

The Behaviour of Fowl

There are hardly any differences in behaviour between domestic chickens and their ancestral relation, the jungle fowl. Even artificially incubated hybrid chickens can successfully revert to the wild state and reproduce in nature.

Fowl live in groups and form a strong social structure.

In nature, and in husbandry systems adapted to their behavioural needs, fowl form a strong social structure. Although they are capable of distinguishing 80 or more members of their own species, they prefer to live in small groups. A stable ranking order is formed within this group on the basis of preference, threat and avoidance behaviour and factors such as age and size of comb.

Fowl spend most of their day foraging for food.

Fowl leave their sleeping place before dawn. The dominant cock accompanies and guards the flock during the morning forage. Although they eat insects and worms, fowl live mainly on seeds, seedlings, fruit and berries. They expose the ground with scratching movements of the feet, step back and peck at anything edible which they find.

At around midday, the birds return to the sleeping place to preen themselves thoroughly and to rest.

Chickens frequently take sunbaths.

The longer the birds have been deprived of the sun, the more inclined they are to seek sunlight and the longer they lie in it. The hunger for the sun is understandable if one realizes how important sunlight is for the vitality, health and wellbeing of fowl.

In the afternoon, the birds go off to feed again. They repeatedly stop foraging in order to take short breaks during which they rest and preen themselves. They also take dustbaths during this period.

Chickens take regular dust baths to keep their feathers in condition by cleansing them of old grease. The dust bath usually lasts for twenty minutes and is performed once every other day.

Chickens sleep in elevated places.

In the late afternoon, fowl spend almost the whole time foraging for food. Shortly before dusk, long before the sun has gone down, they return to their sleeping places. Chickens like to spend the night as high up as possible.

Hens make their nests in sheltered places.

A hen about to lay an egg becomes restless and walks up and down, cackling frequently. Finally, she moves away from the group, often accompanied by the cock.

Each egg-laying is preceded by a search for a nesting site. An egg is generally laid roughly an hour after going onto the nest - in a standing position. The hen then rolls the egg under her belly with her beak, squats down and remains still for a few minutes. Finally, she leaves the nest and begins cackling at some distance from it. The cock then hurries to the hen and leads her back to the group.

Interestingly, the six to eight eggs in each clutch are not necessarily all from the same hen. Several hens may lay in the same nest, or one hen in different nests.

The development of the fertilized egg has already begun in the mother's body, but stops after laying due to the lower ambient temperature. One of the hens then becomes increasingly broody and remains sitting on her clutch. The resultant rise in temperature restarts the development of the embryo cells. In the next 20 days, the hen leaves the nest for only 20 to 40

minutes per day, generally around midday, in order to defecate and to take a hasty meal and a dust bath. She then returns to the nest by a circuitous route.

During natural incubation, the eggs are subjected to regular and irregular changes of temperature, light intensity and humidity. In artificial incubation, these climactic factors are kept constant. The hen turns the incubating eggs at regular intervals. This turning rhythm influences the later rhythm of activity of the chicks.

Between the seventeenth and twentieth day of incubation, the egg membranes rupture and the egg begins to breathe. Two to three days before hatching, the chicks begin to make contact by voice with each other and with their mother, and the mother with the chicks. The still-unhatched chicks can thus draw their mother's attention to any discomfort they are suffering as a result of cold or abnormal positioning.

With the aid of the egg tooth, a sharp prominence on the upper tip of the beak, the chicks open the shell and break it apart. In the first week, they keep very close to their mother. Voice orientation is of the utmost importance for both mother and chicks. A mother hen will immediately react to sounds of complaint, abandonment or fear from her chicks, but not to the mere sight of a dangerous situation.

The mother hen leads her chicks, warms them and shows them food. She entices her chicks to follow by making deep clucking sounds.

In the first four weeks, chicks in the wild gain weight at the same rate as intensively reared birds. At the age of ten weeks, wild fowl weigh half as much as chickens reared by man due to the marked difference in food supply.

By the age of eight to ten weeks, the young birds have already established some kind of ranking order among themselves. At the age of ten to fourteen weeks, the mother will drive her young away.