The Algae of the Edmund Niles Huyck Preserve

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The Edmund Niles Huyck Preserve is a private wild-life sanctuary near Rensselaerville, N. Y. It was established in 1931 as a memorial to Edmund Niles Huyck and is managed by a corporation, which made possible this brief study in the summer of 1946.

The Preserve consists of Lincoln Pond, of about four acres, and Myosotis Lake, of about eighty acres, and Tenmile Creek, which drains them and which includes a series of cascades called Rensselaerville Falls; also the most of the watershed of this drainage-system.

The two artificial bodies of water, Lincoln Pond and Lake Myosotis, have assumed the habitat-characteristics of natural lakes, except that the practically constant level, maintained by dams, prevents the catastrophic seasonal changes of natural lakes, levels of which may vary greatly. Such uniform habitats often show large populations of algae, but a relatively small number of species, which may remain for long periods in the vegetative condition, making identification difficult beyond the genus. A floating species of *Oedogonium* was the most conspicuous alga of the lakes, collecting in masses above the dams and on the spillways. At times blue-green algae, in the form of water-blooms, become so abundant that copper sulfate is used to destroy them; but they were not abundant at the time of this study.

Tenmile Creek passes by a series of cascades thru a postglacial gorge cut thru the Hamilton flags and shales and the Oneonta red beds of the Middle Devonian. On the faces of the cascades grew scattered colonies of *Lemanea (Sacheria)*, intermingled with various attached green algae, especially *Cladophora*.

The walls of the gorge are in many places permanently moist from seepage. Here occur gelatinous masses composed of mixtures in various proportions of *Nostoc microscopicum* Born. & Flah., *Anacystis rupestris* (Lyngb) Dr. & Daily, *Aphanothece*, *Chroococcus turgidus* (Kütz) Näg., *Cylindrospermum majus* Born. & Flah. and *Gloeothece rupestris* (Lyngb.) Born. *Scytonema figuratum* Born. & Flah. *Anacystis rupestris* and *Glococapsa alpicola* (Lyngb) Born formed lichen-like colonies on shaded walls, associated with the "fleece lichen".

In swift water at the falls occurred *Plectonema Thomasinianum* Gom., forming tenacious, dark-green closely-adherent incrustations on rocks. *Nostoc sphericum* Born. & Flah. formed tough spherical colonies where spattering from the cascades occurred.

Because of the frequent showers characteristic of the region, soil algae were common. *Nostoc muscorum* Born. & Flah., *Microcoleus*

vaginatus Gom and *Cylindrospermum muscicola* Born. & Flah. formed dark green patches on moist soil.

One of the most notable collections was made in a shallow bay of Basic Reservoir, where *Pediastrum* occurred in very great abundance. *Pediastrum Boryanum* (Turp.) Menegh. and *P. duplex* Meyen were the principal species and were accompanied by small quantities of *Scenedesmus quadricauda* (Turp.) Breb. *Pediastrum* is commonly found as isolated colonies among filamentous algae or as plankton; but such an occurrence as this is apparently rather unusual.

The principal lake-bottom inhabitants were the Characeae. *Chara coronata* Ziz. was common in Lake Myosotis and in a beaver-pond north of Rensselaerville. *Nitella flexilis* also occurred in Lake Myosotis.

The Rhodophyceae were well represented, as follows: *Sacheria (Lemanea) fucina* (Bary) Sirod at Rensselaerville Falls, growing with green algae on edges of cascades; *Adouinella violacea,* forming a continuous, extensive, bright-violet area where the trickle of water fell from a height of about thirty feet on a flat ledge at Felter's Glen, a deep, narrow, shaded rock gorge; *Batrachospermum moniliforme* Roth in a small, cold, spring-fed brook; the apparent *Chantransia*-form of *Batrachospermum* at The Vly, a peat bog.

Further study at other seasons of the year will be necessary in order to complete the catalog of algal species occurring in the Preserve and its environs.

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