

Now, unless one spends day after day and week after week in the fields in the neighborhood of the breeding grounds and catches each day a great number of Turtles of different species, in order to ascertain the presence of eggs in the oviducts, (as may very readily and confidently be done by inserting the finger between the shield and the plastron, just in front of the hind legs,) and then having marked them lets them go again to remain free and in a natural and untrammelled state until they can be taken up again perhaps within the next few hours or the next day, it is utterly impossible to determine when the eggs enter the oviduct, and how long they remain in this organ. Although we have seen many Turtles laying their eggs in confinement in a large yard where they were kept well fed and furnished with plenty of water, which is very essential to some species, and although these eggs developed their embryos, still they were always retarded, both as to the time of their being laid, and to the advancement of the young itself. By reference to the tables,¹ it will be seen that in two instances the eggs of *Nanemys guttata* and of *Chelydra serpentina* were retained in the oviduct nearly a whole month beyond the usual time of laying, in consequence of the confinement of these animals. The former having dug, as usually, a hole with its hind legs, at last dropped its progeny into the excavation, and covered the same so as to leave no trace of its operations; but the latter was opened, and found still retaining its brood.

As to the time of the day at which Turtles lay, there have been not more than three different species of so many distinct genera observed throughout the laying season; but, as a great many were seen always laying in the same part of the day, there can be no doubt that different species lay regularly at different times. *Chrysemys picta* and *Nanemys guttata* deposit their eggs in the evening, from six to half-past eight o'clock, and *Chelydra serpentina* in the morning, from four to twelve midday. *Ozotheca odorata* was seen laying but once, namely, at half-past eight in the evening.

In this connection it will be most proper to give some account of the kind of nests which these animals make, and of their manner of proceeding in the formation of the same. We have already alluded briefly to the laying of one species, (*Nanemys guttata*), in confinement; but would say in addition, that this species, as well as *Chrysemys picta*, digs a perpendicular hole, whereas *Chelydra serpentina* excavates at first directly downwards and then laterally, so that the widest part of the hole, in which the eggs are deposited, is on one side of the external opening of the nest. Hence a stick thrust straight into the mouth of the nest would not touch the eggs, which are laid in the lateral dilatation of the

¹ See p. 498 and 499.