ACADEMY OF SCIENCE FOR 1951

Viability of the Eggs of Bufo cognatus'

ARTHUR N. BRAGG and JACK BRESLER, University of Oklahoma, Norman

Sometime ago (1) it was noted that although certain types of contamination of pools may prevent hatching of eggs of Bufo cognatus, normally most clutches maintain a high percentage of hatching if left undisturbed in naturally formed pools. From time to time since these early observations, a clutch of eggs has been found in which hatching percentage seemed lower than normal, but no actual figures have been secured.

On June 13, 1951, very recently hatched larvae of Bufo cognatus were discovered in a temporary pool in a wheatfield at the edge of Norman. Also present were the gelatinous envelopes from which they had just emerged. Some of these jellystrings were collected and counts were made of individual capsules in which the eggs originally lay. Empty capsules were interpreted to represent viable (i.e. hatched) eggs and full capsules to represent nonviable ones (inasmuch as the capsulated eggs did not develop when taken to the laboratory).

¹ Contribution of the Department of Zoology and the Biological Survey, University of Okiaboma, Norman.

PROCEEDINGS OF THE OKLAHOMA

On this basis, of a total of 1331 there were 882 nonviable and 449 viable eggs counted. If this sample may be taken as typical of the clutch as a whole^s, this represents about 34% hatchability for this particular clutch.

There was no evident source of pool-contamination and no other indication as to a probable cause for the poor viability of this particular clutch.

LITERATURE CITED

1. BRAGG, ARTHUR N., 1940. Observations on the ecology and natural history of Anura. I. Habits, habitat, and bleeding of Bufo cognatus Say. Am. Naturalist 75:322-349 and 424-438.

An and the second s