Author: Chaire BEA

Contributing authors: Marion Lévêque, Luc Mounier, Maryse Guinebritière, Laura Warin

Graphics: Marion Weisslinger
DOI: 10.5281/zenodo.12912563







https://chaire-bea.vetagro-sup.fr/en/

September 2023

Species sheet – All about laying hens!



The laying hens seem to you to be silly and boring animals? Their cognitive abilities may surprise you!

This new species sheet is your chance to learn more about hens. You'll discover that the hen is a social animal with specific behavioral needs and a unique sensory perception of the world! Discover also fun facts about the animal!

This species sheet was produced with the help and proofreading of Laura Warin, Animal Welfare Project Manager at Itavi, and Maryse Guinebretière, Scientific Project Manager for Health/Animal Welfare at Anses.

All about laying hens!

ID CARD



Nom scientifique: GALLUS GALLUS DOMESTICUS

Ordre: GALLIFORMES
Famille: PHASIANIDAE
Espérance de vie: UP TO 12 YEARS
Incubation: ~21 DAYS AT 37°C
Domestication: ~1500 ANS BC

Signature: (ocotte

IDFRACOCOTTE<<<<<<<<<<<<<<<<<<<<69280
012299293232GALLUSGALLUSDOMESTICUS<<</pre>

Physiology There are over 200 breeds of laying hens in the world, including 50 in France. 180 to 340 BPM 41,5 °C Monogastric Omnivore Average size: 45cm − 55cm

Social behavior



Social cohesion

Hens live on a small territory in small family flocks (usually 5), including a rooster

Pecking is a form of interaction which is not necessarily aggressive

Dominance

Hens higher in the hierarchy **perch higher**





Leadership

Groups include **leaders**, who initiate activities



Cognitive skills

Abe to discriminate 100 individuals (hens and humans)

Able to memorize colored circles

Able to understand that an object that has been hidden continues to exist (they look for it)



DID YOU KNOW?

Chicks can count to at least 5!



Expressing behavioral needs

Hens seek to express these behaviors **even in the absence of** optimal environment or necessary ressources:

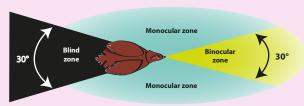


*Different behaviors can be performed at the same time. They also depend on the season and light conditions.

Sensory capabilities

View

Panoramic field of view (300°)





Hens have poor **night vision**, but during the day they can see **close-up objects** very well (useful for feeding).

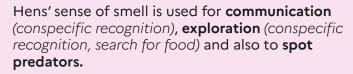
They see more colors than humans, particularly in the **green** and **blue** spectrums.



They detect **movement** very well, enabling them to spot predators (150-200 images par sec. vs 25-30 images par sec. for humans).

They can see ultraviolet light.

Odorat



Taste

In hens, taste is less developed than is some mammals, but this ability may be underestimated.

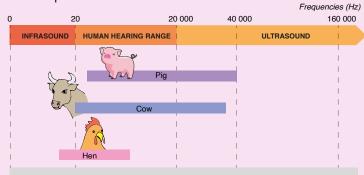
Taste buds are not located on the tongue but in the anterior and posterior regions of the **buccal** cavity.

Unlike mammals, hens only know 4 tastes (sour, unami, salt, bitter) with a high sensitivity to bitter.

Hearing

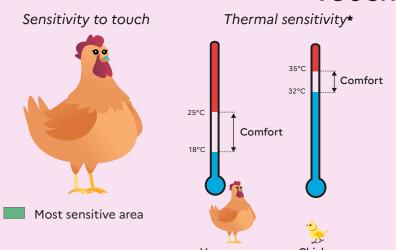
Hens are not very sensitive to **high-pitched sounds**, but more to **low-pitched sounds**.

Hens' auditory system is formed in the egg and develops before other senses.



Hens can be stressed by **loud noise**.

Touch



*The thermal comfort of hens depends on breed, while temperature perception depends on humidity and air speed.

Hens are sensitive to touch and their skin contains many types of receptors for temperature, pressure and pain.

The hen's beak is like the human hand: it enables it to discover and understand its environment, interact with other hens and grasp food.

