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LIFE-HISTORY OF A DYTISCID BEETLE (*HYDROPORUS SEPTENTRIONALIS* GYLL.).*

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The Salmon River, a small stream which flows close by the Nova Scotia Agricultural College, Truro, N. S., harbours many interesting species of aquatic insects. At this point it flows through a red sandstone region, the high, red rocky walls standing out in clear relief against a green background of grassy turf and coniferous trees (pl.1, fig.1). During midsummer the river becomes a small stream trickling lazily over its pebbled bottom, leaving wide stretches of flat red rocks covered with fine sand. Here abound mayflies, stoneflies and numerous small water beetles, besides many others. Along the sandy banks tiger-beetles are abundant, and numerous heads are seen to appear and disappear as one walks slowly along. I was interested in trying to rear some of the more common Dytiscid beetles, but found it a difficult task after procuring the larvæ to provide the proper conditions in order to secure continued larval development, pupation, and finally the coveted adult.

While collecting one day last summer (August 7, 1913), I was delighted to find on turning over some flat rocks several beautiful white pupæ quietly resting on their backs in rather wonderfully constructed pupal chambers. Furthermore, there were several different, not only species, but families represented, not all, however, in such peculiar pupal chambers. I was not long in finding representatives of the Carabidæ, Dytiscidæ, Hydrophilidæ and Parnidæ, oftentimes all under the same large flat stone. Unfortunately, other pressing work did not give me opportunity to make as full notes on as many of the species as I could wish. However, there is one interesting form, the life-history of which, in part at least, I wish to present in this short paper.

*This species was kindly determined for me by Mr. John D. Sherman, Jr.