

of the transient bird. It has generally been recognized in recent years that the state of development of the sexual organs was intimately associated with migratory movements and it has been this phase of the subject, as well as the possible part that duration of light plays in stimulating migration, that has occupied the attention of Prof. Rowan and upon which he reports in the publication before us.<sup>1</sup>

He has for several years kept Juncos in open air aviaries at Edmonton, Alberta, fitted out with electric lights which enabled him to continue a brilliant illumination night after night, after sunset. Birds subjected to this additional period of light were killed at different stages of the experiments and microscopic examination of the testes made. It was shown that the normal rhythm of the reproductive organs could be interrupted almost at will by appropriate manipulation of lighting conditions, and the maximum development of the gonads was thus obtained three times and the minimum development twice, during a period of twelve months. However it was also shown that increase in activity, which accompanied increase in the period of illumination, was probably the real cause of development of the sexual organs, as the same results were obtained by compulsory activity of birds kept in the dark.

Birds liberated in a state of recrudescence or regression in the reproductive organs, departed from the neighborhood at once while those in a maximum or minimum condition showed no inclination to migrate and remained throughout the winter many hundreds of miles north of their normal wintering grounds. It is therefore suggested by Prof. Rowan that the stimulus to migration regularly lapses with the disappearance of the interstitial tissue. The details of the various experiments are exceedingly interesting and we shall look forward to the results of Prof. Rowan's further studies.—W. S.

**Hellmayr on Birds from Central Asia.**—In the paper<sup>2</sup> before us Dr. Hellmayr has reported on the collection of birds made by George K. Cherrie who accompanied Theodore and Kermit Roosevelt on their trip through Kashmir, Ladak and eastern Turkestan (Sinkiang) in 1925. Apparently no new forms are proposed but there is very full and helpful discussion of the relationship of the various species obtained, and a full review of the Himalayan Horned Larks for which the generic name *Chionophilos* is used in place of *Otocoris* on grounds of priority.

The paper is a valuable contribution to the bird literature of this remote country in which apparently only one American ornithologist, Dr. Wm. Louis Abbott, has previously collected.—W. S.

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<sup>1</sup> Experiments in Bird Migration. I. Manipulation of the Reproductive Cycle: Seasonal Histological Changes in the Gonads. By William Rowan. University of Alberta, Edmonton, Alberta. With eleven plates. Proc. Boston Society of Natural History. Vol. 39, No. 5., pp. 151-203, pll. 22-32. October, 1929. Printed from the William Brewster Fund.

<sup>2</sup> Birds of the James Simpson-Roosevelts Asiatic Expedition. By Charles E. Hellmayr. Field Museum of Natural History Publ. 263. Zool. Series XVII, No. 3. Chicago, U. S. A., October 18, 1929, pp. 27-144.