NEW ZEALAND GAME BIRDS

INFORMATION SHEET

INCUBATING EGGS

Our eggs are collected daily during the laying season (Sep-Feb) and can be collected from us or couriered to you.

Onsite we clean, disinfect and sort them and then they are stored for up to a week in a chiller which is set at 12-15ºC. Because the eggs do not develop until they are warmed up, they can be packaged and couriered to purchasers.

Natural incubation - broody hen system

Incubation is an art form perfected by hens. The correct temperature and the humidity are both vital for normal development and hens are great on for small scale production. If you have a broody chook to incubate your eggs for you, then your job will be made easy, as she can carry out the full job of hatching and rearing with minimum outlay on equipment. Texts recommend letting the eggs settle for a day before placing them, 2 or 3 at a time, under your broody hen. Allow her access to plenty of clean fresh food and water. Ensure hatched chicks can't escape, and perhaps lock them up in a laying box at night with the hen for the first week. Also check for any small places from which chicks can escape from the pen, as they may not find their way back to the hen and will quickly die.

Artificial incubation

This is a guide only, but you need to read your incubator manual and consult with the manufacturer to achieve the best results with your individual machine. With artificial incubation science and art combine to (hopefully) produce live, healthy chicks.

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Incubation period

Ringneck pheasants 24-25days

Red Legged Partridge 23-24days

Mallard Ducks 27-28days

Temperature for incubation = 37.5-38°C

Rel Humidity for incubation around 50%; increase to 70% for hatching

When the eggs are warmed and start to develop then they need to have the temperature maintained for the duration of the incubation period (24-25 days for pheasants, 23-24 days for partridge, 25-28days for mallard ducks). The ideal incubation temperature is approx. 37.5-38°C.

During incubation the humidity is set at approx 50% for the first 20 days, increasing them to 70% for the hatching period.

Weight loss – pheasant start at around 32g and lose 13% of their weight to hatching

Once the chick produces the first little chip in the shell ("pipping" figure1.) then the humidity needs to be raised to prevent them drying out during the hatching process. They should be out of the shell within 24hours of pipping.

Figure 1. Pipping of egg shell is first sign of hatching

The chicks need to dry off and be standing up before being transferred to the brooder, which should be pre-warmed.

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TROUBLE SHOOTING

Symptom	Probable Cause
Embryo dying partly formed without pipping	Wrong incubation temperature; lack of ventilation; incorrect turning on eggs
Dead in shell	As above; low avg humidity; too high avg humidity esp with ducks, infectious disease
Abnormal, sticky chicks	Low temp, too much humidity
Abnormal chicks with rough navels	Too high incubator temp
Abnormally small chicks	Low humidity, high incubator temp
Large, soft bodied chicks	Low avg temp, too high humidity, bad room ventilation
Heavy breathing, panting in hatched chicks	Increase room ventilation, check humidity
Unable to break out of shell	Too high humidity and not enough weight loss during incubation
Chick adhering to shell membranes during hatching and unable to break out	Too low humidity during hatching
Crooked toes	Too high or too low temp
Splayed legs	Too high temp, hatching tray too smooth and slippery after hatching
Bent necks	Too long hatching due to low temp or too low humidity during hatching
Prolonged hatch time between eggs	Temp too high, differing temps throughout incubator so differing development times, membranes too dry at hatching
Eggs late pipping and slow to hatch	Average temp too low