

pigeon. The origin of the barred wing-pattern is thought to have been from the uniformly checkered style. Both patterns, by the way, occur among domestic pigeons!

Several sources of evidence are adduced to lead to this conclusion. One is that different wings (of *Columba livia*) may be arranged so as to show uninterrupted gradation from one extreme to the other. Another source of evidence is obtained by comparing in a similar way different wild species. We venture to suggest that neither of these sources of evidence show anything as to the direction of variation *thru time*; and this, it seems to us, would be the crucial point to be proven.

Another source of evidence is based upon the axiomatically-accepted idea that the male plumage is the most specialized (farthest evolved), the female next, and the juvenal least (that is, most primitive). This sequence, apparently in harmony with the orthogenetic theory, is shown in the wing-patterns of many wild species of pigeons, and Professor Whitman places much value upon this as indicating the direction of the development of the characters.

But we would object that it seems just as clear, in a great many species of birds, that the *juvenal* plumage is the *specialized* one (for the sake of protection), the female often as much, or nearly as much, specialized (and for a similar reason), and the male, therefore, the most *generalized*! This reverse theory accords better with the demands for survival, and would therefore be explainable by natural selection. There are many adaptive structures in the young, lost in the adult because useless; for instance, the calcareous nodule on the tip of the chick's bill. Ontogeny does not repeat phylogeny in every detail.

The best point in proof of the theory of orthogenesis was obtained thru the breeding and selection of tame pigeons. It was found that artificial selection could accomplish the reduction of the number of checkers, but would never lead from bars to checkers. The author concludes from this that "the direction of evolution can never be reversed." Hence the direction of evolution in the present case is from the checkered pattern towards the barred. As there seems to be no significance at present for these markings (either directive or protective), they appear to the author to exhibit an instance of orthogenesis. We must confess that, while we do see several such cases of traits exhibited in progressive series (if properly arranged), we do not clearly see evidence of an active variation thru time in any one direction.

We are pleased to remark that Professor Whitman, after careful consideration, concedes but little probability to the frequent occurrence of mutations, according to the theories upheld

by Hugo de Vries. Mutation, the abrupt appearance of new species without gradual successive and continuous transitional stages, must be rare among birds, if it occurs at all.

However, we cannot here take space to carry on a discussion of the problem of the origin of species, which is still the greatest problem in biology. What a field there is in ornithology for the student of evolution! The very fact that birds have been so thoroly worked systematically and geographically is all the more reason why this is a particularly advantageous field for such studies. And yet we hear of young men at college being advised to direct themselves to investigation in any other group than birds: "Birds are too well worked"—J. G.

## MINUTES OF COOPER CLUB MEETINGS

### NORTHERN DIVISION

NOVEMBER.—The Club met November 24, 1906, in the Barbara Jordan Library of Ornithology at Stanford University, California.

Vice-president Fisher occupied the chair. The minutes of the previous meeting were read and approved. The following proposals for membership were made: John W. Martin, 339 N. First St., San Jose, Cal., by D. A. Cohen; Miss Flora A. Randolph, 1706 Walnut St., Berkeley, Cal., by D. A. Cohen; Prof. O. P. Jenkins, Stanford University, Cal., by H. O. Jenkins.

The following were elected to active membership: Chas. Reining, 601 Webster St., Palo Alto, Cal.; F. W. Weymouth, 326 Lytton Ave., Palo Alto, Cal.; John E. Thayer, Lancaster, Mass.; Henry F. Duprey, 919 Morgan St., Santa Rosa, Cal.

Nominations for officers for 1907 were made as follows: President, Dr. F. W. D'Evelyn; senior vice-president, Bertha L. Chapman; junior vice-president, Rollo H. Beck; treasurer, H. T. Clifton; secretary, H. O. Jenkins.

The program was now taken up. Prof. V. L. Kellogg favored the Club with an interesting resume of his forth-coming work on the Mallophaga, touching particularly on the peculiar distribution and habits, and the resulting formation of species, of these external bird parasites. N. K. Carpenter read a paper entitled, "A Season with the Pacific Horned Owl", and brought out some very interesting facts in regard to the life history of this bird.

Mrs. Park then spoke to the Club concerning the passage of a Bird and Arbor Day Bill in the California Legislature. Thereupon the following resolutions were adopted:

WHEREAS it has come to the knowledge of the Cooper Ornithological Club that an effort will be made to establish in the State of California, by act of Legislature, a Bird and Arbor Day, to be observed by the Public School children; and

WHEREAS, the observance of this day is not to be made

at all compulsory, and the day is not to be constituted a legal holiday, therefore be it

*Resolved*, that the Cooper Ornithological Club heartily approves of and endorses this movement as one of great educational importance which will tend to secure better protection for our native birds, and be it further

*Resolved*, that a copy of these resolutions be placed on the Minutes of this Club, and published in the January, 1907, issue of THE CONDOR.

H. O. JENKINS, *Secretary*.

#### SOUTHERN DIVISION

NOVEMBER.—Residence of Joseph Grinnell, Pasadena; November 30, 1906. Meeting was called to order by President Howard, with members Grinnell, Morcom, Clifton, Willett, Owen, Joseph Dixon, Watson, Taylor and Law present, and as visitors Messrs. James Dixon, and Howard Wright. The minutes of the last meeting, Oct. 3, 1906, were read and approved.

On motion duly carried, the Secretary was instructed to cast the unanimous ballot of the members present, electing Clarence B. Linton to active membership; this formality was complied with by the Secretary.

The applications for active membership of Reginald Rogers, of Santa Barbara, and C. M. Harris, Willard Chamberlain, and Arthur Howard, of Los Angeles, all proposed by O. W. Howard, were read and filed for final action at the next meeting.

Mr. Grinnell urged on all those present, the importance of sending in all notes on Los Angeles County birds, as the compilation of the new list will soon be under way. A great deal of data has been gathered since the previous list, and all of this should be placed at Mr. Grinnell's disposal as soon as possible. Mr. Grinnell also expressed his desire for notes on comparative bird populations, to the end that valuable information relating to increase or decrease of certain species might be recorded.

A very interesting paper by Wright M. Pierce on the dotted canyon wren was read by the Secretary in the absence of the author. Mr. Pierce described vividly his observations of a brood that was raised in a deserted miner's cabin in a canyon near the foot of Old Baldy.

After an inspection of several interesting series of skins from Mr. Grinnell's private collection, dainty refreshments, served by Mrs. Joseph Grinnell and Miss Grinnell, wound up a very enjoyable evening. Adjourned.

J. EUGENE LAW, *Secretary*.

DECEMBER.—The regular monthly meeting of the Southern Division of the Cooper Ornithological Club was called to order by President Howard Saturday evening, Dec. 29, 1906, at

the residence of H. J. Lelande, 1320 E. 15th Street, Los Angeles, with members Lelande, J. Grinnell, Clifton, Cooper, Alphonse Jay, and Law present, and as visitors Messrs. Fordyce Grinnell and Willard Chamberlain.

The minutes of the last meeting were read and approved. Applications for active membership were proposed as follows: Austin Paul Smith, La Jolla, Cal., by H. W. Marsden; Jesse C. A. Meeker, Danbury, Conn., by O. W. Howard; John F. Ferry, Field-Columbian Museum, Chicago, by H. S. Swarth.

On motion by Mr. Clifton, seconded by Mr. Lelande and duly carried, the Secretary was instructed to cast the unanimous ballot of the members present, electing to active membership, the following named persons already presented: Henry K. Coale, Chicago, Ill.; C. M. Harris, Los Angeles, Cal.; Willard Chamberlain, Los Angeles, Cal.; Arthur Howard, Los Angeles, Cal.; Reginald Rogers, Cheshire, Conn.

A communication from Dr. Frederick W. D'Evelyn, the nominee for President of the Northern Division, was read and heartily endorsed by those present.

An interesting letter from our former and long-time President, Mr. F. S. Daggett, now of Chicago, was read, describing an outing with a few of the old standbys early in November. Messrs. Dean, Gault, Woodruff, Swarth, and Daggett composed the party. A half dozen good winter visitors were observed, including white-wing and American crossbills, and snowflakes. Our eastern brethren certainly are entitled to our heartfelt sympathy when they take a winter trip. It would be rubbing it in too much to mention the names of the dozens of good birds an observer, perfectly comfortable in a khaki shirt outfit and sombrero, can see in a day's winter stroll in this locality. Ask Mr. Daggett if it's not so!

The club then proceeded to nominations of officers for 1907. The following nominations were made and nominations closed in each case on proper motion: For President, Mr. G. Frean Morcom, Pasadena; for Vice President, Mr. G. Willett, Los Angeles; for Secretary, Mr. J. Eugene Law, Hollywood; for Treasurer, Mr. W. Lee Chambers, Santa Monica. Towards the close of the evening Mrs. Lelande served elaborate refreshments. Adjourned.

J. EUGENE LAW, *Secretary*.

NOTE.—The lateness of this issue of THE CONDOR is regretted by all concerned; but it is one of those things that can't be helped, and is liable to occur sometime to everyone. The reason in the present instance is the serious illness of our printer and simultaneously of several of his office force.—ED.