## Dwarf Ferns for the Garden By Todd Boland, Research Horticulturist, MUNBG

At some point many gardeners have to deal with shade issues. Shade need not be a detriment, as many lovely ornamental plants are ideally suited to shade. Hosta, astilbe, pulmonaria and primroses are just a few examples. If you have a small shaded area, such as a shaded planter or a shaded rockery, then you have a whole host of miniature hosta to choose from. But what would be suitable to plant with them for some contrast? Ferns would seem a logical choice, but many of the popular cultivars are relatively large. As it happens, there are several ferns that mature fewer than 30cm (12") and some that rarely exceed a few centimeters. This article will introduce you to some of these exquisite and often, underutilized dwarf ferns. Some of the following ferns are even offered at the FOG plant sales.



For simplicity, the ferns will be described alphabetically, starting with *Asplenium*, the spleenwort ferns. This genus is quite large and occurs worldwide from the tropics to the Arctic. For gardeners, the easiest to grow is the beautiful maidenhair



## Cystopteris fragilis

Α. trichomanes. This spleenwort, species occurs throughout the northern hemisphere, often growing in shaded cracks in limestone. They form small, tufted plants with fronds 8-20cm long. The pinnae are round and arranged as a double-row on either side of a contrasting black stipe. Also, they remain green all year. Ideally suited to a shady rockery, rock wall or alpine trough, this little fern will survive as cold as zone 3. Looking very similar, but slightly more challenging to cultivate, is the green spleenwort, A. viride (a Newfoundland native growing in our crevice garden) ebony spleenwort, and the Α platyneuron. The former is rated for zone 3 while the latter, zone 5.

Our native fragile fern, *Cystopteris fragilis* (in our limestone garden), is a tough little fern hardy to zone 2. It has very finely divided lance-shaped fronds that are among the earliest ferns to show in the garden. Full shade to considerable sun is tolerated by this tufted species. This species benefits from additional lime in the soil. Similar is the bulblet fern, *C. bulbifera*.

There is only one wood fern that is small enough to be included among the miniature ferns, and that is the fragrant wood fern, *Dryopteris fragrans*. This very hardy fern (zone 3) is quite tufted in habit, with narrow, lance-shaped fronds reaching about 15cm. The foliage is fragrant when rubbed and it is ideal for a shaded alpine trough or rockery.

Oak fern, *Gymnocarpium dryopteris*, is a delicate, deciduous native fern that produces individual, triangular-shaped fronds from a running rhizome. Over time, it can make an admirable groundcover. Dappled to full shade and reasonable moisture will suit this hardy fern (zone 3).



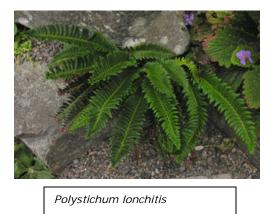
Phegopteris connectilis

Beech fern, *Phegopteris connectilis* (growing at the entrance to our cottage garden) sits on the fence in regards to size. Some populations stay consistently small with triangular fronds 15-20cm. Others are larger with fronds reaching to 45cm. Plants produce a creeping rhizome but are relatively slow to spread. Ideal on banks located in shade to semi-shade. They prefer moist, acidic soil and are very hardy (zone 2). This species is winter deciduous.

While there is many rock polypody or



Polypodium ferns, the two smallest ones are *P. vulgare* and *P. virginianum* (the latter one grows in our rock garden). These two species look very similar but the former hails from Eurasia while the latter from North America. Both are rated for zone 3. These evergreen ferns have leathery, lance-shaped fronds and in the wild, often grow atop moss-covered rocks. They will tolerate full sun to shade but need a moist yet well-drained, acidic site. They send up individual fronds from a creeping rhizome but overall, the plants are relatively tufted in appearance.



Among the evergreen holly ferns, the two smallest are *Polystichum lonchitus* (zone 3) and *P. scopulinum* (zone 5). These evergreen ferns have stiff, leathery fronds that are narrow and lance-shaped with overlapping pinnae. They are among the most beautiful of ferns. Part-shade with moist, yet well-drained limey soil seems to suit them

best. They dislike hot summers thus are most at home along coastal



Woodsia ilvensis

regions of the Pacific north-west or Atlantic Canada.

Finally, we come to the genus *Woodsia*. There are several desirable species, all deciduous and tufted. They prefer semi-shade to full sun but need a moist site and are not fussy about soil pH. The easiest to grow is *W. obtusa* (zone 3) but others worth trying include *W. alpina* (zone 2), *W. glabella* (zone 4), *W. ilvensis* (zone 3), *W. scopulina* (zone 3) and *W. polystichoides* (zone 5).



Woodsia obtusa

These are but a few of the many miniature ferns that the 'limited-space' gardener can cultivate. Whether in a rockery, an alpine trough, planted in a rock wall or grown as a groundcover, these small-sized ferns are a wonderful addition to any garden.