In the latter direction the interesting plan was tried of maintaining birds in aviaries in the hope that the young when released would regard the locality as their home and breed there. One colony of about 10,000 birds was built up in a few years by this method. The total number of the birds in Egypt at the time of the reports¹ here reviewed was estimated at about 100,000 resulting from the original nucleus of 120 pairs during a period of 8 years of protection and encouragement. The movement for protection of the species was largely for economic reasons and we are informed that "From reports received from landowners it appears that these Cattle Egrets will in this one year, 1920, have saved to Egypt crops to the value of from two to three million pounds, which would otherwise have been destroyed by insect pests." Money estimates of the good done by birds are hard to get and it is gratifying to have this notable modern instance.—W. L. M.

The Ornithological Journals.

Bird-Lore. XXIV, No. 5. September-October, 1922.

Stories from Birderaft Sanctuary. By Mabel Osgood Wright. II. The Rights and Wrongs of Bird-Trapping.—From the standpoint of the bird sanctuary Mrs. Wright finds the Starling a pest in spite of the Biological Survey's praise of it as a destroyer of noxious insects, she likewise sounds a timely warning against trapping birds for banding purposes by any but skilled persons who are able to watch their traps continually.

A Vireo as Hostess. By Ernest Harold Baynes.—A remarkable experience with a nesting bird.

Koo. By Florence Merriam Bailey.—A familiar biography of a Roadrunner at an Arizona camp.

The A. M. S. Robins. By O. C. Wood.—A nesting study at Denver, Colorado.

The Mating Antics of the Pacific Nighthawk. By Mabel A. Stanford.

There is an instructive paper by Dr. A. A. Allen in the school department on Young Birds their Growth and Care; while Mr. Pearson in the Audubon Bulletin considers the Herons of the United States, with a plate by Fuertes. The species treated in this installment are Snowy and Reddish Egrets and Little Blue Heron.

A photograph of more than ordinary interest is one of a young Whooping Crane taken in Saskatchewan in the summer of 1913. The species is rapidly approaching extinction.

Bird-Lore. XXIV, No. 6. November–December, 1922.

The Trailer-Blind de Luxe. By Guy A. Bailey. Account of a little house on wheels which is used as a photograph blind and can be attached to a car or wagon as a trailer. Photographs taken from the blind are used as illustrations.

¹ Ministry of Public Works, Egypt. Report on the Zoological Service, (1914–1918) 1920, pp. 79–86, and (1920) 1921, p. 4.

The Brown-headed Nuthatch. By Frank F. Gander. An account of the bird in Florida with illustrations from photographs.

A Prince of the House of Eagles. By Etta S. Wilson.—A Bald Eagle kept in captivity remained in the brown plumage for three years.

Valley Quail and Roadrunners. By Ernest McGaffey.—Sketches of these species in southern California.

The Baltimore Oriole is the subject for the migration and plumage articles and a colored plate by Fuertes illustrates the male, female and immature.

The Annual Report of the National Association of Aububon Societies takes up the greater part of the issue, full as usual of valuable and instructive information on bird conservation and profusely illustrated, two of the more striking pictures are one of Audubon's old home, New York City, which is threatened with destruction, and a portrait of Louis Fuertes.

The Condor. XXIV, No. 4. July-August, 1922.

With the Willow Ptarmigans. By Grace A. Hill.—Breeding north of Nome, Alaska, with photographs of old and young.

Further observations on the activities of the California Woodpecker. By W. E. Ritter.—An extremely interesting paper in continuation of one published in 'The Condor' for 1921 (pp. 3–14.) The author's previous surmise that the birds are more interested in the grubs contained in the acorns than in the acorn meats he considers has not been maintained in view of his further observations, and contrary to his previous opinion he now finds that living oaks are sometimes used as storage trees. On other points his earlier conclusions have been confirmed.

In addition he finds that the store holes are made to fit the size of the acorns where two species of oaks with different sized acorns are present. Also that the bird which digs a hole is not the bird that uses that hole for the storage of an acorn, all are hole-diggers and all are nut storers, but no bird has any particular hole or tree in which to place his nuts. Frequently a bird will deposit a nut in a hole and then take another nut out of its hole and place it in another hole. The nuts are placed in the holes butt-outward but as all acorns in Prof. Ritter's observation were taken from the trees it is obvious that somewhere the bird reversed the position of the nut in its beak, where and when he failed to determine.

The author explains that his investigations of the habits of these woodpeckers has to do with a broad study of adaptation and that he has come to the conclusion that as animals are vastly more responsive to changed conditions, that is to say more adaptive, in their activities than in the organs which preform the activities, that the activities of animals furnish a better point of attack for scientific study of adaptation than is offered by an examination of their organs.

He admits that the development of such an instinct as this acorn storing may result in absurdities such as the storing of pebbles, or the digging of countless holes that are never used, but insists that this is not an overdeveloped instinct but a badly controlled one, and that nature is always

providing the necessary remedy or control which is what we know as intelligence.

At present he concludes the adaptations connected with the acorn storing are none of them perfect and some of them very dangerously imperfect.

Fossil Birds from the Pleistocene of McKittrick, California. By Loye Miller—An account of the forms found in this new exposure of Pleistocene asphalt, comparable in nature if not in extent to the Rancho La Brea beds.

A New Sparrow from Southern California. By W. E. Clyde Todd. —Aimophila ruficeps canescens (p. 126) San Diego, Calif.

Status of the Crested Jays of the North-western Coast of California. By Joseph Mailliad.—As the result of a careful study of a large series of specimens Mr. Mailliard comes to the conclusion that the Coast Jay (Cyannocitta stelleri carbonacea) inhabits only the region about San Francisco north to Tomales Bay and south to Monterey Bay, with intergradation with the Blue-fronted Jay (C. s. frontalis) on the south but rather sharply defined on the north by a narrow non-coniferous belt where no crested Jays are found. North of this belt frontalis extends westward to the coast and then gradually approaches stelleri typical specimens of which are encountered in Vancouver, birds from the northern interior of California being intermediates between frontalis and stelleri with nothing to do with carbanacea.

The Condor. XXIV, No. 5. September-October, 1922. No. 5

The Mimetic Aspect of the Mocker's Song. By Donald R. Dickey.— A most suggestive note. A young Mockingbird taken in October and thus only a few months old, was perfectly "imitating" the notes of the Sparrow Hawk, Killdeer and Cactus Wren along with the more characteristic Mockingbird interludes. The author questions whether the "imitative" portion of the song was not "as inherent and hereditory in his breast as were the true Mockingbird phrases." He further concludes: while no claim is made that the perfection of a Mocker's so-called imitation is attained without examples to copy, the suggestion is made, however, that the basic phrases which simulate the notes of other birds may well be as intrinsic a part of his transmitted vocal ability as are those other interludes which have no analogies among other species.

Our English Nomenclature. By A. D. Dubois.—A plea for a definite system and rules to govern English names such as we have for scientific names, similar to those advanced by Mr. Taverner and others. We agree with the author that it would be well in cases where we have "Crossbill" and "White-winged Cross-bill," for instance, to add a qualifying word to the former, as "Red Crossbill" but when it comes to introducing "Whitebreasted" into the names of all the Nuthatches which are at present subspecies of *Sitta carolinensis* we cannot agree. Some day we may find that the three western subspecies are really specifically different from the eastern forms; then *aculeata* becomes a specific name and the other races when so many of our vernacular names have become so well established. Cactus Wrens' nests in Southern Arizona. By Florence Merriam Bailey.—Another of Mrs. Bailey's interesting contributions to Arizona ornithology now appearing in various of our ornithological magazines. The detailed analysis of the botanical make-up of the nests is interesting and might well be adopted by those who write of nests and eggs.

Notes on the Summer Avifauna of Bird Island, Texas and Vicinity. By Alvin R. Cahn.—Annotated list of 68 species with numerous illustrations from photographs.

The Wilson Bulletin. XXXIV, No. 3. September, 1922.

Nesting Birds of Lake County Oregon. By A. G. Prill.—A briefly annotated list.

Some remarks on the Facial Expression of Birds. By George M. Sutton —An interesting study from the standpoint of the artist.

Birds of Greenwood Lake and Vicinity (New Jersey and New York). By Lewis S. Kohler.—This region has been worked by other ornithologists but no reference to previous publications appears. A number of the author's statements are at variance with the experience of others, while the passing over of an alleged record of the Connecticut Warbler with no corroborative data leads one to suspect that the author was unaware of the fact that there are but one or two authenticated Spring records of the species east of the Alleghanies.

Some Iowa Owl Notes. By Fred J. Pierce.—Deals mainly with Screech Owls in Iowa.

Nesting Habits of a Great Horned Owl. By O. J. Murie.-In Minnesota.

Nesting of the Sandhill Crane, Warner Valley, Oregon. By Dr. A. G. Prill.

The Oölogist. XXXIX, No. 9. September, 1922.

Birds of Marney Valley and Malheur Lake Region, Oregon. By Dr. A. G. Prill.—A list similar to that noticed above in the 'Wilson Bulletin.' The alleged nesting of the Trumpeter Swan will be interesting to those in charge of this bird reservation!

The Oölogist. XXXIX, No. 10. October, 1922.

Discovery of the Breeding of the White Ibis in South Carolina. By Alexander Sprunt, Jr.—A colony discovered in a swamp in Charleston County, in company of Arthur T. Wayne, May 20, 1922.

A Trip to the Marshes of Northwestern Iowa. By John L. Cole.

A supplement to this issue contributed by Mr. H. Severn Regar contains a sketch of the life of the late W. H. Werner with portraits and photo-

graphs of some of Mr. Werner's groups which now adorn Mr. Regar's private museum at Norristown, Pa.

A supplement to the June issue consists of an interesting paper by Dr. N. W. Jepson: 'Bird-Lore and Bird Songs' of the North American Indian.

Journal of the Museum of Comparative Oölogy. II, No. 3-4, 1922. Besides an account of the dedication of the Hazard Memorial building which is to house the collections of the Museum, and other papers dealing with Museum activities there are the following:

Nesting of the Sierra Nevada Rosy Finch. By W. L. Dawson.—A lengthy account with many illustrations.

A Little Known American Bird. By Rev. F. C. R. Jourdain.—The Large-billed Puffin as observed by the author in Spitzbergen, in 1921.

On the Nesting of the Barnacle Goose in Spitzbergen. By A. H. Paget Wilkes.— An account of the same experience described in 'The Auk' for 1922, p. 166 by Mr. Jourdain, with the same illustration.

Haunts and Breeding Habits of the Yellow Rail. By Rev. P. B. Peabody.-Well illustrated.

Puysegur Point and Preservation Inlet, with an Account of the Birds. By R. S. Southerland.—Deals with the bird life of the southwestern corner of South Island, New Zealand.

The Ibis. (XI Series.) IV, No. 4, October, 1922.

The Birds of Sind. Part II. By C. B. Ticehurst. —A very fully annotated list.

On a Collection of Birds from Acheen, Sumatra. By R. Snouckaert van Schauburg.—List of material collected by F. C. van Heurn in 1920.

Some Cretan Birds. By H. R. Kelham.—Field notes on a number of species.

On a Collection of Birds made in the Sudan by Major S. S. Flower, O. B. E. in December 1920 and January and February 1921 and Some Remarks on "A List of the Birds of the Anglo-Egyptian Sudan." By W. L. Sclater and C. Mackworth Praed. By M. J. Nicoll.

Notes on the Mound-building Birds of Australia, with Particulars of Features peculiar to the Mallee-Fowl, *Lcipoa ocellata* Gould, and a Suggestion as to their Origin. By Edward Ashby.—An extremely interesting paper. From the data presented we learn that the mounds of the Jungle Fowl (*Megapodius reinwardti*), a bird scarcely as large as a domestic fowl, measure as much as 53 feet in diameter and 167 feet in circumference while they reach a heigth of eight feet and over. Tunnels are scratched out in the mound at an angle of 45 degrees and the eggs are laid at the end, only one egg to a tunnel. The mound of the Brush Turkey (*Alectura lathami*) is similar. In each case the heat generated by the decaying vegetable matter of which the mound is composed is relied upon to hatch the eggs, the same mound being used year after year. Mr. Ashby points out that a new mound generates so much heat that it would cook the eggs and the birds seem able to ascertain just when it is safe to deposit the eggs without endangering them. The Mallee-fowl lives in the drier parts of Australia, where the humidity is known to have decreased very much in recent time and under present conditions the mound heat is quite insufficient to hatch the eggs. The mound is shallower and made largely of sand which on clear sunny days is removed by the birds from immediately over the egg suntil they are almost exposed and filled in again before sunset so that the heat of the sun and that of the freshly warmed sand serves the purpose formerly accomplished by decaying vegetation. If the birds have learned to do this regularly on favorable days, as would seem to be the case, it indicates as, Mr. Ashby says a remarkable development of intelligence.

Hybrids of *Gennaeus* from Natural and Artificial Crosses showing Similar Pattern and Intergrading. By Mrs. Rose H. Thomas.

A Note on Acquired or Somatic Variations. By Percy R. Lowe.

Bulletin of the British Ornithologists' Club. CCLXXI. October 27, 1922.

Capt. G. H. Wilkins gives a short account of the birds observed on the Shackleton-Rowett Expedition to the Antarctic.

Mr. Bannermann describes two races of Sarothrura pulchra obtained respectively in the Cameroon highlands and lowlands by, Mr. G. L. Bates; S. p. tibatiensis (p. 5) and S. p. batesi (p. 7). A number of other new forms are described from Cameroon, China, Australia etc.

British Birds. XVI, No. 1. June 1922.

Habits of the Glaucous Gull as Observed on Bear Island and in the Spitzbergen Archipelago. By A. H. Paget Wilkes.

On the White-billed Northern Diver as a British Bird.—Two certain British records of *Gavia adamsi*.

British Birds. XVI, No. 2. July, 1922.

On the Habits of the Red-throated Diver in Spitzbergen. By G. J. van Oordt and J. S. Huxley.—Remarkable illustrations from photographs.

British Birds. XVI. No. 3. August, 1922.

The Migration of British Starlings: Results of the Marking Method. By A. Landsborough Thomson.—This is a real result of bird-banding, based on five years work, and as has already been pointed out results of real value so far as distribution and migration are concerned can only begin to be had by this method after several years labor. The publication of fragmentary records of birds banded, and scattered returns, are not of much scientific value, and had perhaps better remain, like most similar scientific data, in manuscript, until something definite is accomplished.

In the present paper it is demonstrated that Starlings reared in England rarely leave the island, although stragglers have reached Ireland and one crossed to France. Starlings banded in England in winter, however, have

been taken in Norway, Finland and northern Germany while Starlings banded in summer in Demnark, Sweden, northern Germany, Courlan, Livonia and western Russia have been taken in the British Isles in winter. This of course demonstrates a southwesterly migration in autumn, with a return in spring. Continental banding furthermore shows migration from northern Europe to Spain, Italy, and northern Africa.

British Birds. XVI, No. 4. September 1, 1922.

On the Nest-Building of the Little Tern. By J. N. Douglass Smith.— With interesting illustrations of several types of nests.

Preferential Mating in Birds with Similar Coloration in Both Sexes. By J. S. Huxley.—Although Louisiana Herons observed in Mr. McIlhenny's rookery showed considerable variation in intensity of coloration, in any given pair the male was apparently always brighter than the female and the palest male was mated with the palest female. Similarly among Snowy Herons four were observed with the lores orange instead of yellow and they were found to be mated as two pairs. The suggestion is made that either brother and sister had mated, or that, as the courtship of the herons is mutual, it is probable that two birds with the same level of emotional intensity (which would almost certainly carry with it the same intensity of coloration) would be likely to mate together.

This development of "strains" within the species would account for such types as the bridled form of the Common Murre, and similar forms.

British Birds. XVI, No. 5. October, 1922.

Ability of the Oystercatcher to Open Oysters and its Bearing upon the History of the Species. By J. N. Dewar.—Experiments on captive birds showed that the Oystercatcher can open oysters, attacking the edge of the shell farthest from the hinge which would be the exposed part as the shell stood in the oyster-bed. In a large part of their range, however, Oystercatchers are today unable to find oysters as these mollusks have disappeared from the northern colder waters, at least as littoral species, and there the birds are accustomed to feed on mussels in the same way. The feeding on shellfish seems to be an inherited character developed in the far distant past when the oyster was a wide spread littoral species.

British Birds. XVI, No. 6. November, 1922.

Some notes on the Icterine Warbler. By E. M. Nicholson.

The East Woodhay Warbler Sylvia Bidehensis. By. H. S. Gladstone. Observations on the Birds of Lundy. By L. R. W. Loyd.

The Emu. XXII, Part 1. July, 1922.

Buff-breasted Quail *Turnix olivii*. By A. J. Campbell.—With a colored plate followed by an account of its nest and eggs by H. L. White with photographic reproductions

The Lost Paradise Parrot. By A. H. Chisholm.—The rediscovery of *Psephotus pulcherrimus*, with photographs from life of the birds and their nest in a termites' mound.

A Method of Taking a Bird Census. By J. B. Cleland.—By making actual counts for each species on each walk.

Birds of the Moree District. By F. C. Morse.—With many excellent photographs.

Egret and Glossy Ibis Rookeries. By F. C. Morse.

Bird Notes from Boree. By Mrs. S. P. W. Norton.

The Birds of Little Barrier Island, N. Z. By W. R. B. Oliver.

Notes on Sea Birds between Sidney and England. By A. S. LeSouef. Round the Lamp. R. Stuart Sutherland.—Sea birds observed at Puysegur Light, N. Z.—With measurements of specimens and discussion of the differences between the four species of *Prion*.

Field Notes on the Black Belt Magpie Strepera fulginosa. [Æ. fuliginosa.] By Miss J. A. Fletcher.

New Sub-species of Tit Warblers. By A. G. Campbell.—Five races of *Acanthiza* and five of *Geobasileus*.

The Emu. XXII, Part 1. October, 1922.

On the Status of Several Species belonging to the two Genera, Fregetta Bp. and Fregettornis Mathews. By J. R. Kingborn and N. W. Cayley.— A careful review of characters and variation. The authors conclude that there are two species: Fregettornis grallaria Vieill and Fregetta tropica Gould the latter including leucogaster, melanogaster and tubulata as synonyms. An excellent plate by the junior author illustrates the species.

New Subspecies of Acanthiza nana Vig. and Horst. By H. L. White. A. n. flava (p. 97) N. Queensland.

A Collecting Trip to Cape York Peninsula. By H. L. White.—An interesting account of the expedition of Wm. McLennan to this northern point of Australia in the interests of Mr. White. The nesting of *Psephotis* chrysopterygius is described in a separate paper.

A trip to the Norther River-Scrubs of N. S. W. By E. A. D'Ombrain.

The Orange-winged Tree Runner (Neositta chrysoptera). By P. A. Gilbert.

Birds of Hobart. By M. S. R. Sharland and S. W. Crane.

List of birds found Breeding in and around the Swamps near Moorn, W. A., during 1921. By P. T. Sandland and O. L. E. Orton.

In the Haunt of the Gray Butcher Bird (Cracticus torquatus.)

Notes from Wahroonga, Sydney, N. S. W. By H. Wolstenholme.

The Austral Avian Record. V. No. 1, July 17, 1922.

Some additions and corrections to his 'List', by Mathews, adds a few new genera and sub-species, while 'Notes of Interest' contain publication dates of British Museum Publications, and notes on a number of other works and type designations of certain of Reichenbach's genera. An account of another work by Jarochi the Polish ornithologist (1819) introduces two new genera and several species. One is *Eider* for the Fider Duck ruled out by the International Committee so far as Oken is concerned. but apparently tenable here and conflicting with *Somateria* of even date. This paper and a long one on Thomas Watling, Artist, are by Mathews and Iredale. Seven Watling plates are reproduced in colors. Volume IV, No. 8 of the 'Record' consists wholly of Index.

Ornithological Articles in Other Journals.¹

Patch, Clyde A. A Biological Reconnaisance on Graham Island of the Queen Charlotte Group. (Canadian Field Naturalist, September, 1922.) —With annotated list of the mammals and birds. (Concluded in the October issue.)

Munro, J. A. An Invasion of Coots. (Ibid.)—Large numbers failed to go south on the advent of cold weather in February 1922, and perished on several British Columbian lakes in spite of efforts to feed them.

Lewis, Harrison F. Occurrences of the Meadowlark in Nova Scotia (Ibid.)—Fourteen records.

Evans, William. Notes on the Breeding of the Goosender and the Red-breasted Merganser in the Forth Area: A Retrospect. (Scottish Naturalist, July-August, 1922.)

Rintoul, Leonora J. and Baxter, Evelyn V. Report on Scottish Ornithology for 1921. (Concluded from May-June issue.) (Ibid.)

Ritchie, James. The Great Waxwing Invasion of 1921. (Ibid, September–October, 1922.)—The greatest invasion on record. Flights of this species to Scotland and England have occurred about every ten years since 1834–5 which is the first record available.

Gross, A. O. A Visit to Great Duck Island. (Maine Naturalist. II, no. 3-4. Nov. 25, 1922.)—On the coast of Maine.

Kilburn, Frank. Some Additional Birds Records for Aroostook and Washington Counties [Me] (Ibid.)—A number of other notes on Maine ornithology are to be found in this publication.

Allen, F. H. Some Little Known Songs of Common Birds. (Natural History, May-June, 1922. XXII, No. 3.)—Unusual songs of many species that of the Blue Jay being probably similar to one recorded in the Auk (1919, p. 111). Mr. Allen pays especial attention to the utterances of the Tyrant Flycatchers and the Swallows, groups which are usually neglected in considerations of song.

Cahn, Alvin R. The Brown Pelicans at Home. (Ibid. September-October, 1922, No. 5.)—On the Bird Islands on the Texas coast, with admirable illustrations from photographs.

Wood, Norman A. Observations on the Birds of Berrion County, Michigan. (Occasional Papers of the Museum of Zoology, Univ. of Michigan, No. 119, July 6, 1922.)—An excellent annotated list.

¹Some of these journals are received in exchange, others are examined in the library of the Academy of Natural Sciences of Philadelphia. The Editor is under obligations to Mr. J. A. G. Rehn for a list of ornithological articles contained in the accessions to the library from week to week.