

the search had narrowed down to the ferns, with usual acumen, he soon located the great colony of the Meadows. It developed the common *Osmundas* are the ones chosen, both *O. regalis* and *O. cinnamomea* being infested. Whether *O. claytoniana* is also bored did not develop, since that species did not occur here, being a denizen of dryer places. While it is a surprise this common fern proves the food-plant so long sought, *Osmunda regalis* being the favourite, and that negative results had followed its examination in hundreds of cases previously, the prominent feature is the localized colony encountered, with the evidence of its probable antiquity. From twenty years' observation on the growth of *Osmunda* under our windows, we do not hesitate to state that most of these individual plants represent fifty years development at least. The gnarled, ruminating root-stocks are elevated 50 to 60 cm. above the level of the quaking morass, in the effort to get above the water and from the nature of the yearly accumulations, and show the borings of preceding generations.

The presence of the larva in *O. regalis* is not easily noted. There is no wilting or drying of a conspicuous frond as happens with the other fern borers. The newly emerged larva enters a miniature stipe whose uncoiled, tender tip has sprung up but three or four centimeters, and in a few days has tunnelled down into the root-stock. This dies, it is true, and is some evidence, but a peculiarity with this fern in this locality seems to be that many more fronds start than eventually mature, what appears to be a fungous blight nipping some in their tender incipency. Further, a dipterous larva bores these young stipes and causes them to die, so that we find two other similar results produced at the same time in the plant, as is occasioned by the working of *speciosissima*. As the larval period lengthens, the frass thrown out is the only indication, and this is not in the usual well-formed pellets, but a rusty-brown, mud-like deposit. Even this sign is hard to detect for the fruiting fronds send down their brown inflorescence, which, with the chaff-like scales from the stipes sprinkle the root-stock and help to smother the meagre clues. So the apprehension of this larva is not as easy as with most others, and the surprise greater, when, at maturity, one of these old roots is cleft open, disclosing