therefore, that where similar conditions exist, that is to say, where there is an abundance of water plants in clear cool waters, the former can be used for fodder with great advantage.

I have found from experience that the vegetation growing in marshy warm waters can not be used to feed cattle on account of the musty odor, which they dislike. For example, plants growing in ponds used for carp breeding are not suitable for fodder. Cows, in particular, show a marked aversion to musty-smelling fodder and are reluctant even to eat the grass round the edges of the ponds. If they are forced to eat this kind of fodder by being given none other, the result is that they give less milk.

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EGGS BY PHEASANTS AND QUAIL INDUCED BY NIGHT-LIGHTING

IN SCIENCE for March 13, 1936, appeared a short note by Clark, Leonard and Bump[1] describing the results of some experiments on "Light and Reproduction in Game Birds." The birds used were pheasants, quail and grouse. The method followed evidently was one adapted from the earlier work of Bissonnette[2] on starlings and ferrets.

Beginning on December 16, 1935, we have carried out similar experiments independently on pheasants and quail, using Bissonnette's improved methods of illumination.[3] One cock and four hens of the hybrid ring-necked variety of pheasant and a single pair of quail were used as experimental animals. The rest of the colonies of these types of birds were used as controls. The birds were kept in outside cages subject to winter conditions.

On January 15, at thirty days of experimental lighting, the pheasants began to lay and before the 28th they were laying at the rate of about three and a half eggs each day of twenty-four hours in spite of very severe weather. Before March 16 well over 120 eggs were laid by the four hens. Three of them are still laying well at date of writing.

Of the first 37 eggs laid and incubated in an improvised electric incubator, 32, or about 86.5 per cent., were fertile and began development. Owing to trouble with the electric lighting none hatched. Two eggs from a setting placed under a hen and accidentally broken had live chicks in them. The single female quail began to lay on March 22 and is continuing to do so, but none of her eggs have yet been set. None of the controls have yet begun to lay (March 30).

Details of these experiments will be published elsewhere. The authors wish to acknowledge the valuable cooperation of the State Department of Fish and Game of Connecticut, without which these experiments could not have been carried out.[4]

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[1] L. B. Clarke, S. L. Leonard and G. Bump, SCIENCE, 83: 2150, 268, March 13, 1936.

[2] T. H. Bissonnette, *Quart. Rev. Biol.*, 8: 2, 201–208, 1933.

[3] T. H. Bissonnette, *Jour. Exp. Zool.*, 71: 2, 341–373, 1935; *Jour. Exp. Zool.*, 27: 4, 315–320, 1935; *Anat. Rec.*, 63: 2, 159–168, 1935.

SOME RARE BOOKS ON PROTOZOOLOGY

VERY recently Gustav Foch, of Leipzig, has made a reprint of the monumental work of Ph. Fr. de Siebold "Fauna Japonica," published the first time in 1833–50, and considered since as a classical reference book. Unfortunately, the small original edition and the prohibitive price account for the scarcity of the work. The reprint fills a serious gap in many libraries.

It occurs to me that there are many old and very important reference books on protozoology, as for instance Muller's "Animalcula Infusoria," 1786; Ehrenberg's "Die Infusionsthierchen als Vollkommene Organismen," 1838; Dujardin's "Histoire Naturalle des Zoophythes Infusoires," 1841; Claparéde and Lachmann's "Etudes sur les Infusoires et les Rhizopodes," 1858–61; Stein's "Der Organismus des Infusionthiere," 1854–83; Saville Kent's "A Manual of the Infusoria," 1880–81; etc. All of them are out of print to-day, and when listed in second-hand book catalogues they have a very high price. That accounts for the lack of reference works so important, not only in private laboratories but also in libraries of smaller institutions.

It would be welcome to very many serious students of the protozoa, especially for those not connected with great institutions, if some firm should make a reprint, as economically as possible, of the abovementioned books. I am sure that, if properly advertised and moderately priced, such reprinted books would have quite a large demand, and make profitable the enterprise.

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SOURCE MATERIAL REQUESTED

WE are starting to work on the history of the botanical succession in the upper Hudson Highlands. To do this thoroughly, we must first reconstruct the original forests as they existed hereabouts at the time

[4] Aided by grants from the National Research Council, Committee for Research in Problems of Sex.