

Quarantine and Health Screen Protocol for Brown Teal Eggs transferred from the wild to captivity

Collection and Transport of Eggs

- Eggs should only be handled with clean latex or rubber gloves and should be kept as dry as possible. DO NOT attempt to clean eggs at this time.
- Ensure eggs are kept warm throughout collection and transport.
- The portable incubator must be thoroughly pre-disinfected immediately before use with Trigene at 1ml per 50 ml water.

Egg Incubation

- The Brown Teal Egg Incubation Hygiene Protocol (attached) should be followed.

Ducklings

- Ducklings should be weighed daily and their weights charted on graph paper
- Between 15 – 25 days of age the following diseases should be screened for:

Salmonella – cloacal or fresh faecal swab

Chlamydophila – cloacal swab using a swab specific for this organism.

Both these organisms can be vertically transmitted i.e. pass from the mother to the chick via the ovary. Ensure results are received and evaluated before the chicks are transferred to an aviary where they will contact other ducks.

As both diseases are zoonotic due care should be taken to avoid human exposure (usually via inhalation or accidental ingestion of air-borne, dried faecal particles or feather dander). Paper face masks and latex gloves should be worn when handling birds and cleaning brooder boxes and hands thoroughly washed with an antiseptic soap (eg hibiclens) immediately after.

Brown Teal Egg Incubation Hygiene Protocol

Based on the Auckland Zoo protocol prepared by Dr. Berend Westera

Some Key Facts

- 1. When collected most eggs are already part way through incubation by parents and any penetration of the shell by bacteria is already likely to have occurred.**
2. At this stage keeping eggs dry and warm is more important than cleaning them.
3. It is important not to add to the bacterial burden of the egg. The egg shell is porous and should be kept from contamination when in your care.
4. The most contaminated surface your egg is likely to be in contact with is your hand.
5. The fastest way for bacteria to penetrate the shell is to drop the egg temperature.
6. Egg handling with unwashed hands is easily the most dangerous activity likely to happen to the egg - this is the risky combination of contamination with temperature drop.

Golden rules for egg incubation

1. Start with a thoroughly clean and fumigated incubator (including the fan and heating mechanism) at the beginning of each new incubation
2. All ledges and surfaces in the incubator room should be cleaned and disinfected
3. Handle eggs as little as possible for as short a period as possible
4. Before handling eggs wash hands with disinfectant (e.g. Antec instant hand sanitiser or Hibiclens) and thoroughly dry or use disposable gloves
5. Eggs should only be in contact with sterile, dry surfaces
6. Re glove or re sterilise between different incubators or eggs of different species
7. Do not allow egg temperatures to drop significantly
8. Handle eggs gently and slowly - sudden movements or holding blunt end of egg down can cause strains on membrane between albumin and air cell thus damaging the embryo.
9. Prolonged candling can also damage the embryo
10. Separate hatching eggs from the others as these eggs do not need to be turned in the last few days and, in hatching, release a lot of bacteria. All empty shells should be removed from incubator and incubation room

For eggs that are exceptionally dirty or you suspect infection

1. Gently clean eggs by lightly scraping off large pieces of muck with a knife. Take care - if you damage the cuticle you are changing the porosity of the shell and so increase temperature conductivity and moisture loss.
2. Dip egg in disinfectant (eg Techsan – TC – Qual Tech PO Box 4182 Hamilton East or Antec Superhatch Chickguard, NRM, Private Bag 99927, Newmarket), which is warmer than the egg. (eg: 43 – 44 °C) for no more than 5 seconds. Carefully change grip so the whole surface is in contact with the solution. This draws bacteria out.
3. If known infection - dip eggs in antibiotic solution eg: Baytril at lower temperature than egg e.g. 4 °C this draws antibiotics in.

References

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