such as *Boottii, intermedium* and *americana* (the latter formerly known as *dilatatum*) are by no means always easy to determine, and more time will have to be spent on them before any very definite opinion can be expressed as to their distribution.

BULBLET BLADDER FERN, *Cystopteris bulbifera* (L.) Bernh. It seems strange to have to speak of a fern as a nuisance, but that is what this species really is at times. It abounds everywhere not only on the rocks, but in the woods as well. I remember once visiting Burrough's Falls in the hope of finding some of the smaller rock ferns. I soon gave up the search as the rocks were simply smothered with this species, and it would have been impossble to detect any of the small Aspleniums with such a blanket over them. The Fragile Bladder Fern, *Cystopteris fragilis*, is not nearly so abundant and can really be said to be rare in comparison with the Bulblet.

SMOOTH WOODSIA, *Woodsia glabella*, R. Br. This rare and delicate little fern I look upon as one of my best finds. The only locality for it is situated on the eastern shore of Lake Massawippi, between the railway station of that name and Perkin's Point. I first found it on May 24 of this year (1920) almost at the foot of a rocky railway slope and I am pleased to say there was quite a little colony of it, all the plants I examined being heavily fruited.

OSTRICH FERN, *Pteretis nodulosa* (Michx.) Nieuwl. Of the large ferns this in my opinion is the handsomest, although the great Osmundas run it very close. The reason for its masquerading under the names *Pteretis nodulosa* and not *Onoclea Struthiopteris* as heretofore ,will be found fully explained in Mr. Weatherby's paper already referred to.

ROYAL FERN, *Osmunda regalis* L., var. *spectabilis* (Willd.) Gray. Seeing that the American Royal Fern differs from the European in the shape of its pinnules it has been thought desirable to make it a geographic variety, hence the var. *spectabilis*, see Weatherby as above.

CINNAMON FERN, *Osmunda cinnamomea* L. Possibly of the three Osmundas this is the most widely distributed. On August 22, 1919, I came across a peculiar frond growing apparently from a root of *Osmunda Claytoniana*, which I gathered and pressed, there being only this one example. From the disposition of the pinnules I took it to be var. *dubia* Grout. On September 7, 1920, however, I came across another similar frond very near the same spot, which clearly belonged to *O. cinnamomea*. This caused me to more carefully examine the previous frond at the base of some of whose pinnæ, by means of a magnifying glass, I found the little woolly tufts, thereby clearly establishing its identity as *cinnamomea*. I also found where I had gathered it the year previous that there was a root of *cinnamomea* and *Claytoniana* growing almost interlocked, and as there were several fronds of the latter and only this one of the former I had taken it as belonging to *Claytoniana*. The pinnae of these fronds are placed far apart on the rachis the upper ones being from 2.5 to 3.5 cm., and the lower ones 4 cm. apart. The pinnules which are somewhat toothed or lobed are also from 5 to 10 mm. apart which gives the whole frond a very light and open appearance. As far as I can gather there is no name for this variety, or may it be a cross between these two Osmundas?

ADDER'S TONGUE FERN, *Ophioglossum vulgatum* L. As it is proposed to make the family Ophioglossaceae the subject of a further paper, at some future time, I only propose in the present instance to deal very briefly with each species. The present one I find in the damp hollows of almost every mowing field, as well as on the dry knolls of some of the upland pastures. In the latter situations, environment plays an important part in the growth of the species, many of the plants only attaining a height of from 3 to 9 cm., whereas those growing in the damper situations run from 20 to 33 cm.

MOONWORT, *Botrychium Lunaria* (L.) Sw. This rare little fern was only discovered in June of the present year (1920) in two localities, in one of which only one plant was found, and about half a dozen in the other. These latter seem referable to the form known as *onondagense* Underw.

MATRICARY GRAPE FERN, *Botrychium ramosum* (Roth.) Aschers. In 1919 this species was particularly abundant in one station on sloping ground under cedars, but this year comparatively few plants could be found, although at another new station, also on sloping ground, but under deciduous trees, quite a number could have been gathered.

COMMON GRAPE FERN, *Botrychium obliquum* Mulh. This species and the var. *dissectum* Spreng, I had the gratification of adding to the list of Quebec ferns on December 21, 1918, as recorded in "THE CANADIAN FIELD-NATURALIST," Vol. XXXIII, 1919, No. 5, p. 97. At that time only one example of each was found, and nothing was known of their distribution. Now, however, I am able to state that both are abundantly distributed, *obliquum* being much the commoner of the two.

TERNATE GRAPE FERN, *Botrychium ternatum* (Thunb.) Sw., var. *intermedium* D. C. Eaton. This is another well distributed species, but not nearly so plentiful as *obliquum*.

RATTLESNAKE FERN, *Botrychium virginianum* (L.) Sw. There is hardly a wood in which this species is not more or less abundant, the plants ranging in height from 8 to 60 cm.

It may here be of interest to mention, that of the forty-one species and varieties enumerated, all have