# **Storage and Handling of Eggs**

The quality of the chick all depends on the quality of the egg. It is essential that care is taken in the storage and handling of the eggs. It must be emphasised that the eggs cannot be improved once laid, and will only deteriorate with poor storage and handling. The following factors will help to ensure an egg is of best possible quality:-



## NOTE: - Eggs should be stored with pointed end down.

#### • Temperature

Ideal storage temperature is between  $12^{\circ}$ C and  $15^{\circ}$ C ( $50 - 69^{\circ}$ F). Too high a storage temperature and reactions will occur at the wrong rate. This will decrease the chances of the embryo developing normally. If storage temperature is below freezing the cell structure of the egg can break down and prevent the embryo developing.

#### Humidity

The best humidity level at which to store eggs is between 75 to 85% RH to avoid significant drying out of the egg before incubation.

### • Time in Storage

It is generally considered that eggs should not be kept for more than 7 days prior to incubation. Beyond this time chances of hatchability decrease considerably. Vitamins decay and membranes breakdown in time and so the embryo can often suffer early mortality.

#### • Cleanliness

Cracked, mis-shaped and heavily soiled eggs should be discarded (if possible). Soiled eggs may be cleaned using a brand egg wash solution such as Brinsea Incubation Disinfectant Concentrate following the manufacturer's instructions. It is essential to wash eggs in solution which is significantly warmer than the egg so that water in the egg flows out through the pores rather than dirty water flowing inwards. Bear in mind that all solutions will remove the outer cuticle from the egg as well as the dirt and may leave the egg at greater risk from bacterial contamination in the future.

# • Turning During Storage

Eggs should be turned once a day, 45 degrees each day, back and forth through 90° during the storage period. Insufficient turning can cause the yolk to float and touch membranes near the shell. If the embryo touches then it may stick and prevent growth once inside the incubator.

# • Handle Eggs Carefully

Eggs should be handled with care as any bumping may rupture the yolk membranes, in which case the egg will not hatch. Care should also be

taken during incubation, whereby a bump can rupture blood vessels causing the chick to bleed to death.

## • Collection of Eggs

Generally the best time to collect eggs is before 9am, and to check again at lunchtime. Eggs left in the nest for much longer than 24 hours tend to be poor hatchers.

# • Egg Shape, Shell Texture and Quality

Some naturally misshaped eggs have lower than expected hatch rates. Undersize eggs often have a large yolk in proportion to the albumen. Large eggs can sometimes be 'double yolkers' which will not hatch. Misshaped eggs usually have faults in the shell.

It is important to remember that in natural circumstances eggs warm up quite slowly. Incubators often warm up quickly, and so if placed in the incubator immediately the egg may suffer some thermal shock. If possible, the eggs should be brought up to temperature slowly.



