

Willow Creek Woods topography and vegetation before management



Willow Creek Woods Tree and Shrub Planting Objectives

Establish pools of trees and shrubs that will help screen the Natatorium and other developed surroundings. Space the plants far enough apart to allow efficient maintenance, continual ground cover, and increased diversity.

Increase stand diversity and structure

Provide screening between Lake Mendota, the Lakeshore Path and the Natatorium

Increase long-lived recalcitrant populations such as oak, hickory, hawthorn, hazel

Maintain an intact ground layer vegetation to prevent erosion

Allow for efficient cost effective maintenance

Increase and maintain Lakeshore Nature Preserve biodiversity

Tightly regulate nutrient flows

Produce high quality nuts, fruits, wood

Maintenance: Mow and rake off the ground layer; prune shrubs to prevent monocultures from forming and to maintain upright shrub posture that will provide openings between shrubs for growth of planted forb and grass cover populations.

Archaeologist will need to evaluate all planting holes

Willow Creek Woods

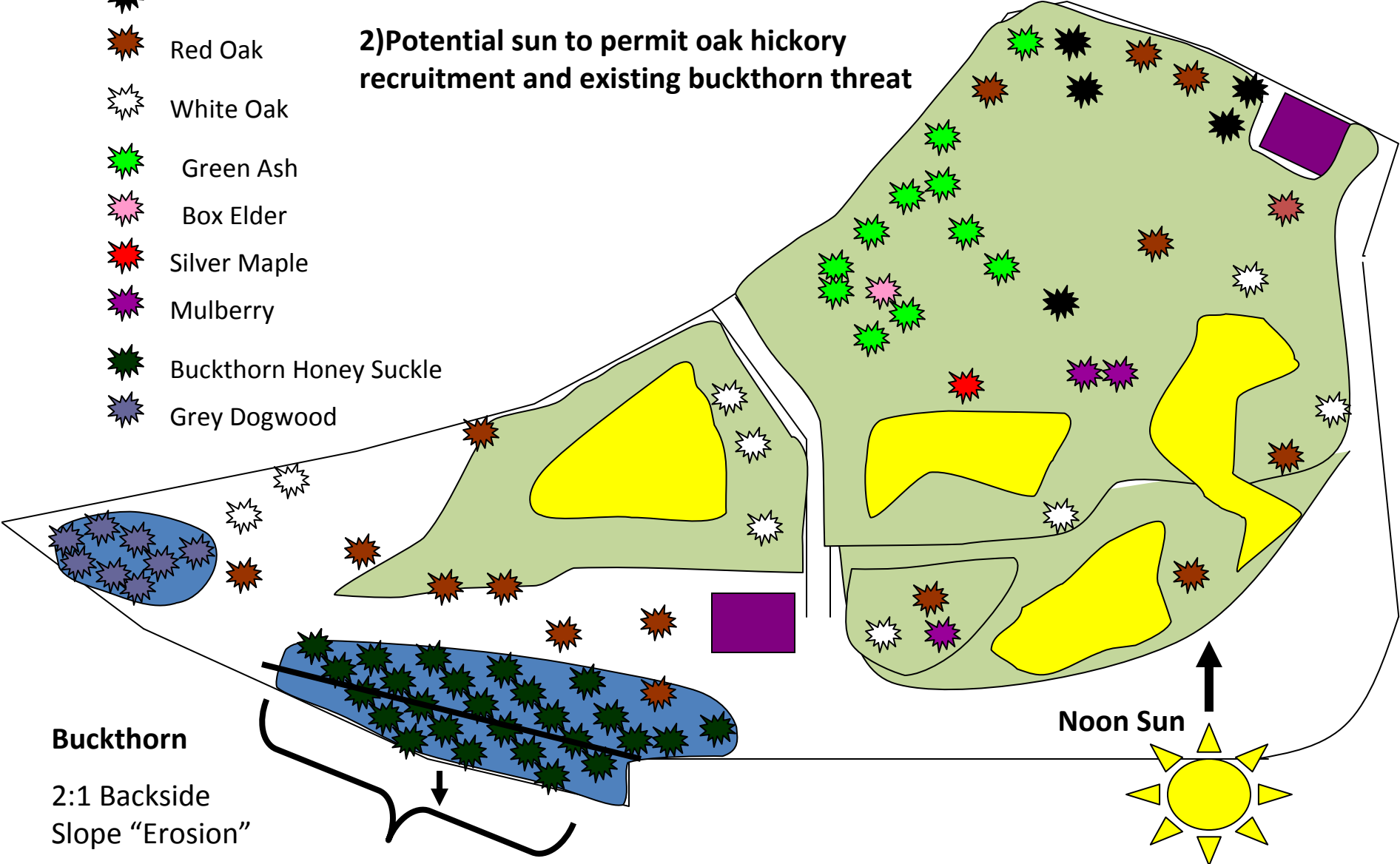
1) Persisting trees March 2010

2010

-  Hickory
-  Dead Oak
-  Red Oak
-  White Oak
-  Green Ash
-  Box Elder
-  Silver Maple
-  Mulberry
-  Buckthorn Honey Suckle
-  Grey Dogwood

2) Potential sun to permit oak hickory recruitment and existing buckthorn threat

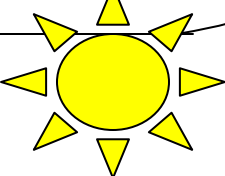
North ↑



Buckthorn

2:1 Backside Slope "Erosion"

Noon Sun ↑





**2011 anticipated persisting trees, shrubs and
Surviving trees, shrubs planted
Summer 2009,
(Carter Denniston Fund)**

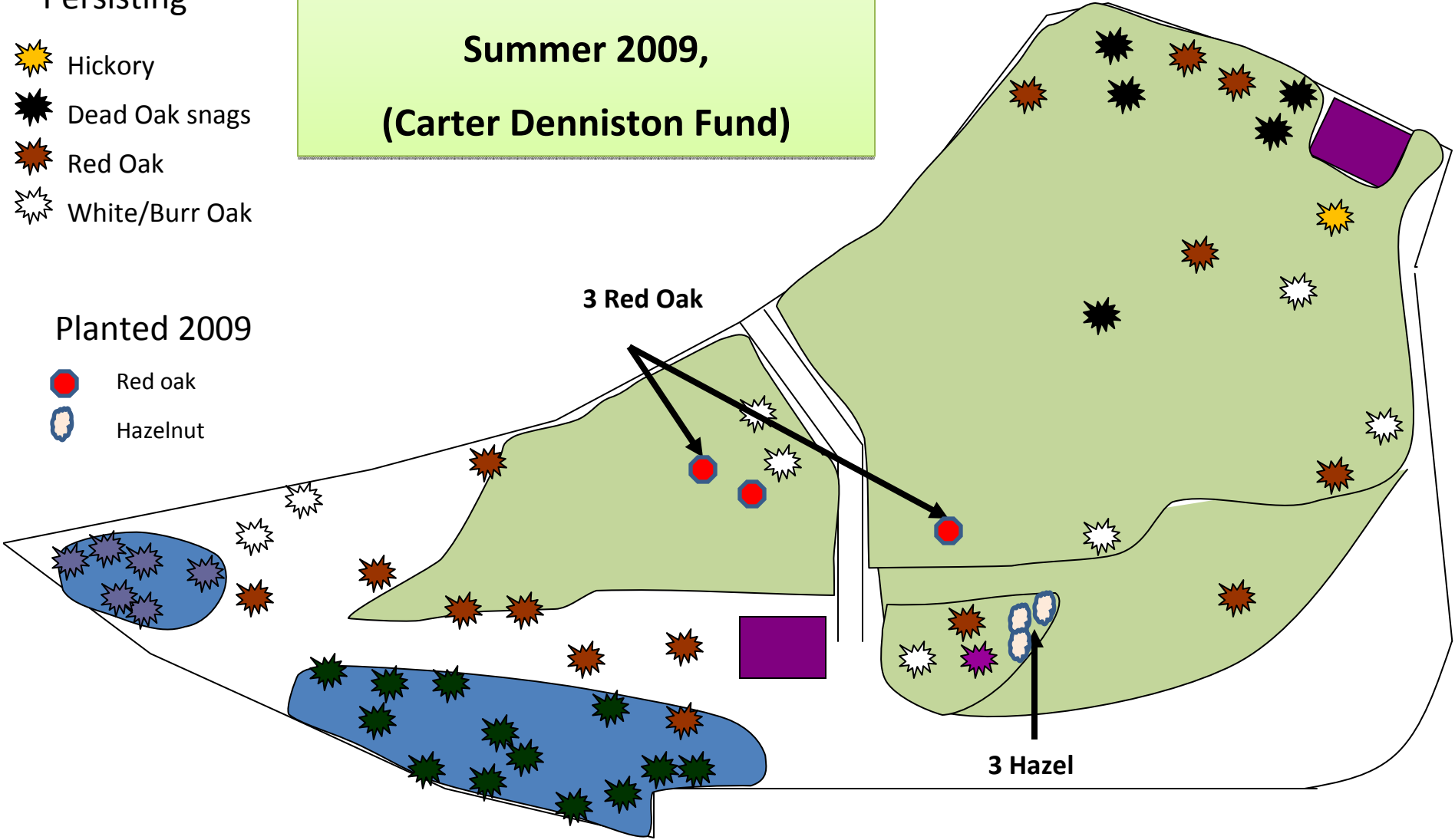
North ↑

Persisting

-  Hickory
-  Dead Oak snags
-  Red Oak
-  White/Burr Oak

Planted 2009

-  Red oak
-  Hazelnut





Red /Black Oak



Dead Oak snags



White/ Burr Oak



Grey Dogwood



Buckthorn- Honey Suckle



Shagbark Hickory



Red oak-6



Black oak-1



Burr Oak-3



White oak-2



Swamp white oak-1



Shagbark hickory-4



Crus-galli hawthorn-3



American plum-3



Pagoda Dogwood-2



Hazelnut-12



Ironwood-9
(*Ostrya virginiana*)

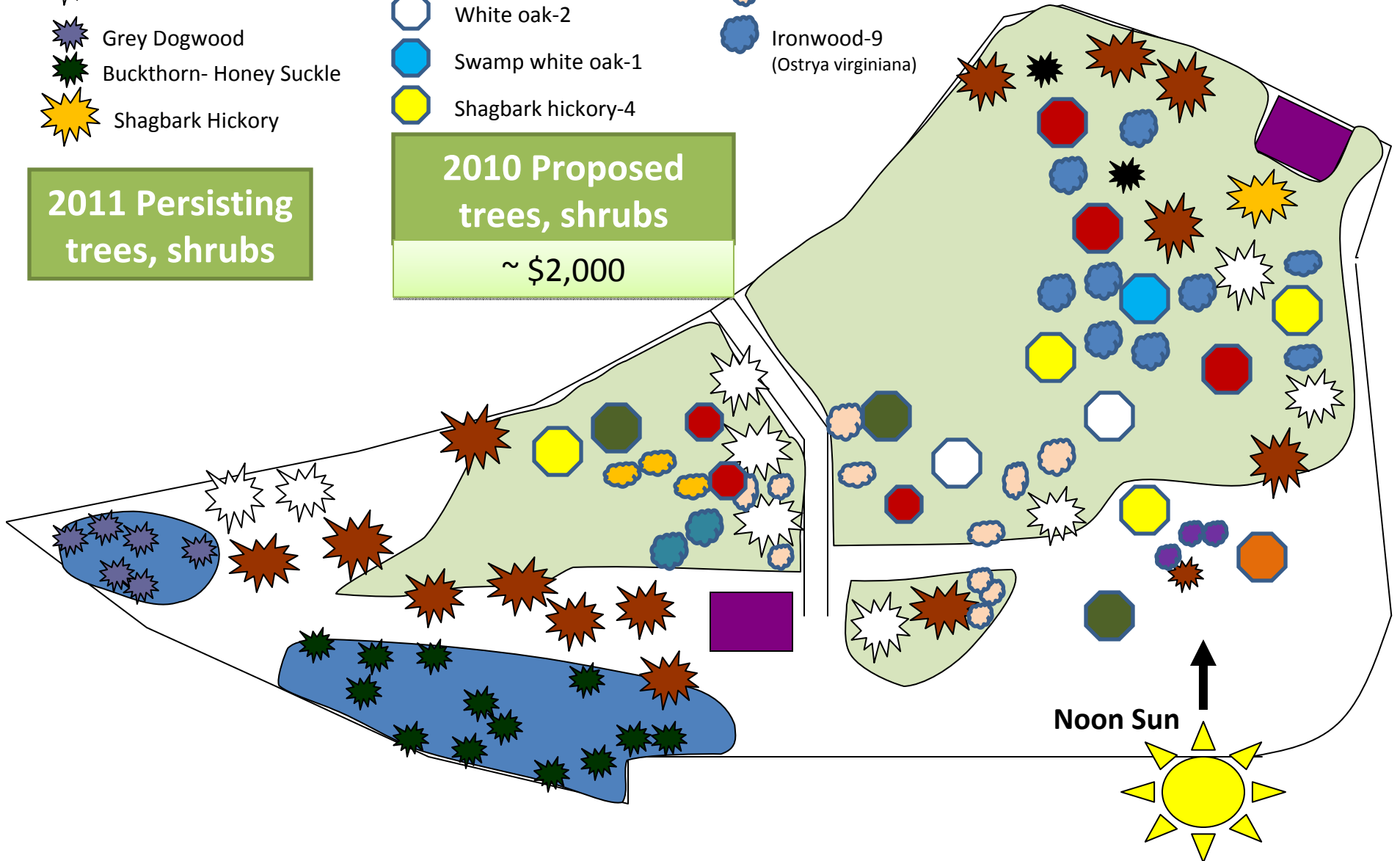
2011 Persisting
trees, shrubs

2010 Proposed
trees, shrubs

~ \$2,000

North ↑

Noon Sun ↑



Species	Amount	Size	Price	Total
<i>Carya ovata</i> Shagbark hickory	4	1 - 1.5" Caliper	\$104.00	642.00
<i>Cornus alternifolia</i> Pagoda Dogwood	2	1 - 1.5" Caliper	\$32.00	64.00
<i>Crataegus crus-galli</i> Hawthorn	3	18" Tall 4' Tall	\$4.00 \$80.00	54.00 240.00
<i>Corylus americana</i> Hazelnut	9	18" Tall #3 #5	\$4.00 \$14.00 \$16.00	36.00 126.00 144.00
<i>Prunus americana</i> American Plum	3	25" #3	\$3.50 \$17.00	10.50 51.00
<i>Ostrya virginiana</i> Hop Hornbean	9	18" #1 #5	\$5.00 \$8.50 \$35.00	45.00 76.50 315.00
<i>Quercus alba</i> White Oak	2	1 - 1.5" Caliper Plugs	\$110.00 \$2.50	550.00 12.50
<i>Quercus bicolor</i> Swamp Oak	1	1 - 1.5" Caliper	\$110.00	110.00
<i>Quercus macrocarpa</i> Bur Oak	1	1 - 1.5" Caliper	\$120.00	120.00
<i>Quercus rubra</i> Red Oak	3	1 - 1.5" Caliper	\$95.00	285.00

Actual plants, costs dependent on availability



Red /Black Oak



Dead Oak snags



White/ Burr Oak



Grey Dogwood



Buckthorn- Honey Suckle



Shagbark Hickory



Red oak-6



Black oak-1



Burr Oak-3



White oak-2



Swamp white oak-2



Shagbark hickory-6



Crus-galli hawthorn-3



American plum-9



Pagoda Dogwood-2



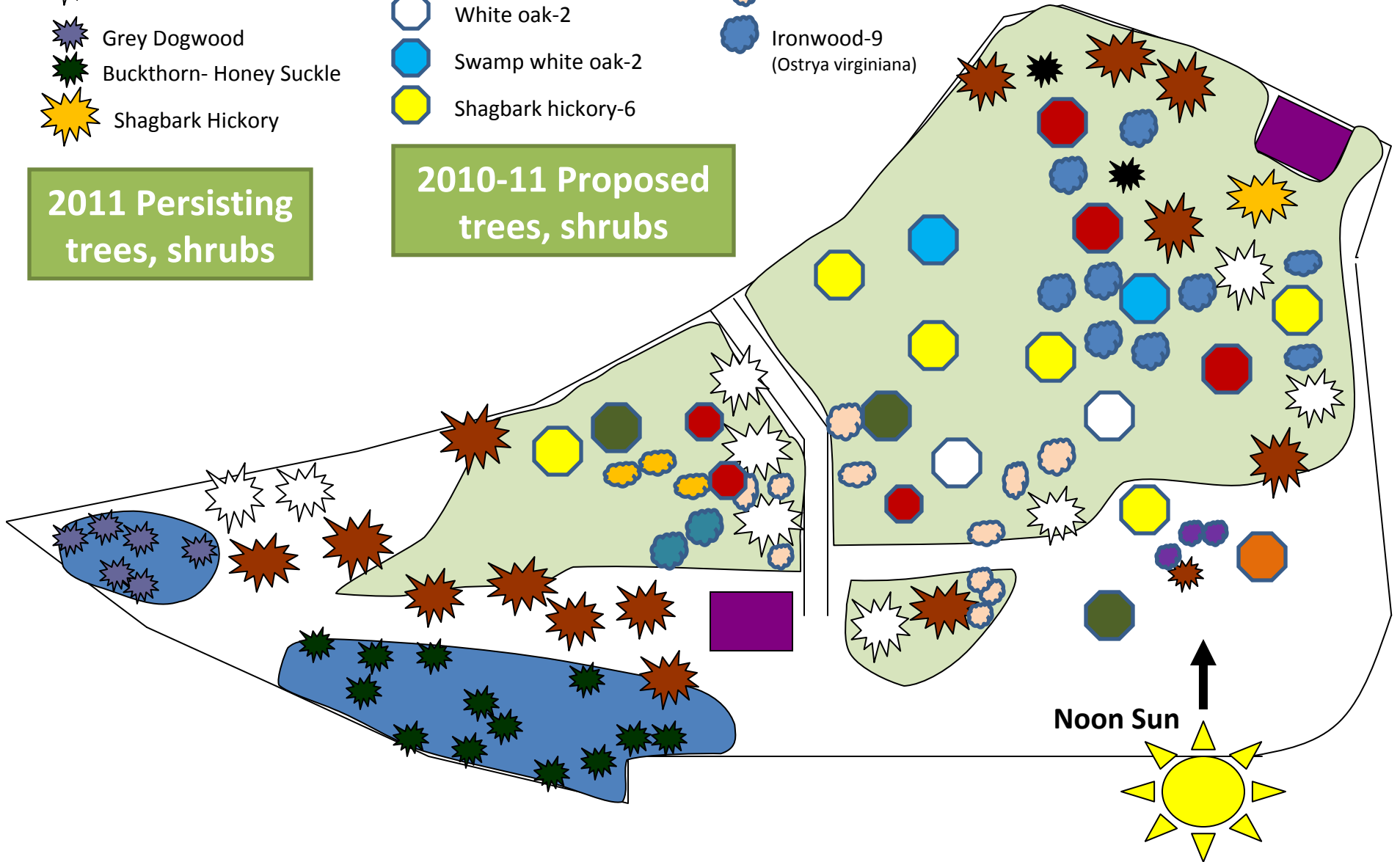
Hazelnut-12



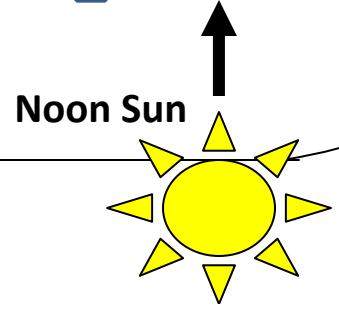
Ironwood-9
(*Ostrya virginiana*)

2011 Persisting trees, shrubs

2010-11 Proposed trees, shrubs



North ↑



Species	Amount	Size	Price	Total
<i>Carya ovata</i> Shagbark hickory	4	2" Caliper		
<i>Cornus alternifolia</i> Pagoda Dogwood	2	2" Caliper		
<i>Crataegus crus-galli</i> Hawthorn	3	4' Tall	\$80.00	240.00
<i>Corylus americana</i> Hazelnut	9	#3	\$14.00	126.00
<i>Corylus americana</i> Hazelnut		#5	\$16	144.00
<i>Prunus americana</i> American Plum	3	#3	\$17.00	51.00
<i>Ostrya virginiana</i> Hop Hornbean	9	#1	\$8.50	76.50
<i>Ostrya virginiana</i> Hop Hornbean		#5	\$35.00	315.00
<i>Quercus alba</i> White Oak	2	2" Caliper		
<i>Quercus bicolor</i> Swamp Oak	1	2" Caliper		
<i>Quercus macrocarpa</i> Bur Oak	3	2" Caliper		
<i>Quercus rubra</i> Red Oak	3	2" Caliper		
<i>Quercus velutina</i> Black Oak	1	2" Caliper		

Actual plants, costs, dependent on availability