Micro and Macro Invertebrates: What's Crawling in the Water?

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Ponds and streams are being impacted daily in complex ways. Teems of organisms that inhabit these waters are excreting nitrogenous waste products. Fisherman and farmers may also be adding small amounts of waste to these biotic systems. In addition, natural processes of the water cycle like acid rain and runoff are at issue. There are also agricultural and residential sources that may be suspected of causing pollution. All of these factors contribute to the changes observed in pond and streams. The focus of this year’s study was to make visible and quantities observations of these self-contained aquatic ecosystems; thereby providing a multiple measure of their quality. From the field research done this school year the fauna in local streams revealed that even though chemical test showed 90% of these waters could be classified as in good condition, about 50% of this year’s water analyzed reveal that there are organism found in them that have been associated with poor water quality. The presence of certain macro invertebrates like black fly larvae and at least one leech indicates that the waters may be changing in a negative way. As shown in the photographs, the general areas that surrounded the streams looked good. In addition, there were no foul smells apparent in any of the waters tested. There were signs that animals have visited these waters by tracks being present. The micro-organisms found in local waters can also be used as a barometer of stream quality they were ciliates, flagellates, and some amoeboid.

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