Quails - Their General Management and Artificial Incubation

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Introduction

It is my hope that the writing of this article, compiling my experiences with quails over the past two seasons, may spur on further writing from more experienced members from our Avicultural Society and hence build a basis for people interested in the breeding of these birds. Many bird breeders often enhance the floor of their aviaries with a pair or a trio of quails of various breeds.

This was the basis for the growth of my interest in hatching of previously wasted eggs that were laid on the floor of my aviaries. The first requirement is to obtain healthy breeding stock. King Quail and Japanese Quail and readily available, but native Brown and Stubble Quail and two species of American Quails (Californian and Bob-white) will need extra effort to source good birds.

Quails will live compatibly with finches and most small breeds of parrots, but care should be taken when they are housed with Lovebirds. Both Peach-faced and Fischers have been responsible for the deaths of some of my adult quails.

Breeding groups of birds should be made up of one species only. I usually keep one male and two females to each aviary. Having more than one male will only cause fighting and unsuccessful mating and thus result in clear eggs.

The diet you feed your finches, parrots and lovebirds will be quite sufficient for these quails. Extreme benefit will be gained by feeding Turkey Starter Crumbles which contain many extra vitamins. A sod of soil will provide minerals and some live food. Greens should be provided daily; but care must be taken with thin grasses such as Kikuyu, which I placed in some aviaries as nesting material, and later found a King Quail choking on a long strand of this grass which it tried to eat. A dust bath will be enjoyed by your quails; a shallow tray of dry dirt or sand will be readily used.

Quails being ground dwelling birds, require a dry section of the aviary to roost. Ground covers such as tufts of grass and small shrubs will naturally become hiding places and nesting sites.

Of all birds, quails seem to be less prone to disease, but are susceptible to chills (caused from dampness) and injuries. If by chance you lose either a male or female, the reintroduction of a new bird is always a dicey situation. Buy your new bird, but DON'T put it in direct contact with the birds. Instead place it in a cage with feed and water on the bottom of the aviary and watch for signs of aggressiveness from the other quails. When there are no signs of aggression introduce the bird and observe the way it is accepted.

Breeding

Anytime from the beginning of spring you may notice eggs being laid on the floor of the aviary. For natural breeding the hen will gather the eggs into the nest and will sit when the clutch is complete. Care should be taken to prevent the young of the smaller breeds of quail from escaping through the wire when newly hatched.
Artificial incubation

Eggs for the incubator must be no more than seven days old (for best results the eggs should be collected daily). My incubator is a MULTIPLO BENCH TYPE with capacity of 108 quail eggs. It is fan driven, with a CARBON globe and a WET_BULB THERMOMETER. Temperature and Humidity should be present.

The usual settings are:

TEMP:  100°
HUMIDITY: (for incubation)  83° - 88°
HUMIDITY: (for hatching)  89° - 95°

These settings should be checked and written down in a note book, before the eggs are placed in the incubator. Temperature is controlled by a thermostat knob; humidity is controlled by air intake and release ports which can be opened and closed to obtain the required setting; moisture comes from a water tray in the bottom of the incubator and it should be kept full at all times. Eggs should be placed in the incubator pointed end down. Some machines turn the eggs automatically, but I prefer to turn the eggs by hand. Each time I turn the eggs I make a general check, temperature, humidity and moisture tray. The number of times to turn the eggs is a minimum of two to a maximum of five times daily. This is done by wetting the finger tips and tilting the eggs from one side then the other.

On the fourth or fifth day I check the eggs for fertility. This can be done by using a lead-light with a 100 watt globe. Leave the cardboard cover on the globe and open the top end of the cover. The eggs should be encircled by the thumb and index finger and held over the opening in the cover.

As soon as the globe is turned on, fertile eggs can be quickly picked out. Clear eggs can be discarded; of course this procedure is best done in a dark room.

Hatching

At the nominated time the humidity should be increased to the higher level to soften the shell and aid the chicks in hatching. One problem I quickly found is that the chick would jump out of the hatching tray and would be found in the moisture tray dead. This was remedied by a small frame made out of 3mm wire and fly gauze to neatly fit inside of the hatching tray.

Young can be left in the incubator for up to 24 hours; but I prefer to move them to the brooder as soon as they are dry. Hatched egg shells should be removed as they may attach themselves to the unhatched egg and cause the death of an overtired chick.

Brooding

My brooder is 12" x 12" x 24" long, part of the top being a hinged lid, the front being wire. Heat comes from a 100 watt clear globe mounted to a dimmer switch. When chicks are 1-5 days old the temperature should be kept high; (95° - 100°F). This sounds like too much heat but it is required to keep the chicks very active. Temperature can be reduced as the chicks get older.

Young chicks are prone to drowning so I use something the size of a TOBACCO tin lid for the first few days as a water container. As the chicks grow they can be given a self-watering container. On the floor of the brooder a hessian bag mat can be used and this will stop the chicks’ feet from being fouled by their droppings. This can be changed every few days as required.
All my chicks are raised on Crushed Turkey Starter. This is a high protein food and the young will grow quickly and will stay in good health. When the chicks are fully feathered they are moved outside to a larger run where they can mature and colour.

I hope this article will benefit some members and make good reading for others.