

Keading petrel (*Oceanodroma kœdingi*), Brandt cormorant (*Phalacrocorax penicillatus*), white-crested cormorant (*P. dilophus cinninatus*), Baird cormorant (*P. pelagicus resplendens*), western grebe (*Aechmophorus occidentalis*);² Holboell grebe (*Colymbus holboellii*).²

It has been estimated that the birds of the island groups, including the migratory birds, number at least 100,000.

One hundred and thirty-seven species of birds have been listed from the Olympic Peninsula, and are described in the paper of which this is an abstract.

The full paper will probably appear in the *Transactions of the Kansas Academy of Science*.

The Differentiation of Neuroblasts in Artificial Culture Media: M. L. SHOREY, Milwaukee-Downer College.

The experiments to be described were conducted for the purpose of gaining evidence regarding the factors involved in the differentiation of neuroblasts. Previous experimental work has led to the expression of two radically opposed views; one that they are entirely self-differentiating (Harrison, 1907, Braus, 1906), the other that no differentiation occurs except in the presence of the normal end-organs, or the products of the metabolism of these organs (Shorey, 1909).

Neuroblasts from the medullary canal of *Necturus* were placed in artificial culture media, one containing the products of muscular metabolism, and the other not. In each the cells remained alive for a considerable period of time, but only in the first were fibers developed.

Spermatogenesis in the Mole Crickets: W. J. BAUMGARTNER, University of Kansas.

The paper will show the method of formation of the tetrads, and the method of maturation division. The work indicates that while Vom Rath is correct in theory, his figures are not at all true to the conditions found in the specimens. His illustrations must have been drawn mostly from imagination.

The chromosomes in the maturation divisions show a constancy of number, and a constancy of the series of shapes through which the individuals pass. The accessory is present, and one of the tetrads divides unequally.

This paper will be printed in *Kansas University Science Bulletin*.

GALESBURG, ILL.

H. V. NEAL,

Secretary

² Migratory.

SOCIETIES AND ACADEMIES

THE TORREY BOTANICAL CLUB

THE first meeting of the club for 1911 was held at the American Museum of Natural History, on January 10, President Rusby in the chair. Dr. C. A. Darling, of the department of botany, Columbia University, was nominated for membership.

This being the annual meeting, reports were presented by the various officers.

The report of the treasurer was presented and upon motion referred to an auditing committee.

The secretary reported that fifteen meetings had been held during the year with a total attendance of 467, as against 411 in 1909, and an average attendance of thirty-one, as against twenty-seven last year. Twelve persons have been elected to membership, and eight resignations received and accepted. Six illustrated lectures were delivered during the season at which the combined attendance was 319, as against 251 at seven meetings last year.

The editor reported that the *Bulletin* for the year 1910 contains 630 pages and 36 plates, and that the expense of its publication was less than the amount allowed for it by the budget committee. He also reported that only one paper had been published in the *Memoirs*, this being a paper by Dr. O. Butler on "The Californian Vine Disease." The editor declined to be considered for reelection.

The editor of *Torreya* presented a special report for that periodical. The volume of *Torreya* for 1910 contained 292 pages.

The chairman of the field committee reported that twenty-three meetings were advertised during the year, one of which was an afternoon lecture at the New York Botanical Garden. Eight meetings were not held on account of stormy weather or from other causes. At the fourteen field meetings actually held there was a total of 103 persons present, making an average attendance of a little more than 7 at each meeting.

As chairman of the local flora committee, Dr. N. L. Britton gave a brief report of the investigations being carried on by Mr. Norman Taylor on the local flora.

Election of officers for the year 1911 resulted as follows:

President—H. H. Rusby.

Vice-presidents—Edward S. Burgess and John Hendley Barnhart.

Secretary and Treasurer—Bernard O. Dodge.

Editor—Philip Dowell.

Associate Editors—John Hendley Barnhart, Jean Broadhurst, Ernest Dunbar Clark, Alexander William Evans, Tracy Elliot Hazen, Marshall Avery Howe, Herbert Maule Richards and Norman Taylor.

The following committees were appointed by the president for the year 1911:

Finance Committee—John I. Kane and H. M. Richards.

Program Committee—Elizabeth G. Britton, Fred J. Seaver, Tracy E. Hazen and Jean Broadhurst.

Field Committee—E. B. Southwick, Norman Taylor and William Mansfield.

Committee on Local Flora—N. L. Britton, chairman, Phanerogams: N. L. Britton, C. C. Curtis, E. P. Bicknell, K. K. Mackenzie, E. S. Burgess and E. L. Morris. Cryptogams: Wm. A. Murrill, E. G. Britton, Tracy E. Hazen, M. A. Howe and Philip Dowell.

Budget Committee—H. H. Rusby, E. S. Burgess, J. H. Barnhart, B. O. Dodge, Philip Dowell and N. L. Britton.

PERCY WILSON,
Secretary

THE ANTHROPOLOGICAL SOCIETY OF WASHINGTON

THE 450th regular meeting of the society was held in the hall of the Public Library, December 20, 1910, 8 P.M., with the president, Dr. J. Walter Fewkes, in the chair.

The paper of the evening was on "The Winnebago Winter Feast," by Mr. Paul Radin. The speaker gave a description of the ceremonies incident to this feast and dwelt on the religious and social elements connected with the celebration.

In the discussion, which followed the reading of the paper, Dr. Swanton stated that among the Indians of the Pacific coast the ceremony is observed on the death of an uncle and to strengthen a chief, but in either case the social element predominates over the religious. Mr. La Flesche pointed out that among the old tribes the feasts are held about spring time, when life is awakened, heralded by the arrival of thunder. Mr. Hewitt and Dr. Fewkes gave parallels from the Iroquois and the Hopi Indians, respectively.

THE 451st regular meeting of the society was held in the hall of the Public Library, January 17, 1911, with the president, Dr. J. Walter Fewkes, in the chair.

The first paper of the evening was on "The Totemic Complex," by Dr. A. A. Goldenweiser.

The speaker first gave a brief survey of the study of totemism from the sixteenth century to the present as represented by Frazer, Morgan, Lang, etc., in England, and by Boas and Swanton in America. He then pointed out the difference of conception and method between the British and American investigators and subjected the English point of view to a thoroughgoing criticism. This point of view is evolutionary and comparative. It assumes totemism as a necessary stage in the evolution of religion and hence wherever it could trace the existence of one of the supposed elements of totemism, such as exogamy, tabu or totemic names, it established there the existence of the totemic system. In this way totemism was attributed to the ancient Egyptians, the Romans, the Semites (by Robertson Smith). Dr. Goldenweiser pointed out that the various features of totemism, such as exogamy, tabu and descent from an animal are nowhere found united, but exist separately and independently from one another and are hence not correlated to one another. Totemism can, therefore, not be studied as an organic whole, but in its various elements. The element of descent is the main feature which gives a social coherence and stability to a social group. Next to this in importance is the bond of union formed by common ceremonies.

The second paper was on "The Medicine Arrows of the Cheyenne," by Dr. Truman Michelson. The ceremony, which was attended by the speaker in 1908, consists of a long ritual, songs and prayers, and lasts through seven days. Of these the first three days are preliminary. The persons taking part in the ceremony are the chief priest, the candidate or candidates who are to be initiated, each accompanied by a friend who acts the "old man." The participants live during the seven days in lodges or tents within a closed precinct. The speaker recited parts of the songs and prayers addressed to sky and earth. These are accompanied by processions, moving from lodge to lodge, burning of pieces of sweet grass, etc. The center of the ceremony, which gives it its name, consists in laying arrows on the ground, with heads to north, surrounded by twelve buffalo heads. The officiating priest goes through various motions, while the candidate breathes four times on the arrows. No woman may witness the ceremony.

Both papers were discussed by Messrs. Swanton, Hewitt, Hough, Fewkes and Casanowicz.

I. M. CASANOWICZ,
Secretary