

What are these trees?



The trees planted along this hillside are apple trees of many different varieties. Some of these varieties have been grown for almost a thousand years, while others are the result of recent breeding work at Midwestern universities. Actually, each tree you see is really *two* trees carefully stuck, or *grafted*, together. The bottom part (the part with roots) is called the *rootstock*, and is the same on each tree you see here. The upper part, or *scion*, is different on each tree. The person who grew the trees joined each rootstock and scion at a point called the *graft junction* that you can usually see as a lump on the trunk close to the ground.

There are two reasons for joining trees together like this. The first reason is that apples do not “breed true.” This means that if you take the seeds from an apple you enjoyed eating and plant them, you will get apple trees, but the apples that grow on them will look and taste completely different from the apple you ate. As a result, if you want another tree that grows the apples you like, you must take pieces of green, growing wood from the tree your apple came from, and “lend” those pieces roots by grafting them onto some other apple tree.

The other reason for grafting trees together like this is that each of the two pieces contributes some properties to the single tree that you see. The rootstock is a kind of apple tree that stays small and is resistant to disease, but whose fruit would taste bad if it were allowed to grow fruit (which it isn't — it only provides the roots to the grafted tree). The scion is a kind of apple tree whose fruit tastes good, but that would get too big and be vulnerable to disease if it didn't “borrow” the properties of the rootstock (which it can do because it shares fluids with the rootstock). Almost every apple tree in the world (and most other fruit trees as well) is actually two trees grafted together.

How were they planted? How are they being cared for?

These trees were planted in April of 2008 and 2009. The trees came from different sources in Wisconsin, and were shipped to us as one-year-old “bare root” transplants, meaning that they did not come in pots or with soil, but with their roots exposed. The roots of bare root trees must be kept wet and the trees must be planted quickly. The day after the trees arrived, deep holes were prepared and each tree was planted. Care was taken to ensure that the roots pointed downward and that the junction between the rootstock tree and the scion tree was at least 4 inches above ground level. A wire cage was placed around each tree and the base of the tree buried in a few inches of gravel. Both the cage and the gravel keep mice from damaging the tree during the winter. Finally, fertilizer and lime were spread around the base of each tree.

These trees will be pruned each winter, probably in March, to remove dead or sick wood and establish a shape for each tree that allows light and air to reach each branch. The trees will also be fertilized each spring. We hope to have a first harvest in 2011.

Who is taking care of them?

These plants were planted and are being cared for by an informal group of volunteers. The group includes people from around Madison who like fruit of all kinds and want to learn more about it. New people are always welcome! To get involved, e-mail the group at: ehcg.fruit@gmail.com

Why were they planted, and who will get the fruit?

Many people — even gardeners who grow their own vegetables — are unfamiliar with growing fruit and may think that they cannot do so themselves. Although you are asked NOT to plant trees in your garden plot, these trees were planted here to show you that ordinary people can indeed grow fruit, and this sign is intended to tell you a little about how it was done.

Because the Garden Committee felt that these plants would serve an educational purpose, the plants and the supplies used to take care of them are being purchased with money from gardeners' plot fees. As a result, the fruit belongs to all gardeners. However, we request that you NOT take any apples from these trees. Why? Ideally, we'd like to collect all of the fruit, crush it, and use it to make apple cider. Making apple cider is fun (it's a process that's been done by large groups of people for thousands of years), and we would like to make this a community event that all of the Eagle Heights and UHouses gardeners can share. Beginning in 2011 (we hope!), watch your e-mail for an invitation to such an event.