#### BULLETIN

of the

#### ORNITHOLOGICAL SOCIETY OF NEW ZEALAND. NUMBER III. YEAR 1941-42.

Issued October 24th.

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### OFFICERS.

President—Dr. R. A. Falla.

Vice-Presidents—(N.I.), Dr. W. R. B. Oliver. (S.I.) Mr. E. F. Stead.

Secretary-Treasurer—Professor B. J. Marples.

Regional Organisers-Wellington: Mr. R. H. D. Stidolph.

Auckland: Mr. R. B. Sibson. Christchurch: Dr. R. A. Falla. Dunedin—Professor B. J. Marples.

Recorder—Mr. C. A. Fleming.

### MEMBERS OF THE SOCIETY.

The initials in front of the names indicate those members who have contributed short notes for this bulletin.

> A. L. M. Allan c/o P. C. Bull, Ascot, Mangare, Auckland. Mrs. N. Alston, c/o Paymaster Commander Ashby, Glen Rd., Kelburn, Wellington. G. G. Austin, c/o Kempthorne Prosser & Co., Dunedin.

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P. C. Bull, Ascot, Mangare, Auckland.
E. W. Calverly, The School, Half Moon Bay, Stewart Island.
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J.M.C.

Deep Creek School, Marlborough.

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R.A.F.

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N.F. N. Friend, Okarito.

Gowan Bridge School, via Nelson. G. Graham, The School House, Taieri Beach. Mrs. V. Grant, Craigburn, Waimate.

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H. R. McKenzie, Clevedon, Auckland.
C. W. McLatchie, Hilderthorpe, N. Otago.
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R. H. Traill, Half Moon Bay, Stewart Island.
E. G. Turbott, Auckland Museum, Auckland S.E.1.
A. Ward, 344, Crinan Street, Invercargill.
A. H. Watt, Te Kao, North Auckland.
E. V. Welch, Wairarapa College House, Renall St., Masterton.
H. T. Wenham, Durham St., Levin.
A. S. Wilkinson, Kapiti Island.
Mrs. A. S. Wilkinson. Kapiti Island. E. C. Studholme, Te Waimate, Waimate. E.C.S. I.T. R.H.T. H.T.W. Mrs. A. S. Wilkinson, Kapiti Island. S. Wilkinson, Paraparaumu Beach, Wellington.
Major R. A. Wilson, Lethenty, Bulls.
Dr. K. A. Wodzicki, Consulate General of Poland, Box 280, K.A.W.

Wellington.

P.W. P. Wood, Tuki Tuki, Colville.
Mrs. I. Woodhouse, Blue Cliff Station, St. Andrews.
Major G. F. Yerex, Army Headquarters, Wellington.

#### INTRODUCTION.

This, the third and final bulletin for the year 1941-42, contains the short classified notes which have been received during the year. In many cases it is only possible to publish short summaries of the notes which were sent in, but these are filed and will be available in future and may become very valuable. As was recently stated by Dr. Serventy, "well prepared and frequent local lists, even from well-known areas, can be rich mines of material." Some of the longer notes are being held over for inclusion in later Bulletins.

The attention of members is specially directed to the article in this Bulletin dealing with daily note-taking. It is so easy to take a general interest in birds but to make only vague and unsystematic notes, or none at all. If. however, a scheme such as this is carried out, everyone, no matter how busy they are or where they live, can collect interesting and valuable information without interfering with their ordinary affairs in any way. Even those who are in the habit of making notes will find that the adoption of such a system adds greatly to the accessibility and value of their records. The object of our Society is to carry out field work on birds and every member can take an active part. No bird is too common to be worthy of attention.

Attention is also drawn to the special investigations. The response of members to these has so far been disappointing. Make sure that any contributions which you can make, positive or negative, reaches the organiser. If you can observe banded dotterel or dabchick, or collect information from others about them, please do not fail to do so and to send it in. Early laying dates and clutch sizes, especially of introduced birds, are requested by the organiser of the clutch size investigation (Dr. Falla) and a further statement on the breeding season inquiry is included in this Bulletin. Get the habit of observing, counting and making notes, and send them in. The nesting season has begun and now is the time to look out specially for data for these investigations or to try out for oneself a system of daily

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song or other activity records.

Membership still continues to increase and the thanks of the Society are due to those members who have obtained new recruits. Still more are needed and everyone is urged to get as many as possible.

It is highly desirable that as soon as circumstances and finances permit, we have our Bulletins printed instead of typed. The advantages of having a printed periodical are obvious, and it would no doubt attract a considerable number of new members. It has consequently been decided to open a special "Publication Fund," and contributions are invited to it. Since the Society was founded a total of £12 5s. has been donated, and this will form the nucleus of the fund, to which future donations and perhaps a proportion of each subscription will be added. Of this sum, £9 has been donated, since the appeal was made in the June report, by the following members to whom acknowledgment with the thanks of the Society is made: Miss Baker, 5/-; Mr. T. Cockroft, 10/-; Mr. A. B. Deeming, 5/-; Mrs. C. A. Fleming, 5/-; Dr. Gribben, 15/-; Mr. W. Knight, 5/-; Mr. R. H. D. Stidolph, 10/-; Major R. Wilson, £5; Dr. K. A. Wodzicki, 10/-; Mr. P. H. Wood, 5/-; S/Lt. Allan, R.N., 5/-; S/Lt. Bull, R.N., 5/-.

# REPORT OF MEETING.

The Otago Branch of the Royal Society decided to devote one of its monthly evening meetings to the O.S.N.Z. and the Secretary was invited to prepare a programme. The meeting was well attended and four new members joined shortly afterwards. After a general account of the field

study of birds and the aims and objects of the Society by the Secretary, three short communications were made, one on the nesting activities of a pair of blackbirds (I.T.), one on a detailed study of the development of blackbird nestlings (L.G.) and one on the annual periodicity of singing of the bellbird, grey warbler and fantail (B.J.M.). Mr. Richdale also spoke on the activities of the Society and showed a film of his field work at Stewart Island. There were also a number of exhibits, including some of the historical MSS. in the possession of the Society, a set of nests constructed by one pair of blackbirds in one season (I.T.), a map showing the starling and sparrow roosts of Dunedin (O.U. Biol. Soc.) and a homemade mechanism for recording on a smoked drum, rotated by a clock, the movements of a perch (B.J.M.). Subsequently this mechanism has been set up at a blackbird's nest and is at present making a record of the times at which the bird enters and leaves the nest during incubation.

### REVIEW.

The Emu, Vol. XLII., pt. 1, July, 1942. This number does not contain any papers from New Zealand, but one, "Photography in the Swamps—The Marsh Crake," by C. E. Bryant, deals with a bird which is found in this country also. A paper, "Petrel Notes from Western Australia" by F. L. Whitlock and H. M. Whittell, dealing with the bodies of petrels cast up on the beaches, will be of interest to members who have a chance to pursue this line of study. It is to be hoped that all members who find specimens in this way will endeavour to identify and measure them.

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(instructions will be sent on request), and if at all unusual to send them in to one of the museums for expert examination. Another paper of interest is "The Winter flocking of the Pied Currawong" by N. J. Roberts. This deals with an Australian species, but as an account of flocking habits it will be useful to anyone interested in this aspect of bird life.

# PHOTOPERIODICITY INVESTIGATION.

The following remarks may give to the members of our Society a more adequate picture of the proposed study of photoperiodicity in New Zealand birds, than the short note published in the Second Annual Report of 1941.

For many years the close relation of the sexual activities of birds and of the amount of light, i.e., the length of the day, has been known to poultry-breeders. An investigation, published in 1930 by a member of the staff of the School of Agriculture, University of Cambridge, gives us an enlightening survey of the changes in maximum and minimum egg production in poultry in different countries of both hemispheres according to the changing length of daylight. Poultry-breeders have made many attempts in the past to obtain a higher yield in eggs, especially in winter months by introducing artificial light.

Due to the work of two American scientists, Professor Rowan, of the University of Alberta, Canada, and Dr. T. H. Bissonnette, of Trinity College, Hartford, Conn., many facts of the greatest interest for ornithologists have been made known. By a prolongation of a quarter of an hour daily, by means of an adequate electric light, they were able to produce a significant change in the size of the testicles in different birds, and later even in some mammals such as the ferret. In experiments performed in severe climatic conditions of the North American winter, they were able to obtain there as early as January, testicles of a size normally found at the end of April or in May. Later, Rowan found similar conditions in London starlings roosting in the city on account of the street lighting having the same effect as prolonged daylight. These phenomena are explained as follows:—The light acts through the eyes on the anterior lobe of the pituitary, thus inducing the latter to produce the gonad stimulating hormones.

Simultaneously, Dr. Pontus Palmgren, an ornithologist of Helsingfors, Finland, was able to make the following very interesting observations on