



## How to Make Money Raising Coturnix (Japanese) Quail. Raising Coturnix Quail For Fun & Profit!

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Coturnix Native Habitat

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## I. Getting Started

Successful projects are well planned ones. Advanced planning is strongly recommended when you are planning to raise Coturnix Quail. Chicks can and will die while waiting for you to get ready, so get everything ready in advance of their arrival. Test the brooder to make sure it's holding the right temperature by running it for a day or two before putting chicks in. Check it frequently before and after putting the birds in. It should be set at the proper temperature and be located away from drafts. If the birds are arriving by airfreight, do not let them sit at the airport any longer than necessary. Do not drive them home in the back of an open truck or a car with the windows down or the air vents open.

If you're planning to raise Coturnix Quail to sell or eat and want to get a fast and inexpensive start, your best method is to buy day-old chicks or eggs. This eliminates the need to obtain breeder quail. Buying day-old checks shifts the burden of hatching to the farm you are buying them from. Before attempting to hatch your own chicks, read the section in this book on incubation. After you have raised your chicks, select breeders for the following season and set them aside. Keep a few more than you need for breeders in case you did not select all "winners". Sell or eat the rest. By selling your excess, you should be able to cover most expenses and if you have not had bad luck or kept too many breeders, there may be that elusive thing called profit. Coturnix are not raised for release in order to stock your farm or a wild life area. Typically, they are raised for meat or eggs. Their space requirements are small, they don't eat a lot, convert feed into protein efficiently.

The modern Coturnix has a speeded up metabolism. It has been bred to begin producing eggs when less than two months old, usually starting the breeding cycle at six weeks of age. Once the hen starts laying, she will produce an egg daily for approximately a year. The males are equally rapid growers, being ready for the table at six to eight weeks of age.

Coturnix eggs are nearly identical in taste and nutritional quality to chicken eggs. Coturnix hens, however, need less than two pounds of feed to produce a pound of eggs. Comparatively, chickens need almost three pounds of feed to make that same pound of eggs. You can use the eggs yourself or sell them in gourmet markets. Because of their small size, they are especially attractive as hors d'oeuvres, either pickled or hard-cooked. (See Recipes) Five Coturnix eggs equal one chicken egg. Quail eggs are all different in appearance, being speckled and mottled.



It would seem cheaper to buy eggs and hatch your own and this may be, if you have a good forced-air incubator and have experience hatching eggs. The hatching rate for Coturnix eggs is about 60% and generally half of them will be young cocks. If you should decide to go this route, make sure the eggs you buy are from a good game farm and not been mishandled by the seller, the transporter, or you. Eggs are extremely sensitive to heat, cold, time, dirt, and jolts. Without a microscope and an expert, only way you can tell if an egg will hatch is to set it. Therefore, buy from an established, reputable game farm. Hatching eggs come with no guarantee because the producing game farm has no control over them once they leave that farm. The shipping agent or the receiver could have mishandled them. The attempts to hatch eggs in a poor incubator at the

wrong temperature with no control of humidity is an old and common story heard many times a season by the game farm that has shipped good hatching eggs. Instead of finding the cheap way to get started, the beginning raiser has just found the expensive way and not only blames the game farm but unfortunately gives up and misses the exciting adventure of raising his own Coturnix Quail. Both parties, the producer and the receiver, are disappointed and are left with a bad taste. Nobody profits, least of all the game farm that lost a good customer.

Beginning with adult breeders can work for you if you can find them at about 6-8 weeks old. They will be more expensive than eggs or checks because the producer will have feed and raised them. Typically, they can be obtained year-round. Raisers often keep them in heated buildings or quarters because of their small space requirements.

In order to start right and grow into the business of raising quail, starting with chicks seems to be the most economical and practical way. Eggs can produce a poor hatch and buying adult birds is more expensive. By raising your own chicks, you can select the best for breeders and keep them. If you want to have the complete cycle of raising, breeding, and hatching, starting with chicks can be both fun and profitable.

## II. Chick Care

Whether you have bought or hatched your Coturnix chicks, the disappointment will be extremely great if your efforts to raise them fail. Chick care, especially during the first few weeks, is critical.

### A. Brooding

There are two basic methods for brooding chicks. Some raisers use battery brooder units with wire floors and heaters built in. Others start the birds on fresh clean litter on the floor of a pen.



**Typical floor brooding setup**

When using the floor you can use the common hover-type brooder or you can use ceramic socket brooder heat lamps. They can be bought or made to hold one to four heat bulbs. Whichever you choose, the hover or the bulb type, a restrictive circle of cardboard or metal sheeting should be placed around the heated area to keep the chicks from getting lost in a corner of the pen away from the life giving heat. There should be enough space between the circle and the heated area to allow the chicks to escape the concentrated heat if they

desire, but not enough space for them to get lost. The circle also helps cut drafts, which can be deadly to new chicks. Keep the number in each group to 350 or less and provide adequate space for each chick as well as sufficient feeders and waterers.

While chicks can be crowded, as they grow, it is necessary to provide more space as they age. Plan on a square foot of space per adult bird. Since Coturnix grow very rapidly, it is easier to not crowd the chicks, but to start them with more space unless you are planning to move them from the brooder situation to adult quarters. When startled, quail tend to fly straight up and can gain enough upward momentum to break their necks when they hit the top of the cage. If your cages

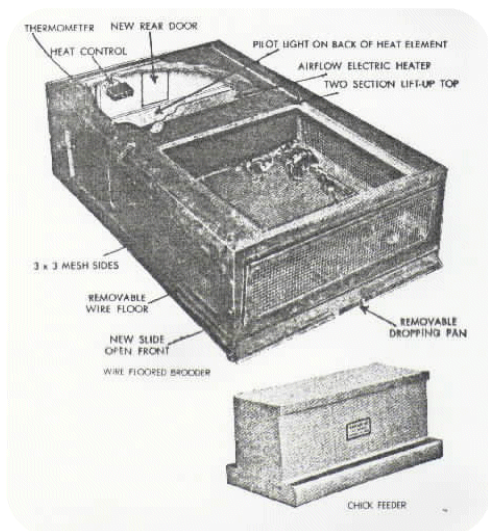
are high enough to allow flight, make the tops of burlap, nylon netting, or canvas, otherwise you will be removing dead birds as they smash themselves on the solid cage tops.

Cages can be raised or rest on the ground. Many quail breeders favor raised cages because they are easier to keep clean. The droppings fall through to the ground and can be raked up and removed to the compost heap without disturbing the birds. In raised cages, the birds will never be standing in manure and the eggs will remain clean.

Whichever method you chose to raise quail, cleanliness is very important. Start out, before the chicks are hatched, by preparing your raising facilities. The first step is a thorough cleaning and disinfecting.

If raising them on the floor, put down a clean absorbent litter such as ground corncob, peanut hulls, clean dry sand, wood shaving, or pine needles. Make the litter about two inches deep. Don't use sawdust as they will eat it and derive no food value, consequently death will occur. Most raisers favor starting the quail on wire floors made of  $\frac{1}{4}$  inch hardware cloth. These facilities can be purchased ready made or you can make them.

### Quail on wire floored cage



Wire floored brooders allow droppings and spilled water to fall to the manure trays underneath the birds for easy and regular cleaning. This in turn cuts down on potential disease causing problems. If you want to use an old wire floored chicken brooder, clean it very good and then either change the wire in the floors from  $\frac{1}{2}$  inch to  $\frac{1}{4}$  inch or cover the wire with burlap or an old lean sheet for the first ten days. The young Coturnix would fall through the  $\frac{1}{2}$  inch floor with both feet and become immobilized. Laying on the floor with both feet hanging through the wire will cause them to rapidly exhaust themselves struggling to get out. They' also won't be able to reach food or water.

To get your brooding efforts off to a good start the following general guide of "what to do when" will be helpful: The day before you intend to put chicks in the brooder, turn on and set the brooder heaters for 100°F. Let them run and keep checking to be sure the temperature is correct at ground level. Lay a thermometer where the chicks will be, and make certain the brooder is operating correctly. This is also a good time to put the waterers around the sides.

Most water founts, unless they are specifically designed for quail chicks, are too wide and deep. You can solve this by' putting clean stones or marbles in the drinking area of the waterers to reduce the depth and to give the chicks something to climb out on if they get in the water. It will also help them to get started drinking by getting them to peck at the colors of the stones or marbles. You might prefer to insert wire in the water base. Put a teaspoon of neoterramycin or other starting medication to a gallon of water lot the first week. This is also the time put in paper towels, egg flats or big pieces of light colored rags to sprinkle feed on. Don't use newspaper or any other slick surface covering as the chicks will develop spraddle legs from slipping. The feed

you start them on can be a specific game bird starter or a good turkey starter but it should be a medicated, 28% to 30% protein feed. Now is also the time to place several regular feeders around the edges of the brooder area.



The next day, when you're taking the chicks from the hatcher and getting ready to place them under or in the brooder, you should get rid of the crippled and the weak, as they waste feed time and money. They also can get cannibalism started because the others are attracted to peck them because of lack of movement or erratic movements. Make sure your brooder is maintaining the correct 100<sup>0</sup>F. temperature. Check them several times that first day to make certain they are comfortable, but don't be alarmed if they don't seem to be eating or drinking seriously. For the

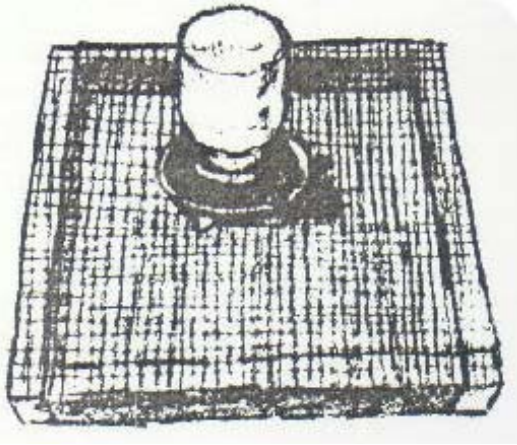
first 24 to 48 hours they will be living mostly off the yolk sack they absorbed while in the egg. They will eat and drink some and there are raisers that believe this little food and water helps them to get a better start. It is important that they learn what food and water is as soon as possible because a major cause of chick deaths in the first few days is dehydration and starvation. This is why it is so important to have plenty of places for them to stumble over food and water and to exercise the innate reaction of pecking at bits of food or colored stones or marbles in the skater instead of one another.

For the first week after they are in the brooders, check the temperature, keep fresh medicated water in front of them and renew the paper towels and sprinkle new feed on it. A few green vegetables such as cabbage or chopped greens will help them but is not necessary. About midway through the week, give them a little more room by enlarging the circle if you have them on the floor or moving any restriction in the wire floored brooder you are using to keep them near the heat. At the end of the week you can remove the circle altogether if there are no drafts or unusually cold weather. In the wire-floored brooders, you can let them have the rim of the whole pen at this time. Also, you can discontinue putting in paper towels with feed sprinkled on it. They can depend on the regular feeders now.

At the start of the second week, reduce the brooder temperature by 5°F. Top dress the feed with chick grit. Keep fresh clean water in the founts, medication can be discontinued although a good vitamin supplement in the water is helpful. Keep feeding the medicated 30% protein feed. Never leave a dead or obviously weak bird in the brooder. Dead birds decay rapidly under brooder heat and others will die from pecking the rotting flesh.

The third week, begin by reducing the heat to 85<sup>0</sup>F. The birds are no longer as dependent upon you to keep them in close proximity to the heat but drafts or a sudden snap of cold weather where they are housed can bring disaster. Feed and water daily. Make sure the brooder is operating correctly. Continue to clean the water founts and feeders daily. A disinfectant such as a germicide or a little bleach; in the cleaning water will help stop disease. If you should have area on the floor where the litter is wet or heavy with manure, clean and replace the litter. The trays of a battery brooder should have been cleaned at this point. It is a good idea to set up a regular time to clean the manure trays. Frequency will depend upon the condition, should be done often enough to avoid odors and excess amounts building up. During hot weather, a fly and maggot problem will occur if not cleaned often enough.

When the birds are 21 days old, reduce the brooder heat by 5<sup>0</sup>F. again and continue to reduce it by this amount each week following until about the 5th week when you should have it down to about surrounding area temperatures. Keep up the good practices of daily observation and fresh water and feed. Continue all good sanitation practices.



**Gallon waterer on hardware cloth covered frame**

By the end of the sixth week, the quail should be acclimated to normal temperatures and can now be moved from the brooder situation. If they are on the floor, or in an enclosed brooder, it's time to give them area to grow up in. A hundred birds need a pen at least 10 foot by 10 foot. If possible, it is best to continue to keep them up on a wire floored pen. If they are to be put in a pen built on the ground, be sure and keep a low level medication in the waterers. A teaspoon of Neoterramycin, triple sulfa or other good medication per gallon of drinking water should help avoid disease. If you have mortality or

droopiness, increase the medication to two teaspoons per gallon or follow the directions on the package. Any dead or droopy birds should be diagnosed to determine specifically the problem is. When you move them from the brooder to the raising pen, you will find this a good time to debeak and to dust for lice and mites. Five percent Sevin or 4% Malathion is effective if dusted up under the feathers. Some type of shelter in the raising pen is recommended. If it is an open pen without shelter, you run the risk of losing birds to the first good rain or too much sun. Some raisers use pine trees or corn stalks. Certainly, these will not hurt and are good but a more permanent and substantial shelter is recommended. Put a three or four-sided roofed shelter with an opening in the corner for them to run in and out. It doesn't have to be too tall, but should be big enough for you to get in and out of when you need to do anything with the quail. If the birds are being raised for meat, the ten by ten foot pen is adequate; however, flight conditioned birds, such as those used on hunting preserves or for dog training or for stocking purposes, need a large enough pen to exercise their wings. A long narrow pen with a shelter at one end is what is usually used whether they are being reared on wire or on the ground.



**Brooding-Rearing Pen**

A nesting or brooding box is necessary if you want to get eggs. This should be a solid box with a small opening for the hens to enter and leave by and a large door for you to collect eggs and change bedding. You should be able to get into the nesting box from outside the cage. You can keep 40 birds in a cage three feet by three feet by seven feet. The nest box should be 16 inches by three feet by three feet.

However your pens for rearing are set up follow the feed and watering space guide lines and have several of each set around the pens. Make sure the feeders are also set up on wire stands so droppings and spilled feed can fall through and not become concentrated, as harmful organisms find this a good developing area. Feeders should be such that rain can not get in and so birds can not scratch out large amounts. Provide a low container with grit for the quail to peck when they need it.

Like most birds, Coturnix like to take dust baths in hot weather. If your birds are in raised cages, give them a cat-litter pan full of dry soil for dusting.

## **B. Pen Construction**

**Rearing Wire Floored Pen with skirting to create privacy for Quail**

First, locate pens away from people, dogs, etc. As mentioned before, a good pen should be provide at least one square foot per adult. If possible have the floor made of 1 inch hardware cloth with narrow supports so manure, spilled feed and water will fall through. But the supports may have to hold you so they should be strong. Make



it tall enough to accommodate you if you have to get into the pen. Usually four to six feet is necessary. The wire floor should be about one or more feet off the ground.

For pens built without wire floors, the same dimensions can be used, although six foot of head room is handy. In either case, a combination catch/shelter area at one end that the birds can be caught is a good idea. Put your gates in a corner as this makes it easier to drive the birds in or out.

Ground floor pens should be plowed up and exposed to frequent intervals to disinfect the soil. More than one pen allows alternating, or you can simply fence off part of the pen periodically to turn the soil over. Low ground cover planting is helpful. Plants in the pen that exclude the beneficial effects of sun and weather tend to promote disease because of constant dampness and should be avoided. Plants such as milo, sorghum, lespedeza and legumes are good seeding agents. If more than one pen is available rotate the birds in order to let one pen be reseeded. If you plan on keeping quail on the ground, plan on a good program of preventative medication with drugs like Terramycin or Neoterramycin to prevent Ulcerative Enteritis and other potential disease problems.

Use a wire floor over both areas if desired. Outdoors, a galvanized after weaving hex one-inch wire is good for the sides. The top can be made of a good plastic or nylon netting or of the same wire as the sides. Make sure the openings are one-inch or less. The netting is easier on the birds' head. The area used to brood the chicks can become the shelter and catch area for the grown birds if the brooding equipment is removed. Don't forget, put the doors or drop gates in a corner for easy driving of the birds in or out of the shelter/catch area. Bury about one foot of wire in the ground around the outside pens to keep out predators. You can layout a foot of wire on the ground and weight it rather than bury it.

## **III. Breeding Stock**

As mentioned before, Coturnix Quail should be over six weeks old before attempting to breed them. Birds younger than this tend to have low fertility rates and poor egg production. The eggs from younger Coturnix Quail will have more egg defects such as a soft shell. Pushing your quail