## AN ESSAY ON THE VALUE OF COLLECTING

# OR

## HOW TO TELL IF YOUR COLLECTING TRIP WAS MORE THAN JUST FUN

#### by Robert E. Schmidt

Since publication of the <u>Atlas of North American Freshwater</u> <u>Fishes</u>, anyone with 325 can get a pretty good idea of what species they are likely to find when they dip a net in a stream or pond in unfamiliar territory. Although the Atlas does a creditable job in summarizing where we know fish are, the lack of a dot in the vicinity of your collecting site should not be taken as an absolute statement that a species is not there. A lot remains unknown about distribution of fishes in North America.

A case in point is a recent experience that I had with a population of brook lampreys. Fete Warny, an avid collector of things herpetological and ichthyological, sent we some specimens of lamprey annocoetes (i.e., larval lampreys) that he had netted on Long Island. Examination of the color pattern (Vladykov, 1950) showed that they were American Brook Lampreys (Lampetra appendix) and not the Sea Lampreys (Petromyzon marinus) that I had expected. If you turn to the American Brook Lamprey page in your Atlas, you will find no records from Long Island.

Dr. C. Lavett Smith and I mounted an expedition (with other American Museum of Natural History personnel) and met Pete Warny and Norman Soule at the scene in the Nissequogue River.

Pete brought his dipnet, but we cheated and used a backpack electroshocker--a much more efficient method of catching lamprey annocoetes. Within 15 minutes, we had collected 24 annocoetes and stirred up dozens more. Annocoetes burrow in silty areas on stream margins, and they react to the electric field by writhing out of the mud (the experience is not fatal). If you can imagine 8-15cm wormlike organisms appearing from the mud, you have a picture of our experience. We went on to collect American Brook Lamprey annocoetes in the Patchogue River also.

The moral of this story is that there are still distributional records out there waiting to be discovered, and the more familiar you are with the areas you visit, the more likely it is that you will recognize something worth mentioning. In our case, we published a short paper describing the new records.

## Bibliography

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Vladykov, V.D. 1950. Larvae of eastern American lampreys (Petromyzontidae). I. Species with two dorsal fins. Nat. Can. 77:73-94. 1