STARR VALLEY RANCH FOREST MANAGEMENT AND PRESERVATION PLAN (Adopted March 24, 2001)

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 wild flowers, 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 <u>must</u> 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 a 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.

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 farm land. 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-desacs* 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 Property Management and Preservation Plan, the grapevines have in large part been eliminated.

Management Plan:

- 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 main roads are the primary target, then the *cul-de-sacs*, nature path, and forest perimeter to the west and along Warren Woods Road. The elimination and control of multiflora rose is an ongoing process.
- Continue efforts to remove dead trees from areas where they are a recognized hazard. Because of the number of trees which may have to be removed, this will be an ongoing process, and can be accomplished only over a period of time. The best time to remove the trees is in Fall and Winter. Trees felled near roads or homes will be removed. Trees will be left to decompose deep in the forest where there is plenty of cover by the crowns

- 2 -

of mature trees. This Plan shall not be deemed to create an obligation by the Association to any homeowner to remove any particular trees or branches.

- Trees are not to be cut for firewood by homeowners, even if the tree is dead.
- Paths will be kept in a natural state.
- Trees and shrubs are not to be dug up and replanted.

General

In no case will the forests be allowed to take on a "landscaped" appearance. The goal is to enjoy their natural beauty. Litter 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.