

**SIREX PROGRAM UPDATE AND INDUSTRY
STAKEHOLDERS MEETING AND 18TH USDA INTERAGENCY
RESEARCH FORUM ON INVASIVE SPECIES**

**JANUARY 9 – 12TH, 2007
LOEWS ANNAPOLIS HOTEL
ANNAPOLIS, MD**

**Sirex noctilio
The European Woodwasp
A New York State Perspective**

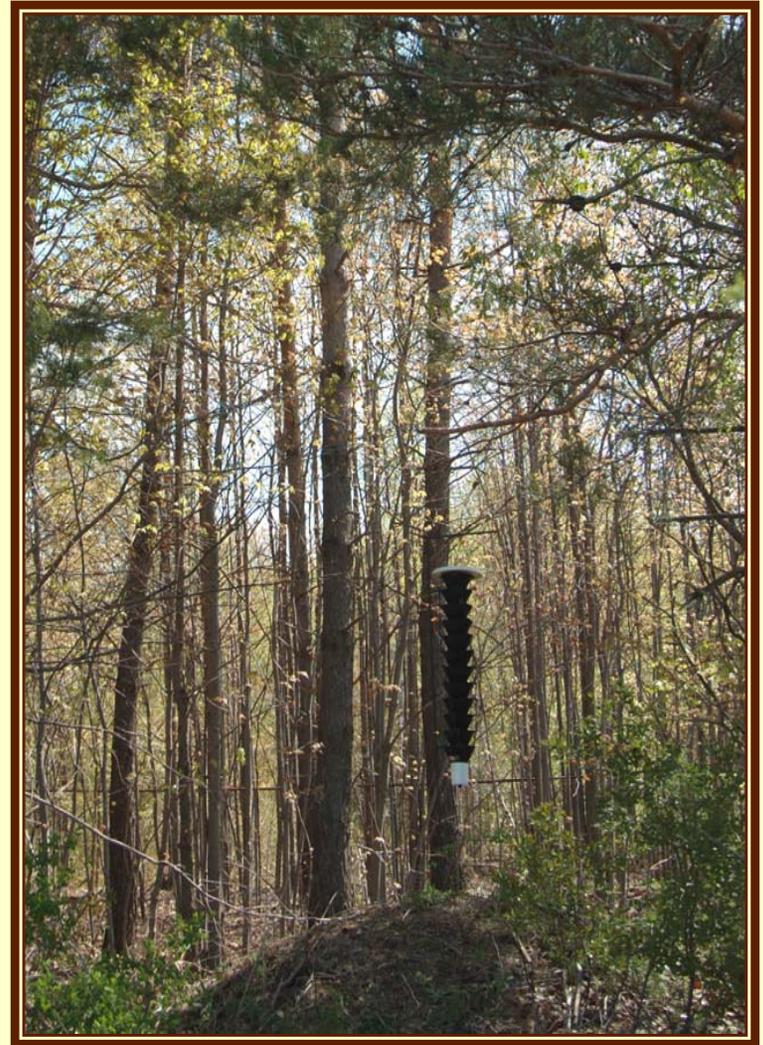
**Robert J. Mungari, Director
Division of Plant Industry
New York State Department of Agriculture and Markets**



Sirex Cooperators



- In September of 2004 a single female specimen of *Sirex noctlio* was submitted as part of a collection from a CAPS Lindgren Funnel trap targeting Exotic Bark Beetles.
- The EBB trapping was conducted under the Cooperative Agricultural Pest Survey Program.



CAPS EBB Survey (Hot Zone)

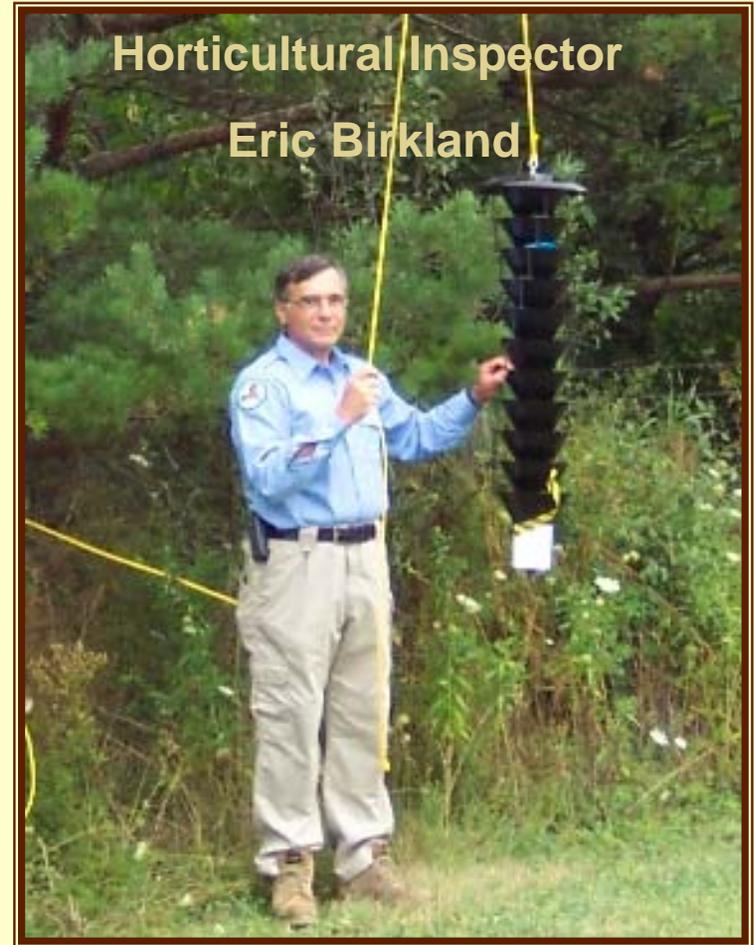


In February 2005 the specimen was indentified
by Dr. Richard Hoebeke of Cornell and
confirmed as *Sirex noctilio* by *Dr. David Smith*
USDA ARS.

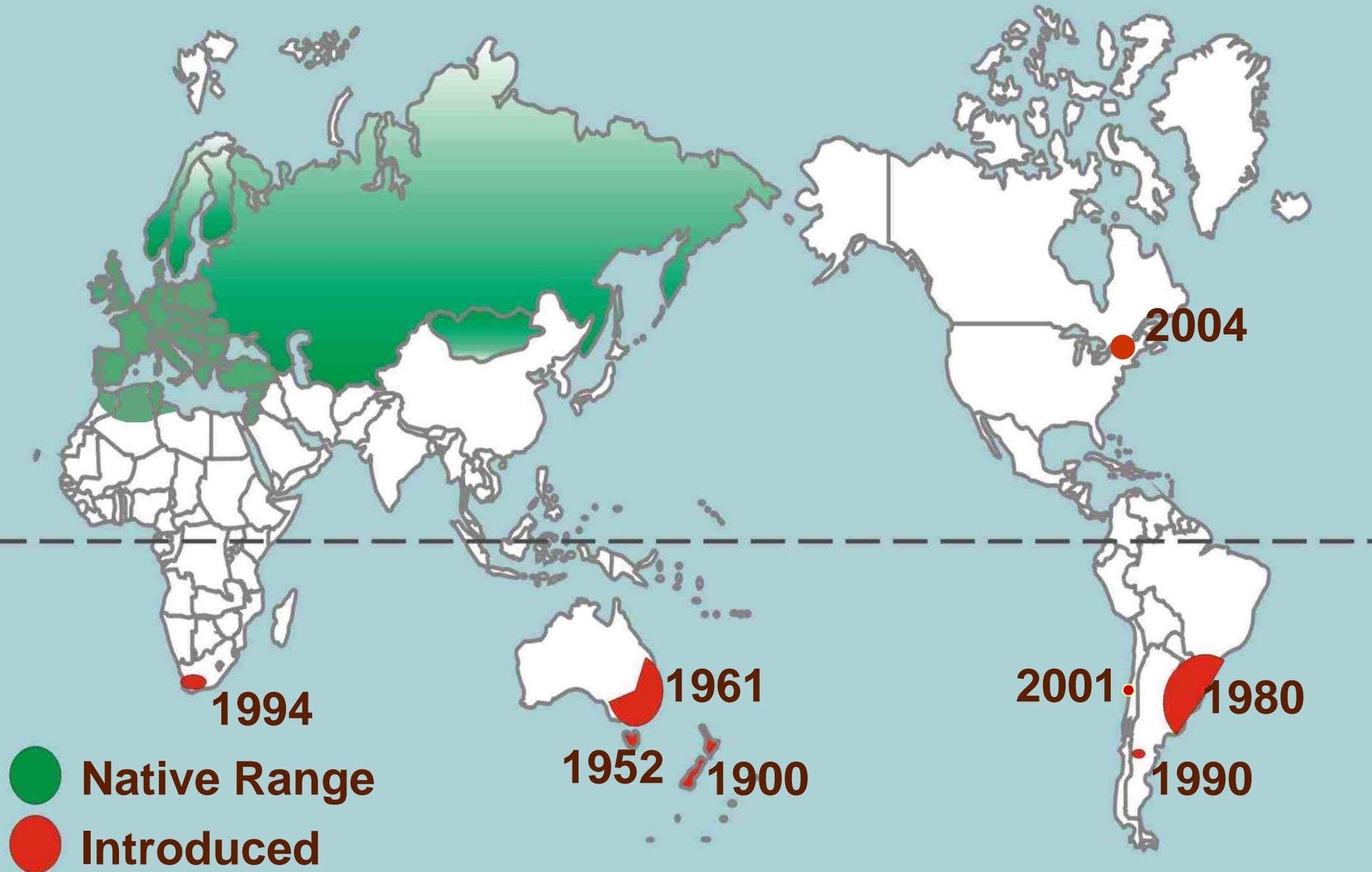


Significance of Detection

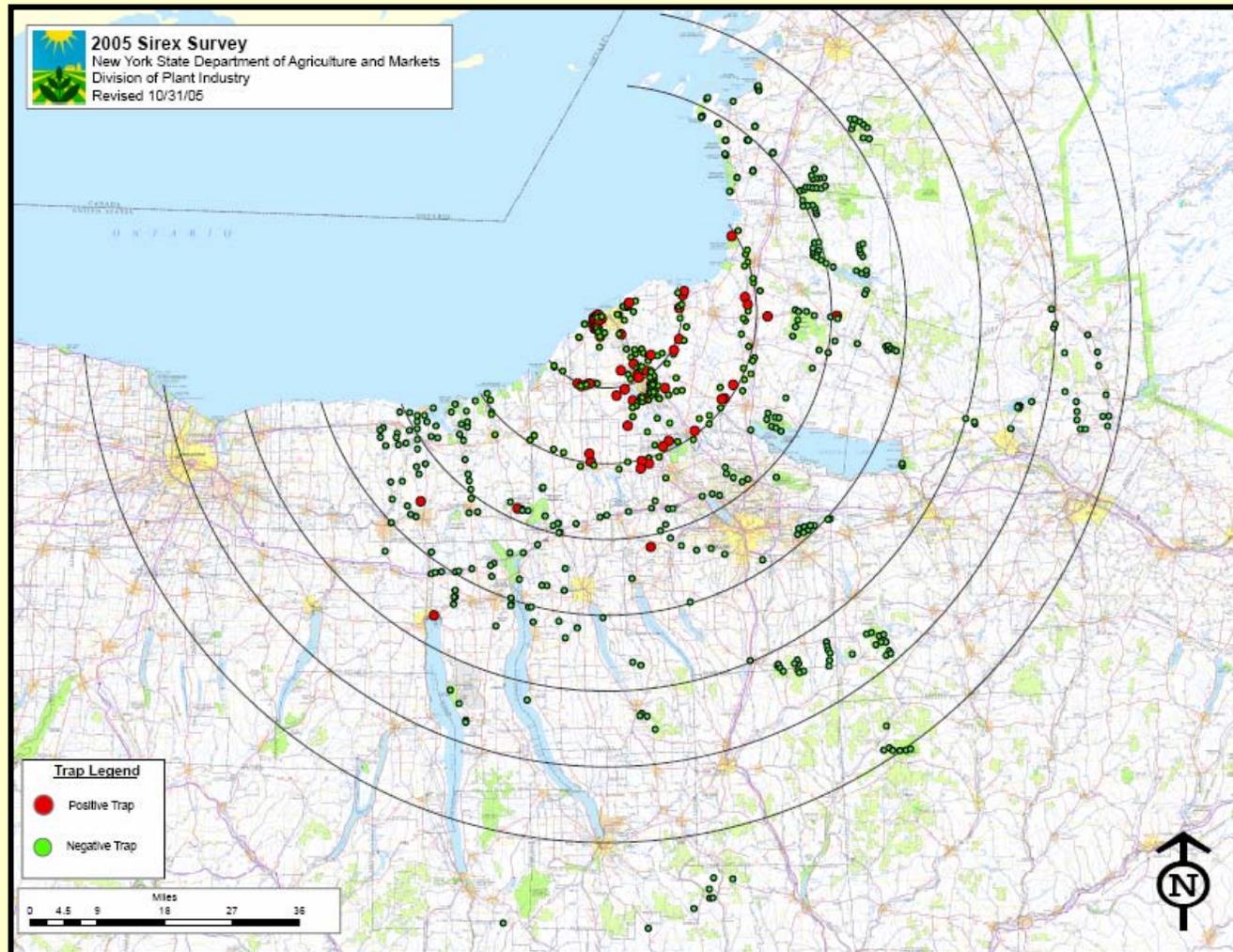
- **First environmental detection in North America**
- **Associated with a toxic mucus and symbiotic fungus introduced during oviposition**
- **Associated with the mortality of North American Pine species grown in the Southern Hemisphere**



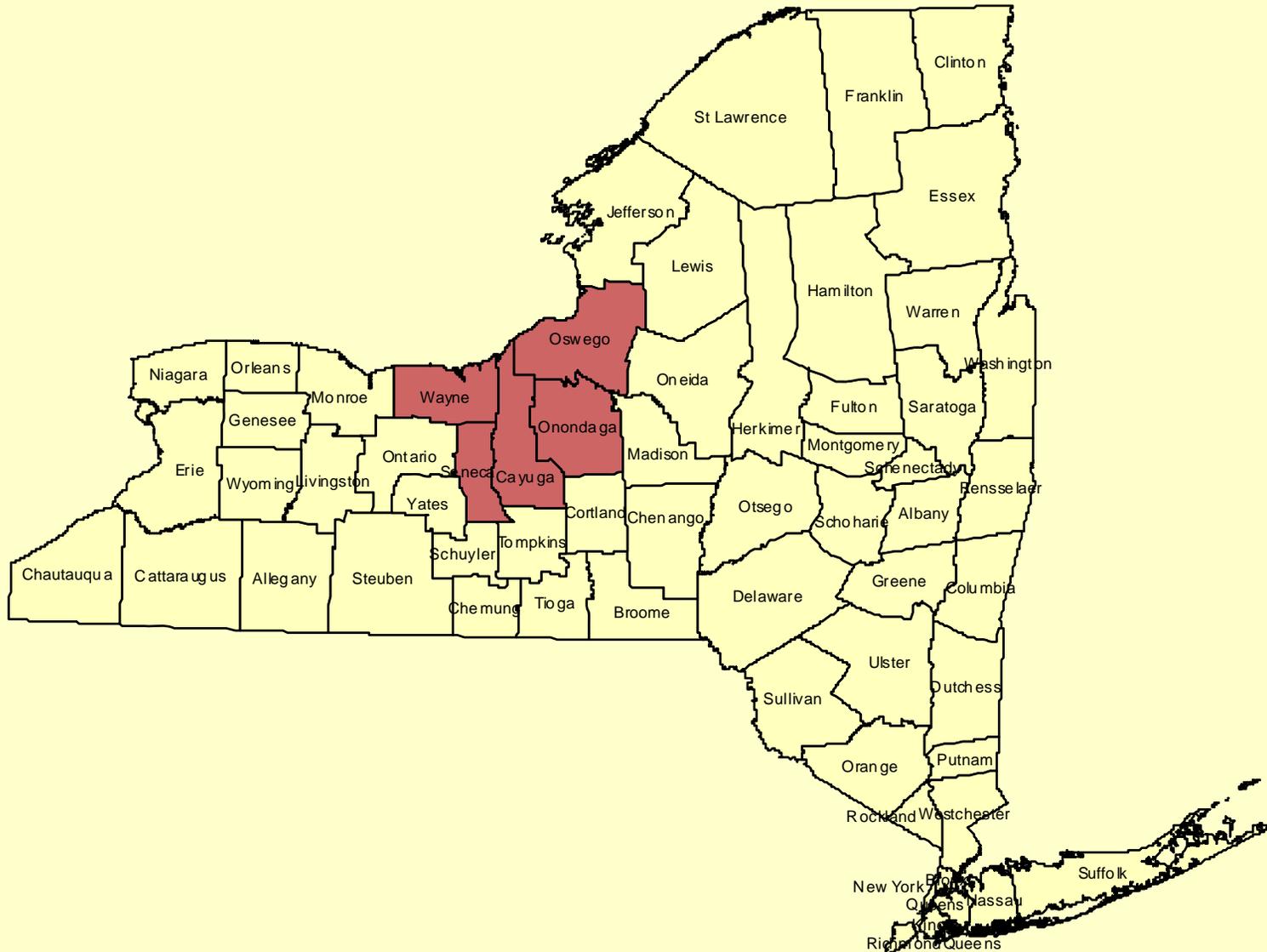
Sirex noctilio Global Distribution



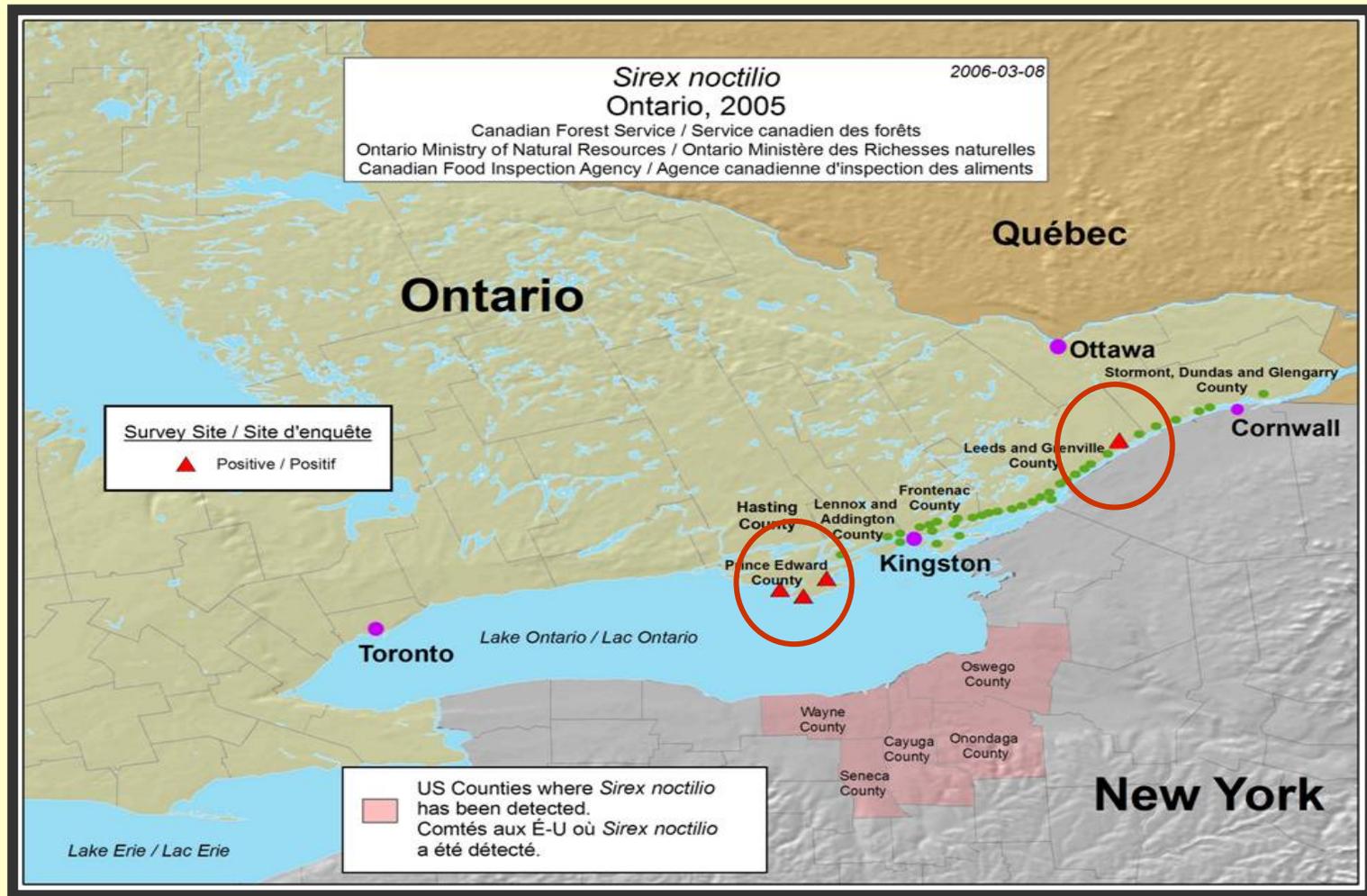
Rapid response to the discovery resulted in the placement of approximately 600 traps extending out 80 miles from the port of Oswego.



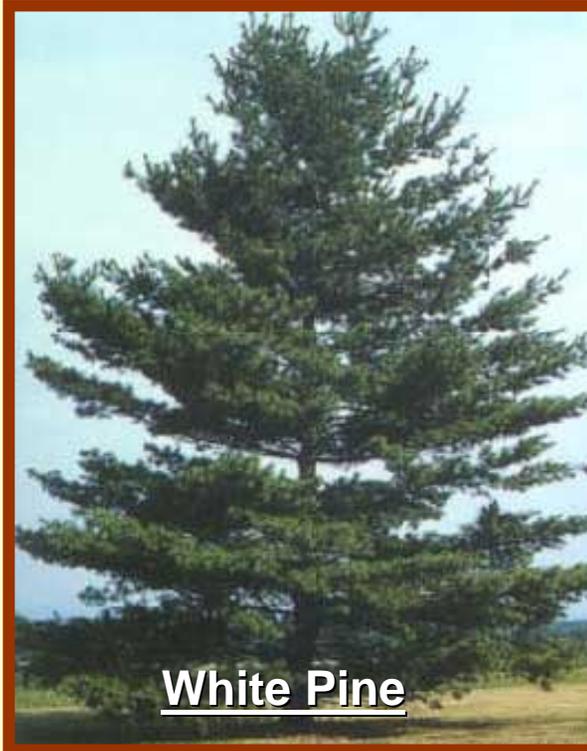
Five counties in New York were declared infested with *Sirex noctilio*.



CFIA reported the detection of *Sirex noctilio* along the northern border of the state and Lake Ontario.



Pine Hosts in New York



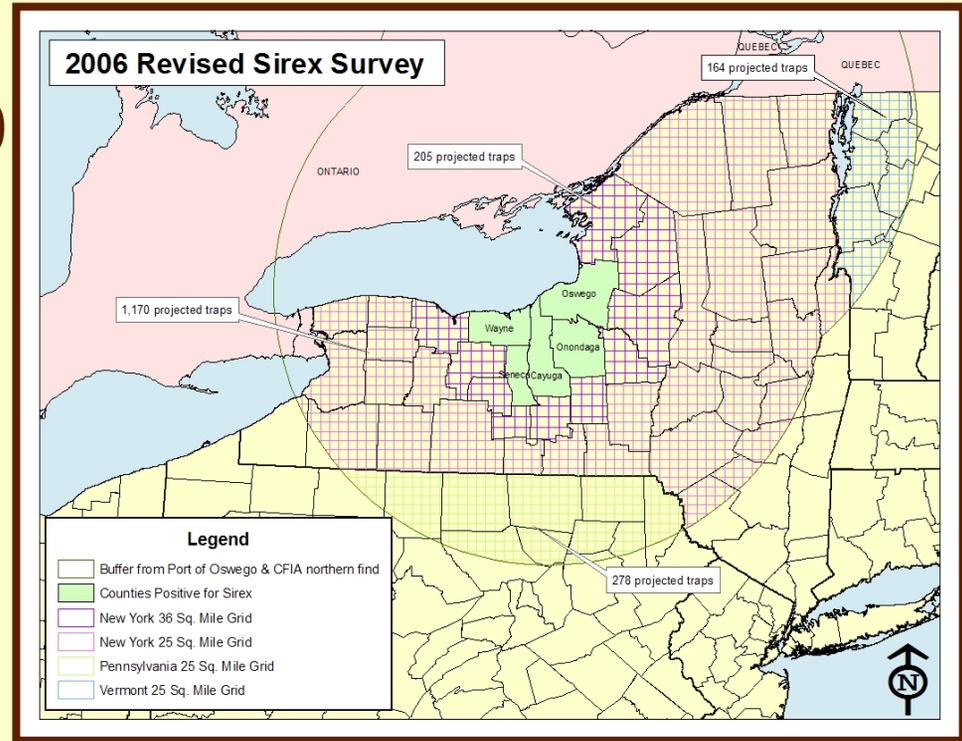
***Sirex* Science Advisory Panel**

Annapolis, MD

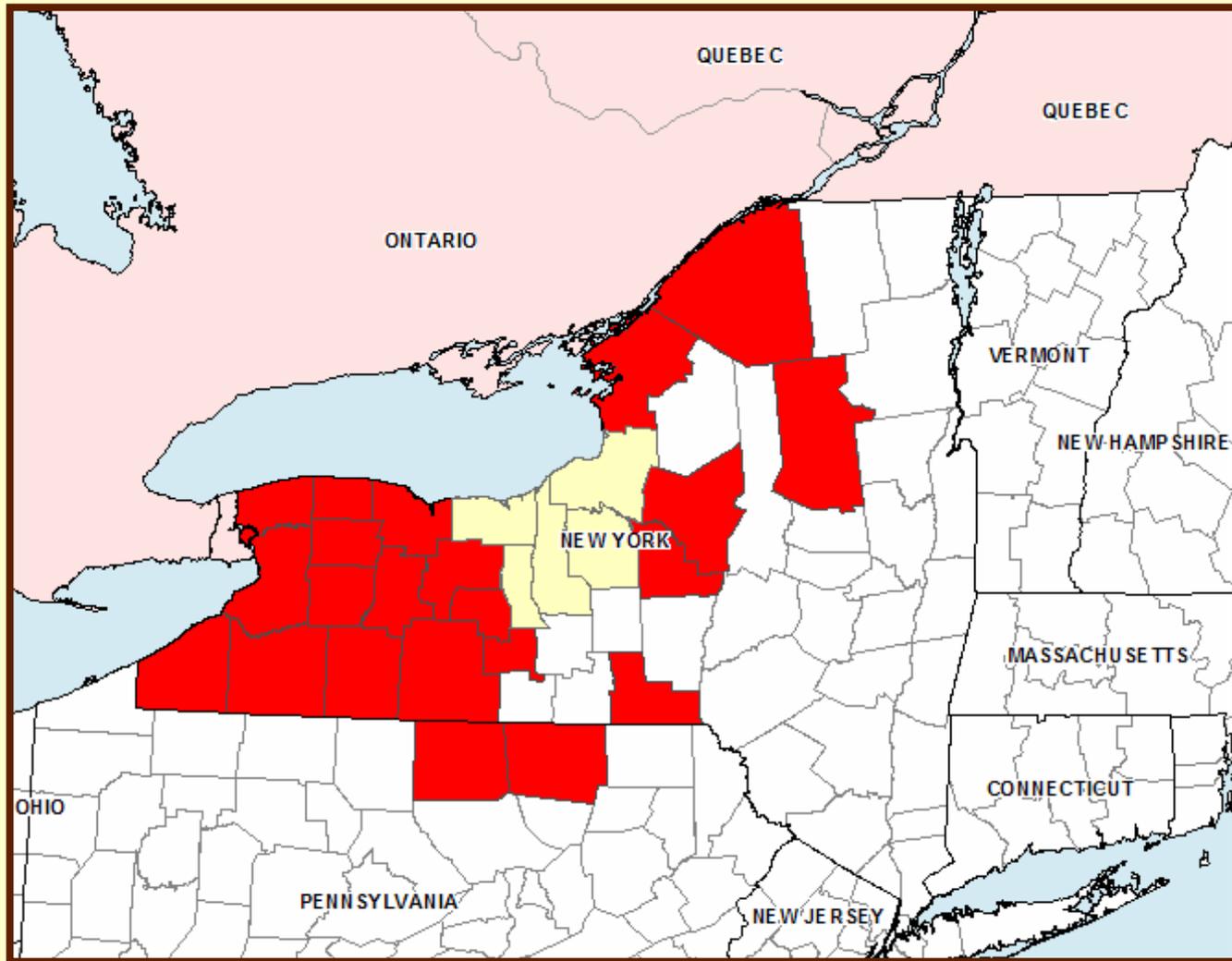
- **SSAP was comprised from representatives of CPHST, USFS, SUNY ESF, PSU, NC State, Brazil, Australia, & Canada.**
- **Determined SWW is NOT a candidate for eradication.**
- **Recommended an intensive survey protocol for 2006.**
- **Recommended the initiation of a Biocontrol Program and the implementation silvicultural BMP's.**
- **Tree removal not recommended.**



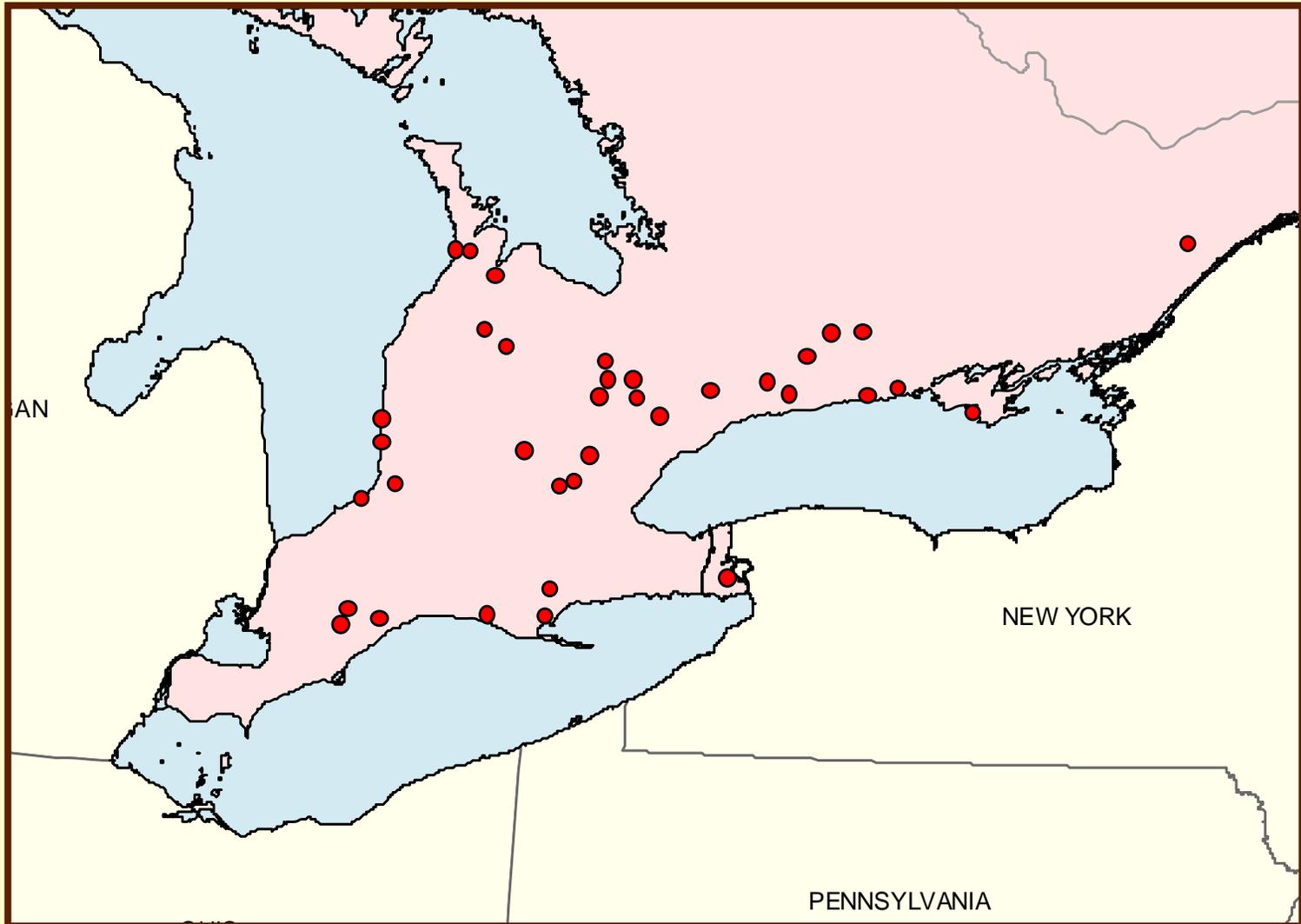
- A much more comprehensive survey strategy was employed in 2006.
- Approximately 1,400 traps were placed at a density of 1 trap per 25 square miles throughout most of the state.
- Vermont and Pennsylvania also participated in the survey.



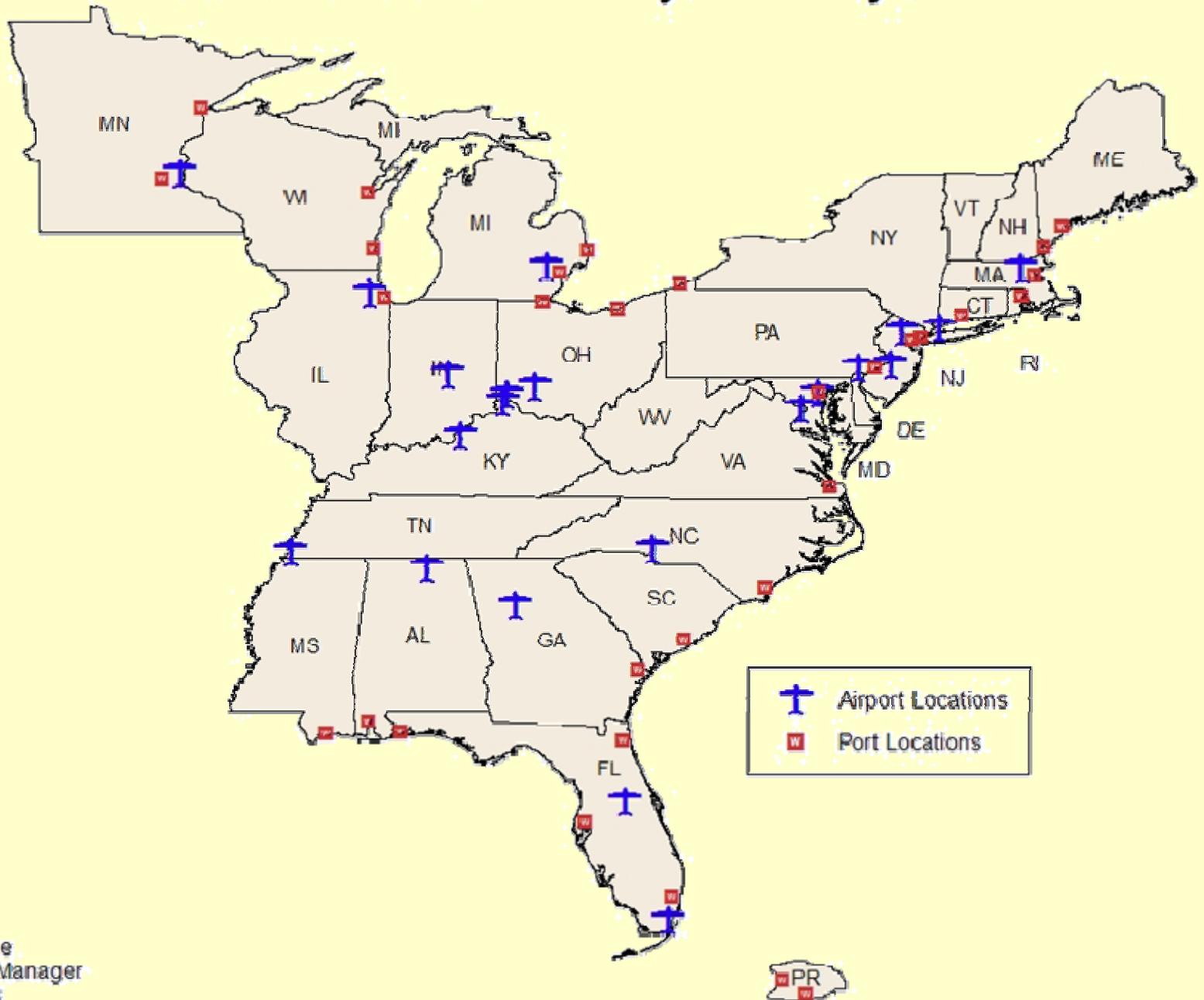
- **2006 survey results found an additional 22 counties to be infested. Pennsylvania reported 2 infested counties.**



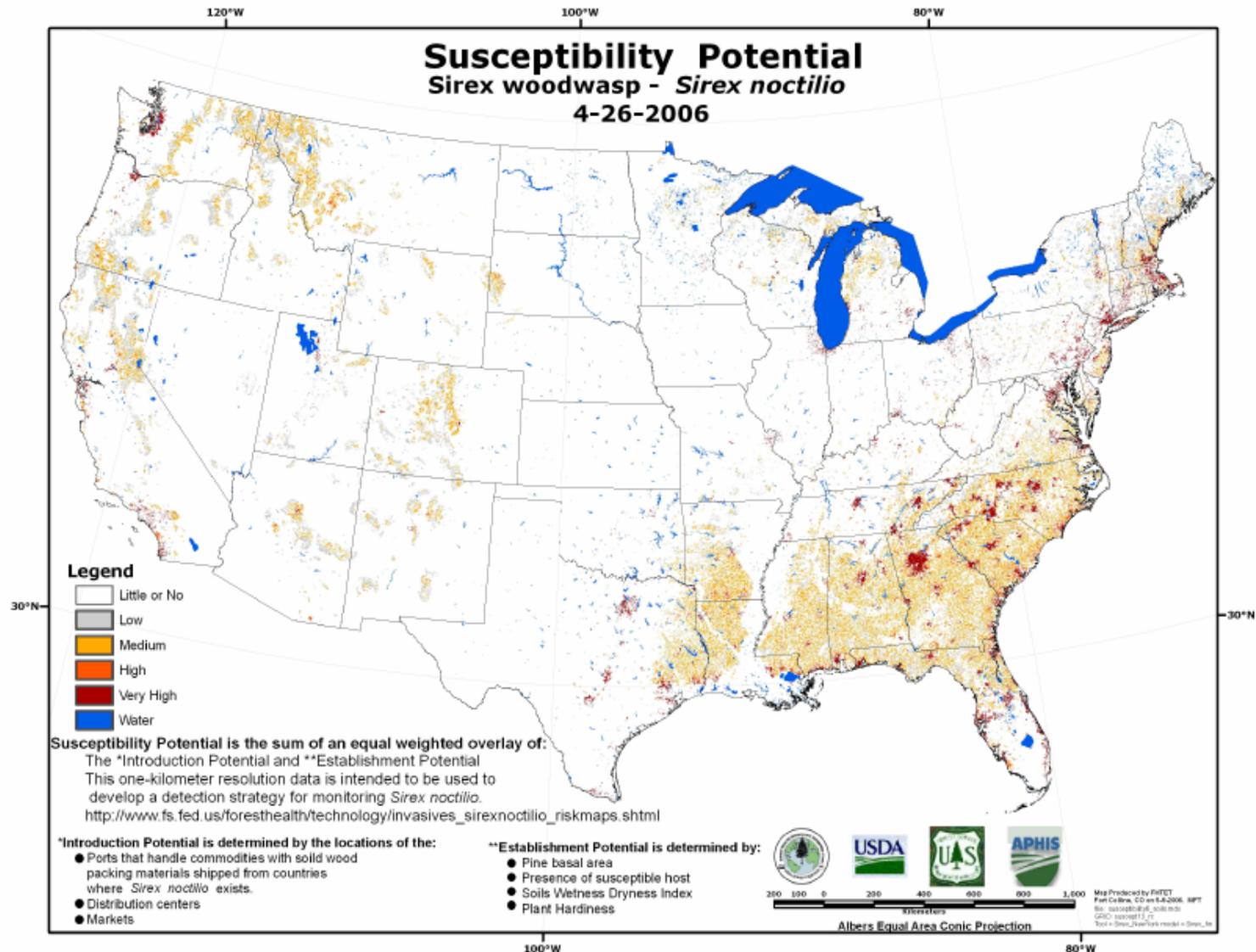
CFIA reported numerous detections north of Lakes Ontario and Erie and east of Huron.



Sirex Port of Entry Surveys



The National Plant Board has requested a quarantine to prevent the facilitated spread of this pest.



Federal- State Draft Quarantines

FOR INTERNAL USE ONLY BY APHIS AND NY STATE REGULATORY OFFICIALS – DO NOT FORWARD

Note: Must consult with New York State, tribal authorities in New York State, and Canada prior to publication of this Federal Order.

EMERGENCY FEDERAL ORDER
RESTRICTING MOVEMENT OF
Sirex noctilio Fabricius
HOST MATERIAL FROM NEW YORK

Month XX, 2006

I. Purpose and Goal

The purpose and goal of this Order is to prevent and control the spread of *Sirex noctilio* through regulatory authority provided for in Sections 412 and 414 of the Plant Protection Act, (7 U.S.C. 7712, 7714). The Act authorizes the Secretary of Agriculture to prohibit or restrict the movement in interstate commerce of any plant, plant part, or article if the Secretary determines the prohibition or restriction is necessary to prevent the dissemination of a plant pest within the United States.

II. Effective Date

This Order is effective on Month xx, 2006.

III. Introduction

The Administrator of the Animal and Plant Health Inspection Service (APHIS) considers it necessary, in order to prevent the spread of *S. noctilio*, to establish restrictions on the interstate movement from New York and the international movement from Ontario, Canada of *S. noctilio* host material as described in this Order.

IV. Rationale for this Order

This Order addresses the detection of *S. noctilio* in five New York Counties, Seneca, Cayuga, Onondaga, Oswego, Seneca, and Wayne Counties, during detection and delimiting surveys conducted in the field. In addition, the Canadian Food Inspection Agency (CFIA) reported to APHIS that *S. noctilio* was found by CFIA in four Ontario, Canada Counties, Durham, Leeds and Grenville United, Prince Edward, and Waterloo Counties, during detection surveys in the field.

Adult *S. noctilio* are strong fliers and can naturally disperse 18-25 miles (100 miles in flight-mill studies), especially when assisted by strong winds. Females can reproduce by parthenogenesis producing only male offspring, while mated females produce both sexes. As a result, infestations can flourish. *Sirex noctilio* is also capable of dispersing long distances, through human-assisted movement of infested material such as logs.

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NOTICE OF EMERGENCY ADOPTION (Rev. 0105)

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For Department of State use only.

Notice of Emergency Adoption

Department of Agriculture and Markets
(Submitting Agency)

TEXTS/SUBSTANCE AND ATTACHMENTS SUBMITTED: E-MAIL (nysregister@dos.state.ny.us)
 DISK

NOTE: Typing and submission instructions are at the end of this form. Please be sure to COMPLETE ALL ITEMS. Incomplete forms and nonscannable text attachments will be cause for rejection of this notice.

1. Action taken:

Adoption of 1 NYCRR Part 140

2. Effective date of emergency rule:

- Date of filing.
 Other date (specify): _____

3. History of emergency actions:

- This is the first time this emergency rule has been adopted.
 This is the first or subsequent re-adoption of an emergency rule. Provide the I.D. No. and issue date of ALL prior emergency rules (attach additional sheet if necessary).

I.D. No. _____

Issue: _____

- This rule was previously proposed for permanent adoption in the Register on: _____, under I.D. No. _____.

4. Statutory authority under which the rule was adopted:

Agriculture and Markets Law sections 18, 164 and 167

5. This emergency rule is necessary for the preservation of:

- public health public safety general welfare

6. The specific reasons underlying the finding of necessity, above, are as follows:

This rule establishes a European wood wasp quarantine in New York State for purposes of helping prevent the further spread of this insect within the State.

The European wood wasp, *Sirex noctilio*, an insect non-indigenous to the United States, is a destructive wood-boring insect native to Europe, Asia and northern Africa. The wasps attack pine trees by nesting in them. The females carry a fungus, *Amylostereum areolatum*, which they deposit in the trees when laying their eggs. The fungus and accompanying mucous the wasps inject when laying their eggs rapidly weaken and kill the trees. The developing larvae feed on this fungus while boring through the trees. The larvae develop and eventually emerge from exit holes as adult wasps, ready to begin the life cycle anew. The wasp's life cycle can last a year or more. Symptoms of an infestation include wilting and discoloration of foliage; bearding or dribbling of resin at egg laying

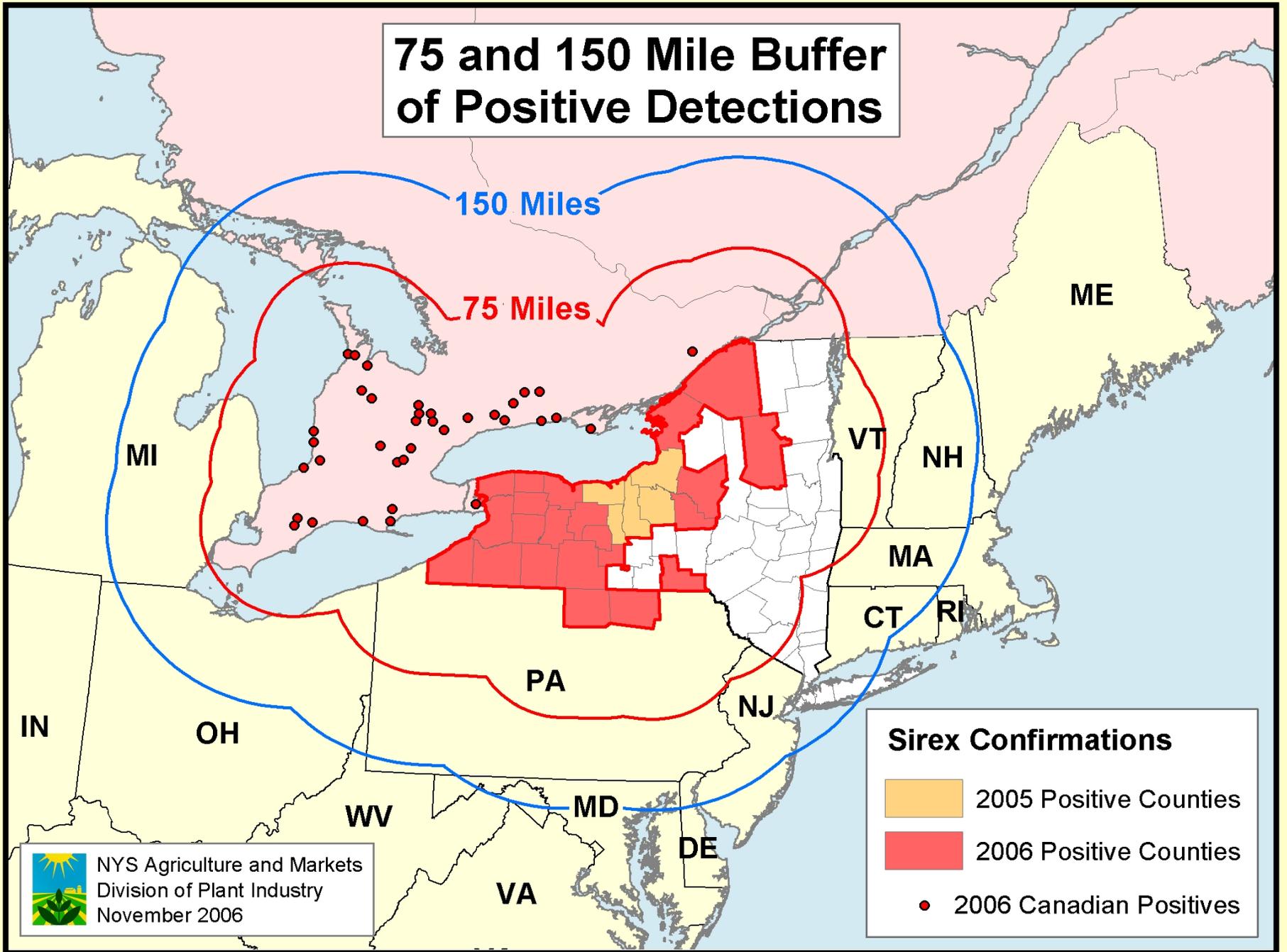


Pest Distribution

- **Incomplete**
- **2007 survey needs to focus on that area immediately west of the 2006 distribution map Great Lake States.**
- **Consideration should be given to the implementation of a trap tree survey that will transition into the bio-control initiative if *Sirex* is detected.**
- **A regulated area can be identified with some degree of confidence if we include a buffer to account for natural spread and the absence of sensitivity to our general trapping methodology.**



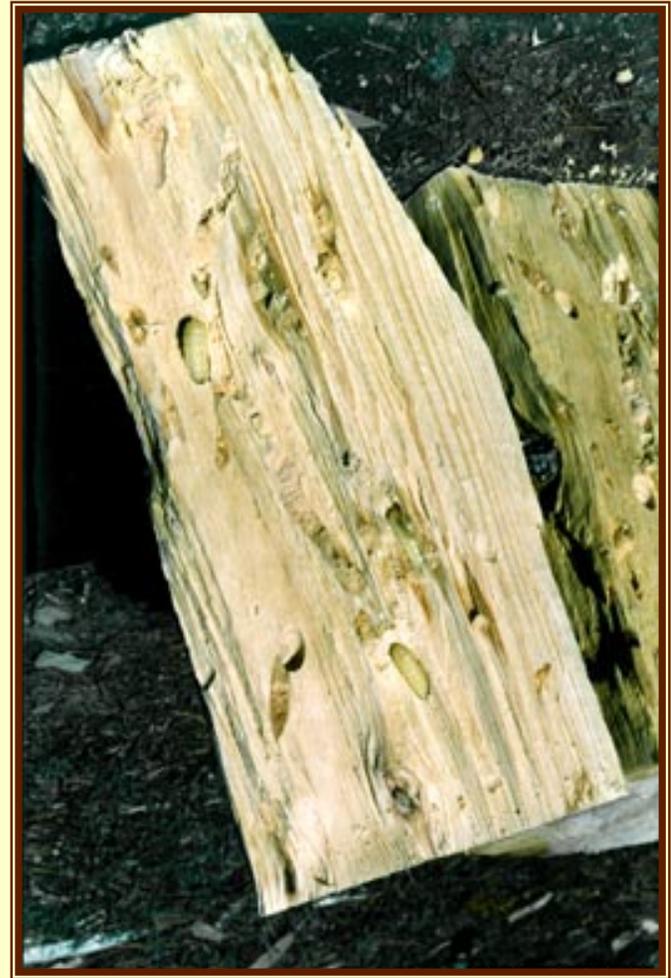
75 and 150 Mile Buffer of Positive Detections



Quarantine

Purpose:

(1) to prevent the facilitated spread of a pest through the movement of regulated articles.....for the protection of designated areas outside of that area or region known to be infested.



What is at risk?

- **Softwood production in the U.S. is a multibillion dollar industry.**
- **Southern States combined value of logs and bolts, lumber, veneer, and pulpwood production is greater than \$8 billion annually.**
- **In the Western U.S. the same commodities are valued in excess of \$10 billion annually.**
- **Additionally throughout the U.S. pine provides valuable and unique habitat to a variety of flora and fauna.**



STAKEHOLDERS ?

- **Do landowners/managers and forest products industries see themselves as stakeholders?**
- **Will they support the USDA in the designation of the wood wasp as an actionable pest?**
- **Will they aid in the identification of high risk pathways leading from infested areas of the country to those regions of the country requiring protection**
- **Will they support accelerated research to assist in the identification of treatments, the implementation of silvicultural BMP's and the initiation of a bio-control program?**
- **Will you, as a key stakeholder, support/lobby federal and state governments to implement the above?**



- **To move forward with the confidence that federal and state governments can succeed - necessitates our understanding of your position on this issue and of Forest Health in general.**
- **If we do not proceed with what we know about *Sirex* – then what status of pest does it take to trigger support of your industries and to obtain your participation in a partnership safeguarding the Forest Resource of the state and country?**



- **It is approaching 2 years from the date of initial confirmation.**
- **In terms of Rapid Response it is apparent that funding must be available to :**
 - **Delimit infestations ASAP**
 - **Identify gaps in our pest database and initiate research networking with local colleges and universities.**
 - **Conduct outreach to stakeholders**
 - **Implement a response strategy**

