RETINAL PHOTOGRAPHY IN ANIMALS*†

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RETINAL photography in animals is a useful aid to veterinary teaching and diagnosis and to both medical and veterinary research. It has been in use since 1930, when Leonardi first took animal fundus photographs, and a few years later Huber (1937) photographed the dog's retina. The subject is discussed by Saurer (1947), Catcott (1952), Luginbühl (1958), Byrom (1963), Barnett (1963), Donovan and Wyman (1964), and Barnett and Keeler (1967).

Method

We have found that the Kowa hand-held fundus camera is simple to use; it is portable and rarely requires general anaesthesia or tranquillization. If the animal is in darkened surroundings, a mydriatic is often unnecessary. Minimal restraint, provided by one assistant, is all that is required for both large and small animals. The eyelids are separated with the first finger and thumb of the left hand and the front of the camera is rested on the left thumb to steady the apparatus and prevent the light projection prism from touching the cornea. Reflex viewing allows the fundus to be focused.

The intensity of the strobo flash can be varied, and the following settings are suggested for various animals using colour reversal film rated at ASA 25 (15 DIN):

Human	Max.	Donkey	6	Pig	6
Monkey	Max.	Ox	7	Dog	5
Horse	6 or 7	Sheep	7 or 6	Cat	4 or 3

A wide range of domestic and wild animals has been successfully photographed (Figs 1 and 2, and Fig. 3*a-d*, page 201).

FIG. 1.—Fundus of the cat.

FIG. 2.—Fundus of the horse.

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(a) Shorthorn calf.

(b) Jersey cow.

(c) Persian Gazelle.

(d) Bison.

FIG. 3.—Fundus of four ruminants.

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