

depth of thirty feet. Due to the opaque coloring nothing could be made of the internal structure, nor were eyes seen. The specimen was preserved but has not been sectioned yet.

Two or three specimens of the marine triclad found at Mt. Desert Island among the rocks between tide marks were secured. This form is yellowish-gray, with two eyes and a truncate head rounded at the sides. None of the available specimens has any sex organs and hence it is impossible to determine the genus.

A rich invertebrate fauna was found in the various fresh-water ponds of the islands. Several specimens of hydra were secured—they were all of the species *Hydra Americana* (Hyman) 1929. Only one kind of planarian was found, *Euplanaria tigrina* (Girard) 1850 (—*Planaria maculata* Leidy, name preoccupied). I was informed that *Phagocata woodworthi* (Hyman) 1937 (erroneously called *Phagocata gracilis*) occurs on Mt. Desert but no specimens were seen. Rhabdocoels were very abundant as to individuals, but few as to species, in the ponds. The most common were *Typhloplana*, probably *viridata*, *Gyratrix hermaphroditus*, a species of *Dalyellia*, and several species of *Stenostomum*.

THE LIGHT RESPONSE OF *CLITELLIO* *ARENARIUS* (O. F. MULLER)

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Clitellio arenarius is a marine tubificid worm, 4–5 cm. long, living gregariously in the sandy substrate under small stones between the tide levels. On Mount Desert Island this species is abundant in a number of localities. Isolated individuals respond to a sudden increase of illumination of sufficient amount by a muscular contraction which begins at the posterior end of the body and progresses anteriorly. The degree of response depends on the strength of the stimulus and varies from a slight movement of the extreme posterior end to a vigorous contraction in the course of which the posterior two thirds or more of the body is wound into a compact coil. The reaction time of dark adapted animals varies with the light intensity from ca. 2 seconds to ca. 0.7 of a second. The reaction time is composed of two parts, a sensitization period during which the light must shine and a latent period which is independent of light. The latter is markedly affected by temperature. Light adapted animals placed in the dark show a typical process of dark adaptation as indicated by a progressive decrease of reaction time with the duration of time spent in the dark. The process of dark adaptation is also markedly influenced by temperature. The results on this annelid closely parallel the results obtained by Hecht (1918-19), with *Ciona* and *Mya*.

REFERENCES

Hecht, S., 1918-19, *J. Gen. Physiol.*, 1, 147; 545.