MELANISTIC NATTERJACK TOADS ON THE SEFTON COAST, MERSEYSIDE

R. A. HALL and D. A. NISSENBAUM

36 Lathom Road, Southport, Merseyside

INTRODUCTION

The yellow vertebral stripe of Natterjack toads (Bufo calamita) is the main diagnostic feature. Thus Smith (1951), states that in the British Isles it is never absent. It is known, however, that Natterjacks without stripes do occur. Cooke et al (1983) describe three such animals, one of which was considered to be melanistic. This note records the occurrence of stripeless, apparently melanistic Natterjacks in the coastal dunes of north Merseyside.

DESCRIPTION

Whilst undertaking regular Natterjack survey work at Birkdale on 28th April 1986, the authors located four stripeless toads. In 1987, at the same breeding pool, two were found on the 6th of April, one on the 14th, and one on the 21st. The individuals located on the 6th of April were temporarily retained for detailed examination. the following description is based upon notes taken by the authors and Dr. P.H. Smith.

Snout-vent lengths (mm): individual 1 51 individual 2 46.

General description: Both toads were similar in appearance, this description relating to both. the upperparts were uniformly dark borwn. As in normal Natterjacks the skin was warty. The main warts were dark orange on their upper surface, and paler on the sides. The parotid glands were short and well demarkated, diverging slightly anteriorly; they were orange-brown in colour. The underparts were pinkish grey. No vertebral stripe was present. The edge of the jaws were creamy brown. The fore digits were yellowish, the 3rd and 4th tipped brown, while the hind digits were darker, lacking the blackish tips. The iris was a very dark brown colour, the pupil black. The gait was typical Natterjack, running rather than hopping. The general body structure was also characteristic of the Natterjack. The calls were identical to those of male Natterjacks.

The toads were photographed and released, where found, on the 7th April.

DISCUSSION

The specimens are unusual as they lack the yellow vertebral stripe. In Britain only five stripeless Natterjacks have been recorded in the literature, one of which was melanistic (Cooke et al 1983). The Merseyside individuals appear to lack white, yellow and green pigments in their skins. This in turn suggests either a lack of, or non-functioning of lipophore and guanophore skin pigment cells. Thus their colouration must be due to the melanophores (Frazer 1983).

The Natterjacks described would therefore appear to be melanistic toads.

ACKNOWLEDGEMENTS

The authors would like to thank Dr P.H. Smith, of Liverpool Polytechnic Biology Department, for corroborating the identification of the specimens and for comments on the manuscript. Thanks also to Paul Franks for developing and printing the photographs.

REFERENCES

Cooke A.S.; Banks B.; and Dennison S. (1983). Stripeless Natterjacks in England. British Herpetological Society Bulletin, No. 7, 1983.

Frazer D. (1983). Reptiles and Amphibians in Britain. Collins, London.

Smith M. (1951). The British Amphibians and Reptiles. Collins, London.



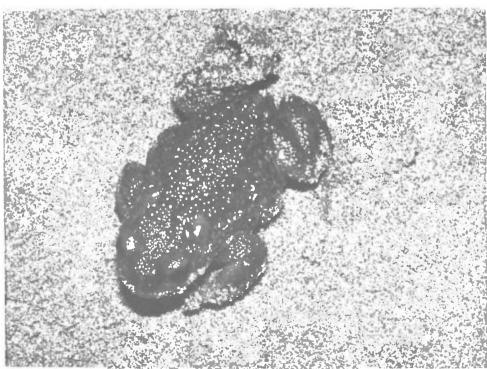


Plate 1. Melanistic Natterjack Toads. Birkdale, Merseyside 1987