

A NEW J.G. NEEDHAM DEVICE FOR COLLECTING ADULT MAYFLIES (AND OTHER OUT-OF-REACH INSECTS)¹

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ABSTRACT: A useful device for collecting out-of-reach insects is described.

James G. Needham (1880-1950) was an innovative designer of devices for the collection of aquatic insects. While we were examining a file on correspondence between Jay R. Traver and J.G. Needham we found a sheet hand written by Needham in May, 1929 illustrating (fig. 1) a useful device for collecting adults. We immediately recognized the value of the "new" device.

"A suggestion for collecting adult mayflies from the highway bridges. Set a big feather. Wedge its quill in the tip of a *light* cane. . . and glue it there. . . . Wet the vane with some adhesive that is soluble in water — say honey. Touch the wings of the mayflies as they sit on the concrete. They will adhere until picked off. Dilute adhesive so that it will not adhere too strongly, pulling off the tails. Merely wetting the vane with alcohol may do: I have not tried it."

We have been frustrated many times by being unable to reach resting adults, not only under bridges, but around lights on buildings, on lighted signs, etc. Certainly such a device would be useful for a variety of insects.

A number of modifications of the device are possible depending on the needs and practices of the collector. In place of a light cane, a jointed fiberglass fishing rod could be used, or an end piece could be adapted to a long insect net handle. While a feather is a good working item, a piece of clear plastic may not frighten away the insects. Tack-Trap[®] or Tanglefoot[®] may be good sticky materials if suitable mild solvents are carried for removing the specimens. It may be that the original Needham device is best for mayflies: a feather and alcohol.

¹ Accepted for publication: April 4, 1978

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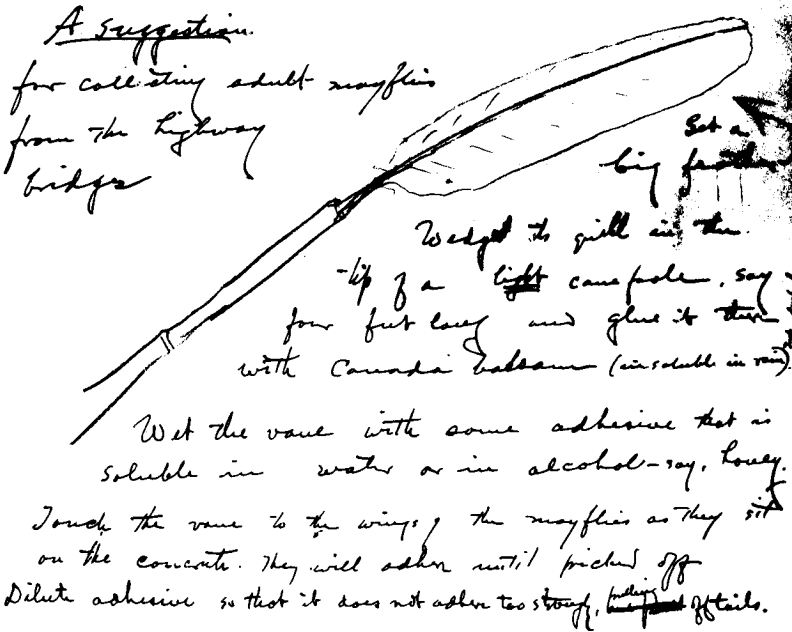


Fig. 1. Sketch and notes by J.G. Needham.