

EXTENSION SERVICE
STATE COLLEGE OF WASHINGTON
W.S. THORNBEE, DIRECTOR
PULLMAN, WASH.

State College of Wash-
ington and U.S. Dept. of
Agriculture co-operating.

Poultry
Extension Circular
No. 6

Eggs for Hatching
by
Helen Dow Whitaker, Extension Specialist in Poultry

The loss of eggs which are incubated but fail to hatch is by no means a negligible quantity in totaling the profit or loss from the flock. One large factor in the failure of eggs to hatch is improper care before incubation, yet the essentials in the care of hatching eggs are few and can be simply stated.

In the fertile egg the chick has begun to develop while the egg is still in the body of the hen that lays it, and that development is arrested from the time the egg is laid until it is placed under the sitting hen or in the incubator. It will readily be seen that there is a limit to the time that eggs can be held before incubation. Eggs under eight days of age give best results in hatching, but with care they may be held 12 or even 14 days, after which time they deteriorate very rapidly, due largely to the evaporation of the moisture within the egg. The hen that steals her nest away often holds eggs for 14 days or more and gets a good hatch. In some cases the eggs are upon the ground and get moisture from it. In all cases the hen visits the nest occasionally to lay more eggs. Oil from her feathers partially closes the pores in the eggs and prevents evaporation. It is also thought that possibly the occasional warming of the eggs from the hen's body is beneficial.

The temperature most favorable for holding eggs is one as near 55° as possible. Below 45° and above 73° are the danger points. Eggs should be kept preferably on the side, and should be changed in position by rolling them very gently about once per day. They should be in a slightly moist atmosphere where there is good ventilation but no draft. Too rapid circulation of air or too dry an atmosphere causes the natural moisture of the egg to evaporate too rapidly and lessens the hatching value. Dipping eggs in water or washing them is detrimental to their hatching. It is often suggested to dip eggs in a 90% alcohol solution or a 5% solution of zenoleum as a disinfectant. Personally, I should not care to incubate eggs that needed disinfection. Disinfect and send to market all such eggs. Hatch only from stock known to be healthy and kept under sanitary conditions. Likewise reject eggs needing washing as the fine particles of lime from the egg-shell are washed into the pores of the shell through which the growing chick gets his supply of oxygen. When the pores of the shell are clogged you are growing your chick in a room without ventilation. Do not pack eggs for hatching in bran or any thing which affords fine powder to close the pores in the shells. Eggs wrapped in newspaper may not get sufficient ventilation. Handle eggs for hatching only with clean hands and keep in a room free from odors or mould.

Since within the egg a tiny life is suspended by a frail thread, eggs for hatching should be handled gently and most carefully protected from all jars and jolts. The most careful packing is necessary in shipping hatching eggs. Where they are to be sent by parcels post, the safest package is made up as follows: Use any of the regular parcels post egg cartons, wrapping each egg in a square of soft paper before placing it in the carrier, then completely bury the sealed carrier in excelsior or cut straw in an ordinary market basket with handle. Sew a piece of burlap over the top of the basket; label "Eggs for Hatching—Handle with Care" and write plainly the name of the purchaser and the sender on a card securely attached to the package. The cost of shipping may be increased a trifle by careful packing, but hatchability is increased any fold.