

NOTES ON THE BREEDING HABITS OF THE YELLOW-BELLIED TERRAPIN

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In the Potomac river between Washington and salt water, the yellow-bellied terrapin (*Pseudemys rugosa*) in former years supported a profitable fishery, but for a long time it has been uncommon and is now seldom sought, those caught being taken incidentally in winter seines hauled for fish. The decline of the fishery, while due primarily to the decrease in abundance of the terrapin, was to a considerable extent dependent on the establishment in Washington and other eastern cities of a trade in southern and western terrapins which could be caught in large numbers and sold at much lower prices than the local species. The terrapins frequented the marshy shores and heads of creeks, and were caught with haul seines and fyke nets during fall and winter. Piscataway creek was one of the best fishing grounds, and many hundreds of dozens of terrapin were taken there every winter for the Washington market. On one day in December, about the year 1883, 240 terrapin were there caught at one seine haul by Mr. L. G. Harron, now of the U. S. Bureau of Fisheries; they had been buried on a shallow bar, but had uncovered themselves under the influence of an unusually warm spell. The largest were sold for seventy-five cents apiece in Washington, which was about the average price in those days, while the smallest, six to seven inches long, were worth only fifteen or twenty cents. This species is known along the Potomac under the names "slider," "terrapin," and "fresh-water pullet," the last designation being in common use among fishermen and negroes generally.

The egg-laying season is in June and July, and the place where the eggs are laid is usually a cultivated tract, often a cornfield adjoining the water. It is probable that a field would always be selected, but when there is a high steep bank the eggs are of necessity deposited on the shore. The terrapins visit the fields only during egg-laying time and only for this purpose, and sometimes make their nests more than one hundred feet from the water. It has often been observed that six or eight terrapins will lay on the same shore or in the same field, their tracks being easily discernible in the moist or soft sand or loam. The nest is made in

sand, clay, or loam, a sandy loam or sandy clay being most frequently chosen. The nest, which is shaped like a carafe, is dug by the female with her fore-legs. Its size depends on the size of the animal or, what amounts to the same thing, on the number of eggs to be laid; an average nest would be four inches deep and four inches wide at the bottom, the opening being somewhat smaller than a silver dollar. When on the shore, the nest is always above high-water mark.

All the eggs are laid at one time, and when the laying is completed, earth is scraped into and over the hole and packed tightly. The packing is accomplished by the terrapin raising herself as high as possible on all four legs and then dropping heavily, by the sudden relaxation of the extensor muscles. Immediately after covering the nest, the terrapin withdraws to the water.

The size of the eggs varies somewhat with the size of the terrapin, but averages one inch by three-fourths of an inch. A six-inch terrapin lays ten or twelve eggs, while the largest terrapins, fourteen or sixteen inches long, lay as many as twenty-five to thirty-five eggs, possibly more. When a terrapin is disturbed while making a nest or laying, she will abandon the nest. On one occasion, when a terrapin was discovered over a nest in a cornfield, removed to see whether any eggs had been deposited, and replaced over the hole in the ground, it was found when the place was visited two hours later that she had left without laying any eggs. The eggs probably hatch during the summer, but on this point there have been no personal observations. The young, however, remain in the nest until the following spring (April 10 in one case), and when they emerge they are about the size of a twenty-five-cent piece. They go to the water at once.

Considerable quantities of terrapin eggs were formerly eaten by people living on the river shores, but of late very few eggs have been thus utilized. When boiled, the eggs are regarded as a delicacy. Birds (especially crows) and other animals doubtless destroy some eggs. On one occasion a terrapin was observed over a nest on the shore, and a crow noticed on a dead tree near by. When the terrapin covered the eggs, concealed the nest, and withdrew to the water, the crow immediately dropped to the ground and began to dig into the nest. Before the observer, who was in a boat, could reach the shore, the crow had destroyed at least two of the eggs, seven others remaining.

The male yellow-bellied terrapin is smaller than the female; his claws are twice as long as hers, and the under-shell is flat, while in the female it bulges centrally.