



Self-guided Tour of the Dorrance H. Hamilton Fernery

Welcome to the self-guided Dorrance H. Hamilton Fernery Tour. The Fernery was first built in 1898 by John T. Morris, the original owner of the Morris Arboretum property, and is fashioned after the traditional Victorian fernery style that was extremely popular in England at the turn of the 20th century. The Dorrance H. Hamilton Fernery is the only free standing fernery left in North America and is home to over 200 different species of ferns and fern allies. During this tour you will be introduced to some of the most notable ferns in the current collection and be able to learn a little bit more about them.

As you enter the Fernery you will be on a balcony overlooking the two koi ponds. From here you can see many ferns, but our tour will begin with the largest fern:



Birds-nest Fern (*Asplenium nidus*): This fern is in the Spleenwort Family (Aspleniaceae) and is native to Southeast Asia and Eastern Australia. This fern is quite noticeable for its long undivided fronds that form a distinctive bowl shape in the middle (a bird's nest). In places where the fern is native, the new fronds of young ferns are used as salad greens. If you flip over the fronds you will see many sori, collection of sporangia each containing hundreds of spore. From just this one plant you could start growing a lot of fern salad greens!

To the left of the Birds-nest fern you will see a fern with large rhizomes growing over the rocks this is:



Bear-Paw Fern (*Agglomorpha meyeniana*): This fern native to the Philippines and Tiawan and is a member of the Polypodiaceae family (one of the largest fern families). It is an epiphytic fern, meaning that it grows on with its roots exposed to the air (not in the soil). The thick, hairy rhizome and pinnatifid fronds makes this a beautiful fern in the collection. Some fronds have terminal fertile sections that are constricted into bead-like lobes adding to the appeal of this fern.

If you now turn around, you will find a rock covered in another epiphytic fern:



Felt Fern (*Pyrrosia lingua*): This fern, we believe, was originally purchased by John T. Morris and has been growing in the fernery ever since. This fern is also in the Polypodiaceae family and is endemic to (native only in) Taiwan. The slightly lobed fronds grow vertically out of the rhizome that slowly creeps to form a dense mat over this rock. The name comes from the dense pubescence on the underside of each frond.

Located just to the left of the wooden bridge is:



Tasmanian Tree Fern (*Dicksonia antarctica*): 350 million years ago trees, as we know them today, had not evolved, but rather large tree ferns dominated the canopy. Though these large tree ferns no longer exist, there are smaller tree ferns still found around the globe. This fern is native to parts of Australia and is one of the three extant genera in the family Dicksoniaceae. The species can grow to over 20' tall in nature and can withstand temperatures dropping to below freezing making this a very unique species.

On the far side of the bridge there is another tree fern:



Australian Tree Fern (*Cyathea cooperii*): These tree ferns belong to the scaly tree fern family (Cyatheaceae), but also native to Australia - as the name suggests. These are much faster growing tree ferns and are commonly used as ornamentals. These ferns can reproduce easily and have become a problem in parts of Hawaii. For more information you can read the sign located at the base of the trunk.

While on the bridge with the Australian tree ferns to your left on the right up on the wall you will see:



Asian Basket Fern (*Drynaria sparsisora*): This is one of the most rare ferns currently in the collection. This epiphytic fern belongs to the Polypodiaceae family and is native to Southeast Asia. The fern gets its name from its sterile basket-looking fronds that grow over and protect the thick scaly rhizome (similar to the Bear-Paw Fern). These baskets are used to collect falling leaves and debris, creating a humus-rich soil even while growing on rocky hillsides.

Now continue down the path and look up above the waterfall, here lives:



Japanese Holly Fern (*Cyrtomium falcatum* 'Rochfordianum'): This is one of the most prolific ferns in the fernery. A member of the Dryopteridaceae family, this fern easily reproduces through spore dispersal. Look around the fernery and can you can find it growing in the tiniest cracks. The fern has a very distinctive vase-shape and when mature can have fronds over a three foot long. Native to Eastern Asia, this is a great option for growing at home.

Located on the slope to the right of the tunnel entrance you can find a selection of various:



Maidenhair ferns (*Adiantum*): These ferns are all part of a large genus in the Pteridaceae family and found around the globe. There are hardy species in this genus that you can grow outside in your garden, and others that make great indoor plants for your house. The fern has very graceful foliage and some emerge with a brilliant rose color. Compare the similarities and differences of the fronds between the large leafed *A. peruvianum* and the smaller *A. capillus-veneris*.

Pass through the tunnel, and as you start up the stone steps look to your right and you will see:



Australian King Fern (*Todea Barbara*):

This is a low growing tree fern (notice the multiple bulbous stems) native to southern Australia. This tree fern is a member of the Royal Fern Family Osmundaceae and is not actually a true tree fern, in fact it is in the Order Osmundales, different then the other two true tree ferns seen today (both in the Order Cyatheales). The King Fern can grow to be around 5 feet tall with fronds over 4 feet long, and can withstand temperatures down to 15°F making it possible to grow in southern parts of the country.

Our final fern is possibly the most remarkable, but small, fern located to left of the stairs leading up to the overlook (please do not climb the stairs). Look for a fern with simple undivided fronds and a distinct blue color:



Blue Fern (*Microsorium thailandicum*) – This fern is very unique and known for its blue sheen that is almost iridescent. It is an epiphytic fern that grows on limestone outcrops in Taiwan and southern China. This is a unique specimen and is often over looked or missed by visitors.

This concludes the guided tour of the Fernery, but it does not mean there aren't more amazing ferns to see. Take some time to walk around more and observe the plants closely.