

liarily adapted to living in a locality where the water supply may fail at any time. They must then be fitted to (1) migrate overland or through the air to another pond, or (2) to bury themselves in the mud or debris in a state of reduced activity (æstivation), or (3) go into a condition represented by spores, seeds or eggs, or (4) to lead an amphibious life, existing sometimes for months out of the water and the remainder of the year within that element.

Even the larger ponds that are permanent are isolated from other bodies of water, and consequently the organisms in them represent a biological unit such as is now studied under the title of Ecology.

Apparently slight differences, such as variations in the amounts or kinds of vegetation, depth of water, amounts of shade or sunshine received, turbidity of water, proportions of certain kinds of voracious creatures, etc., may be the determining factors that result in very emphatic and conspicuous differences which can so often be seen in comparing the life of any two of these isolated ponds.

In the limestone region, on the other hand, but few ponds are found, and all are connected with the superficial streams. As a consequence the aquatic life of this kind of a region represents one vast organic unit, without many local variations. What is found in one branch or part of the stream is likely to be found in another.

The streams in the limestone portion of this country are maintained almost wholly by springs, which are the outlets of the underground drainage from the sandstone region. Their temperature is consequently nearly uniform throughout the year, being cool in summer and warm in winter, and the living things which they contain are those organisms which thrive best in cool water during the summer, such as the Caddis fly larvae, or "case worms," among insects and the Brook Trout among fishes. However, just beyond the Bald Eagle range is found a stream which exhibits extremes