

**STARR VALLEY RANCH FOREST
MANAGEMENT AND PRESERVATION PLAN
(Amended and Approved October, 2022)**

Climax Forest

Our forest really has two distinct parts to it. The most valuable part in the ecological sense is that portion of the forest which covers the slopes and lowland areas to the south of Charleston and Georgetown *cul-de-sacs*. This area has unique, tall trees with large spreading crowns and trunks so large that it takes two or three people to link arms around them. Most people are impressed with the size of these trees. Ecologically, they represent the remnants of the beech - maple climax forest that covered southwest Michigan prior to the settlement of the region in the 1830's. Most of the forests were cut down around the time of the Civil War.

The trees themselves are not the only indicator of a rich flora. In the spring, homeowners can enjoy a beautiful but short explosion of wildflowers, characteristic of an undisturbed forest floor. Over a three to four week period in early spring there are large masses of white trillium, squirrel corn, Dutchman's breeches, yellow trout lily, toothwort, spring beauty, Virginia waterleaf, Jacob's ladder, wood violet, blood root, Jack-in-the-pulpit, and several other wild flowers native to eastern forests. In order to maintain this type of growth, the forest must remain undisturbed.

Our forest has survived and remains a real ecological gem that we should protect. The only forest in our part of Michigan that compares is the famous Warren Woods. That woods is a textbook example of a beech-maple climax forest that is widely discussed in the literature and is visited and studied by students, ecologists and the general public. Botanists and ecologists who have visited our forest are awed by it.

Management plan:

This forest has done fine on its own and will be treated as nature preserve. Management strategy is to protect it from vandalism, cutting or removal of young trees for transplanting and protecting its borders to eliminate any encroachment by weedy species that can overgrow and destroy young replacements. Excessive growth of alien grape vines and multiflora rose are to be eliminated. The soil will not be disturbed by digging or clearing more paths through this forest. No other work will be done without specific Board authorization, including tree removal, including standing or felled trees.

Secondary Growth Forest

The forest surrounding most homes is *secondary growth*. The original climax forest on this portion of the land was logged over years ago, and the area was turned into farmland. Most of this land was subjected to plow and to grazing. When the fields were left to go fallow several decades ago, they again went through stages of succession. Our secondary growth forest has a large mix of succession species which will grow for several decades and eventually be replaced by more dominant species.

Secondary growth forests are characterized by a diversity of species. They all have different nutrient, water and light requirements. In addition to the larger trees, there are shrubs and small trees that form an understory growing in the protection of the taller trees.

Many of the species contained in the climax forest are also found in the secondary forest. This occurs because the main source of seeds is in the climax forest, and many of them are wind borne. Beech nuts and oak acorns have to be transported by squirrels and blue jays if they are to be distributed far from the parent tree. Given the proper conditions, the secondary forest will prepare the soil for the progression to a climax state. The tulip trees, maples, oaks and beech will grow taller and shade the understory, giving the forest the open appearance of the climax forest. Though this takes a few hundred years, we are in the transition from farmland to mature forest.

However, the transition is threatened by the growth of grapevines, poison ivy vines and multiflora rose. These three species are retarding the recovery process and threaten the forest. The multiflora rose grows around the edge of the forest where it receives the most light. It has been particularly thick along East Colony Road and South Colony Road. Some of the *cul-de-sacs* are free of the weed, but others have varying amounts of multiflora rose cover. Not only does it destroy the young native species, it also withdraws nutrients from the soil around canopy trees and retards their growth.

Grapevines and poison ivy vines spring up around mature trees and become a problem after several years. As grapevine and poison ivy mature on the trees, they cover the crown of the tree and block out sunlight. The tree dies and the vine loops over to another tree and continues the process. Some of the vines are five to six inches thick and have destroyed hundreds of maple, oak, cherry, elm and hackberry trees. Since implementation of the original 1996 and 2001 Property Management and Preservation Plans, the grapevines have in large part been eliminated.

Management Plan:

- Ongoing, cut the vines and remove multiflora rose where it has overgrown trees, roads, power pedestals signs and padmount transformers. Grapevines and

poison ivy vines must be left to decompose before removal is possible. The elimination and control of grape vines, poison ivy and multiflora rose is an ongoing process.

- Continue efforts to remove dead trees from areas where they are a recognized hazard, as described below in “Tree Removal and Pruning/Trimming Policy and Procedure.”
- Paths will be kept in a natural state. Any use of herbicides must be approved by the Board.
- Trees and shrubs are not to be dug up and replanted.
- In no case will the forests be allowed to take on a "landscaped" appearance. The goal is to enjoy their natural beauty. Felled trees and other forest detritus is essential to the health of the forests, the climax forest in particular. It feeds the decomposition food chain, which cycles essential nutrients back into the dominant trees.
- **The Board will contract with a certified arborist to walk through property on a periodic basis to identify issues and make recommendations.** This had happened prior to about 2013 and we will reinvigorate this practice to maintain the integrity of the forest habitat.

Tree Removal and Pruning/Trimming Policy and Procedure:

The tree removal policy is intended to balance important concerns about safety with minimizing disturbance of the natural forest ecosystem.

Policy:

- Trees within 10 feet of any home, including deck or porch but not including driveway: owners may remove at their own expense by a Board approved company, with Board approval.
- Trees outside 10 feet: owners should raise any concerns to the Board, who will make decisions on a case-by-case basis on any removal or pruning needed. Any costs on approved removal and trimming will be covered by the Association.

Procedure:

- Homeowners should use the Construction Request Form to request tree removal.

- In NO case should a resident attempt to remove a large tree themselves, or have a tree removed without contacting the Board.

In all cases, Board decisions on tree removal will be made consistent with this plan, aiming at all times to minimize our impact on the forest ecosystem, consistent with safety of our residents.

As a final tip, removing sapling trees under 2 inches in diameter that are clustered together except one will likely save that last sapling of the cluster. The tree sapling cluster takes more nutrients and none of the group will grow well, but one sapling will do fine. Removal of these small saplings within reasonable distance to a home does not require Board involvement or approval.

Landscaping:

The Board strongly discourages any species that would be invasive or difficult to control. Georgia's kudzu vine and our own local multiflora rose are examples of good landscaping intentions gone terribly wrong. We would further discourage plants which could impact another resident's health. A vigorous stand of ragweed next to a neighbor who has severe hay fever would not do much for neighborhood relations. Castor beans, while fast growing and rather attractive, are unfortunately poisonous to children and pets.

We urge residents to learn all they can about a plant before choosing to use it for landscaping, and to keep all plantings consistent with our forest habitat and aesthetics.

Please use the "Construction and Maintenance" Form and submit to the Board for any significant landscaping project.

Resources:

- Fernwood Botanical Gardens: A local facility with a wonderful reference library and a very knowledgeable staff. A walk through the grounds will give you many ideas on planting arrangements. The staff can help you with problem solving, local species lists and landscape design.
- Local Nurseries: Locally grown plants are more likely to thrive than imports from other habitats which have totally different growing conditions. Local nurseries like Sawyer Garden Center have many planting examples, grow their own stock, and can help in responsible garden planning and care.
- Michigan State University Extension Service: The Extension Service provides useful information on forest maintenance and native species best practices. <https://www.canr.msu.edu/berrien/>

Local Species:

The following lists are not exhaustive. They are simply a list of the more common native species which are found in Berrien County.

Understory Shrubs and Trees

- Flowering Dogwood
- Winter Berry
- Shadbush or Service Berry
- Witch Hazel
- Red Bud
- Spice Bush
- Silky Dogwood

Woodland Flowers

Bloom from early spring to early summer, then die back

- Jack-in-the-Pulpit
- White Trillium
- Yellow Trout Lily
- Dutchman's Breeches
- Spring Beauty
- Wild Geranium
- Wood Violet
- Squirrel Corn
- Toothwort
- Bellwort
- Rue Anemone
- Solomon's Seal
- White Trout Lily
- Wood Lily
- Yellow Violet
- Toad Trillium
- Canada Lily
- False Solomon's Seal
- Virginia Waterleaf
- Thimble Weed
- Blood Root
- Doll's Eyes
- Woodland Phlox
- Bluebells
- May Apple
- Buttercups
- Hepatica
- Wood Anemone
- Columbine
- Red Trillium

Ferns

- Wood
- Ostrich
- Spleenwort
- Cinnamon
- Sensitive
- Interrupted

Perennials for Sunny Areas

These are mostly prairie plants that grow in open, sunny areas

- Culvers Root
- Butterfly Milkweed
- Golden Ragwort
- Lance Leaved Coreopsis
- Tall Sunflower
- Joe Pye Weed
- Bone Set
- Black-eyed Susan
- Purple Cone Flower
- Yellow Cone Flower
- Jerusalem Artichoke
- Spiderwort
- Tall Cinquefoil
- Monarda
- Celadine Poppy
- Coreopsis
- Michigan Lily

- Woodland Sunflower
- Cardinal Flower
- Dame's Rocket
- Fire Pink
- Butterfly Bush
- Tall Larkspur
- Liatrus

Non-Native Species

There are several plants which are not native, but which have been introduced and seem to do very well in this area.

- Hosta
- Day Lilies
- Creeping Vinca
- Spring Bulbs
- Ajuga
- Rhododendron