

**United States  
Department of  
Agriculture**



**Animal and  
Plant Health  
Inspection  
Service**

# **Asian Longhorned Beetle Control Program**

## **Environmental Assessment, December 1996**

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## **I. Need for the Proposed Action**

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), is proposing a program for the control of the Asian longhorned beetle, *Anoplophora glabripennis* (Motschulsky). The program is necessary to reduce the potential for damage from this major pest of trees. The Asian longhorned beetle bores into and kills a variety of tree species (including species of maple, elm, chestnut, mulberry, poplar, and willow). This nonnative pest has the potential to spread to other areas of the United States and cause extensive losses to ornamental and commercial tree species. It has been detected in the Greenpoint section of Brooklyn, New York, and in a small area of Amityville, New York, and ultimately may be found in other areas as well.

APHIS' authority for action in this proposal is based upon and complies with various enabling statutes or regulations, including the Incipient and Emergency Control of Pests [Act] (1937), the Organic Act of the Department of Agriculture (1944), and the Cooperation with State Agencies in the Administration and Enforcement of Certain Federal Laws Act (1962). Under APHIS' National Environmental Policy Act Implementing Procedures, 7 CFR Part 372, the proposed action is a class of action for which an environmental assessment (EA) is normally prepared. This EA considers the potential effects of the proposed action and its alternatives, including no action.

## **II. Alternatives**

### **A. No Action**

Under the no action alternative, APHIS would take no action of any kind. Some actions may be taken by other Federal or non-Federal entities; those actions would not be under APHIS control or funded by APHIS. In the absence of effective measures taken by other entities, the Asian longhorned beetle could increase its numbers and spread to other areas.

### **B. Regulatory Quarantine Only**

Under the regulatory quarantine only alternative, APHIS would quarantine the infested area and regulate commodities that could harbor the pest. Restrictions on movement and/or treatment of those commodities would reduce the spread of Asian longhorned beetle to other areas. Control actions, even eradication actions, could be undertaken by other Federal or non-Federal entities; those actions would not be under APHIS control or funded by APHIS.

## **C. Suppression**

Under the suppression alternative, APHIS would use (singly or in combination) any of various control methods to reduce, but not eliminate, the population of Asian longhorned beetles. These methods could include physical and cultural control. Objectives of suppression might be to reduce the damage to trees in the known infested area or to reduce the pest's potential for spread. The Asian longhorned beetle still would be able to spread by natural and human-assisted means. A suppression program would last for an undetermined period of time.

## **D. Eradication (The Preferred Alternative)**

Under the eradication alternative, APHIS would quarantine the infested area and regulate commodities to prevent the spread of the Asian longhorned beetle, and would employ physical and cultural control methods (tree removal and destruction or tree pruning) to eradicate (or reduce to undetectable levels) its populations. An eradication program could expand if additional infestations of the Asian longhorned beetle are found and would cease after the pest population is eliminated.

# **III. Environmental Impacts of the Proposed Action and Alternatives**

## **A. No Action**

Environmental impacts that could result from APHIS' implementation of the no action alternative include damage to and loss of valuable ornamental trees in the infested areas (Brooklyn and Amityville), spread of the pest to other areas of the country with resultant damage to and loss of ornamental and commercial trees, and private or uncoordinated use of pesticides to control the pest with associated adverse impacts to the environment (the physical environment, human environment, and nontarget species). The wide distribution of potential host plants of the Asian long-horned beetle indicates possible spread across much of the country with increases in damage and losses commensurate with the spread. The damage and losses could result in reductions in private property value. The damage and losses to commercial trees would lower the value and production of timber and maple syrup. The changes in the composition and age structure of the forest from no action would have long-term effects on the ecological relationships in the forested areas. There could be losses in recreational revenue to some areas from diminished amount of certain activities such as fall foliage visitations. The potential for future quarantine restrictions on export of logs and nursery stock is more likely if the no action alternative is selected.

## **B. Regulatory Quarantine Only**

Under a regulatory quarantine only, in the absence of effective eradication measures by non-APHIS entities, the Asian longhorned beetle would be expected to spread through natural means, resulting in virtually the same impacts as the no action alternative above. Although the rate of spread of the beetle would be much slower with the regulatory quarantine than with no action, the potential for damage and losses would be similar as the infested area expanded. The regulatory quarantine only alternative might facilitate suppression or eradication efforts by non-APHIS entities by containing the pest or reducing its movement to other areas.

## **C. Suppression**

In a suppression program, the adverse impacts (weakened and destroyed trees) from the Asian longhorned beetle would be reduced. However, suppression would result in continued loss of esthetically and commercially valuable trees. The continuing program would exacerbate objections concerning government intrusion and regulation. The actions of non-APHIS entities to contain or control the beetle are possible, but their limited ability to coordinate use of resources against the beetle might limit their effectiveness. Effective control would be particularly difficult if the pest were to become widespread throughout the range of the known host plants.

## **D. Eradication (The Preferred Alternative)**

Under the preferred alternative, Asian longhorned beetle eradication, regulatory quarantines would be combined with other control methods to eliminate any current or future infestation of the beetles. Potential adverse impacts would be limited to the infested areas in Brooklyn and Amityville with a good regulatory quarantine to contain the pest and eliminate infested host plants. The burning and chipping of all materials from host tree removal before May 1 should result in elimination of the beetle from known infested sites. The continuing quarantine and monitoring would indicate if any infested sites or infected host materials were not detected in the early investigation.

The adverse impacts from burning and cutting of the host tree materials in the infested areas are minimal. The amount of burning and chipping is less for this alternative than for the other alternatives due to quantity of infested host material. The amount of host material to be destroyed in the small infested area is likely to be less than the amount if the beetle has the chance to spread. The impacts of chipping are negligible. All burning will be done in compliance with local laws. Although smoke and particulate emissions will occur with burning, the amount of host material to be burned is limited within the infested areas. The actual burning would occur in winter and spring when the weather conditions are windy. This results in good mixing of emissions, and the potential for atmospheric inversions (poor air quality) is minimal.

Potential adverse impacts (direct, indirect, and cumulative) of the preferred action on the agricultural and nonagricultural environmental components were considered in detail. Any special and unique characteristics of the preferred action's area were considered with respect to the influence on the kinds, amounts, and severity of potential adverse impacts. APHIS anticipates that implementation of the preferred action at the site-specific level would affect the quality of the human environment minimally, if at all. Standard operating procedures and protective measures ensure that impacts to environmental quality are minimized to the fullest extent possible. The most likely result of the preferred action would be beneficial impacts to agricultural environmental components, growers, and consumers.

Although use of other control methods was considered, there were efficacy and environmental issues that made these less feasible. Use of biological control would not be effective in eradication because this species has been shown to cause damage within its native range despite the presence of associated natural enemies. Use of chemical control in an eradication program requires high levels of efficacy from the treatments to be effective and practical. Chemicals applied to control eggs or adult Asian longhorned beetle must be effective for extended periods of time (May to October). Chemicals applied to control larvae must be effective and systemic in the inner bark and cambium of the host plant when the larvae first begin feeding. None of the chemical treatments have been shown to be very effective or practical for eradicating the life stages of this beetle. The unavailability of effective chemical controls precludes any potential concerns over their safety, environmental impacts, and the level of pesticide residues in derived products (i.e., products like timber and maple syrup).

Consistent with the Endangered Species Act of 1973 and its implementing regulations, potential adverse impacts to federally listed endangered and threatened species and their critical habitats were considered in detail. No effect on endangered and threatened species and their critical habitats is anticipated as a consequence of implementing the preferred action.

Consistent with Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," APHIS considered the potential for disproportionately high and adverse human health or environmental effects on any minority populations and low-income populations. No disproportionate effects on such populations are anticipated as a consequence of implementing the preferred action.

## **IV. Agencies, Organizations, and Individuals Consulted**

This EA was prepared and reviewed by APHIS. The addresses of participating APHIS units, cooperators, and consultants (as applicable) follow.

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine  
Program Support  
4700 River Road, Unit 134  
Riverdale, MD 20737-1236

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Policy and Program Development  
Environmental Analysis and Documentation  
4700 River Road, Unit 149  
Riverdale, MD 20737-1238



**Finding of No Significant Impact**  
**Asian Longhorned Beetle Control Program**  
**Environmental Assessment**  
**December 1996**

The U.S. Department of Agriculture (USDA), Animal and Plant Health Inspection Service (APHIS), has prepared an environmental assessment (EA) for a proposed program to quarantine and control the Asian longhorned beetle, a serious exotic pest of trees—including elm, maple, mulberry, poplar, and willow.

The Asian longhorned beetle has been found in the Greenpoint section of Brooklyn, New York, and in Amityville, New York. The proposed program is needed to reduce damage to valuable trees from the Asian longhorned beetle, to prevent the spread of the Asian longhorned beetle to other areas of the

United States (especially forest ecosystems), and to comply with relevant pest control statutes and regulations.

The EA, incorporated by reference in this document, is available from the following offices:

U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine  
Domestic and Emergency Programs  
4700 River Road, Unit 134  
Riverdale, MD 20737-1236

or

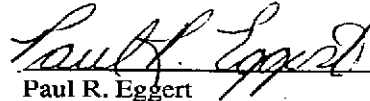
U.S. Department of Agriculture  
Animal and Plant Health Inspection Service  
Plant Protection and Quarantine, NRO  
Blason II, 1st Floor  
505 South Lenola Road  
Moorestown, NJ 08057-5073

The EA analyzed four alternatives—no action, regulatory quarantine only, suppression, and eradication. Based on the information presented in the EA, I have selected eradication as the preferred alternative because of its capability to achieve the program's objective in a way that reduces the magnitude of potential environmental consequences.

APHIS considered the potential environmental consequences of each alternative. Based on analysis of the environmental impacts, APHIS has determined that there would be no significant impact from the implementation of the control program. APHIS' finding of no significant impact for this program was based upon the appropriate use of control methods for the program and their expected environmental consequences, as analyzed within the EA. APHIS will consult with the U.S. Fish and Wildlife Service to ensure that this program will have no adverse effects on endangered and threatened species.

It also appears, consistent with Executive Order No. 12898, "Federal Actions to Address Environmental Justice in Minority Populations and Low-Income Populations," that implementation of the control program will not result in disproportionately high and adverse human health or environmental effects on any minority populations and low-income populations.

APHIS will implement the preferred alternative because it has the greatest chance of achieving the program objective with the least overall risk to human health and the natural environment.



Paul R. Eggert  
Acting Regional Director  
Northeastern Region  
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12-03-96

Date