



Importance and Utility of Ostrich or Emu Farming

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INTRODUCTION

Ostrich or Emu farming is newly emerging as a nonconventional industry to which the Indian to which the Indian farmers are getting attracted. Ostrich is a very big non flying bird mainly from Africa. Emu is slightly smaller in size and has origin in Australia and New Zealand. The first ostrich farm was started in South Africa in the year 1860 and after observing its success, this farming was started in several other countries like Egypt, Australia, American, and recently in India also as a profiteering business. Commercial Emu farming was first started in Texas in 1989 and since then pursuing the trend are the countries like Canada, China, Southern Russia, Belgium, France and many more European countries and middle east

The Emu is Australia's tallest native bird, Height during standing condition reaching up to 1.6m to 1.9m. Adult Emus having shaggy grey- brown feathers all over the body except neck and head, which are largely necked and bluish black. The wings are highly reduced, legs are long and powerful.

This bird is known as "Emu" in Australia, "Casoverly" or "Kiwi" in New Zealand, and "Reha" in U.S.A and "Shamburg" in India. It belongs to the "Retites" family of Australian desert. Due to low fat content, the Emu meat is recommended by the American Cardiac Association. Emu meat has tremendous world market and due to its taste it is considered as a delicacy in multi star hotels in India and abroad. Emu meat which was being exported till recently, has good demand in local market too. There are nearly 100 Emu farms in India at present, and Andhra Pradesh is leading. There are over 50 Emu farms in Maharashtra in Beed, Phaltan, Ahmadnagar, Potada and Satara. These farms are also in Wardha, Chandrapur, Akola, Buldhana and Bhandara districts of Vidarbha. The Association of Emu breeders has also been established with its headquarter at Malegaon in Baramati taluka of Pune district. This association guides the member farmers in respect of sale-purchase of birds, it's meat, eggs, feathers and other bye products.

Important Characteristic of Emu bird

Due to peculiarities of vertebral column, flat sternum, heavy body with 2.5 meters' height, wings are not developed with strength for flight, but has immense capacity and strength to run at a speed of 60 to 70 kilometres per hour. Average body weight of 2-year-old Emu bird is around 60 to 70 kilograms. The breedable age is about 18 to 20 months when the female starts laying eggs. The total length of oviduct is about 118 centimetres and the last segment has calciferous secretory glands. The shell is formed the average weight of egg is about 600 to 700 grams and is greenish in colour. The female lays about 6 to 8 eggs per season in the beginning and egg lying increases to 20 to 28 eggs per season (November to march) after 1 to 2 years of laying. Emus usually remain in pairs. (1:1) Female is rather bulky as compared to male. The male has a phallus (penis) which is about 10 cm. long and is folded when not erect. It projects at the time to allow defecation and urination. Female has a diminutive phallus.

The incubation period of eggs is 50 to 52 days and later, male sit for brooding on these eggs for a period of 52 days without food and water. The chicks after hatching are kept in a brooder and temperature of about 30 degrees gradually reducing to 28 to 24 degree, @2 degree every week.

Emusing Secrets:

1. Eggs used as table delicacy having a pleasant taste. Storage life is longer due to its chemical composition. \
2. Infertile as well as broken eggs are used to make attractive painted and carved ornaments sold as special gifts, as works of jewellery arts and crafts.
3. Emu meat (Gourmet) is dark red in colour, lean and tender in texture with a delicious taste, and the thigh muscle is an excellent alternative to beef as per taste and texture due to high protein and less calories and sodium. Fat is 10 times less in fatty acid than beef. The cholesterol is also less than

0.5% (45% mono-unsaturated LDL cholesterol). Calories are also 4 times lower than beef. Low fat meat loses quickly moisture, so it is advisable to moist heat cook. Vitamin C is also more than any other meat. Gourmet is sold approximately at rate of Rs. 250/- to 300/- per kilogram.

Emu Oil

About 4 litres of oil can be derived from 14 to 18-month old Emu bird from the fat only once. There is a thick pad of fat on the back initially provided by nature to protect the bird from extreme temperature. The crude oil when processed is stabilized. The animal trials have indicated that Emu oil has properties of lowering cholesterol, reducing inflammation (anti-inflammatory) and non-pore clogging properties. The oil is absorbed by the skin easily without greasy feeling which makes its use very beneficial in moistening and emollient applications making the skin soft and supple. Emu oil also reduces inflammation and pain from joints and muscles and helps in healing the scars. Oil is also used as a base for hair conditioners and shampoos. Emu oil is sold at approximately the rate of Rs. 2500/- to 3500. Per litre.

Emu Feathers

Feathers are very attractive and are used in craft industry and are in great demand.

Emu Leather

Is used for leather belts, purses, jackets, valets and other gift articles. So also Emu bones are also used for various artistic purposes.

Digestive System

The gizzard contains stones and pebbles for grinding food as in chicken. The average productive age of the Emu bird is over 30 years. The average price of Emu egg is about Rs. 600 to 700 and the meat (gourmet) costs around Rs. 300/ per Kg. and each adult bird can yield 25 to 30 kg. meat, 0.75 meters of body leather, leg leather (used for manufacturing of bags, purses, jackets and protective clothing), 3 to 4 litres of oil (which

is used for skin care, cosmetic and for application and medicinal use for massage in cases of rheumatic arthritis, joint pain and for healing of wounds. It has a good market and is sold @ Rs. 2500/ to 3500/ per litre (as per purity grades). In addition, Emu feathers are very attractive and colourful and has a very big market for manufacturing artistic purses and various gift articles.

Management and Health Problems

Emu birds are very docile and sturdy and easy to manage. They do not require large sheds and prefer open barren land to move about. They do not prefer bushes and shady trees and can bear hot and dry atmosphere and can thrive summer temperatures of 52 degree celcius and above without any discomfort. Emu birds prefer standing and wandering for most of the day time and sit during night hours and during dust bathing. A pair of Emu birds requires space of 100 ft x 25 ft and 4 pairs and stay in a open plot of 100 ft x 100 ft. which need to be provided with a wire compound of a try that a bird's head or legs cannot get trapped, with about 8 ft height. The fencing should be such that it should be easily seen by the birds, strong enough to withstand birds colliding with it, resilient enough not to injure the birds, free from projections and sharp parts. About 400 sq. ft space is enough for rearing 40 growing young ones.

Health

The birds usually do not have many health problems. The general health of the flock affects egg productivity. If the oviduct is not properly formed, females may ovulate internally. The infundibulum fails to engulf the ovulated ova, which then remain in the abdominal cavity, such females develop a potbellied appearance and are normally termed as internal layers. Prolapse of oviduct is another condition associated usually with young females in their first season. In addition, some females may become egg bound, in the case the bird is unable to deposit or expel the completely formed egg. The egg may not always be palpable in the caudal abdomen.

Encephalomyelitis is the only disease that may pose a problem sometime as it is transmitted from horses but is not communicable to human beings, so due precautions to avoid proximity of horse and other equines be taken as preventive measure.

Emu meat is 98% free fat and very low in cholesterol percent and as such is largely preferred by educated elite middle class families which are health conscious.

Economic of Emu farm

Initial requirement is that of an open land provided with a strong wire net compound of 8 ft. height, a small shed inside for rest and shelter, and some utensils for food, water and green vegetables and grasses. It is better to have a concrete tank for water storage and a good perennial fresh water supply. A pair of Emu birds can cost about Rs. 12000 to 14000/ as an initial investment as per the size of farm that is anticipated. The female Emu can give about 40 young chickens per year.

FEEDING: Usually a readymade commercial feed can be used or the feed can be compounded by crushing grains, maize, oil cakes and wheat or rice bran as we do for poultry. It is advisable to use readymade feeds available as **Starter, Grower, Breeder, Maintenance and Finisher** feeds.

A fully grown one-year-old adult Emu needs 750 to 1500 grams of maintenance feed per day.

The feeding schedule is as under:

0 to 8 weeks old bird -----Starter feed -- ad lib.

8 weeks to 9 month -----Grower feed ---- and lib.

9 months to 18 months -----Finisher feed --- ad lib.

Breeder Age / Breeding season -----Breeder feed ad lib.

Maintenance ration for other times for all adult birds. Emu Farming is a good subsidiary business for any agriculturist and once established, needs very little management skills and supervision is required as the Emu

birds are very sturdy and except and beyond adequate and fenced open space with a shed inside very few things are required and with a very big life span of over 25 to 30 years, the initial number of 10 or 20 pairs with which a beginning was made, the number of birds may cross 3 to 4 hundred within a span of 10 to 15 years which will mean a very good and profitable investment the Emu farms are increasing rapidly as a new industry an one who is interested to restore, must visit and get adequate practical experience and the know-how before start.