

Ramapo Lake, a Walk to Remember

By Mel Pollinger



Having, for most of my life, a natural curiosity and love of nature, especially as it relates to microscopy, I have always been fascinated with ponds and other kinds of water-catches that might harbor animal

and plant microcosms. Wherever my travels may have taken me, I have always tried to find time for the purpose of collecting and viewing samples of the macroscopic and microscopic life existing in such aquatic places and their environs. The trunk of my car has rarely been without a variety of such collecting equipment as sample jars, a collecting scoop, plankton net, magnifying lens and a backpack. On occasion, even a portable microscope has been carefully stowed amongst the other items in my car for later viewing of a day's catch. Occasionally, while still in the field, I have set the microscope on a flat rock or on the ground and did my observing pronatedly. Camera and tripod, have also been parts of my gear for any incidental day-hike.



On one warm, sunny day, during the summer of 1994, at the upper end of an ascending rocky trail, I found myself walking the perimeter of Ramapo Lake. The lake is part of the Ramapo Forest Preserve in the Oakland area of Bergen County, New Jersey. Since that day, the lake and its surrounding ponds have afforded many hours of visual adventures through the microscope.



The trail up to the lake, although only 0.6 miles long, is rocky, steep at times and is hiked best with good shoes and sturdy legs and provides a decent cardiovascular

workout. The path around the lake continues for another



four miles and is more or less graded, running over gently rolling hills. Alongside this road many varieties of mushrooms and tree fungus can be found in as many shapes and colors. During Mid-Summer, wild blueberries and blackberries abound, their fruit-laden branches

hanging over the sides of the road and also drooping over the rocky edges of the lake. From early Spring, each



weekend brings another stage in the development of the abundant mountain laurel flowers, their petals painted in various shades of pink, blue and also bright white. The lake is alive with aquatic insects, whose purpose in life, it appears, is to be snapped up by the rock bass and sunfish. Huge bullfrogs snore loudly and various types of snakes rest upon flat rocks absorbing as much sunlight as possible. The snakes may be seen slithering smoothly to change rocks or moving lightning-fast to hide under a rock or escape back into the woods to avoid being stepped upon by hikers, or snapped at by dogs out for a walk. Swans, geese and ducks also frequent the lake, and the sky above it. Bird-song is everywhere along the road and side trails.

Ramapo Lake can be overwhelming. The plants and ponds, the bogs and swamps, the seasonal macro and microcosms of life each abound in their sheer quantity and natural beauty. My aim has been to enjoy as much as I can see or hear while moving along the road, stopping only to study the much-varied aspects of the lake and its environs. I have to admit, to spite my claim of such aim, never having passed up an opportunity to get down into the dirt in order to capture images of the flowers, mushrooms, snakes and insect life that abundantly inhabit this place. Taking the lake in small doses during the year helps me to avoid being overwhelmed. The focusing-in on specific plants or water caches can be rewarded with some very interesting images and specimens. Allowing for at least two or three hours at the lake seems to be best. Images taken first, then specimen collecting just before the hike down to the parking lot, the car and then, finally home. At this point, the jars are usually full, crustacea zipping around and tiny whitish specks moving and changing direction as if hunting for even tinier whitish specks. **On any Summer day one can find an abundance of interesting things to see and/or photograph.**

Many evenings have been happily spent at the microscope, peering at the ciliates, rotifers, diatoms, desmids, filamentous algae, etcetera, trying to identify what I had discovered in the jars of plant-laden pond water collected from the lake area. An almost compulsive desire to classify and photograph these creatures has caused me to look for simple ways of identifying them. Consequently, I consider books on microscopy and nature an excellent foundation for such an amateur's basic microscopical-subject library. A variety of books on microscopic life is essential to anyone seriously interested in such studies, not the least of which include, but is not limited to, the following eight books:

- Curry/Grayson/Hosey, "Under the Microscope"
- Grave, Eric V., "Using The Microscope, A Guide for Naturalists"
- Jahn, "How To Know The Protozoa"
- Nachtigall, "Exploring With The Microscope"
- Patterson, D.J., "Free-Living Freshwater protozoa"
- Prescott, G.W., "How To Know The Fresh Water Algae"
- Rainis and Russell, "Guide to Microlife"
- Reid, George K., "Pond Life"

"How To Know The Protozoa," by Jahn, started me, in my teens, on the exploration of pond waters and various infusions of hay, rice, wheat and lettuce. That wire-bound volume was my first book on protozoology. I found, very early on, that the key to using such a book, is exactly that, a key! This book, and many others, are set up to identify species and varieties by first describing a microscopic subject's anatomy. Therefore, without knowing what the parts of the lifeform in question are called, the key cannot be properly utilized. Although the many line drawings in Jahn can be as helpful as "Classic Comics" or "Cliff Notes", in general they do not always show the subtle differences between closely related species and/or varieties of protozoa and algae. Realizing this led to an attempt to study the Jahn "key." I found that the pursuit of such information regarding microscopic lifeform anatomy can become complicated. Whenever such complication appears to obfuscate the issue, it is time to purchase more books. I had developed a growing desire to identify the creatures and plants I observed. Using the keys and texts along with newly learned anatomical descriptions allowed for identification of the specimens that I wanted to photomicrograph. I was thereby enabled, by means of this newly acquired

language, to attempt the taking of meaningful images of the species I believed I was encountering. I was enjoying nature and science; in other words, having fun with my cameras, microscopes and computer imaging programs and sharing all this with my family and friends.





