

# **COOPERATIVE ASIAN LONGHORNED BEETLE PROJECT**

## **Chicago, Illinois**

Joseph McCarthy  
City of Chicago  
Bureau of Forestry  
November 13, 2008





**Ravenswood:**

**25 sq miles**

**State total:**

**30 sq mile +**

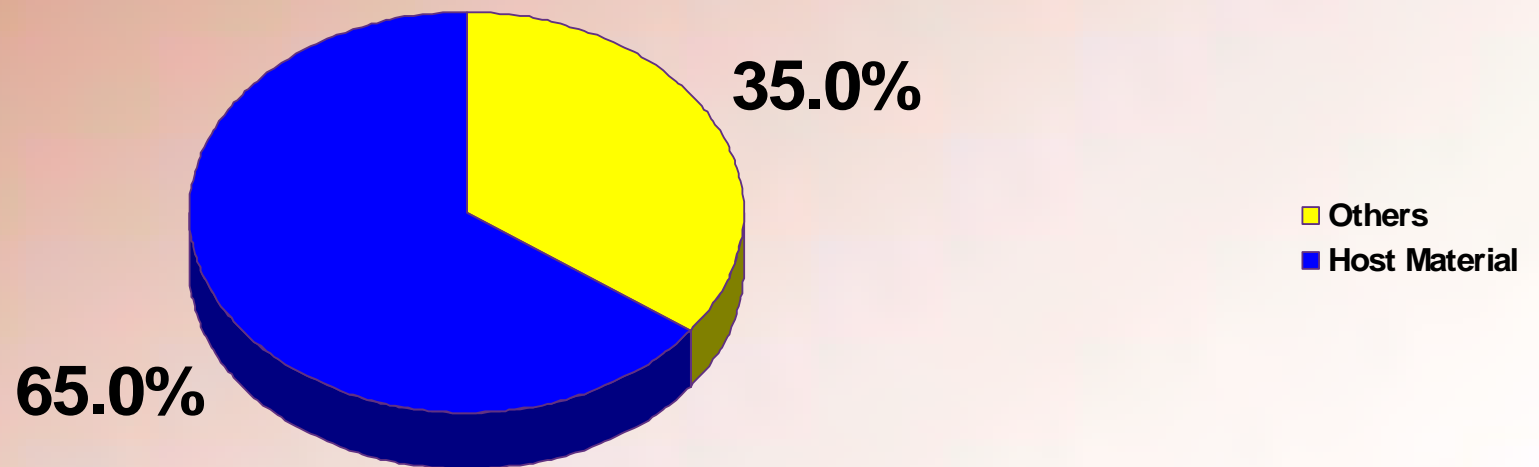
# Chicago Street Trees at Risk

ALHB Host Tree Population  
Distribution City Wide

**ALHB Host Trees**

**Maple, Elm, Ash, Horsechestnut**

**Poplar, Birch, Mulberry, Black Locust**



# Estimated Value of Chicago's Street Trees 1995\*

- Estimated Number: 450,000 (540,000 today)
  - Average Tree Value \$1085
- CITY'S INVESTMENT
  - \$1/2 BILLION DOLLARS

\* The State of Chicago's Street Trees:  
*A Random sample Inventory* (May 1995)



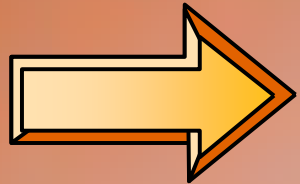
# ESTIMATED VALUE OF LEVEL 1 TREES

## Treat or Remove Host Trees

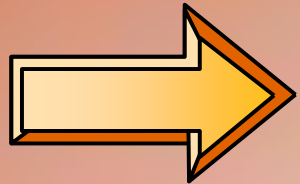
- 25,000 STREET TREES
- \$2,200 PER TREE AVE IN 2003 EST.

Tree Resource Valued at:  
\$55 MILLION

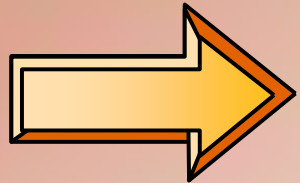
# Objectives of the City of Chicago



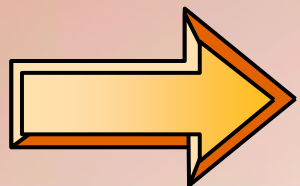
**Eradication of the  
Asian Long Horned Beetle**



**Modification of 7 CFR 319.40 to  
Eliminate Future Infestations**



**Reimbursement for Costs Incurred**



**Re-Plant/Beautification**

# Survey Results Chicago

- PUBLIC TREES
  - Infested 992
- PRIVATE PROPERTY TREES
  - Infested 471
- TOTAL # INFESTED 1463
- State Total: 1551

# 10 yr Survey Results (by Season)

■ YEAR 1 (7/98 to 7/99)	837
■ YEAR 2 (7/99 to 7/00)	472
■ YEAR 3 (7/00 to 7/01)	125
■ YEAR 4 (7/01 to 7/02)	19
■ YEAR 5 (7/02 to 7/03)	6
■ YEAR 6 (7/03 to 7/04)	4
■ YEAR 7-10 (7/04-7/08)	0



# BEFORE.....AUGUST 1998



# AFTER.....FEBRUARY 1999

## 330 Trees in 3 Days



# **KEYS TO SUCCESS**

**Eradicated 2008**

# Political Support



**Born on Arbor day**

**“The Tree Mayor”**

**Wants Chicago to be  
Greenest city.**

# Mayor Daley's Commitment

- USDA and IDOA are the Experts
  - ➔ Program Goal is to Save Trees
  - ➔ Remove only Infested Trees
  - ➔ Replant Trees where removed
    - true value replacement on private property
- No Cost to Homeowners
- City to Seek Re-imbursement



# Funding '98-08

- **~\$70 million for Eradication efforts**
  - ~95% APHIS, ~5% State and City**
  - Annual Cooperative Agreement with APHIS**
  - ~\$1.5-2 million/year (15% match)**
- **~\$1.5 million for Restoration**
  - USFS \$480,000**
  - IDNR \$500,000**
  - COMED \$480,00**



# MEDIA, MEDIA, MEDIA

- T.V., PRINT, RADIO
- PUBLIC MEETINGS

ALL ESSENTIAL IN  
REPORTING BEETLE  
SIGHTINGS

## Response to Events

Beetle Sighting of Year

Response to Advertising  
weekly “in season”



## **WANTED:** **The Asian Longhorned Beetle**



**For killing innocent trees by boring into  
trunks and branches**

The Asian longhorned beetle is about one inch long with antennae as long as its body. Its body is black with white spots, and its antennae are banded with black and white.

This criminal will attack many different hardwood trees, including Norway, sugar, silver and red maple, horsechestnut, poplar, willow, elm, mulberry, and black locust. Trees damaged by beetles have entry and exit holes about a half inch in diameter and sawdust piled up at the base.

If you have seen signs of this beetle, please contact your local USDA Animal and Plant Health Inspection Service office at 1-800-641-3934.

**Help us stop this wanted criminal  
before it kills again!**

# COOPERATIVE

## Key to Success

- DOES NOT MEAN EQUAL
  - Each Agency Brings Strength to Table
- UNITED FRONT
  - All on same page
- COOPERATORS
  - Federal
  - State
  - Local
  - Politicians
  - **Public**

# COOPERATORS

- USDA APHIS PPQ
  - Full Time Staff (17)
  - 90% of all costs
  - Survey
  - Treatments
  - Quarantine
- City Of Chicago Bureau of Forestry
  - Full Time Staff (18)
  - Survey (8 bucket trucks)
  - Data Management
  - Tree Removal
  - Tree Planting/ Beautification

# COOPERATORS

- Illinois Dept. of Agriculture
  - Full Time Staff (2)
  - Quarantine
- Illinois Department of Natural Resources
  - \$500,000 Planting Grant
  - Urban & Community Forestry Grants
    - \$10,000 max grants
- USDA –US Forest Service
  - Tree Climbers (seasonal) for Survey
  - 50/50 Cost Share Planting Funds (\$480,000)

# COOPERATORS

- Openlands Project
  - TreeKeepers
    - Volunteer tree advocates
- Friends of the Park/WXRT TREE FUND
  - Sold music CD
  - Raised \$100,000 for planting
- Commonwealth Edison (Electric Utility)
  - \$480,000 tree plant grant match



# COOPERATORS

- Politicians
  - Public Meetings
  - Mailers
  - Education thru Service Office
    - Flyers etc.
    - Calls
- Public
  - Key to Reporting ALB
  - Access to Property

# ACCOUNTABILITY

## Open Communication

- ESTABLISH "BEETLE OFFICE"
- ESTABLISH "BEETLE HOTLINE"
- PROJECT MANAGERS FOR EACH AGENCY
  - CITY      STATE      FEDERAL

PUBLIC NEEDS TO KNOW WHO TO CALL  
TO REPORT  
TO INQUIRE  
TO COMPLAIN



# INNOVATION

## TOWER TRUCKS

## TREE CLIMBERS



- **Climbers and Trucks nearly Doubled # of Trees by July 1999**

- 473 found by Ground Survey in 1998
- 364 found by Climbers and Trucks



# PROTECTIVE TREATMENTS



Trunk Injection



Soil Injection

# PROTECTIVE TREATMENTS

- PROTECTIVE NOT CURATIVE
- NOT 100% EFFECTIVE
- 50% EFFECTIVE? RESEARCH ONGOING
- HAS HELPED SURVEY
  - PUBLIC FOUND ADULTS
- ONE MORE TOOL TO REDUCE/ ERADICATE BEETLE POPULATION
- 90,000 per year



# Quarantine Status

## ■ CITY FORESTRY OPERATIONS

- Compliant with State Quarantine Regulations
- Quarantine Debris Disposal of Private and Utility ALHB Host Material
- Established Log Disposal Site within Quarantine Limits
- Rapid removal of Infested Host trees
  - Same Day City
  - 48 hr Private



# Quarantine Status

## ■ PRIVATE WORK

- State-issued Compliance Agreement
- City-issued Quarantine Certificate
  - Track Who is Doing What Where
- Must Chip, Bring Logs to City Disposal Site

## ■ UTILITY WORK

- Compliant with State Quarantine Regulations

# Beautification Committee

- Concerned local residents
- City, State, Federal Professionals
- Staff from Morton Arboretum and Chicago Botanic Gardens
- Local Volunteer Gardening/Tree Groups
  - Openlands Project TreeKeepers
  - Greening of Ravenswood members

# Beautification Committee Goals

- True Value Replacement or Inch for Inch Replacement for Private Trees Lost
  - ➔ Plant tree with "inch" difference made up in other plant material (shrubs/groundcovers)
    - 20" private tree lost
    - \$2,000 cap per tree minus \$600 (Tree Cost)
    - credit worth \$100 per inch (estimate)

# Beautification Committee Goals

- HOMEOWNERS HAVE THREE OPTIONS
  - ➔ OPTION 1 (20% of 247 owners)
    - TREES ONLY UP TO 5 (20" CAP/MIN)
    - MAY SHARE TREES WITH NEIGHBORS
  - ➔ OPTION 2 (47%)
    - TREES AND LANDSCAPE SUBSIDY
    - \$2,000 CAP, INCLUDES \$600 TREE COST
  - ➔ OPTION 3 (11% resp., 22% no response)
    - NO REPLACEMENT OR SUBSIDY REQUESTED



# 2200 Street Trees





**19,000 sq yd Sod**







**334 Private trees**





Owners used  
**\$50,000** out of  
**\$150,000** in  
subsidies





**Bye?**