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A PRELIMINARY SURVEY OF THE PROTOZOA OF BEAVER LAKE NEAR SALSBURY COVE, MAINE

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Many of the invertebrates of Mt. Desert Island, Maine, have been surveyed but apparently the Protozoa have not been studied very extensively for no record of such work is known to the older members of the Mount Desert Island Biological Laboratory Corporation. In order to acquaint future research workers with some of the fresh water Protozoa to be found on Mt. Desert Island, a preliminary survey was made of a pond near the village of Salsbury Cove in July 1940. The body of fresh water selected for study is south of the property of the Biological Laboratory and the pond is known locally by such names as Beaver Lake, Hamilton Pond, or Red Meadow Pond. The pond was created by building a dam and thus flooding a swamp about 1930.

The following genera and species from Phylum Protozoa were observed: (arranged alphabetically by classes)

MASTIGOPHORA

Anisonema acinus
Astasia sp.
Bodo sp.
Chilomonas paramecium
Chlamydomonas sp.
Chromulina pascheri (?)
Colacium sp.
Colponema loxodes
Cryptomonas ovata
Entosiphon ovatum
Euglena acicula
Euglena deses
Euglena limnophila
Euglena sanguinea
Euglena spirogyra
Glenodinium cinctum
Lepocinclis ovum
Mallomonas sp.
Pandorina morum
Peranema trichophorum
Peridinium sp.
Phacus brevicaudata
Phacus longicauda
Phacus pyrum
Phacus triqueter
Rhipidodendron splendidum
Synura uvella
Trachelomonas dangeardi var. *glabra*
Trachelomonas hispida
Trachelomonas horrida
Trachelomonas oblonga
Trachelomonas spinosa
Trachelomonas urceolata var. *serrataglabra*
Trachelomonas volvocina
Urceolus cyclostomus

SARCODINA

Amoeba dubia
Amoeba sp.
Actinophrys sol
Arcella mitrata
Arcella vulgaris
Cyphoderia ampulla
Difflugia acuminata
Difflugia constricta
Difflugia corona
Difflugia pyriform

Difflugia sp.
Diplophrys archeri
Hyalosphaenia papilo
Nuclearia sp.
Valkamfia limax

CILIOPHORA

Acineta sp.
Aspidisca lynceus
Chilodon sp.
Cinetochilum margaritaceum
Coenomorpha medusula
Coleps amphacanthus
Coleps elongatus
Colpidium striatum
Condylostoma vorticella
Dileptus sp.
Epistylis plicatilis
Euplotes charon
Halteria grandinella
Holosticha sp.
Holophrya sp.
Lembadion sp.
Lacrymaria olor
Loxodes rostratum
Loxophyllum meleagris
Loxophyllum sp.
Nassula aurea
Nassula sp.
Metopus sigmoides
Mesodinium sp.
Oxytricha fallax
Paramecium bursaria
Paramecium caudatum
Pleuronema sp.
Prorodon sp.
Spirostomum ambiguum
Stentor coeruleus
Stentor igneus
Stentor polymorphus
Stentor roselii
Stentor viridis
Stylonychia mytilus
Trachelius ovum
Tracholophyllum clavatum
Urocentrum turbo
Uroleptis pisces
Vorticella sp.
Zoothamnium nutans

SOME EXPERIMENTS ON THE EFFECTS OF HYPOPHYSECTOMY AND PITUITARY IMPLANTATIONS ON THE MALE *FUNDULUS**

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The endocrine relationships in the sexual activities of fish are very imperfectly known. The present experiments are a continuation of our studies on the sexual cycle of *Fundulus* (Burger '39, '40).

Adult male *Fundulus* hypophysectomized shortly after maximal spring spermatogenesis show an inhibition of spermatogenesis for stages beyond those of spermatogonial multiplication. While spermatogonial divisions occur they do not become numerous enough to cause a progressive increase in the number of these cells. The complete inhibition of the later stages of spermatogenesis is not immediately effected. A few cysts continue to form sperm for as long as one month after hypophysectomy. By two months after the ablation of the hypophysis spermatids no longer were formed. These results confirm those of Matthews ('39).

Both hyposectomized adult male *Fundulus* and males which re-

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