## THE PLATYPUS.

The following notes on the Platypus (Crnithorhynchus anatinus) by Morton Allport, F.L.S., F.Z.S., etc., etc.,

[Read 14th March, 1878.]

The majority of our indigenous mammals are gradually but surely becoming extinct, and, therefore, observations on their habits of life, though possibly of but trivial interest now, will in a few generations, be eagerly sought for and be as valuable then as a few authentic notes on the marners and customs of the Dodo or the Moa would now be to us.

An additional value is given to the minute life-history of marsupials and monotremes by the fact that they represent here in actual existence a condition of things which in the northern hemisphere is only known as a bygone world, and such life-history to the studious geologist may furnish a key that will unlock and display far more of the details of past eras than the most careful study of the few fossil remains of

early European marsupials can ever afford.

On a fine hot evening at the close of last January I was sauntering, rod in hand, down a wild part of one of the small tributaries of the Huon, known as the Mount River, when my attention was directed to a disturbance in a still pool some 150 yards below, and directly afterwards I saw the low flat back of a Platypus resting on the surface. One bank happened to be a high one, and as a tree had fallen across the pool making a rude bridge some 10 feet from the water, a good opportunity offered for making observations of the creature's proceedings, the more so as the water was of such brilliant clearness as to render fly-fishing a heartbreaking occupation. Divesting myself of my rod and basket I crept silently through the scrub and reached the lower end of the log; then lying on it at full length, I crawled on, taking every opportunity of progressing while the Platypus was under water, and remaining as motionless as the log itself when he came to the surface, being ultimately placed in so good a position that I could, and did, for more than half an hour, watch all his movements. It was a large specimen and one of that variety which has very red fur on the sides. Down the centre of the pool, which was very deep in places, there was a long ridge of coarse gravel, consisting of stones each from an inch to four or five inches in diameter, and it was to this ridge of gravel that my friend's attention was altogether directed. The depth over the gravel was in the shallowest places about 2 ft. 6in., and his method of proceeding was to burrow his head and more than half the body amongst the stones, causing a small cloud of sediment to arise at each

dive as he worked his head and fore-feet about. He never remained under water longer than a trifle over half a minute, and stayed on the surface between the dives rather less than half a minute, as ascertained by careful timing during seven or eight dives. While under the water, whether burrowing in the gravel, or seeking a fresh spot in which to burrow, he emitted a large quantity of small bubbles, which, rising constantly to the surface, would have accurately marked his position, even if the clearness of the water had not enabled me to see him the whole time. The fur seemed to repel the water just as the feathers of a water-bird do, and appeared perfectly dry the instant the back emerged above the surface. He generally remained motionless on the surface except that the upper and lower mandibles were working rapidly with a lateral grinding motion, just as one might expect from the flat horny rudiments of teeth, and the nature of the articulations between the jaws. From the time I first saw him till he quietly sailed off for his burrow (which I subsequently found at the lower end of the pool) his operations lasted over three quarters of

Several times during his burrowing in the gravel, an English trout of nearly half a pound weight made his appearance on the outskirt of the cloud of sediment raised by the platypus, and darted on some prey which was too minute for me to distinguish—the fish evidently having no fear of its

neighbour.

As the spawning time of our Tasmanian grayling was then commencing in the earlier rivers (of which the Mount River is one) I had a strong suspicion that the platypus was collecting ova for anything but a righteous purpose, and, therefore, as soon as he had cleared out for the night, I waded on to the upper part of the gravel bed where it was somewhat shallower, and brought a few handfuls on shore for examination; in this there were no eggs, but a large number of caddis grubs or pupe of a small stone-fly belonging to the Phryganidæ, which appear to abound in some of our rivers, and these doubtless were the attraction, as I well remember dissecting specimens of the Platypus in which the curious cheek pouches were found distended with the cases of similar caddis grubs.

Although no fish eggs were found in this particular gravel bed, it bore so close a resemblance to a large trout rid, to rob which the whole of the animals operations so evidently fit him, that though an advocate for living and let live, I cannot conscientiously recommend the owners of trout streams to en-

courage the presence of the Ornithorhynchus anatinus.