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## Factors Controlling the Incubation Period of Birds

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FACTORS CONTROLLING THE INCUBATION PERIOD  
OF BIRDS

WARREN N. KECK

The incubation period of birds varies from approximately two to four weeks with three rather well defined periods known; namely, two, three and four weeks. Some of the factors suggested by others responsible for this variation include size of egg, condition of young at the time of hatching, temperature, etc. An evaluation of these factors will be discussed. A study of the histology of the digestive tract of an English Sparrow at the time of hatching (14 days) was carefully compared with the digestive tract of a chick incubated for the same length of time. Likewise, the histology of the tract of an English Sparrow seven days after hatching was compared with that of a chick at the time of hatching (21 days). These comparisons reveal facts of importance to the length of the incubation period.

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COCCIDIAN INFECTIONS OF WESTERN PAINTED  
TURTLES OF THE OKOBOJI REGION

ORVILLE J. DEEDS AND THEODORE L. JAHN

In a survey of 150 Western Painted turtles (*Chrysemys marginata bellii*) 56 per cent were found to be infected with one or more species of coccidia. Species found were:

*Eimeria chrysemydis* n. sp. Incidence: 34 %. Oocysts oval,  $23\mu \times 15\mu$ ; differs from *E. delagei* in that the granular mass does not form a crescent and vacuole, in that there is no definite arrangement of sporocysts, and in host and geographical distribution.

*Eimeria delagei* var. *marginata* n. var. Incidence 6.7 per cent. Differs from *E. delagei* in that segmentation does not result in five equal spheres and in that there are differences in size, shape, host and geographical distribution.

*Eimeria mitrarium* (Laveran and Mesnil). Incidence 32 per cent. This is a new host and geographical record for the species.

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