

The results of these experiments and of others by workers in West Virginia and Oregon are interpreted as showing that the planting of fingerling trout in the waters studied to date has resulted in a negligible return to the fishermen. More widespread use of the "test stream", as operated in Vermont, Pennsylvania, and West Virginia, is advocated to provide more accurate knowledge of the percentage of planted trout fingerlings that survive to the angler's creel.

R. L. C.

COMMENTS ON THE ADEQUACY OF ACCEPTED STREAM BOTTOM SAMPLING TECHNIQUE

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The accuracy of the collapsible brass-frame sampler was tested by repeated sampling of three restricted, uniform areas. The results show that as regards total volume of food organisms present, considerable reliance can be placed on results derived from a single carefully handled sample. It is also evident, however, that although repeated sampling of a uniform bottom type within a restricted area yields very similar volumetric values, the faunistic elements making up these values vary greatly in species composition. It is suggested that a given area of stream bottom is capable of sustaining a definite amount of insect life, which may be composed of any combination of a variety of species suited to the habitat. A single sample, therefore, does not necessarily provide a comprehensive picture of the relative numbers of individual species throughout the larger areas from which the sample is taken.

Among problems needing attention, the true position occupied by each species in the food cycle of game fishes is mentioned.

By measuring specimens in the field immediately after being killed and again after 15 months of preservation in 73 percent alcohol, it was found that a large amount of shrinkage occurs. Application of a correction factor is urged when comparing preserved samples with those measured while fresh.

Although the collapsible bottom sampler is considered the most satisfactory device available for studying supplies of fish food organisms, certain limitations of the method are described. Among these are the difficulty of operating the sampler at very low temperatures and of seating the net in rough gravel or rubble, the comparative uselessness of the net in quiet water sections of streams, and the time required to sort out the organisms.

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