

In some cases a fern is so restricted in distribution that it is a matter of little difficulty to decide upon its natural habitat. In others, certain species are found in various locations presenting different conditions, and a comparison has to be made of plants and stations before a conclusion can be arrived at. As a general rule, a fern of normal size, of a healthy color and spore producing is growing in its natural location.

The conclusions of the writer are based on investigations made chiefly in the counties of York, Peel, Waterloo, Huron, Grey and Bruce.

*PTERIS AQUILINA* L. (Common Brake or Bracken). Is so widely distributed that we may say it is found almost throughout this hemisphere. In some localities the specimens are gigantic in comparison with ours. In Oregon it attains a height of six to seven feet; in the Andes of fourteen feet. It is found also in Great Britain. In the Journal of the Linnaean Society, Boodle gives its height in England as seven to eight feet. Its occurrence in the Highlands of Scotland is evident, as Sir Walter Scott mentions it several times in "The Lady of the Lake":

"From shingles gray their lances start,  
The bracken brush sends forth the dart."

"Each warrior vanished where he stood,  
In broom or bracken, heath or wood."

"The next all unreflected shone  
On bracken green or cold gray stone."

A plant of such wide distribution must be capable of an extended range of variation without endangering its life processes. But as it often occurs in large patches extending over localities that introduce different ecological factors, a conclusion can be arrived at with a fair amount of confidence by a comparison of specimens from different parts of the station.

The preferred habitat of *Pteris* is the top or slope of a dry hill covered with sandy loam. The shade producing plants almost invariably present are poplars, paper birch, sumach, pin cherry and hemlock. It is found near Credit Forks on sandstone strata covered by only a few inches of loam; in this locality it is associated with *Aspidium spinulosum* and shaded chiefly by pin cherry and paper birch. On passing in from the face of the cliff the loam becomes of greater depth and the timber consequently larger and of greater variety. The additional shade producing plants are hard and soft maple and beech. This shade dwarfs the *Pteris* in spite of the increased depth of loam.