



# **VILLAGE OF IRVINGTON**

## **STREET TREE INVENTORY MARCH 2009**

**PREPARED BY HUDSON VALLEY SPECIALIZED WEEKDAY ARBORIST TEAM (SWAT)**



**Cornell University**  
Cooperative Extension



- **Why an inventory?**
- **SWAT Project**
- **Public Trees**
- **What data is collected?**





# INVENTORY SAMPLE

TREE ID	STREET NUMBER	STREET	SITE	SIDE	SPECIES	DBH	LOCATION
1	1	AQUEDUCT	1	YES	ASH	10	<4 FT
2	1	AQUEDUCT	2	YES	SPRUCE	18	<4 FT
3	1	AQUEDUCT	3	YES	SPRUCE	14	<4 FT
4	1	AQUEDUCT	4	YES	ASH	6	<4 FT
5	1	AQUEDUCT	5	YES	NORTHERN RED OAK	39	LAWN
6	1	AQUEDUCT	6	YES	NORWAY MAPLE	25	LAWN
7	1	AQUEDUCT	7	YES	NORWAY MAPLE	20	LAWN
8	31	ARDSLEY AVE	2	NO	JAPANESE MAPLE	21	LAWN
9	31	ARDSLEY AVE	1	NO	ASH	32	LAWN
10	33	ARDSLEY AVE	1	YES	NORWAY MAPLE	17	>4 FT
11	33	ARDSLEY AVE	2	YES	MAPLE	24	<4 FT
12	33	ARDSLEY AVE	3	YES	MAPLE	23	<4 FT
13	33	ARDSLEY AVE	2	NO	CALLERY PEAR	5	LAWN
14	33	ARDSLEY AVE	1	NO	CALLERY PEAR	5	LAWN



# INVENTORY SAMPLE

MTNC REC	CON SULT	SIDE WALK DAMG	WIRE CONF	COND WOOD	COND LVS	% DEAD WOOD	WEAK FORK	GPS LAT 41° m.mmm	GPS LONG -73° mm.mmm
ROUTINE PRUNE	NO	NO	YES	FAIR	GOOD	10-25	NO	2.000	52.179
ROUTINE PRUNE	YES	NO	YES	POOR	POOR	50-75	NO	2.010	52.182
ROUTINE PRUNE	YES	NO	YES	POOR	POOR	50-75	NO	2.009	52.181
ROUTINE PRUNE	NO	NO	YES	GOOD	GOOD	<10	NO	2.012	52.182
ROUTINE PRUNE	YES	NO	NO	GOOD	GOOD	<10	NO	2.015	52.183
ROUTINE PRUNE	NO	NO	NO	GOOD	GOOD	10-25	NO	2.021	52.180
ROUTINE PRUNE	NO	NO	NO	GOOD	GOOD	<10	NO	2.029	52.178
NONE	NO	NO	NO	GOOD	GOOD	<10	NO	1.537	52.147
HI PRI PRUNE	YES	NO	NO	DEAD	DEAD	>75	NO	1.548	52.122
NONE	NO	NO	NO	GOOD	GOOD	<10	NO	1.530	52.189
ROUTINE PRUNE	NO	NO	NO	GOOD	GOOD	<10	NO	1.521	52.189
ROUTINE PRUNE	YES	NO	NO	POOR	FAIR	10-25	YES	1.499	52.189
NONE	NO	NO	NO	GOOD	GOOD	<10	NO	1.539	52.177
NONE	NO	NO	NO	GOOD	GOOD	<10	NO	1.538	52.152



# 792 TREE SITES



# 60 PLANTING SITES



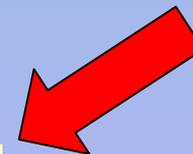


## STOCKING LEVEL

TOTAL TREES	792
TOTAL PLANTING SITES	60
GRAND TOTAL	852

NATIONAL AVERAGE IS 60%

IRVINGTON'S STOCKING LEVEL IS 93%





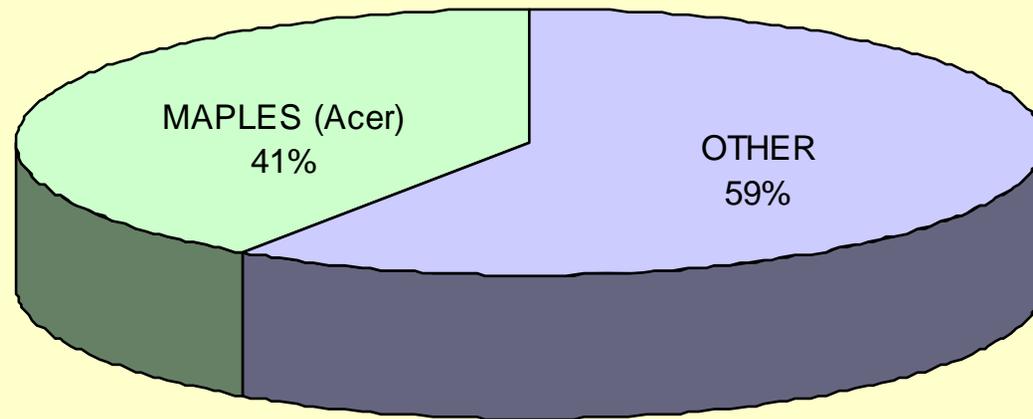
## TOP FIVE SPECIES

SPECIES	#	%
NORWAY MAPLE	178	22.47%
CALLERY PEAR	46	5.81%
WHITE PINE	42	5.30%
RED MAPLE	38	4.80%
SYCAMORE	34	4.29%



# MAPLE DISTRIBUTION

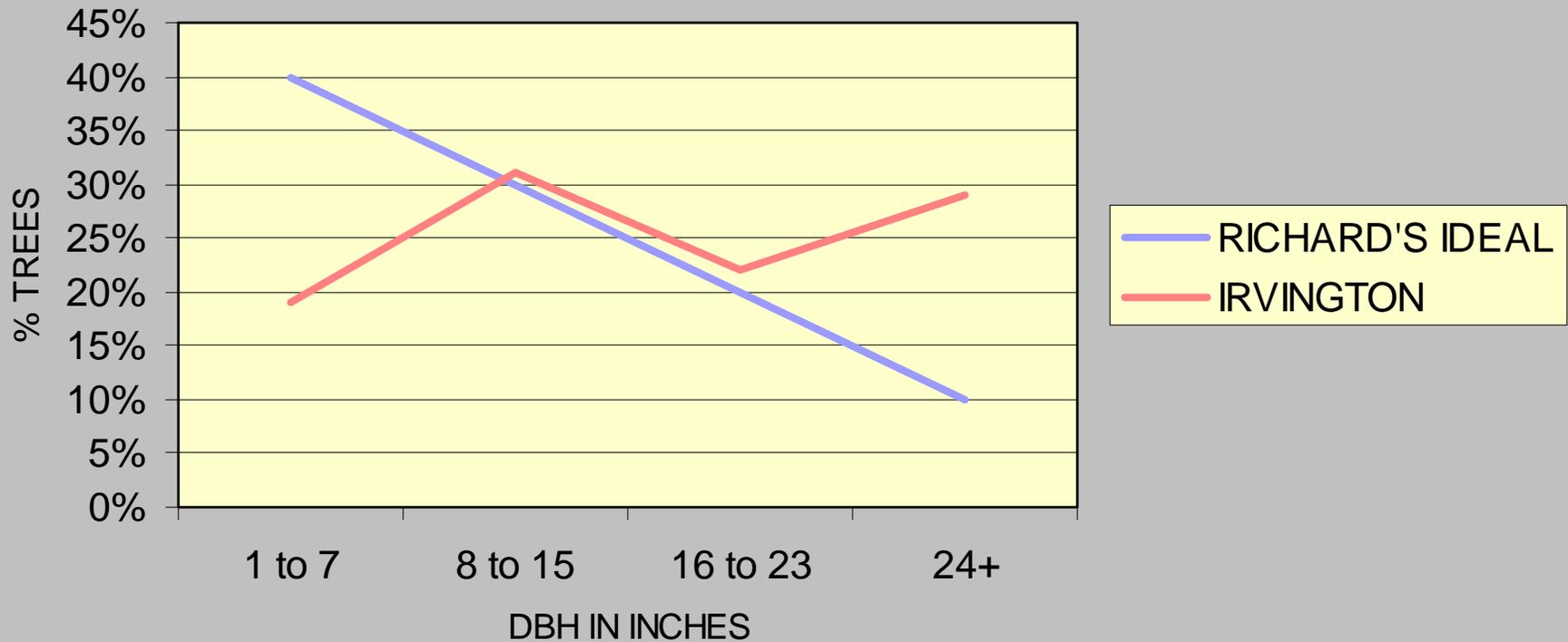
## GENUS DISTRIBUTION





# DIAMETER DISTRIBUTION

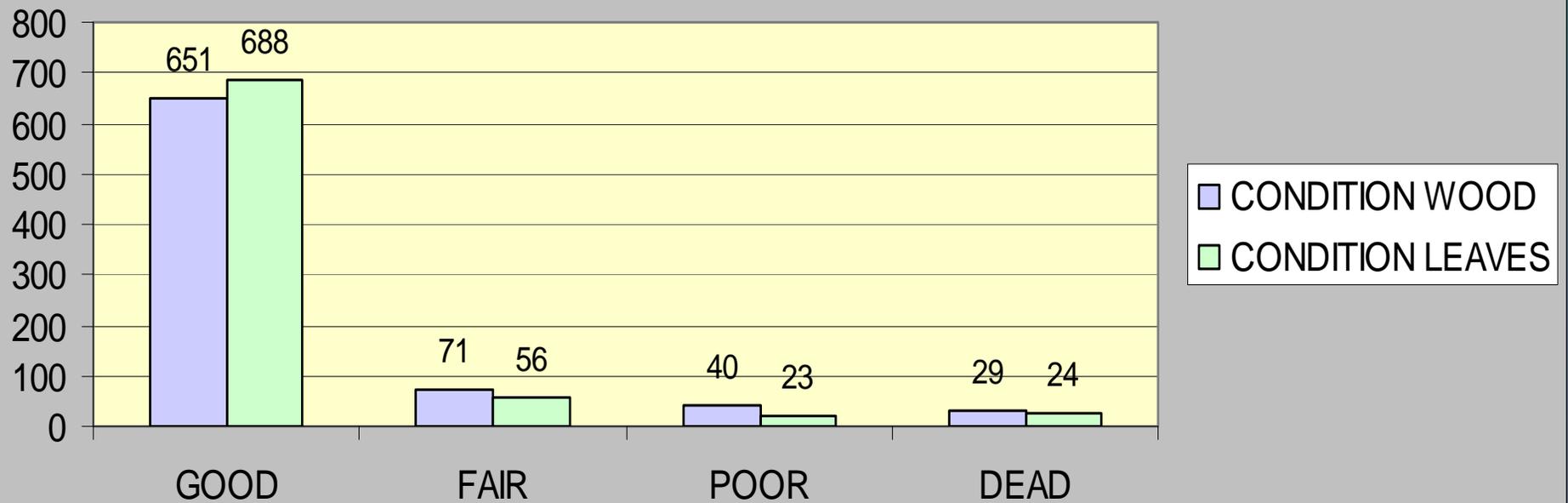
## DBH DISTRIBUTION - IRVINGTON VS IDEAL





# CONDITION

## CONDITION OF WOOD AND LEAVES





# MANAGEMENT

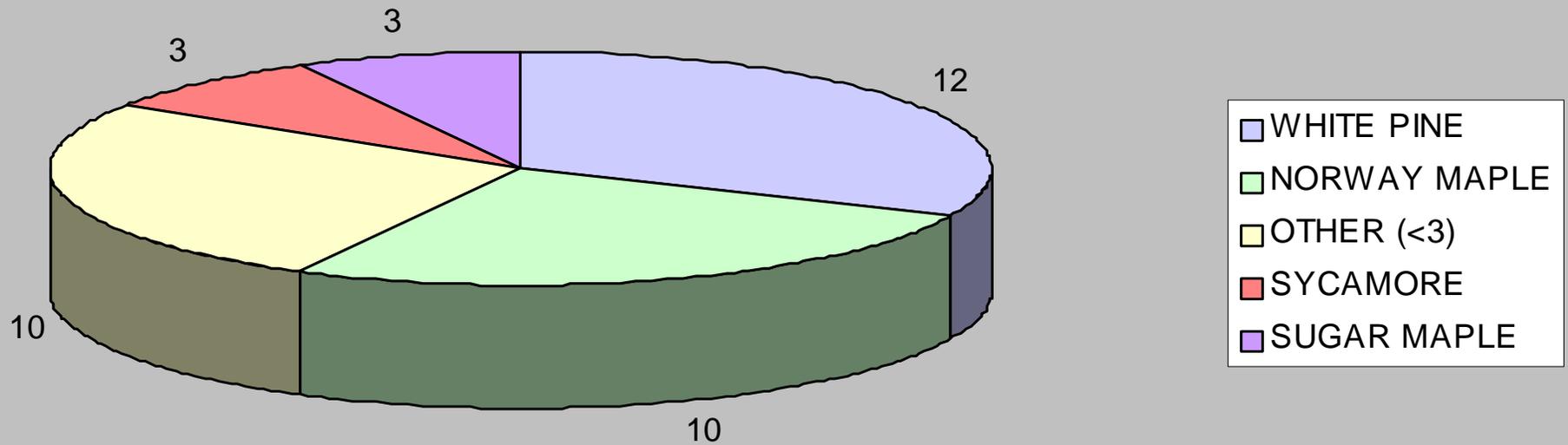
84 CONSULT

HIGH PRIORITY	38	5%
ROUTINE	238	30%
TRAIN	8	1%
NONE	508	64%



# HIGH PRIORITY PRUNE

## HI PRIORITY PRUNE BY SPECIES





## **HIGH PRIORITY PRUNE**

**Dead branches > 3"**





## **ROUTINE PRUNE**

**Dead branches < 3"**





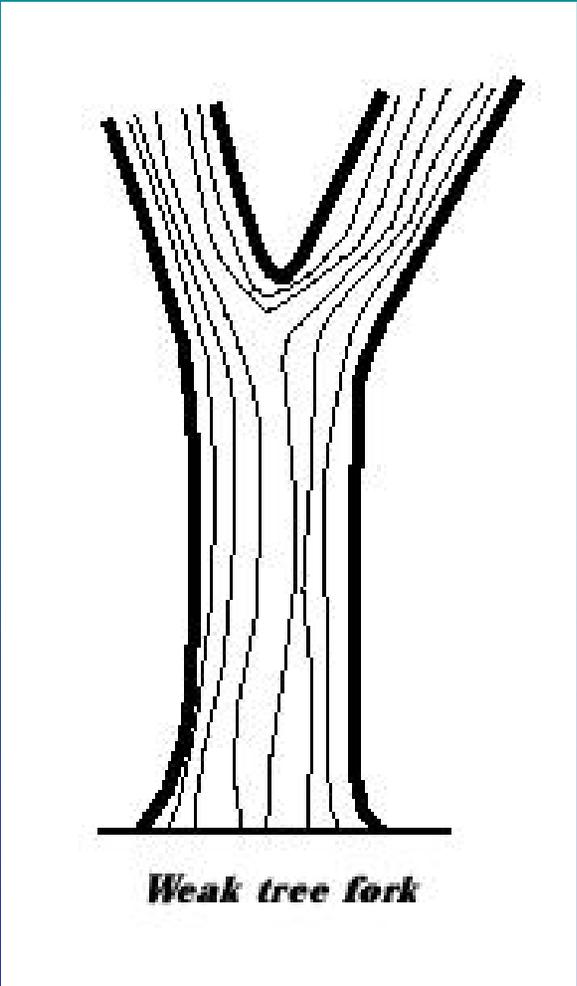
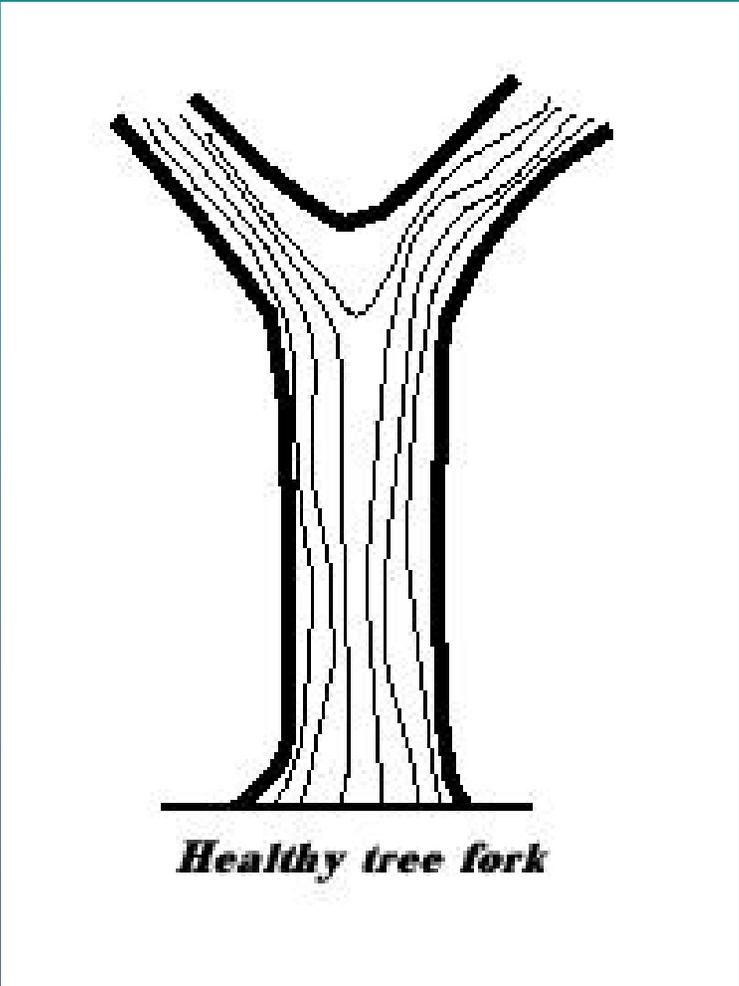
**TRAIN**

**Young tree**





# TREE FORK





## ANNUAL BENEFITS

Benefits	Total (\$)	\$/tree
Energy	52,368	66.12
CO2	1,401	1.77
Air Quality	9,965	12.58
Stormwater	14,161	17.88
Aesthetic/Other	45,137	56.99
<b>Total Benefits</b>	<b>123,032</b>	<b>155.34</b>



**REPLACEMENT VALUE OF STREET TREES IS \$6,372,984**



## NEXT STEPS

**MAINTAIN INVENTORY**

**TREE BOARD**

- reps from village depts
- knowledgeable.

**TREE ORDINANCE**

- simple, complex
- public, private
- protection during construction
- planting specs
- budget
- site plan review



# NEXT STEPS

## MANAGEMENT PLAN

MAINTENANCE GOALS

CONSULT

HIGH PRIORITY  
PRUNE



PLANTING GOALS

RIGHT TREE  
RIGHT PLACE

DIVERSITY



**RIGHT TREE  
RIGHT PLACE?**







have some fun





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Suburbia is where the developer bulldozes out the trees,  
then names the streets after them.  
~ *Bill Vaughan*

Acts of creation are ordinarily reserved for gods and poets.  
To plant a pine, one need only own a shovel.  
~ *Aldo Leopold*

Beautification be damned! Urban and community trees  
should be planted for economic, environmental and social reasons.  
~Donald C. Willeke

Trees are the only part of infrastructure that actually appreciate  
in value while the rest depreciates.  
~ *Pepper Provenzano*