

2. Zoological Society of London.

3th April, 1883. — The Secretary read some extracts from a letter he had received from Mr. J. Sarbo in reference to the Gayal. The writer observed that *Bos gaurus* (the Gaur) and not *Bos frontalis* (the Gayal) is the Wild Ox of Assam, and that the *B. frontalis* is not known in a wild state, but only as a semi-domesticated animal owned by various wild tribes from Assam to Arracan. — Mr. Sclater called the attention of the Meeting to the skin of a Brown Crow from Australia, which had been sent to him for examination by Mr. Albert A. C. Le Souef, C.M.Z.S., and which he was inclined to regard as a variety in plumage of *Corvus australis*. — Mr. A. G. Butler read a paper containing an account of a collection of Indian Lepidoptera made by Lieut.-Col. Charles Swinhoe, chiefly at Kurrachee, Solun, and Mhow. Thirty-two new species were described, and numerous field-notes by Col. Swinhoe were incorporated in the paper. — Col. J. A. Grant read some notes on the Zebra met with by the Speke and Grant Expedition in the interior of Central Africa in 1860—63, which certainly belonged either to the true Zebra (*Equus zebra*) or to its closely allied northern form, the recently described *Equus Grevyi*. — P. L. Sclater, Secretary.

3. Linnean Society of London.

19th April, 1883. — A paper was read by Sir John Lubbock, 'On the sense of Colour among some of the Lower Animals'. He said, some years ago M. Paul Bert made a series of interesting experiments with the common daphnia or water flea which is so abundant in our ditches and pools; he exposed them to light of different colours and he thought himself justified in concluding from his observations that their limits of vision at both ends of the spectrum are the same as our own being limited by the red at one end and the violet at the other. In a previous communication Sir John Lubbock showed that on the contrary they are not insensible to the ultra violet rays and that at that end of the spectrum their eyes were affected by light which we were unable to perceive. These experiments have recently been repeated by M. Merezkowski who however maintains that though the Daphnias prefer the yellow rays which are the brightest of the spectrum they are in fact attracted not by the colour but by the brightness; that — while conscious of the intensity of the light they have no power to distinguish colours. Given an animal which prefers the brightest rays, it may seem difficult to distinguish between a mere preference for light itself rather than for any particular colour. To test this however Sir John Lubbock took porcelain troughs about an inch deep 8 inches long and 3 broad. In these he put 50 daphnias: and then in a darkened chamber threw upon them an electric spectrum arranged so that on each side of a given line the light was equal, and he found that an immense majority of the Daphnias preferred the green to the red end of the spectrum. Again to select one out of many experiments he took four troughs and covered one half of the 1st with a yellow solution, $\frac{1}{2}$ of the 2nd with a green solution, $\frac{1}{2}$ of the 3d with an opaque plate and he threw over one $\frac{1}{2}$ of the fourth a certain amount of extra light by means of a mirror. He then found that in the first trough a

large majority of the *Daphnias* preferred being under the yellow liquid rather than in the exposed half, that in the second a large majority preferred being under the green liquid rather than in the exposed half; that in the third a large majority preferred the exposed half to that which was shaded and in the 4th, that a large majority preferred the half on which the extra amount of light was thrown. It is evident then, that in the first and second troughs the *Daphnias* did not go under the solution for the sake of the shade, because other *Daphnias* placed by their side under similar conditions preferred a somewhat brighter light. It seems clear, therefore, that they were able to distinguish the yellow and green light and that they preferred it to white light. No such result was given with blue or red solutions. In such cases the *Daphnias* always preferred the uncovered half of the trough. It is of course impossible absolutely to prove that they perceive colours, but these experiments certainly show that rays of various wave lengths produce distinct impressions on their eyes; that they prefer rays of light of such wave lengths as produce upon our eyes the impression of green and yellow. It is of course possible that rays of different wave lengths produce different impressions upon their eyes, but yet that such impressions differ in a manner of which we have no conception. This however seems improbable, and on the whole therefore it certainly does appear that *Daphnias* can distinguish not only different degrees of brightness but also differences of colour. — The Rev. A. E. Eaton gave a digest of an extensive Monograph of the Ephemeridae or Mayflies, Part I. In this the subject is prefaced by the historical account and his views of the group generally; the genera are defined and a tabular conspectus of the present known species indicated. — J. Murie.

4. Linnean Society of New South Wales.

March, 28th 1883. The following papers were read: 1) (Botanical).

2) »On tooth-marked bones of extinct Marsupials.« By Chas. W. de Vis, B.A. A large proportion of fossil marsupial bones from the Darling Downs, recently examined by Mr. de Vis, are considered by him to show more or less decided traces of the action of the teeth of carnivorous animals. The tooth-marks are ascribed to the agency partly of the Native Dog, partly of the *Thylacoleo*, and partly of an extinct species of *Sarcophilus* which was identified by a portion of a tibia.

3) »On *Brachalletes Palmeri*«, an extinct Marsupial. By Chas. W. de Vis, B.A. A femur from the Darling Downs differs so markedly from that of *Macropus* and *Halmaturus* in the less prominent character of the great trochanter, that it is considered to belong to a new generic type, proposed to be named *Brachalletes*.

4) On the habits of the »Mallee Hen« (*Leipoa ocellata*) by K. H. Bennett. This gives an interesting and detailed account from the author's own observation of the nidification and general habits of this very curious bird.

Mr. Macleay exhibited a specimen of *Dendrolagus Dorianus*, a new species of Tree Kangaroo from Mount Owen Stanley, New Guinea, described by Mr. E. P. Ramsay at the January meeting of the Society. He pointed out that the hair on the body all turned the wrong way.

Mr. Macleay also exhibited some specimens of a Moth, with a fungus upon which their larvae had fed. He stated that the larvae were inhabi-

ZOBODAT - www.zobodat.at

Zoologisch-Botanische Datenbank/Zoological-Botanical Database

Digitale Literatur/Digital Literature

Zeitschrift/Journal: [Zoologischer Anzeiger](#)

Jahr/Year: 1883

Band/Volume: [6](#)

Autor(en)/Author(s): Murie J.

Artikel/Article: [3. Linnean Society of London 302-303](#)