

in a shaded ravine through which water flowed in the spring. It was rooted in clay loam and shaded densely by beech and maple. It was associated with *Adiantum* and *Aspidium spinulosum* var. *intermedium*. In Huron County the fern was found in abundance in rather mucky soil at the bottom of a ravine, which served as a water course during a part of the year. A dense shade was given by maple and beech, with an occasional hemlock. The ferns associated with it were those mentioned above and *Polystichum acrostichoides*. With the exception of the soil, the two stations are identical. The fact of the water course underlying the habitat in each case is important in the facilities it gives for drainage.

*ASPLENIUM ACROSTICHOIDES*, Sw. (Silvery Spleenwort). This fern requires a mucky, springy situation, but dense shade does not appear to be a necessity. The fern is found associated with *Impatiens* and fraternizing with *Onoclea Struthiopteris* and *Cystopteris bulbifera*. The station has usually scattered trees of beech, maple, ash and birch.

*PHLEPTERIS DRYOPTERIS* (L.) Fee. (Oak Fern). The favorite habitat of this fern is at the edge of mucky soil, especially where it is shaded by maple and beech. It is found growing, also, in cedar swamps, on knolls, in mucky soil. Shade in this case is produced by pines and cedars. In this station the fern is sometimes associated with *A. marginale*. This fern is able to do well under decidedly dry conditions if it is not exposed to the sun. Growing in the open it becomes invariably infested with a blight that shrivels the fronds.

*PHLEPTERIS POLYPODIOIDES* Fee. (Long Beech Fern). In most cases this fern and the preceding are associated, but the Beech Fern is much more sensitive to lack of moisture and requires shade that is extremely dense. A typical locality noted was one in which the fern was found growing in a slightly mucky, reddish clay loam, where the soil was overlying a sandstone stratum and was of little depth. The timber, in consequence of this lack of soil, was small, but so close together as to produce a very dense shade. Shade producing plants present were beech, maple and hemlock, but occasionally also birch and basswood. The location described is situated at Inglewood, in Peel County, about three miles south of Credit Forks. The same escarpment is found there as at the Forks, but the overlying limestone is absent.

*DICKSONIA PUNCTILOBULA* (Mich.) Gray. (Hay-scented Fern). This fern was found in the same locality as the preceding but the soil, while slightly mucky, was less so than in the habitat of that species.