

"The writer would also be particularly obliged by specimens of spongillæ, or fresh-water sponges, as he is engaged on a monograph of that tribe. They are found in rivers, lakes or tanks, and pools, attached to dead wood, rocks or stones, and are occasionally found surrounding the branches of trees, dipping into the water during periodical floods; and if they contain their granular, seed-like bodies, they are the more valuable. Dry them just as they come from the water. If it be deemed necessary to preserve parts or the whole of delicate specimens of either marine or fresh-water sponges in fluid, the best material is strong spirit, or water with a *considerable* excess of undissolved salt in it, but *never* alum. Jars or pickle and fruit bottles, well corked and sealed, or tied over with bladder, are the best vessels for the purpose."

Rising a little higher in the scale of life, little has been done with our fresh-water polyps, whether the simple hydra-like forms or the more complex fresh-water bryozoa. Great reputations have been made by the study of such creatures in Europe,—and in a land of streams and lakes like this, much could certainly be done in collecting new forms, and adding to our knowledge of the habits and range of organization of the fresh-water radiates. These animals should be sought in lakes and streams, especially on submerged wood, fresh-water shells, and the leaves of aquatic plants. They may easily be kept in water for examination, and careful drawings should be made of their forms and internal structures as seen under the microscope. It is difficult to preserve them; but I would recommend immersion in glycerine or the method above given for sponges, as likely to succeed.

The mollusks also offer tempting fields of inquiry, more cultivated than those formerly noticed, but still having large promise. Many species of unio, alasmodon and anodon, exist in our river, most of them no doubt identical with species described by American naturalists, but some perhaps new, and many requiring more careful study as to their habits, reproduction, and the real limits of species and varieties. The univalve mollusks are also very numerous, both in the waters and on the land, and require study, more especially in relation to the animals as distinguished from the empty shells. Such studies demand patience and nicety, and would be greatly aided by vivaria, in which these creatures can be easily kept alive and examined at leisure. Mr. Billings, one of our members, has done some work in this field, portions of which have appeared in the *Canadian Naturalist*. Prof. Hall will bring before us this winter some interesting facts respecting