

logical Society of London in 1853.¹ In this article I figured four species of bivalves from the coal-formation of the South Joggins, but without descriptions. Two of them, one the common *Naiadites* and another a narrow *Anthracomya*, were referred to *Modiola*. Two others were referred to *Unio*. One of these is an *Anthracomya* of *Unio*-like form. The other appears to be a *Carbonicola*, perhaps *C. angulata*. I remarked at the time on the vast abundance of these shells and their apparently freshwater habitat. This was the first publication so far as I know of these fossils from the Nova Scotia coal region.

These shells were further referred to in the first edition of "Acadian Geology" in 1855; and in the supplement to that work issued in 1860, I proposed for them a new generic name, *Naiadites*, and described them in the following terms, which I quote here, as indicating conclusions which have to a large extent been verified by subsequent discoveries.

"The so-called *Modiolæ* of the coal-measures are still uncertain as to their affinities. They do not come within the characters of the genera *Cardinia*, *Anthracosia*, &c., to which fossils occurring in similar situations in the British coal-fields have been referred. They are all thin shells, marked with growth lines, but destitute of other ornamentation, and, so far as can be observed, without teeth. In so far as external form is concerned they may all be referred to the genera *Modiola* and *Anodon*. But mere form may be a very fallacious guide, and I shall notice what seem to me to be the distinct specific forms under the provisional name *Naiadites*, intending thereby to express my belief that they are probably allied to the *Unionidæ*. They are certainly distinct from any of the shells of the marine carboniferous limestones, and are never associated with marine fossils. It is possible that their nearest living analogue is the *Byso-anodonta* of D'Orbigny, from the River Parana."

At the same time five species were described, and indications were given as to their local and stratigraphical distribution. A sixth species was subsequently discovered,