A NOTE ON THE EGG-MASSES OF SCAPHIOPUS HURTERII STRECKER[1]

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In an earlier paper (1) I described the eggs and their method of attachment in the Savannah spadefoot, *Scaphiopus hurterii* Strecker, as seen in a single pool, approximately 6.5 miles east of Norman, Oklahoma. Since then I have seen the eggs of this form many times in this and other pools in eastern Cleveland County. The description by Livezey and Wright (3) of the eggs of this species is based upon my observations, since no one, so far as I am aware, has had opportunity to check my original work.

It is the purpose of this note to extend the original description to include variations noted recently and to account for the differences between the two sets of observations. This seems especially desirable inasmuch as all recently published keys to salientian eggs and egg masses, including one by me, (2) will not separate these eggs from those of the related *S. couchii* Baird unless those of *S. hurterii* had been produced as originally described.

The original description gave as the typical pattern of an egg mass a sort of three dimensional lattice-work formed by intermittently jointed bufo-

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like strings of eggs (1). All egg masses noted in several pools in 1946, 1947, and 1948 had this pattern, but in both these same pools and in others, in 1949, the eggs were produced differently. During this season, all eggs seen were laid in smaller masses (approximately 50-100 eggs) more or less loosely joined in strings and attached to vegetation near the water's surface. Obviously, the pair in each case had moved about among the plants, producing a few eggs here, a few there, till all had been laid. In the larger bunches, there was often a suggestion of the lattice-work pattern, but this was not typical. Since these eggs are black and white and of similar size to those of *S. couchii*, the egg masses produced are strikingly like those of the latter when observed superficially in a pool.

Searching for a reason for the difference, I examined my notes of former years. I found that in every case previously, the eggs had been produced on the only vegetation available to the animals in a particular pool. In contrast, in 1949, the principal breeding period was late (May 16-17) and much vegetation was available for egg-supports. The conclusion is obvious that availability of proper egg-supports makes the difference. Wherever these are rare, all eggs are likely to be produced as a lattice-work on a single bunch of vegetation. Wherever vegetation is common, protruding from the surface, the animals move from one place to another producing smaller egg-masses which are scattered about. This last method is essentially that of other spadefoot species.

LITERATURE CITED

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2. ———, 1949. The identification of Salientia in Oklahoma. Researches on the Amphibia of Oklahoma. Norman: University of Oklahoma Press.
3. Livezey, Robert L. and A. H. Wright, 1947. A synoptic key to the salientian eggs of the United States. Amer. Midl. Nat. *37*:179-222.