



Guinea Fowl Management Guide

Guinea Fowl

— *Management Guide* —

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Zambia Agribusiness Society

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Introduction

The domestic guinea fowl (*Numida meliagrís*) is a poultry bird that derives its name from the guinea coast of West Africa where it originated. Many poultry farmers in Africa are doing Guinea Fowl farming business successfully, mainly for profit. The Guineas are also sometimes called **Guineas**, **Pintades** or **Gleanies**. The commonest variety of guinea fowl is the Peal helmeted guinea fowl. On the contrary, guinea fowl production has proven to be commercially viable and is raised in large numbers in Europe and the United States of America where it has been successfully commercialized. In India, these birds are raised as free range scavenging birds in rural areas. Guinea fowls are easier to manage by resource poor farmers with hardly any access to formal veterinary services because they are resistant to most poultry diseases at the adult stage. Housing is rudimentary and health management practices depend, largely, on ethno-veterinary medicine.

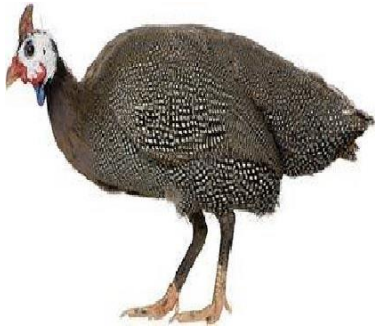
Guinea fowl, often referred to as guineas, are gamebirds that are increasingly popular among keepers of small and backyard flocks. Guineas are vigorous, hardy, and largely disease-free birds.

- **Act as Watchdog.** There are many reasons people raise guinea fowl. The birds sound an alarm whenever anything unusual occurs on the farm. While some people find this noise to be a nuisance, others find it to be an effective tool for protecting the farm and make guinea fowl the farmyard "**Watchdogs.**" The loud noise of the guineas has also been shown to discourage rodents from invading the area.
- Keeping guinea fowl is an **effective means of pest control**. Flocks of guineas kill and eat mice and small rats. In addition, guinea fowl can be used to control insects. Wild guineas eat mainly insects, and domestic guineas can consume large amounts of insects without affecting garden vegetables or flowers. Guineas have been used to control wood ticks and insects such as grasshoppers, flies, and crickets. Guineas can reduce keepers' risk of Lyme disease by consuming deer ticks, which carry the disease. Guinea fowl also eat slugs, and flocks have been known to attack snakes.
- Guinea fowl can also be **raised for meat and egg production**. The meat of young guineas is tender and tastes like that of wild game. The meat is lean and rich in essential amino acids. Guinea eggs can be eaten just like chicken eggs (and should be collected daily if not used for hatching purposes). During the laying season, it is common for a **guinea hen**—an adult female at least one year old—to produce an egg a day.

Colour Pattern

There are three main feather patterns:

- Fully pearled (white spots all over)
- Partially pearled (some white spots)
- Solid colours (no spots)



Any of these featherings may also include patches of white, typically on the fronts and wings, in which case the birds are described as ‘pied.’ There are over 20 recognized guinea fowl colours, although the most commonly known is the original ‘pearl grey’ – dark grey with white spots all over.

Varieties of Guinea Fowl

There are three main varieties of guinea fowl raised at CPDO(ER): **Pearl, White, and Lavender**. The pearl variety is the most popular and typically the one that people recognize most readily. Feathers from the pearl variety are often used for ornamental purposes.

Guinea Fowl in the Garden

- A large garden could be home to a few guinea fowl, although they are likely to stray further afield. They range much further than chickens – we have a large garden plus an adjoining field, but that didn’t stop my guineas from crossing the main road (in a single line) and marauding around the neighbourhood. They can fly well when they want to (although like chickens they generally run or walk) so they can cover a lot of ground when they feel the urge to explore.
- While they don’t scratch for food as much as chickens do, they still make dust baths – ten guinea fowl can make a considerable hole in the lawn. Although they will probably eat some vegetation, the ideal guinea fowl diet mostly comprises insects (especially ticks) and seed heads. In fact some growers keep them as an organic form of pest control.

Understanding Guinea Fowl

It’s a mistake to treat guinea fowl like chickens, although they share many characteristics. While chickens are much more inclined to domesticity, and can become very tame, guinea fowl tend to be wilder and more flighty. If regularly handled from day-olds they may be reasonably friendly towards their owner, but as a rule they hate being picked up or even touched. Guineas don’t automatically go into a house to roost either, much preferring to fly to the tops of the tallest trees, which can lead to many losses due to predation.

Preparations before Starting a Flock

Before starting a poultry flock, you must check local zoning regulations to make sure that raising poultry is permitted. This is particularly important when raising guinea fowl because guineas will range and cross the boundaries of a small plot. Although guineas are typically quiet, they can be very noisy if disturbed. Guineas are more active than chickens and not as easily tamed—they seem to retain some of their wild behaviour.

Housing

Guinea fowl house is required to protect them from high winds, rain, cold, sun, and predators. The desired floor space of 2 - 3 sq. ft. /bird is essential.

The floor of the pen should be covered with paddy husk, wood shavings or chopped hay or straw. The litter should be kept dry, it can stay in place till become deep litter after several months. Guinea fowl prefer to roost, so it is necessary to provide perches.

If you want to keep your guineas from wandering in a specific area, you must keep them in covered pens. Guineas are able to fly at a very early age, and they become strong fliers able to fly 400 to 500 ft. at a time. Guineas are also very good runners and prefer to move on foot, including when escaping from predators.

If you are keeping guineas for egg production (for hatching or human consumption), you should provide nest boxes. Nest boxes designed for chickens are usually acceptable. To reduce the likelihood of hens laying eggs in hidden nests outside, keep guinea hens confined to a hen house until noon each day so that they will lay eggs inside.

Bird Selection and Purchase

If you are raising guinea fowl to control ticks and insects, you are better off purchasing adult guineas because they are easier to care for than young guineas and do well on their own. It takes guineas a while to get settled into a new home. It is best to keep them confined for a week or two to let them become accustomed to their new home. If you let them out right away, they could run away. The guineas should be confined in a pen where they can see the area where they will be living. After the initial couple of weeks, let one guinea out. Guineas hate to be alone, so the single guinea will not go far and will learn its way around the area. After a few days, let a second guinea out to run with the first. If they stay near the pen, it is usually safe to let the rest out.

Keets are guinea fowl offspring that are younger than 12 weeks old. If you wish to start with day-old keets, you can purchase them from a local breeder or feed mill. If local facilities do not have any keets, you can purchase the birds online. Newly hatched birds, including keets, can survive for 48 hours on the nutrients they take in when they absorb the yolk during hatching. This allows a window in which birds can survive shipment without supplemental nutrition.

Nutrition

Under free range, adult guineas forage for themselves and are able to meet most of their nutrition requirements on their own. They consume a variety of insects and arachnids (mosquitoes, ticks, beetles, and so on), weed seeds, slugs, worms, and caterpillars. Guineaes need to consume some greens in order to maintain good digestion, and so they eat grass, dandelions, weeds, and other vegetation. Because the birds are consuming vegetation, it is important to make sure grit is available for the birds, and the birds also benefit from having oyster shell available. Guineaes do enjoy a little scratch feed on the ground. They like wheat, sorghum, or millet grain and will ignore whole corn kernels. If you are keeping the guineas for pest control, restricting their feed will encourage them to spend more time eating insects.

Under confinement, they can be fed a commercial poultry diet. Guineaes need a higher protein feed than chickens, but do quite well on regular poultry diets. Keets need a 24 - 26% protein ration as the starter feed. The protein level should be reduced to 18 - 20% for the 5 - 8 weeks. After 8th weeks, the keets can be fed a 16% layer mash. If your feed mill does not sell feeds in the proper protein levels, you can mix a higher protein feed with a laying-hen mash to get the proper protein level. Guineaes should be fed mash or crumbles. Pelleted feed is not recommended for guineas. You should also provide supplemental greens, such as leafy alfalfa, for the guineas to peck. They will eat the leaves. It is important to remove any leftovers daily to prevent a mould problem.

Feed conversion rates are particularly high – it has been estimated that each bird eats about 6.5kg of feed to reach a slaughter weight of 1.85kg – reflecting the fact that they run around all day and often take flight, burning up fuel.

Water for Guinea. Provide clean water at all times. Be sure to provide fresh warm water to keets. They cannot tolerate cold water well. New-born keets are susceptible to drowning, so provide water in a shallow bowl filled with marbles at first. The keets will climb on the marbles and drink the water between them. Very young keets will require help at first, so tip each keets beak briefly in the water to let them know how and where to drink.

Brooding and Rearing

Keets can be brooded under a heat lamp like chicks or naturally with a broody chicken. Guinea hens generally don't make very good mothers although a turkey hen is a good substitute mum if available, as turkeys tend to stay with their youngsters longer than chickens do. Ideally they should be fed a turkey or game bird starter for the higher protein content, but they can also be reared on chick crumbs. Their legs are particularly delicate (this applies to the adults as well) so provide a non-slip surface to help prevent splaying. Keets are lively and agile, so make sure their pen is escape proof and cover it with mesh to stop them jumping out.



In semi intensive/free range, guinea fowl are native to Africa, and as such, are very susceptible to dampness during the first two weeks after hatching. (The moisture keets encounter when following their mother through dewy grass can kill them.) After those initial two weeks, guineas are widely considered the hardiest of all domestic fowl.

In intensive, keets can be raised in the same type of brooder houses and brooders as chicks or poults (baby turkeys). Temperatures should be started at 95°F for the first two weeks after hatching and then lowered by 5°F per week thereafter.

Infrared lamps are a convenient, easy-to-use heat source for brooding. Use porcelain sockets approved for these lamps and hang the lamps with chain or wire. Heating lamps should *not* be hung with the electric cord. Make certain lamps are secured so they cannot fall to the litter and create a fire hazard. The lamps should hang so that the bottoms are 18 to 24 inch above the litter. Lamps can be raised or lowered depending on temperature conditions. The use of more than one heat lamp is often recommended, especially during cold weather, so the keets will not be without heat if a bulb burns out.

There are two-bulb units that come with a thermostat that can make it easier to control the temperature in the room. It is important to remember, however, that you are heating the keets and not the air, so measurements of air temperature may not be the best guide when using infrared lamps. If the keets are piling up under the heat source, they are too cold. If they are trying to get as far away from the heat source as possible, the temperature is too hot. If the keets are evenly dispersed throughout the brooding area, the temperature is just right. After the keets are fully feathered, they are typically able to tolerate extremes in weather fairly well.

Lighting is also crucial. The keets are extremely nervy and the first reaction to turning on lights is for them to run away, which can lead to smothering. Natural lighting is used and any changes are done very gradually.

Hatching Your Own Keets

Mating Ratio

In the wild, guinea fowl mate in pairs. This tendency also exists among domesticated guineas if there are equal numbers of males and females. As the breeding season approaches, pairs of guineas will wander off in search of hidden nesting sites. It is not necessary, however, to have equal numbers of females and males to obtain fertile eggs. For most flocks, one male is usually kept for every four to five females. When guineas are kept in close confinement, one male may be mated with six to eight females.

Egg Production

Guineas usually start laying in March or April and may continue to lay until October. A hen from a carefully managed flock may lay 100 or more eggs a year. Breeders generally produce well for two or three years. They can be kept four to five years in small farm flocks. In such flocks, hens usually lay about 30 eggs and then go broody. The eggs are deeply flavoured, with large golden yolks and surprisingly tough shells. They are smaller than standard chicken eggs – more like bantam size – but their richness makes up for this.

Collecting Eggs

Guinea fowl will lay anywhere and everywhere, particularly favouring large clumps of nettles.

A male often stands guard, and guinea fowl will share their nests. As with chickens, they usually lay a clutch of eggs and then go broody, but if eggs are collected regularly the birds will keep on laying. However, make sure there are no guineas around when you take the eggs and leave a few pot eggs in their place, or the guinea fowl will quickly find a new (and probably even more inaccessible spot) to nest.



Incubation Period

The incubation period for guinea eggs is 26 to 28 days and can be incubated in the same way as hen egg and similar to the incubation period for turkeys. If available, broody chickens can be used to hatch guinea eggs. Typical bantam chicken hens can sit on 12 to 15 guinea eggs, while a large chicken hen can sit on 20 to 28 guinea eggs. Guinea hens do not always make good mothers. Chicken hens tend to be much better mothers, and a large chicken can brood up to 25 guinea keets.

When allowed to incubate eggs naturally, guinea hens normally do not go broody until the nest has around 30 eggs. A healthy guinea hen will lay an egg a day. If the eggs are removed from the nest, she will most likely make a nest somewhere else. If all but four or five eggs (marked for identification) are removed, she may return to the same nest and continue laying. Eggs from confined guineas, however, can be collected daily with no problems—you do not have to worry about going on a scavenger hunt every day in search of new nest sites.

Guinea eggs are smaller and have thicker shells than chicken eggs. As a result, it is difficult to candle the eggs until 10 days of incubation. Otherwise, incubating guinea eggs is similar to incubating chicken eggs.

Guinea Meat

Guinea fowl are often kept for their meat, which is regarded as a delicacy. They taste slightly gamey, although milder than pheasant, and a full-grown guinea fowl should just about feed four people. There is a tendency to dryness, so pheasant recipes are a better bet than those designed for chicken.

Sexing Guineas

It's impossible to tell males and females apart until they start calling at around nine weeks. Adult males are usually larger with bigger wattles and head furnishings.

For identification of male and female one can look for the following:

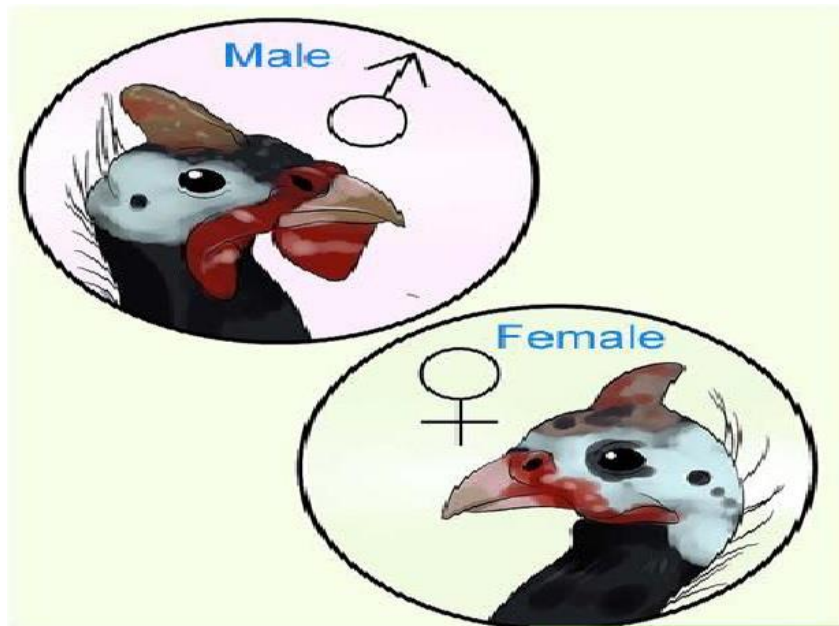
- The males generally have larger wattle than females
- The females generally make a two-syllable sound, while the males make a single –syllable sound.
- The males have a narrower opening between their pelvic bones than the females
- When you hold the bird under one arm and use your free hand to feel the bones, you should notice a distance of about two fingers on males and three fingers on females.

It is very difficult to sex young guineas (those 12 to 52 weeks of age) because **pullets** (young females) and **cockerels** (young males) look exactly the same. When the guineas are older, there are two ways to tell them apart:

- **Listen to the sounds they make.** The hen makes a two-syllable noise that sounds like she is saying "buckwheat, buckwheat," "put-rock, put-rock," or "qua-track, qua-track." These are the only sounds that the hen makes that the

guinea cock (male at least one year old) does not. When excited, both the hens and cocks emit one-syllable cries, but the cock does not emit sounds similar to the two-syllable noise of the hens. (The young keets start making one-syllable cries at six to eight weeks, but some females do not start calling until much later.).

- **Look at the size of the helmet and wattles.** The **helmet** is the protuberance on the top of the head of a guinea fowl. The **wattles** are fleshy appendages that hang from the sides of the head. The [helmet and wattles](#) of the male are much larger than those of the female.



Socio-Economic Attributes of Guinea Fowl Production

Guinea fowl, apart from contributing to household income, play an important role in the socio-cultural lives of the people. The guinea fowls mainly raised by subsistence farmers mainly from the rural areas of the country under rural backyard system of poultry production.

Keeping Guinea Fowl with Chickens

Guinea fowl can be bullies with other poultry and won't easily tolerate newcomers. They seem to particularly pick on cockerels too. They can be relentless in their pursuit of a victim, and may keep him or her away from the food. It is experienced, and has heard similar stories from other people, but a friend who keeps both chickens and guineas on her farm has had no problems. Some people keep guinea fowl and chickens in the same house, but unless they have been very well integrated, it's probably better to give the guineas their own quarters.