

Progress Report on work at Ives Lake, 1 July - 8 Aug. 1971  
Kenneth A. Harrison, Research Associate  
University of Michigan Herbarium, Ann Arbor

The unusually heavy rainfall during June brought an abundant fruiting of fungi in Marquette during the last week of June. On hearing about it from Mrs. Ingrid Bartelli, Dr. A. H. Smith decided that it should be recorded for the Ives Lake area, so my wife and I arrived July 1st and collected regularly during our stay here.

A total of 366 collections of fungi have been processed and are being placed in the herbarium at the University. A number have been photographed for use in future publications. Material has been gathered in the genus Marasmius, that will be used in the doctorate thesis of Mrs. David Gilliam, and in the genus Coprinus for the doctorate thesis of Mr. Wally Patrick. A special effort was made to secure material of the genus Psathyrella for Dr. Smith's work, and Helvellas for Mrs. James Weber (nee Nancy Smith). One very rare mushroom, Pluteus caloceps, was found on the rotting wood in the hollow elm stumps. The cap is a bright orange-vermillion.

The season was late in this area, and most species did not appear until at least two to three weeks later than in 1970. Unfortunately for my special work, the hydnums were very slow appearing.

An interesting study made was on an outbreak of a disease of grasses on the flats under the elms along Elm Creek. The disease is known as "choke", and completely destroys the flowering heads of the diseased grass by forming a tiny yellow collar on the stalk where the flowering point is to emerge. This is a stroma with perithecia that contain the spores of Epichloe typhrina. This disease is widely recorded in North America and Europe. On further examination I found that another fungus, a Tusarium species, was attacking the Epichloe

stroma and killing it with the development of a perfect stage. In fact, it was so prevalent that it was acting as a control agent for the disease "choke". The first "choke" studied was on Hysterix patula (bottle brush grass), and it was further found that a maggot was also present and feeding on Epichloe. Specimens were taken of this insect, and while doing this several were found that in turn were parasitized by tiny larvae that probably belong to the wasp family. Additional collections were made on other grasses. It is hoped to prepare a paper on these observations after a search of the literature to find what has been published previously, and after an entomologist is found who can identify the maggots and their parasites.

Some progress has been made on the preparation of a card file of the fungi identified to date by the various mycologists who have collected in the area. This is a continuing project and new records and species will be added as they are published.

I particularly wish to thank the Huron Mountain Club Wildlife Foundation for providing the excellent facilities at Ives Lake. The new tables and the dark room have given much additional working space. The setting is ideal, and mycological problems are to be found throughout the area.

Kenneth G. Harrison  
7 Aug. 1971