Why Natives?

Native vegetation provides food, cover, and general habitat value for wildlife such as butterflies and songbirds. As an example, monarch butterfly caterpillars can only lay their eggs on milkweed. Without milkweed, there would be no monarchs. Likewise, the viceroy butterfly, a monarch mimic, can only lay their eggs on willow, aspen and cottonwood. By planting these native plants, you'll be encouraging these butterflies and more to visit your shoreline.

Viceroy Butterfly

BEFORE

AFTER

Attract fish and wildlife such as frogs and turtles to your shoreline with the use of "coarse woody structure." Think of the branches or trees that fall into the water. When placed in the lake, along the shoreline, this deadwood provides habitat value for basking turtles or frogs and cover for fish.

Michigan Inland Lake Facts:

~ Michigan has more than 11,000 inland lakes.

~ Michigan has more than 23,500 miles of inland lake shoreline.

~ Oakland County has more than 1,400 inland lakes and 16,000 lakefront homes.

~ Michigan's inland lakes contain 154 species of fish, including 23 species that are threatened, endangered or of special concern. Five species are already extinct, meaning they can no longer be found within Michigan.

~ Michigan has 121 species of mussels and snails, 7 species of crayfish, 24 species of amphibians, and 25 species of reptiles that use Michigan's lakes. In addition, there are 87 species of birds and 19 species of mammals commonly associated with Michigan's lakes.

This Publication was Developed in Partnership with the Following Organizations:

For more information on the Michigan Natural Shoreline Partnership visit:
www.mishorelinepartnership.org

MICHIGAN NATURAL SHORELINE PARTNERSHIP
Promoting Natural Shoreline Landscaping to Protect Michigan's Inland Lakes

Kensington Metropark Natural Shoreline Demonstration Project

Photo Credit: Jane Herbert

*Kensington Metropark Natural Shoreline Demonstration Project
14 Weeks After Installation*

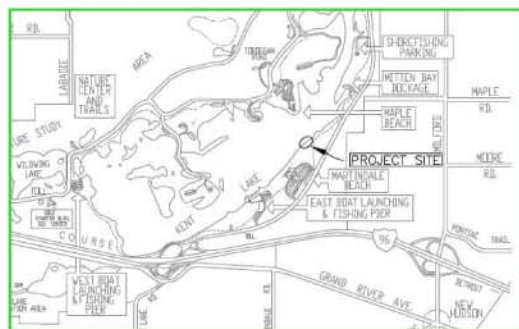## Kensington Metropark Natural Shoreline Demonstration Project

The mission of the Michigan Natural Shoreline Partnership (MNSP) is to promote natural shorelines through the use of green landscaping technologies and bioengineered erosion control for the protection of Michigan inland lakes.

As part of the MNSP's mission to promote natural landscapes along our inland lakes shorelines, the Partnership offers an intensive training to educate and certify natural shoreline professionals in the methods and techniques used to design and install natural shoreline projects. Part of the certification these professionals engage in includes classroom lectures and discussions, as w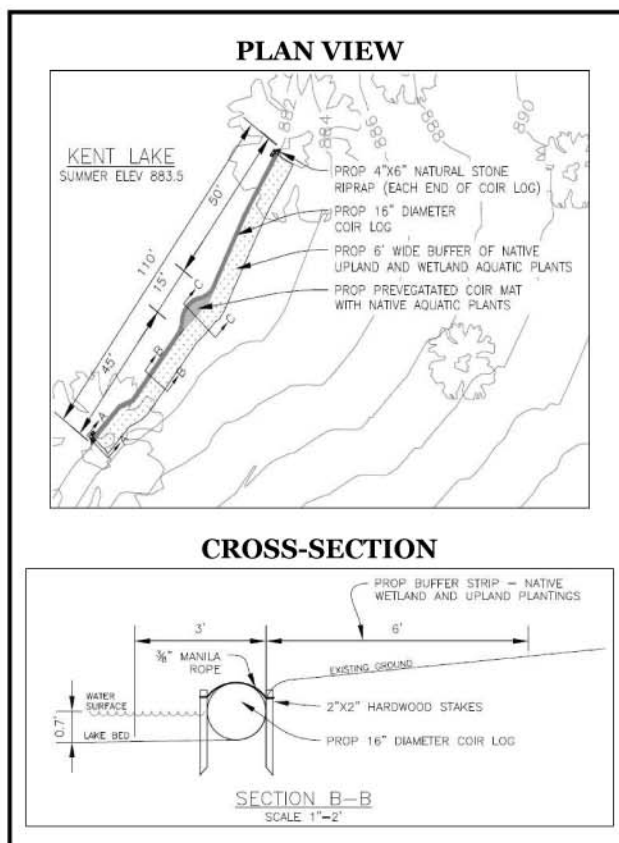ell as a field exercise. In May of 2011, and as part of the training and certification program for Certified Natural Shoreline Professionals (CNSP), a bioengineered shoreline was installed on Kent Lake at the Kensington Metropark located in Milford, Michigan.

Photo Credit: Jane Herbert

Project Location Map

The Michigan Natural Shoreline Partnership Demonstration Project was installed in May 2011 along a total of 110 linear feet of shoreline on Kent Lake and included the use native plants, native seed, coir logs and coir matting.

Photo Credit: Melanie Foose

PLAN VIEW

KENT LAKE
SUMMER ELEV 883.5

PROP 4"X6" NATURAL STONE RIPRAP (EACH END OF COIR LOG)
PROP 16" DIAMETER COIR LOG
PROP 6' WIDE BUFFER OF NATIVE UPLAND AND WETLAND AQUATIC PLANTS
PROP PREVEGATATED COIR MAT WITH NATIVE AQUATIC PLANTS

CROSS-SECTION

PROP BUFFER STRIP — NATIVE WETLAND AND UPLAND PLANTINGS
3/8" MANILA ROPE
WATER SURFACE
LAKE BED
EXISTING GROUND
2"X2" HARDWOOD STAKES
PROP 16" DIAMETER COIR LOG

SECTION B–B
SCALE 1"–2'

Photo Credit: Melanie Foose
Coarse Woody Structure

Vegetation used at the Kensington Metropark Natural Shoreline Demonstration Project

Root Carpet/Lakeside:
Sweet Flag (*Acorus calamus*)
Sedge (*Carex comosa*)
Soft-stemmed Bulrush (*Juncus effuses*)
Southern Blue Flag (*Iris virginica*)
Bulrush (*Scirpus pendulus*)

Root Carpet/Shore Side:
Sedge (*Carex vulpinoidea*)
Virginia Wild Rye (*Elymus virginicus*)
Joe-Pye Weed (*Eupatorium maculatum*)
Boneset (*Eupatorium perfoliatum*)
Blue Lobelia (*Lobelia siphilitica*)
Beardtongue (*Penstemon digitalis*)
Green-headed Coneflower (*Rudbeckia laciniata*)
Three-lobed Coneflower (*Rudbeckia triloba*)
Bulrush (*Scirpus atrovirens*)
Blue Vervain (*Verbena hastata*)

Coir Log:
Swamp Loosestrife (*Decodon verticillatus*)
Common Arrowhead (*Sagittaria latifolia*)
Lizard's Tail (*Saururus cernuus*)
Hardstem Bulrush (*Schoenoplectus acutus*)
Three-Square (*Schoenoplectus pungens*)

Shade:
Red Baneberry (*Actaea rubra*)
Yellow Giant Hyssop (*Agastache nepetoides*)
Columbine (*Aquilegia canadensis*)
Spikenard (*Aralia racemosa*)
Heart-Leaved Aster (*Aster cordifolius*)
Showy Tick Trefoil (*Desmodium canadense*)
Wild Strawberry (*Fragaria virginiana*)
Bluestem Goldenrod (*Solidago caesia*)

Buffer/Sun:
Nodding Wild Onion (*Allium cernuum*)
Sand Coreopsis (*Coreopsis lanceolata*)
Sneezeweed (*Helenium autumnale*)
Western Sunflower (*Helianthus occidentalis*)
False Sunflower (*Heliopsis helianthoides*)
Bee-Balm (*Monarda fistulosa*)
Evening Primrose (*Oenothera biennis*)
Switch Grass (*Panicum virgatum*)
Virginia Creeper (*Parthenocissus quinquefolia*)
Common Cinquefoil (*Potentilla simplex*)
Yellow Coneflower (*Ratibida pinnata*)
Black-Eyed Susan (*Rudbeckia hirta*)
Stiff Goldenrod (*Solidago rigida*)
Spiderwort (*Tradescantia ohioensis*)
Golden Alexanders (*Zizia aurea*)

Shrubs:
Buttonbush (*Cephalanthus occidentalis*)
Swamp Rose (*Rosa palustris*)

Boneset
Photo Credit: Melanie Foose

Blue Flag Iris
Photo Credit: Bob Massie

Blue Vervain
Photo Credit: Melanie Foose

Swamp Rose
Photo Credit: Melanie Foose