Study of Drifting Insects in the Snake River

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This study is part of an investigation into the cutthroat trout fishery on the Snake River in Wyoming, which also involves a number of other interrelated studies.

The drifting insects concerned with in this study are the immature aquatic insects that are the normal fauna of the river-bottom. These insects apparently make use of the current for dispersal throughout the river, by becoming detached from the bottom or swimming upward and letting the current carry them along. Other workers have studied this phenomenon extensively in small streams in the U.S.A., Japan and Europe. It is generally believed that the drifting insects have been induced to move because of crowded conditions. If they have truly been crowded out, then these drifting insects represent an excess of insects. The quantity of drifting insects is therefore a measure of the capacity of the river for insect production. Since the insects are food for the fish, such an investigation as this is of interest in a study of the cutthroat trout.

The major investigations of drifting insects done by other workers have been conducted on small streams. There is therefore no standard technique for studying this phenomenon on large rivers like the Snake River. Accordingly, an important part of this study has been finding out how to go about collecting samples of drifting insects in a large river. Most of my investigations were conducted at the Cattle Bridge about one mile downstream from the Research Station. This bridge was a great convenience since it facilitated the taking of samples from places in the river that could not be reached by wading.

My summer's routine consisted mainly of taking samples of drifting insects in nets suspended from the Cattle Bridge. A number of things were of concern, including what time of day or night the insects were drifting and where they drifted in relation to depth and width of the river. The results of this summer's investigations will not be known until I finish analyzing the samples, which is occupying my time at the present.

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