



## **The Incubation Specialists**

### **Guidelines for incubation of Ostrich eggs**

The following guidelines apply to the handling of Ostrich eggs in general

#### **Period of Laying**

March – August / September

#### **Laying**

Laying will start when the female is 2½ - 3 years old, and the yearly production will be 40 – 60 eggs per female.

#### **Handling of Eggs**

It is recommended always to wear clean gloves or to wash hands carefully in a disinfectant soap before touching the eggs. This is done to protect the eggs against infectious bacteria.

#### **Collecting of Eggs**

The eggs must be collected as soon as possible after laying. It is not necessary to disinfect the eggs, but if they are dirty (i.e. collected outdoors on a rainy day) they can be cleaned with a clean dry cloth. It is recommended to write the date of laying immediately when collected, - preferably at the air-cell end (use a candling lamp).

#### **Storage of Eggs**

Eggs must be stored at a temperature of 16-18°C, and avoid storing them for longer than 7 days. During the storage period the eggs must be turned once every day.

#### **Egg Size (average)**

Length	150 mm
Diameter	135 mm
Weight	1300-1700 g

#### **Incubation Period**

40 - 43 days

# Guidelines for incubation of Ostrich eggs

## Setting of Eggs

It is recommended to set eggs only once every week.

The eggs are placed in the special ostrich egg trays with the air-cell end upwards. If the air-cell end is placed downwards, the embryo will not develop. The air-cell is located by means of a candling lamp.

## Incubation Temperature and Humidity Levels

Setter	36.1 – 36.7°C (97.0 - 98.0°F)
Hatcher	36.0 - 36.7°C (96.8 – 98.0°F)
Humidity	Setter      20 – 40% RH
	Hatcher     60 – 70% RH

## Hatching

The eggs are transferred to the hatcher after 38-40 days in the setter (last 3-4 days in the hatcher).

## Removal of Chicks

The Ostrich chicks must remain in the hatcher until they are completely dry (minimum 24 hours after hatching). The chicks can survive for 72 hours after hatching without feed and water.

After they are taken out of the hatcher, the chicks are placed in a restricted area with temperature control, 30 – 34°C during the first days and gradually adjusted to the normal temperature of the environment over a 2 month period.

## Weight Loss during Incubation

12 – 15% (approx. 0.3 – 0.37% per day)

The weight loss is related to the humidity level in the setter, and in periods with extreme levels of humidity and temperature in the environment, it may be necessary to control (reduce) the humidity in the setter room.

If the weight loss is too low or too high, the chicks will often have problems in hatching, and it may be necessary to help them break through the shells.

If the weight loss is too low, a small hole (2-3 mm) can be drilled in the egg after 28 days of incubation.

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## **Weight Loss during Incubation**

The hole must be drilled in the air-cell end, and it must be done very carefully following the guidelines below:

Weight loss less than 0.2%..... = 3.0 mm hole

Weight loss between 0.2 and 0.3%....= 2.0 mm hole

Weight loss more than 0.3%..... = No hole

(stated weight loss is per day)

## **Candling of Eggs**

Ostrich eggs can be candled by means of a good quality egg candler (high intensity halogen type).

By candling the eggs it is possible to determine whether the air-cell and the embryo are developing as expected. As the incubation advances, a dark shadow will appear in the fertile eggs, and this will grow darker over the period.

With some experience it is possible to see the blood veins developing (as dark lines) after just 10 days of incubation.

## **Turning**

Ostrich eggs are turned 90° once every hour (by automatic turning) or 3 / 5 times a day (by semi-automatic or manual turning).

## **Choice of Equipment**

The choice of equipment depends on the capacity required, but it is recommended to use forced-air machines with separate setter and hatcher.

The following machines are recommended:

Octagon 100 (capacity 6 eggs)

Octagon 250 (capacity 12 eggs)

Modular Hatcher (capacity 8 eggs)