shaded areas like those described by Eads (1976). Water in the tires was clear, ranging from almost colorless to amber in hue, depending upon the amount of litter in the tires. Associated species were *Aedes triseriatus, Anopheles punctipennis* and *Culex restuans*.

A second location of *Cs. melanura* larvae in tires occurred on 24 July in Warren Township, New Jersey, in a densely shaded site. The water in these tires was the color of coffee, and larvae could not be seen unless the liquid was placed in a shallow white container. Associated species in this instance were *Ae. triseriatus* and *An. barberi*.

Siverly (1972) indicated that "receptacles such as tires and tin cans are seldom used" for *Cs. melanura* breeding; however, Judy A. Hansen, Superintendent of the Cape May County Mosquito Extermination Commission, has informed me that *Cs. melanura* larvae have been found in tires in that southernmost county of New Jersey. Thus, it seems possible that the use of tires as an oviposition site by *Cs. melanura* may not be so rare as once thought but only not so well noted or reported. With tires in an urban or suburban area one expects to find *Culex* and/or *Ae. triseriatus* breeding, and while one is not likely to mistake *Ae. triseriatus* for *Cs. melanura*, it is possible that *Cs. melanura* larvae may have been casually identified as *Culex* on the basis of previous experience with *Culex* in the tire habitat. In any event, this further finding of *Cs. melanura* in this particular habitat may reinforce Wallis and Whitman's comments concerning the need for additional survey activity in light of this species' known vector potential.

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A RELIABLE CHILLED WATER STREAM FOR RHEOPHILIC INSECTS

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While attempting to rear larval Tanyderidae (Diptera: Nematocera) which may have a larval period in excess of 2 years (Exner and Craig 1976), the need for a highly reliable artificial stream became evident. Motor driven stirrers have been used effectively by Fredeen (1959) to rear simuliid larvae, and others have used similar techniques (Craig 1966). Now, however, magnetic stirrers offer the best approach as they are reliable and readily available in most laboratories (Colbo 1970). I required a temperature controlled system, so have used a Stirkool® magnetic stirrer (produced by Thermoelectrics Unlimited, Inc., 1202 Harrison Aveñue, Wilmington, Delaware, 19809) which has the upper plate cooled thermoelectrically (Peltier Effect).

The stream (Fig. 1) consists of a 4½" high piece of 5½" inside diameter plexiglass tubing, glued to a piece of flat plexiglass to make a base. A piece of 1¼" high, 2¼" inside diameter plexiglass tubing, is glued to the center of the base. This provides a chamber for the magnetic stirring bar.

Fine sand and gravel were placed in the groove between the stirring chamber and the outer wall. By varying the speed of the stirring bar, water velocities can be varied from almost stationary to approximately 14 cm/sec, quite sufficient to erode the substrate. A subsidiary benefit of the stream design is that any material swept into the stirring chamber is immediately flicked clear by the bar.

The cooling plate allows the temperature of the stream to be controlled closely, for my purposes, 12°C. Such a simple device lends itself to modification for other purposes.

This stream has operated continuously with-

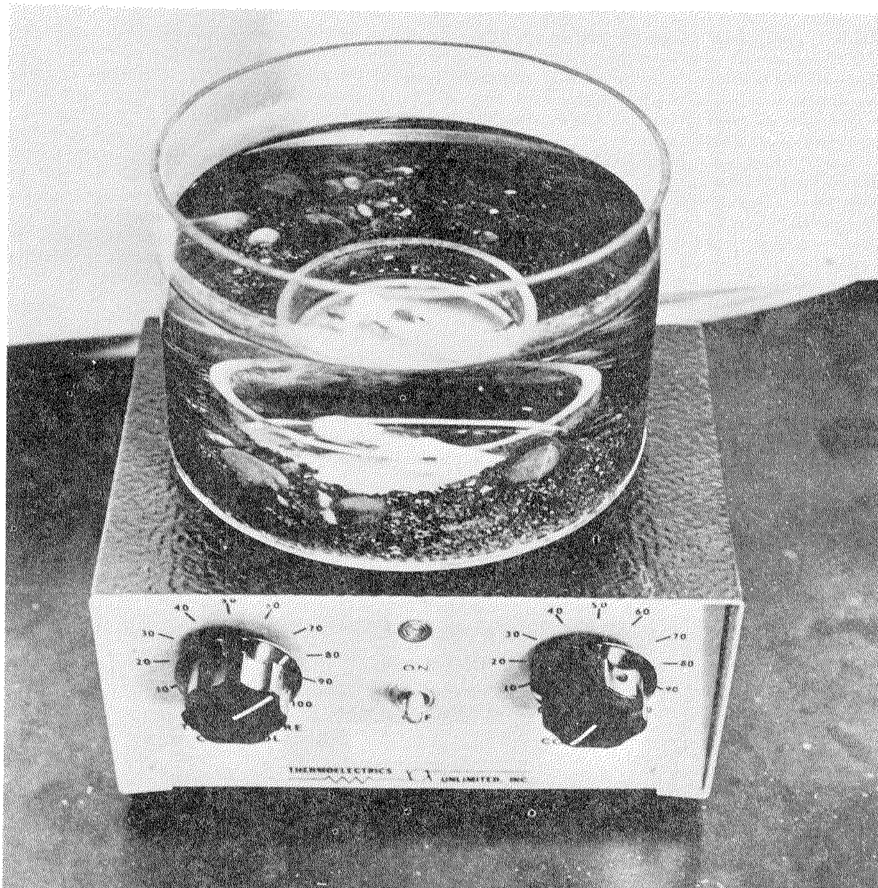

Fig. 1. The stream, showing its basic construction. Temperature control on left, speed control on right. The numbers are arbitrary units.

out trouble for at least 6 months and has successfully reared larval Ephemeroptera, Plecoptera, Trichoptera and Simuliidae. The larval Tanyderidae, although active in the substrate, have not yet emerged.

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