant products, if those

weeds are new to or not known to be widely prevalent in or distributed within and throughout the United States; and

10) Issue civil penalties for violations of the PPA.

Safeguarding Review

At the request of APHIS' Plant Protection and Quarantine (PPQ), the National Plant Board (NPB), which is an association of State plant health officials, conducted extensive research, interviews, site visits, and other interactions with APHIS and its stakeholders. NPB then prepared a thorough analysis of the challenges facing the safeguarding system in four major areas: pest exclusion, international information, pest permits, and pest detection and response. The board identified opportunities to enhance the safeguarding system in "*Safeguarding American Plant Resources, A Stakeholder Review of the APHIS - PPQ Safeguarding System,*" July 1, 1999 (referred to below as the "Safeguarding Report") This concept paper incorporates many of the weed-related recommendations from the Safeguarding Report.

ANPR comments

Prior to the enactment of the PPA, APHIS solicited comments on an advance notice of proposed rulemaking (ANPR) published in the Federal Register on March 20, 2000. The public commented on weed categories, risk assessment and permitting issues, and how to prioritize funding resources for existing and future programs. Although most of the Federal Noxious Weed Act was superseded by the PPA immediately following the close of the ANPR's comment period, many of the comments we received during the 90-day comment period are nonetheless relevant to developing regulations under the new authority.

The ANPR comments most frequently named these areas as APHIS priorities: exclusion, prevention, survey and early detection, and eradication of introduced weeds of limited distribution. Commenters also supported, but mentioned less frequently, risk assessment, public education, and cooperative integrated management (including biological control).

Invasive Species Executive Order

President William J. Clinton issued the Invasive Species Executive Order (E.O. 13112) on February 3, 1999, in response to growing national concern about the harmful effects of alien invasive species. E.O. 13112 seeks to prevent the introduction of invasive species, provide for their control, and minimize their impacts through better coordination of Federal agency efforts. E.O. 13112 established a Federal Invasive Species Council and directed the Council to assemble a

nonfederal Invasive Species Advisory Committee. E.O. 13112 also required the Council to prepare an invasive species management plan to address coordination and invasive species issues. The Council and Advisory Committee established expert working groups to assist in this task. E.O. 13112 requires Federal agencies whose "actions may affect the status of invasive species" to identify such actions, consult with the Invasive Species Council, and act in a manner consistent with the management plan developed by the Council. The first draft of a management plan was circulated in July 2000. The second draft was available for review in October 2000. The final draft of the National Management plan was posted January 18, 2001, on the Invasive Species Council web site (<http://www.invasivespecies.gov/council/nmp.shtml>).

International Agreements

APHIS must consider US obligations under international trade agreements in developing the noxious weeds program. Signatory countries are obligated to base their phytosanitary measures on international standards. A glossary of phytosanitary terms and a standard for pest risk analysis for Federal noxious weeds have been developed by the International Plant Protection Convention (IPPC) and the North American Plant Protection Organization (NAPPO), which is a regional plant protection organization made up of the United States, Canada, and Mexico.

Under IPPC, an international treaty of which the US is a signatory, a country can prohibit or restrict importation only of regulated pests, which are either quarantine pests or regulated non-quarantine pests. A quarantine pest is defined as "a pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled." In the case of our noxious weeds program, Federal noxious weeds meet the definition of quarantine pest. Federal noxious weeds are listed in the regulations at 7 CFR 360.200. A regulated non-quarantine pest is defined as, "a non-quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party." In the case of our noxious weeds program, noxious weed seeds, listed in the Federal Seed Act regulations at 7 CFR 361, meet the definition of regulated non-quarantine pest.

The IPPC definition of "official control," which was adopted at the Third Interim Commission on Phytosanitary Measures held in Rome, Italy, from April 2-6, 2001, is: "The active enforcement of mandatory phytosanitary regulations and the application of mandatory phytosanitary procedures with the objective of eradication or containment of quarantine pests or for the management of regulated non-quarantine pests."

Guided by these events and documents, APHIS is considering updating the noxious weeds program, as outlined in this document. After reviewing the public comments we receive on this draft document and meeting with the National Plant Board, we will determine whether the recommended changes to the regulations and policy described in this draft document are appropriate. As noted earlier, if the plan presented in this draft document is accepted as a whole, some changes to our noxious weeds regulations at Title 7, Part 360 of the Code of Federal Regulations, as well as some changes to our noxious weeds policy, will be necessary. We would propose the necessary changes to the regulations in the Federal Register.

APHIS NOXIOUS WEEDS PROGRAM MISSION STATEMENT

APHIS developed a weed policy in 1993, and a plan to implement that policy in 1995. The implementation plan stated APHIS's mission with respect to weeds:

“APHIS will use modern technologies to exclude, delimit, suppress, and eradicate non-indigenous weeds from the United States. These technologies will be appropriately applied and monitored to achieve environmentally sound and desirable forms of management against invasive plants.”

After reviewing the public comments received on the ANPR published in the Federal Register on March 20, 2000, and our new authority under the PPA, we updated the Noxious Weed Mission Statement and revised the goals for the APHIS noxious weed program. The new mission statement reads,

“APHIS will use modern technologies to prevent the introduction of parasitic-plant pests and Federal noxious weeds (including those already listed in the regulations and candidates for listing in the regulations) into the United States. APHIS will exclude, detect and eradicate newly introduced weeds that pose the highest risk to US agriculture or the environment. APHIS may cooperate with other agencies to achieve environmentally sound and desirable forms of integrated pest management against introduced invasive plants.”

RECOMMENDED REGULATORY CHANGES

The following items are recommended regulatory changes. If we pursue any of these recommended regulatory changes, certain changes to our noxious weeds regulations at 7 CFR 360 would be necessary. We would propose the necessary changes to the regulations in the Federal Register.

Emergency Action

(recommended regulatory change)

The PPA authorizes the Secretary of Agriculture to hold, seize, quarantine, treat, apply other remedial measures to, destroy, or otherwise dispose of any plant, plant pest, noxious weed, biological control organism, plant product, article, or means of conveyance moving into or through the United States, or interstate, or moved into or through the United States, or interstate, that the Secretary has reason to believe is a plant pest or noxious weed, is infested with a plant pest or noxious weed, or is in violation of the PPA. This authority includes action on the progeny of any plant, biological control organism, plant product, plant pests, or noxious weed. Further, the Secretary may use extraordinary emergency action for weeds threatening plants or plant products, if those weeds are new to or not known to be widely prevalent in or distributed within and throughout the United States.

Based on our new authority under the PPA, APHIS plans to update the noxious weeds regulations at 7 CFR 360 to provide for emergency action to prevent the introduction into or spread within the United States of a noxious weed before that weed is listed in the regulations.

In practice, when APHIS detects a plant pest or disease that poses a serious economic threat to American plant resources, the Agency is required to estimate the level of program, budgetary, and personnel resources required to combat the infestation. Based on those estimates, the Secretary of Agriculture may issue either a Declaration of Extraordinary Emergency or a Declaration of Emergency. Declarations of Emergency and Declarations of Extraordinary Emergency require a notice in the Federal Register. A **Declaration of Extraordinary Emergency** provides APHIS with authority to control movement within a State and/or pay compensation. A Declaration of Extraordinary Emergency is almost always accompanied by either an interim or proposed rule to update the regulations. A **Declaration of Emergency** may be issued by the Secretary to request a transfer of money from other agencies or corporations of the Department, such as the Commodity Credit Corporation (CCC), to APHIS for a specific program activity. The Declaration may be issued in conjunction with regulations, such as an interim or proposed rule to contain a plant pest or disease. A Declaration of Emergency is sometimes used in combination with a Declaration of Extraordinary Emergency. This authority is used when a State is unable to take the necessary measures to contain the plant pest or disease.

Petitions to Add or Remove a Weed from Regulation
(recommended regulatory change)

The PPA specifies that anyone may petition the Secretary of Agriculture to add or remove a weed from regulation. APHIS is considering adopting regulations to guide the petition process to add or remove a weed from regulation. At the request of a petition to add or remove a weed from regulation, APHIS would conduct a risk assessment to determine whether or not the specified plant species meets the criteria for regulation. We are considering the process described below.

A petition to add a weed to the list of Federal noxious weeds (i.e., weeds listed in 7 CFR 360.200) should provide the following information in electronic format to assist in the development of the pest risk assessment:

A. Identification

- Scientific name and author
- Common synonyms
- Botanical classification
- Common names
- Summary of life history
- Native and world distribution
- Distribution in the United States if any
- Description of control efforts, if established in the United States
- Identification of regulation at the state level

B. Consequences of Introduction/Spread

- Habitat suitability in the United States (predicted ecological range)
- Dispersal potential (biological characteristics associated with invasiveness)
- Potential economic impacts
- Potential environmental impacts

C. Likelihood of Introduction/Spread

- Potential pathways into and within the United States
- Likelihood of survival and spread within each pathway

D. Supporting documentation (list of references).

A petition to remove a weed from the list of quarantine pests should demonstrate that the weed no longer meets the definition of quarantine pest (e.g., if the weed spreads beyond a limited distribution or is not subject to official control). To do this, a petition to remove a weed from the list of quarantine pests should provide one or more of the following in electronic format:

- A. Evidence that the species is distributed throughout its potential range or has spread too far to implement effective control.
- B. Evidence that control has been unsuccessful and further efforts are not supported locally.
- C. Evidence that a species is readily available commercially in a reproductive form throughout the areas at risk.
- D. For cultivars of a listed weed, scientific evidence of sterility and inability to cross pollinate with wild types, which then might produce seed of weedier biotypes. Scientific evidence that the cultivar has narrower habitat suitability, less dispersal potential, less potential negative impact on the economy and/or environment of the United States.

Pathway Analysis / Specific Treatments

(recommended program change that would result in regulatory changes)

The Draft Invasive Species Management Plan calls for identification of high risk invasive species pathways and the development of effective technologies and management practices to reduce the movement of invasive species associated with the identified pathways. APHIS is filling new positions to provide for ongoing strategic pathway analysis. As pathway analysis improves and as we identify commodities whose risk can be mitigated by treatments, we would amend the regulations to reflect these changes.

Several years ago, APHIS identified niger seed (*Guizotia abyssinica*) imported as bird food as a pathway for multiple species of Federal noxious weeds. APHIS developed a heat treatment to devitalize the weed seeds without unduly affecting the palatability of the bird seed. APHIS then worked with industry to approve three heat treatment facilities to mitigate the risk associated with imported niger seed. Based on these developments, APHIS plans to include a proposal to add a section to the noxious weeds regulations that would require specific treatments for commodities that are consistently associated with weeds in the upcoming proposed rule published in the Federal Register. At first, this section would include only the niger seed treatment. As we identify other commodities whose risk can be mitigated by treatments, we would propose further changes to this section of the regulations.

RECOMMENDED POLICY AND PROGRAM CHANGES

The following items are recommended policy and program changes.

Weed Classification on the APHIS Web Site (recommended policy changes)

The PPA states that the Secretary may develop a classification system to describe the status and action levels for noxious weeds. The system may include current geographic distribution, relative threat, and actions initiated to prevent introduction or distribution.

We are considering the following weed categories for listing weeds on the APHIS web site:

- Category A1: (Federal noxious weeds) Weeds of potential economic or environmental harm to the US and not present in the US.
- Category A2: (Federal noxious weeds) Weeds of potential economic or environmental harm to the US, in limited distribution in the US, and under official control.
- Category B: (Regulated non-quarantine pests) Weeds whose presence in seeds for planting affects the intended use of those seeds with an economically unacceptable impact. (Federal Seed Act weeds, for which tolerances apply, meet this definition.)
- Category C: (Other weeds of concern to APHIS) Plants that meet the PPA definition of noxious weed but do not meet the IPPC definitions of quarantine pest or regulated nonquarantine pest.

If we adopt these categories for listing weeds on the APHIS web site, we would be consistent with internationally recognized IPPC pest categories. See Appendix A for the species we would list under each category.

Weeds that would fall within categories A1, A2, and B on the APHIS web site are listed in the regulations in a different format. Weeds in categories A1 and A2 appear in the noxious weeds regulations (7 CFR 360.200) by habitat (aquatic/wetland, parasitic, and terrestrial) and in the Federal Seed Act regulations (7 CFR 361.6(a)(1)) alphabetically. Weeds in category B are listed in the Federal Seed Act regulations (7 CFR 361.6(a)(2)) as noxious weed seeds with tolerances applicable to their introduction. See the section titled "Current Weed Lists in the Regulations," which begins on page 15, for more information.

Unlike weeds in other categories, weeds in category C would appear only on the APHIS web site. These weeds would not be regulated, but APHIS may cooperate and coordinate with other agencies for their control, as resources allow. APHIS would add weeds to category C through a stakeholder canvassing/targeting process, using the criteria below. The highest ranked weeds would be added to the C list. Weeds would be ranked according to whether or not they:

- are recommended for control by a state or other APHIS-associated cooperator (usually another Federal agency or university).
- have actual or potential impacts on agriculture or the environment.
- may affect Federally threatened/endangered species - or have impacts on a species of special concern to APHIS.
- have cost efficient/acceptable control alternatives.
- affect large areas/multiple states.
- have a high level of nonfederal (or external to APHIS) financial or other resource support.
- have control programs that will not harm non-target organisms, or if non-target impacts are present, they must be understood, acceptable and minimized.
- have programs that are ready/near ready for field implementation.
- have programs for which the potential success is high.
- have control programs with clear plans including well-understood timelines.

In addition, we would include information on the web site concerning current known US distribution and actions initiated for category A2 weeds, as well as information on relative threat for weeds in categories A1 and A2. Including this information on the web site instead of in the regulations would prevent constant regulatory change as distribution status may change frequently.

On the web site, we would also list species that we are in the process of adding, via rulemaking, to the Federal noxious weeds list. Such species would be identified through risk assessment as meeting the PPA definition of noxious weed. When a rule adding a species to the Federal noxious weeds list is published in the Federal Register and effective, importation and interstate movement of that species requires permits. Until then, while the species is listed only on the web site, we would strongly suggest applying for a permit to import or move interstate that species.

Note: Other groups may classify weeds outside of the scope of APHIS regulation. For example, the Agricultural Marketing Service maintains a list of State noxious-weed seeds regulated under the interstate provisions of the Federal Seed Act. In addition to the noxious weed-seed lists, many States have separate noxious weed regulations. The National Plant Board maintains a consolidated list of State noxious weeds on its web page at <http://www.aphis.usda.gov/npb/law®.html>.

Development of Integrated Pest Management Plans

(recommended program change)

The PPA states the Secretary of Agriculture may develop, in conjunction with the noxious weed classification system, integrated pest management plans for Federal noxious weeds for the geographic region or ecological range where the noxious weed is found in the United States.

APHIS is considering participating in the development of these plans with cooperators. Already in existence are a Melaleuca Management Plan and a draft Caulerpa Management Plan. In addition, we are considering developing new pest response guidelines for Federal noxious weeds that share similar characteristics and habitats but are not known to be present in the US. Weeds currently regulated that are known to exist in the US, or that are suspected to exist based on historical reports, would be targeted for confirmation by survey. For this purpose, draft survey plans would be developed and implemented as funding allows. Generic plans, including survey for several species expected in similar habitats, would be developed where possible.

Civil Penalties

(recommended program change)

The PPA authorizes the Secretary of Agriculture to hold, seize, quarantine, treat, apply other remedial measures to, destroy, or otherwise dispose of any plant, plant pest, noxious weed, biological control organism, plant product, article, or means of conveyance moving into or through the United States, or interstate, or moved into or through the United States, or interstate, that the Secretary has reason to believe is a plant pest or noxious weed, is infested with a plant pest or noxious weed, or is in violation of the PPA. This authority includes action on the progeny of any plant, biological control organism, plant product, plant pests, or noxious weed. If a plant, plant pest, noxious weed, biological control organism, plant product, article, or means of conveyance is in violation of the PPA, the Secretary may issue civil penalties ranging from \$1,000 for an initial violation by an individual moving regulated articles not for monetary gain, to \$250,000 per violation. The Safeguarding Report recognizes that the PPA civil penalty fee structure provides an effective deterrent against violations of the regulations. APHIS plans to use our new authority under the PPA to issue civil penalties for noncompliance with the regulations.

Public Awareness

(recommended program change)

APHIS is considering developing and distributing information to the traveling public and associated travel industries, such as travel agencies and tourist boards, about the role that travelers and tourists play in the transport and introduction of Federal noxious weeds. APHIS would target consumer audiences, such as nurserymen, seedsmen, plant buyers, and aquarium

owners, to inform them of the specific problems associated with Federal noxious weeds and let them know how they can avoid contributing to the problem. The goals of the public awareness campaign would be to market and increase awareness of program activities relating to Federal noxious weeds; to establish formal linkages and cooperative strategies with other Federal, State, and local weed programs; and to reduce the interstate movement of Federal noxious weeds through audience education. To begin to address this issue, in May 2001, we began distribution of a poster that identifies aquatic Federal noxious weeds. This poster is designed to educate aquarium/aquatic plant dealers and their customers.

OTHER COMPONENTS OF THE NOXIOUS WEEDS PROGRAM

The other components of the noxious weeds program are described below. We are not recommending any immediate changes for these components of the program, but, in several places, we note certain long-term changes that we may consider implementing for these program components. We invite you to comment on ways in which we can improve these components.

Current Weed Lists in the Regulations *(no immediate changes recommended)*

The noxious weed regulations (7 CFR 360) contain three sections: Definitions, the list of Federal noxious weeds, and general prohibitions and restrictions on the movement of Federal noxious weeds. We would continue to organize the regulations into these three sections, but, as needed over time, we would expand the sections for definitions and general prohibitions and restrictions on the movement of Federal noxious weeds.

In addition, though the PPA eliminates the strict requirement to list weeds in the regulations (but states the Secretary may do so), APHIS plans to continue to list Federal noxious weeds in the regulations and to update the list of Federal noxious weeds as risk assessments are completed. We would also continue to list Federal noxious weeds by habitat (unlike the weed list we are considering for the APHIS web site). Federal noxious weeds are prohibited entry into the United States except under permit and must meet all other applicable requirements. We would also continue to list regulated non-quarantine pest weeds in the Federal Seed Act regulations (7 CFR 361.6) as noxious weed seeds. Regulated non-quarantine pests must meet strict tolerance, inspection, and intended use requirements for entry into the United States. We intend to develop specific criteria for adding species to the B list when the international standard for regulated non-quarantine pests is completed. The current B list is statutory; the Federal Seed Act names these species in the definition of “noxious weed seeds,” which are prohibited in imported agricultural and vegetable seed for planting, subject to tolerances. Changes to the lists that appear in the regulations require publication of rules in the Federal Register. We believe that continuing to list

Federal noxious weeds in the regulations would provide important information to regulated persons, interested individuals, and our trading partners.

APHIS asked for public comment on listing weeds in the ANPR published in the Federal Register on March 20, 2000. Commenters generally supported APHIS's listing Federal noxious weeds (i.e., those weeds that meet the IPPC definition of quarantine pest and that are either not present in the United States or in limited distribution and under official control) in the regulations. The vast majority of commenters strongly opposed publishing general lists of invasive plant species, especially lists that include ornamental and crop species. Many commenters saw value in publishing a consolidated list of species from the State noxious weed lists, but most commenters believed the National Plant Board was the appropriate source for this information. The NPB recently posted this list on its web site (<http://www.aphis.usda.gov/npb/index.html>).

Procedures for Adding Weeds to the Federal Noxious Weeds List
(no immediate changes recommended)

Weeds are identified as candidates for designation as Federal noxious weeds in several ways, including:

- Discovery of an established infestation or an outbreak of a new weed in the United States.
- Identification of a new weed risk through literature search or other research. (For example, we look for information about weed problems in other countries and target for risk assessment those that do not yet occur in the US.)
- Petition or proposal from outside APHIS.

Pest risk assessments are conducted for species identified as potential candidates. APHIS already has a list of species identified as potential candidates by the means listed above and as resources allow, APHIS conducts pest risk assessments (PRAs) or contracts with scientists outside the Agency to write them. APHIS also encourages stakeholders to submit draft PRAs for review. The weed risk assessment guidelines and a template appear on the APHIS web site (<http://aphis.usda.gov/ppq/weeds>). In addition, as discussed earlier in this draft document, we recommend adopting regulations to guide the petition process to add or remove a weed from regulation. Further, APHIS is currently expanding the risk assessment staff by recruiting ecologists and botanists to increase APHIS capacity in this area.

As discussed earlier in this draft document, we also intend to continue adding weeds that are newly identified as Federal noxious weeds to the weed list in the regulations through the publication of rules in the Federal Register.

Permits

(no immediate changes recommended)

We are not planning any changes to our permitting requirements or procedures.

Importation permits are required for Federal noxious weeds, which are currently listed in the regulations and would be listed in separate A1 and A2 categories on the APHIS web site. Generally, permits for those Federal noxious weeds that would fall under category A1 are issued only for research in containment facilities that are inspected and approved by APHIS. Permits may also be issued for germplasm banks and educational purposes, such as study of herbarium specimens in botanical institutions. The permit lists any additional requirements, including appropriate safeguards, for the importation of these Federal noxious weeds.

Interstate movement of certain Federal noxious weeds (i.e., those that would fall in category A2) also requires a permit. Decisions on whether to issue a permit for interstate movement of these weeds may take into account regional differences. For example, a sterile cultivar may be permitted into states where the wild type does not exist. This allow movement of the weed while ensuring that cross pollination cannot occur. Another example is that permits may be issued into States where the weed already is widespread and under no control, but not into States where the weed does not yet occur or where the weed is being eradicated or contained. All permitting decisions are made in consultation with the receiving State departments of agriculture.

APHIS does not require permits for regulated non-quarantine pests (i.e., weeds that would fall in category B on the APHIS web site). These weeds are subject to other requirements, such as tolerances. Weeds that would appear in category C on the APHIS web page would not be subject to permitting or other requirements because they are widespread in the United States.

Port of Entry Inspection

(no immediate changes recommended)

The first line of defense against the introduction of plant pests and noxious weeds into the United States is precautionary activity within countries of origin, such as phytosanitary inspection of commodities. The second line of defense is port of entry inspection. APHIS believes that port of entry inspection is a critical component of its program to prevent the introduction of Federal noxious weeds into the United States, and the Agency plans to continue port of entry inspection using the same methods it currently does. However, if new technologies become available and are determined to be sufficiently effective, we would consider updating our systems to take advantage of these technologies.

During port of entry inspection, APHIS inspectors examine passenger baggage, cargo, conveyances, and mail for regulated items, pests, and Federal noxious weed propagules. In a typical year, APHIS inspectors intercept Federal noxious weeds about 3,500 times, most commonly in passenger baggage, spice, seeds, herbal medicine, decorative dried plant material, and grain for consumption. Inspectors confiscate and destroy Federal noxious weeds from passenger baggage. In other cases, when the associated commodity is considered contaminated by the presence of a Federal noxious weed, most of those contaminated commodities must be re-exported or destroyed because APHIS has few devitalization treatments for Federal noxious weeds. Often the approved treatments would render shipments unsuitable for their intended use. In some cases, APHIS allows cleaning of a contaminated commodity under permit and with appropriate safeguards.

Early Detection and Rapid Response
(no immediate changes recommended)

APHIS will continue to work independently and with outside partners to develop a national network for data collection to support early detection efforts. Traditionally, we have worked closely with the State departments of agriculture and through surveys sponsored by the Cooperative Agricultural Pest Survey Program (CAPS). We intend to expand our network to obtain reports of new organisms by partnering with other agencies, universities, and other non-government organizations. We will continue to work toward developing new methodologies for detecting and responding to first-time detections of nonindigenous weeds.

APHIS will also continue to work through the New Pest Advisory Group (NPAG) for first-time detections of nonindigenous weed species that are not currently regulated. Coordinated by APHIS, the NPAG uses an *ad hoc* group of subject experts and regulatory specialists to evaluate the available information for a new pest. The NPAG recommends an approach to the Deputy Administrator of PPQ based on the biology of the organism and its perceived impact to our agricultural and natural ecosystems.

RELATED ISSUES

Risk Assessment for Imported Nursery Stock (Propagative Material)

Current regulations do not mandate a screening process for the invasive potential of plants imported for propagation. Under 7 CFR 319.37, nursery stock is admissible unless it is on a regulated list. Plants on the regulated lists are prohibited either because they are Federal noxious weeds or because they are associated with certain plant diseases or other plant pests. The Safeguarding Review recommends adopting a modified "clean list approach" for propagative material, specifying what is permissible, rather than listing regulated plants. Similarly, the draft Invasive Species Management Plan recommends development of risk analysis and screening system for evaluating first time intentional introductions of non-native species before entry is allowed.

The PPA states that the Secretary of Agriculture may prohibit or restrict the importation, entry, exportation, or movement in interstate commerce of any plant, plant product, biological control organism, noxious weed, article, or means of conveyance to prevent the introduction into the United States or dissemination within the United States of a plant pest or noxious weed. The PPA further provides the authority for the Secretary of Agriculture to initiate a screening process to evaluate proposed new introductions of non-native plants. Risk assessment for propagative material has two weed-related components: evaluation of the commodity as a potential weed and evaluation of the commodity's potential to provide a pathway for weeds. Developing and implementing risk assessment for nursery stock is a long-term goal for which additional resources will be required. A workshop, co-sponsored by the American Seed Trade Association, the American Nursery & Landscape Association, and USDA, was held May 9-10, 2001, at the University of Maryland, College Park campus. The workshop, titled "Invasive Species Workshop; International Movement of Plant Propagative Material," opened the discussion and began to identify issues and concerns.

APHIS already includes a weediness screening in the risk assessment process for fruits and vegetables and for the bulb preclearance program. Before a new fruit or vegetable can be approved for import, or before a new species of bulb can be added to the preclearance program, an APHIS botanist evaluates its weed potential. If the botanist finds evidence that the plant behaves as a weed elsewhere, it will be evaluated as a potential Federal noxious weed.

RECOMMENDED GOALS, STRATEGIES, AND ACTION ITEMS

Goal 1: Effectively exclude noxious weeds of quarantine pest significance not yet present in the United States.

Proposed Strategies to Achieve the Goal:

1. **Risk assessment:** Use risk assessment processes that follow international standards to support identification of weed species to be regulated, provide classification of undesirable plant species, identify potential pathways, and determine appropriate regulatory action.
2. **Permits:** Evaluate permit requests for importation and interstate movement permits for Federal noxious weeds. The permit will list required additional safeguards.
3. **Weediness Screening:** Explore revision of the nursery stock regulations (7 CFR 319.37) to require risk assessment before a commodity is approved for entry.
4. **Enforcement activities:** Provide support to APHIS enforcement personnel to reduce introduction and spread of Federal noxious weeds.
5. **Environmental protection:** Include potential environmental impacts in risk assessments to determine if a weed species should be listed as a Federal noxious weed.

Action Priorities for 2001-2002:

- Complete risk assessments for at least 10 weeds not known to occur in the U.S. by 2002.
- Publish a proposed rule by 2002 to list new species identified by risk assessment, and add sections on the petition process and mandatory treatment for niger seed.
- Continue to work with the professional societies and external partners to identify weeds not known to occur in the US nor currently recognized as noxious weeds.
- Participate in development of draft procedures and guidelines for potential weediness screening of propagative plant materials.
- Develop, refine and recommend treatments for weed devitalization.

Goal 2: Detect incipient populations early, and implement appropriate responses to new introduction or spread of noxious weeds of limited distribution.

Proposed Strategies to Achieve the Goal:

1. **Identify pests of concern:** Through use of the New Pest Advisory Group system, provide a forum for discussion and decision-making support for regulatory decisions regarding taxa newly introduced or of limited distribution.
2. **Early detection:** Encourage reporting to APHIS of newly introduced or newly detected populations of plants of concern through use of State, Federal and other plant professionals by supporting a National Early Warning System.

3. **Development of integrated pest management plans:** Coordinate development and implementation of program options for eradication, biocontrol, or other appropriate control or management measures for targeted taxa. Cooperate with State, local, and other Federal agencies to eradicate designated invasive plants.
4. **Survey:** Provide support for State and Federal survey efforts to characterize populations of plants of regulatory concern.
5. **Removing weeds from regulation:** Provide support for decision-making regarding removal from regulation of weeds determined to be beyond the scope of APHIS's regulatory authority.
6. **Environmental compliance and monitoring:** Support compliance with environmental statutes (NEPA, ESA, FIFRA) in the planning process. These processes will require liaison with appropriate APHIS staff (e.g. Environmental Documentation and Environmental Assessment and Monitoring) and staffs of other agencies, such as U.S. Fish and Wildlife Service.

Action Priorities for 2001-2002:

- Canvass the States for incipient populations of newly introduced species known only at the local level.
- Complete timely risk assessments (using NPAG) for newly introduced species. (Ongoing)
- Coordinate through APHIS Plant Health Directors detection and delimiting surveys for Federal noxious weeds and new introductions through the CAPS program. Report new finds into the NAPIS database.
- With State Departments of Agriculture, develop official control programs for priority Federal noxious weeds of limited distribution.
- Provide coordination for APHIS Federal noxious weed eradication activities among regional, field, and national headquarters program staffs.
- Assist in the development of early response systems for weeds.

Goal 3: Cooperate with other agencies to manage invasive plants with integrated pest management tools, minimizing the risk to agricultural production, natural resources, and human health.

Proposed Strategies to Achieve the Goal:

1. **Risk assessment input from partners.** Expedite the risk assessment process by encouraging interested partners to submit data or draft risk assessments regarding the weediness of candidate species. Encourage review and consultation with appropriate APHIS and external scientists during development of risk assessments.
2. **Survey.** Provide support for State and Federal survey efforts to characterize populations of plants of regulatory concern. Encourage development and utilization of new technologies for remote sensing of weed populations.

3. **Interagency liaison.** Support Federal initiatives to minimize introduction and spread of invasive plants through participation in interagency initiatives such as FICMNEW and the Invasive Species Council.
4. **Data management.** Work with cooperators to coordinate an appropriate information management system for invasive weeds. Provide specific input on Federal noxious weeds.

Action Priorities for 2001-2002:

- Target A2 weeds, or candidates for the Federal noxious weeds list, for CAPS survey. (*Inula britannica*, for one)
- Work with stakeholders to identify and rank Category C weeds.
- Develop cooperative action plans and MOUs with external partners for targeted weeds.
- Through the APHIS-NRCS partnership, develop the PLANTS Internet site to provide increased data management capability.

Goal 4: Serve the public effectively by promoting public awareness regarding noxious weeds and noxious weed programs.

Proposed Strategies to Achieve the Goal:

1. **Communication strategic plan.** Develop and implement an effective communication strategy regarding the providing of public information on Federal noxious weeds.
2. **Encourage awareness.** Market and increase awareness of program activities relating to Federal noxious weeds.
3. **Cooperate.** Establish formal linkages and cooperative communication strategies with other Federal, State, and local weed programs. Participate in the activities of appropriate professional societies.
4. **Audience education.** Reduce the interstate movement of Federal noxious weeds through audience education. Provide seminars, presentations, training workshops; on-site consultations to cooperators, stakeholders, and other public groups; write and publish articles and books on invasive plants of regulatory concern.

Action Priorities for 2001-2002:

- Develop a poster on Federal noxious weeds for the traveling public by end of 2002.
- Develop fact sheets for high-risk Federal noxious weeds or candidates. (Ongoing).
- Further develop the APHIS weeds web site, separating the Federal noxious weeds list into A1 and A2 categories, including current geographic distribution for A2 weeds and summarizing the relative threat posed by each species.

Appendix A

Weed Lists

A1 Weeds: Federal noxious weeds, not in US

<u>Scientific name</u>	<u>Common name</u>
Aeginetia spp.	aeginetia
Alectra spp.	alectra
Azolla pinnata	mosquito fern, water velvet
Carthamus oxyacantha	wild safflower
Cuscuta spp. (other than native or introduced species)	dodder
Digitaria abyssinica	African couchgrass
Drymaria arenarioides	lightning weed
Lagarosiphon major	oxygen weed
Leptochloa chinensis	Asian sprangletop
Lycium ferocissimum	African boxthorn
Mikania cordata	mile-a-minute
Monochoria hastata	monochoria
Nassella trichotoma	serrated tussock
Opuntia aurantiaca	jointed prickly pear
Orobanche spp. (other than native or introduced species)	broomrape
Oryza longistaminata	red rice
Oryza punctata	red rice
Prosopis alpataco	mesquite
Prosopis argentina	mesquite
Prosopis articulata	mesquite
Prosopis burkartii	mesquite
Prosopis caldenia	mesquite
Prosopis calingastana	mesquite
Prosopis campestris	mesquite
Prosopis castellanosii	mesquite
Prosopis denudans	mesquite
Prosopis elata	mesquite
Prosopis ferox	mesquite
Prosopis fiebrigii	mesquite
Prosopis hassleri	mesquite
Prosopis humilis	mesquite
Prosopis kuntzei	mesquite
Prosopis palmeri	mesquite
Prosopis rojasiana	mesquite
Prosopis ruizlealii	mesquite

Prosopis ruscifolia	mesquite
Prosopis sericantha	mesquite
Prosopis torquata	mesquite
Rubus fruticosus	wild blackberry
Rubus moluccanus	wild blackberry
Sparganium erectum	exotic bur-reed
Spermacoce alata	borreria
Striga spp.(other than native or introduced species)	witchweed

A2 Weeds: Federal noxious weeds, Introduced (Distributions taken from the PLANTS database at <http://plants.usda.gov/> and personal communications. APHIS welcomes corrections and additions.)

<u>Scientific name</u>	<u>Common name</u>	<u>Suspected Distribution</u>
Ageratina adenophora	crofton weed	HI, CA
Alternanthera sessilis	sessile joyweed	HI, PR, FL, MD, GA, LA, VI, TX, MS, SC, AL
Asphodelus fistulosus	onionweed	CA, NM, TX
Avena sterilis	animated oat	PA, NJ, CA, OR
Caulerpa taxifolia	caulerpa	CA, off coast
Chrysopogon aciculatus	pilipiliula	HI
Commelina benghalensis	Benghal dayflower	FL, HI, GA, CA, LA, AL
Crupina vulgaris	common crupina	ID, OR, WA, CA, MA
Digitaria velutina	velvet fingergrass	TX
Eichhornia azurea	anchored waterhyacinth	PR
Emex australis	three-cornered jack	CA
Emex spinosa	devil's thorn	HI, CA, FL, MA, NJ, TX

<i>Galega officinalis</i>	goatsrue	UT, NY, PA, CT, ME, MA, NE, CO, MD
<i>Heracleum mantegazzianum</i>	giant hogweed	NY, WA, ME, PA, MI
<i>Hydrilla verticillata</i>	hydrilla	widespread (16 States)
<i>Hygrophila polysperma</i>	Miramar weed	FL, VA, TX
<i>Imperata brasiliensis</i>	Brazilian satintail	AL, FL, LA, MS, SC, PR
<i>Imperata cylindrica</i>	cogongrass	AL, FL, MS, OR, LA, SC
<i>Ipomoea aquatica</i>	Chinese waterspinach	CA, FL, HI, PR
<i>Ischaemum rugosum</i>	murain-grass	MD
<i>Limnophila sessiliflora</i>	ambulia	FL, TX, GA
<i>Melaleuca quinquenervia</i>	melaleuca	FL, CA, HI, LA, PR
<i>Melastoma malabathricum</i>	melastoma	HI
<i>Mikania micrantha</i>	mile-a-minute	PR
<i>Mimosa diplotrichia</i>	giant sensitive plant	PR
<i>Mimosa pigra</i>	catclaw mimosa	FL, TX, PR
<i>Monochoria vaginalis</i>	monochoria	CA, HI
<i>Orobanche minor</i>	small broomrape	WA, OR, FL, GA, SC, NC, VA, WV, MD, DE, NJ, PA, NY, VT
<i>Orobanche ramosa</i>	branched broomrape	CA, TX, NC, IL, KY, NJ
<i>Oryza rufipogon</i>	red rice	FL, CA
<i>Ottelia alismoides</i>	duck-lettuce	CA, LA, MO, TX
<i>Paspalum scrobiculatum</i>	Kodo-millet	HI, NJ, TX, MD
<i>Pennisetum clandestinum</i>	Kikuyugrass	CA, HI, AZ, PR

<i>Pennisetum macrourum</i>	African feathergrass	CA, HI
<i>Pennisetum pedicellatum</i>	kyasuma-grass	FL
<i>Pennisetum polystachion</i>	missiongrass	HI, PR, FL
<i>Prosopis farcta</i>	mesquite	AZ
<i>Prosopis pallida</i>	mesquite	HI, PR, VI
<i>Prosopis reptans</i>	mesquite	TX
<i>Prosopis strombulifera</i>	mesquite	CA
<i>Rottboellia cochinchinensis</i>	itchgrass	AL, AR, FL, GA, LA, MS, NC, TX, PR, IN
<i>Saccharum spontaneum</i>	wild sugarcane	FL, HI, PR
<i>Sagittaria sagittifolia</i>	arrowhead	HI
<i>Salsola vermiculata</i>	wormleaf salsola	CA
<i>Salvinia auriculata</i>	giant salvinia	PR
<i>Salvinia molesta</i>	giant salvinia	CA, TX, LA, SC, MS, AL, FL, AZ, GA
<i>Setaria pumila</i> ssp. <i>pallide-fusca</i>	cattail grass	AR, LA
<i>Solanum tampicense</i>	wetland nightshade	FL
<i>Solanum torvum</i>	turkeyberry	FL, HI, PR, AL, MD, VI
<i>Solanum viarum</i>	tropical soda apple	FL, LA, MS, GA, AL, PR, TN
<i>Striga asiatica</i>	witchweed	NC, SC
<i>Striga gesnerioides</i>	indigo witchweed	FL
<i>Tridax procumbens</i>	coat buttons	FL, HI, PR, VI
<i>Urochloa panicoides</i>	liverseed grass	TX, NM, MD

B. Regulated non-quarantine weeds:

Acroptilon repens (Russian knapweed)
Cardaria draba (hoary cress)
Cardaria pubescens (white top)
Cirsium arvense (Canada thistle)
Convolvulus arvensis (field bindweed)
Elytrigia repens (quackgrass)
Euphorbia esula (leafy spurge)
Sonchus arvensis (perennial sowthistle)
Sorghum halepensis (Johnsongrass)

C. Nonregulated weeds of interest to APHIS.

These weeds meet the PPA noxious weed definition but are not Federal noxious weeds or regulated non-quarantine pests. The category C list would be developed through canvassing of the State departments of agriculture, ARS and University weed scientists and other groups with weed interests. Weeds would be ranked, and the top 20-25 would comprise the C list. APHIS may cooperate/coordinate with other agencies for their control. The following is an example of a list of weed species that might be expected from the canvassing process. It is the list of biological control targets resulting from a survey using like criteria.

Alliaria petiolata (garlic mustard)
Carduus nutans (musk thistle)
Centaurea diffusa (diffuse knapweed)
Centaurea maculosa (spotted knapweed)
Centaurea solstitialis (yellow starthistle)
Centaurea virgata ssp. *squarrosa* (squarrose knapweed)
Chondrilla juncea (rush skeletonweed)
Cynoglossum officinale (houndstongue)
Cyperus esculentus (yellow nutsedge)
Cyperus rotundus (purple nutsedge)
Eichhornia crassipes (waterhyacinth)
Hieracium aurantiacum (orange hawkweed)
Hieracium pratense (meadow hawkweed)
Linaria dalmatica (Dalmatian toadflax)
Linaria vulgaris (yellow toadflax)
Lythrum salicaria (purple loosestrife)
Mysiophyllum spicatum (Eurasian watermilfoil)
Onopordum acanthium (Scotch thistle)
Phragmites australis (common reed)

Polygonum perfoliatum (mile-a-minute weed)

Pueraria lobata (kudzu)

Rosa multiflora (multiflora rose)

Tamarix ramosissima (saltcedar)

Appendix B World Wide Web sites

Web sites relevant to this document:

APHIS Noxious Weeds Home Page:

<http://www.aphis.usda.gov/ppq/weeds/weedhome.html>

Plant Protection Act : <http://www.aphis.usda.gov/ppq/weeds/PPAText.PDF>

Safeguarding Report: <http://www.aphis.usda.gov/ppq/safeguarding/>

Invasive Species Management Plan (Draft): <http://www.invasivespecies.gov/>

State Noxious Weeds: <http://www.aphis.usda.gov/npb/law®.html>

APHIS Weed Risk Assessment Guidelines and Template:

<http://www.aphis.usda.gov/ppq/weeds/weedsrisk99.html>

PLANTS database: <http://plants.usda.gov/>