

FARMED ANIMAL SENTIENCE AND INTELLIGENCE

Every year, over 50 billion farmed animals are killed worldwide, according to the UN, more than any other animals. Recent scientific studies are revealing that these animals are "sentient beings," which means that they are aware of how they feel, where they are, who they are with, and how they are treated. Because we share our homes with dogs and cats, we understand that they are sentient, but understanding is growing that farmed animals, also, are sentient. This new information may have an impact on our food choices.

FARMED ANIMAL SENTIENCE

Feelings, positive and negative, are an important part of the lives of all animals, human and non-human. European Union (EU) law recognizes animals as sentient beings.

Every year scientists learn more about the intelligence and emotional complexity of animals, including farmed animals. Scientific studies have proved that farmed animals:

- Feel pain the same way as humans do, and have thresholds for pain perception similar to humans.
- Feel fear and anxiety.
- Feel pleasure when they are playing, feeding, or engaging in natural behavior patterns and feel emotionally frustrated when they are prevented from doing so.
- In nature, live in organized social groups (herds or flocks), small and stable enough for the animals to know each other.
- Form strong emotional bonds between parents and young, such as between a cow and her calf or a sow and her piglets.
- Communicate with other members of their group or family using their senses of sight, sound, touch, and smell.
- Show a strong preference for living in conditions where they can carry out natural behavior, such as nesting and foraging.

FARMED ANIMAL INTELLIGENCE

Scientific studies have shown that farmed animals:

- Have good memories.
- Form mental images of things that interest them.
- Learn from each other.
- Understand what another animal knows (modify their actions according to knowledge of those around them).
- Hens, cattle, sheep, and pigs can all tell individual humans apart. Could most humans recognize individual hens, cattle, sheep, and pigs in a group?

Communication Between Farmed Animals

Humans find the behavior of other humans difficult to understand, especially without words. It is considerably more difficult for us to learn about communication between farmed animals. We know that sheep, cattle, pigs, and birds are social animals who communicate using calls and other sounds, posture and gestures, sight, hearing, touch, and smell. Communication is essential for their social interactions, for maintaining relations between parents and young, for conveying information about danger and food, and for expressing intentions and emotions.

Sheep:

- Recognize and remember members of their own group and of neighboring social groups and can identify "foreign" animals.
- Remember images of 50 different sheep faces for at least two years.
- Remember and respond emotionally to images of individuals, by calling in response to familiar faces, for example, just as they would respond to members of their own social group.
- Recognize images of animals from their profiles once they have learned to recognize them from the front.
- Are gregarious and prefer to stay close together, keeping two other sheep within their wide range of vision at all times. They become stressed (emit high-pitched protest calls, attempt to escape, show increased heart rate and level of stress hormones) if they are isolated from their group, but seeing pictures of the faces of sheep they know reduces their fear and stress.
- Mothers prefer to have their own lamb as their nearest neighbor.

Chickens:

- Recognize individual humans.
- Can form expectations. When denied a food reward in a situation in which they had been trained to expect it, they uttered "gakel calls," which indicate frustration.
- Learn from each other. Mother hens use "food displays" (scratching, pecking) to teach their chicks to recognize the right sort of food, and they become concerned when they see chicks eating what they think is the wrong food.
- Learn from watching other chickens perform a task.
- Prefer to be close to familiar birds and avoid unfamiliar ones, have preferred flock mates, and establish stable social hierarchies, which means they recognize other birds and their relative status.
- Even two-day old chicks can form mental images. In an experiment, the chicks were set a task of finding an object they had imprinted on, when they could only see it through a small window. They were able to keep the object in their mind when it went out of sight. Two-week old chicks are able to use their spatial memory to find hidden food.
- In the wild, jungle fowl, from whom domestic chickens are descended, stay close together and synchronize their foraging, resting, and preening activities. They maintain contact with a "ku call," warn each other of danger, and fly to escape danger on the ground, to get over obstacles, or to roost and perch. Males help keep the group together using food calls and food pecking to attract the females, and they may stay alert while the hens feed. Males also lead hens to investigate possible nest sites.

Cattle:

- Can recognize 50–70 individuals.
- Unknown cattle rarely join an established group.

- Before giving birth, a cow moves away from the group; after birth, the bond between cow and calf is quickly established. In nature, the calf suckles for at least eight months and learns essential living skills from his or her mother and other group members.
- Communicate with one another:
 - Visual communication is very important to cattle. They have wide-set eyes with 320° panoramic vision. Visual signals can use all or part of their body, and head posture is important to indicate aggression or submission. Tail position can be used to indicate mood and activity (for example, in play).
 - Calls are important to indicate excitement, interest, or pleasure (for example in feeding), to express frustration or stress, or to regain contact when isolated or separated. Farmers and country-dwellers know that cows call for days after their new calves have been removed.
 - Cattle also have a large number of odor glands, and odors are important in their social, sexual, and, in the case of cows, maternal behavior.
 - Tactile communication and grooming are used in establishing social rank and in sexual and maternal behavior. They assume a special posture to indicate a request to be groomed.

Pigs:

- Recognize 20–30 individuals and greet their friends by nose-to-nose contact, grunting and grooming
- Solve problems at least as well as dogs.
- Remember where to find hidden food.
- Seem to have an understanding of what is going on in other pigs' minds and make decisions accordingly. This type of thinking was previously thought to be unique to apes and humans.
- Live in small groups of those they know and their litters, with whom they communicate using a variety of grunts and squeals. Unknown sows rarely join the group.
- Have different areas for wallowing, defecating, feeding, and sleeping.
- Sows may walk 10 km (6 miles) to find the perfect isolated, protected site to build her nest and give birth.
- Scientists learned that if one pig discovered where food was hidden, other pigs followed that pig and stole food, rather than search randomly. In response, the "informed" pig avoided going directly to the food when a "non-informed" pig was near, in order to have time to eat before the other pig arrived.

COMMERCIAL FARMING PRACTICES

Commercial farming practices cause physical and psychological suffering because they do not consider the sentience of farmed animals. This suffering includes:

- Pain and discomfort caused by mutilations without pain relief (castration, tail docking, debeaking, dehorning)

- Pain and discomfort caused by close confinement in cages, crates, stalls, or crowded sheds
- Painful health problems caused by breeding for maximum yield
- Stressful and painful treatment during marketing, transport, and slaughter
- Fear and distress caused by the separation of parent and young and the early weaning of piglets and calves
- Anxiety, frustration and stress caused by isolation, crowding, and the disruption of social relationships
- Frustration and stress caused by being prevented from engaging in their natural behavior patterns

Resources

"Scientific Papers on Animal Sentience." Compassion in World Farming Trust.
http://www.ciwf.org.uk/animal_sentience/science/research/scientific_papers/default.aspx **OR**
<http://tinyurl.com/3cbqe6q>

Turner, Jacky. *Stop – Look – Listen: Recognizing the Sentience of Farm Animals*. Compassion in World Farming Trust. Updated version: 2006.
http://www.ciwf.org.uk/includes/documents/cm_docs/2008/s/stop_look_listen_2006.pdf **OR**
<http://tinyurl.com/335xken>