

BETTONGIA GRAII, Gould.

Gray's Jerboa Kangaroo.

Hypsiprymnus Graii, Gould in Proc. of Zool. Soc., part viii. p. 178.—Waterh. in Jard. Nat. Lib. Mamm., vol. xi. (Marsupialia) p. 190.

Bettongia Grayii, Gray, List of Mamm. in Coll. Brit. Mus., p. 93.

Hypsiprymnus (Bettongia) Graii, Waterh. Nat. Hist. of Mamm., vol. i. p. 203.

—Lesueuri, Quoy et Gaim. Voy. de la Coquille ?

Booŕ-dee, Aborigines of the mountain districts of Western Australia.

I FIRST described this species in the "Proceedings of the Zoological Society of London" for 1840, from Swan River specimens, and remarked that it differed from its near ally, the *Bettongia rufescens*, in being of an ashy-brown colour above, and in having the hairs which clothe the back of the ears of the same colour as those of the head. During the years which have elapsed between 1840 and the time at which I am now writing (1855), many other specimens have come under my notice, the examination of which has confirmed my views as to its specific value: although in some of its characters it approximates to *B. rufescens*, its most near ally is the species found in Van Diemen's Land, and figured under the name of *B. cuniculus*; it differs, however, from that animal in its more bluff head and in its shorter hind feet. Mr. Waterhouse remarks also, that although the many specimens which have come under his notice exhibited considerable variation in their colouring, and sometimes approximated very closely to other species, yet, with the assistance of the skull, he found no difficulty in distinguishing them.

I have received examples of this animal from various parts of the south-western coasts of Australia, and it appears to be equally abundant in the plains around Adelaide as in those in the neighbourhood of Perth in Western Australia. My drawing was taken from living examples in the Menagerie of the Zoological Society, and I mention this because the positions may appear somewhat singular, but they are correct representations of those the animals assumed at the time. Mr. Gilbert, who had many opportunities of observing the *Bettongia Graii* in Western Australia, states that:—

"It is truly gregarious, many dwelling together in extensively ramified burrows with several entrances, before which the excavated earth is formed into large mounds; the openings are not, as usual, mere round holes, but are dug out in the form of tunnels with perpendicular sides, as correct as if dug with a spade. These burrows are usually constructed in a bank sloping down to a brook or river, and are very numerous along both banks of the river Avon. I made several attempts to dig them out, but failed in every instance in consequence of the depth, six or eight feet, and sometimes even more, at which the burrows are constructed, and of their running one into the other in endless confusion. The Booŕ-dee is exclusively a nocturnal feeder, and, by quietly watching near the entrances to the burrows at sunset, may be shot in considerable numbers either when they emerge or while feeding in the immediate vicinity. It is one of the most destructive animals to the garden of the settler that occurs in Western Australia, almost every kind of vegetable being attacked by it, but especially peas and beans; and I know of no species of its size which makes so loud a thumping noise while hopping along the ground on being alarmed; besides making this noise with its feet, it also utters, when first started, a most singular succession of sounds, which I find it impossible to describe. Many of the specimens brought in by the natives were much discoloured, either by their dirty cloaks, or the clayey soil in which they had been captured. A remarkable circumstance connected with this animal is, that it is extremely difficult to meet with specimens which are not more or less denuded of the fur of the back, and I have often shot examples almost destitute of fur on any part of the body; whether this is the result of disease or some accidental circumstance I am unable to say, but the skins of several I examined certainly presented a very similar appearance to that of dogs afflicted with mange.

"The Booŕ-dee is confined to the interior, and, besides burrowing as above described, sometimes dwells among the rocks like the *Petrogale*."

Fur of the upper and under surface grey at the base; hairs of the under surface dirty-white externally; those of the back dirty-white, inclining to ash-colour near the apex, and tipped with brownish-black; on the sides of the head and body a very faint wash of yellow; ears sparingly clothed, internally with small yellowish hairs, externally with fur like that of the head; feet, greyish-brown in Western Australian specimens, and dark brown, inclining to chestnut, in those from South Australia. A similar difference occurs in the colouring of the tail; there is also an absence of white hairs near the tip of South Australian specimens; nose and other denuded parts flesh-colour.

The figures are about the size of life.