



Gil Dutra Furtado^{1*} 

Abstract

The study of the actions of pigs gives veterinarians the opportunity to know and recognize their behavior, facilitating their preventive and curative care. Pigs have different behaviors, and these animals are very intelligent and have actions and reactions that are very characteristic of their wild descendants, which are wild boars, which helps, in general, in the understanding of these behaviors. This report presents results of observations and records of breeders that, as a whole, help in the study of swine ethology.

Keywords: Veterinary doctor. Behavior. Ethology. Swine.

¹Agronomic Engineer and Psychopedagogue, PhD in Psychobiology and Post-Doctorate in Environmental Development. He is currently a COOPAGRO (Cooperative of Agribusiness Technical Services) Cooperative and a researcher associated with LABEA (Laboratory of Aquatic Ecology) of the Federal University of Paraíba (UFPB), João Pessoa, Paraíba, Brazil

*Corresponding author: gdfurtado@hotmail.com

Submitted on: 23 Apr. 2023

Accepted on: 26 Apr. 2023

Published on: 30 Apr. 2023

© Copyright 2023



1 Introduction

It is up to veterinarians to understand their patients and with this understanding to promote the cure and prevention of different situations that are experienced in the many creations that exist in rural areas (FURTADO et al., 2022).

Pigs are very intelligent animals that bring many of the natural behaviors of their descendants, which is observed in many breeding situations. Thus, understanding these helps a lot in maintaining their well-being, culminating in a more successful and prominent agricultural activity (FURTADO et al., 2022).

For many people, pigs are animals that eat everything, get fat quickly, and whose meat on the plate tastes good, but few know their innate and learned behavior (BEATTIE; CONNELL; MOSS, 2000).

Within this reality, the Swiss behavioral scientist, Alex Stolba, in the eighties, indicated guidelines regarding pig breeding, where he observed in an extensive pig breeding in Scotland, evidence that pigs still behave in a similar way to their ancestors. wild, although they have been domesticated for thousands of years and intensively bred for meat production (HOTZEL; MACHADO FILHO, 2004).

Pigs are active animals and because they have a long snout in their foraging behaviors they plow the soil and look for insects, seeds and roots. Every day they should spend some time in an enclosure where they are free.

They must have this availability even when they receive, in the morning and in the evening, a dietary supplement that covers their nutritional needs (BEATTIE; CONNELL; MOSS, 2000).

It is notorious that even when pigs are no longer hungry, they still look for food by digging in the ground and gnawing on all sorts of things, and that is why it is important for them that they always have something in the pigsty with which they can amuse themselves and feed themselves, such as quality straw, woody grasses as well as softwood branches.

Since this is an environmental enrichment enclosure, it is ideal that the pigs also have access to an unpaved walkway or meadow where they can go to explore (BECKER, 2010).

Pigs are animals with a social hierarchy. The adult wild boar lives alone most of the time. Within the group, the pigs learn to live together, like all animals on a rural property, establishing a hierarchy.

During their first days of life, when they are more involved with psychological maturation, it is observed that at certain times they fight with each other, in the same way they will when they are adults (BEATTIE; CONNELL; MOSS, 2000). In this behavior, they stand shoulder-to-shoulder and seek to bite and push each other. Eventually, the least prepared pig runs away. The pig that lost the battle is left alone by the stronger one, as long as the loser respects a certain distance from the others within the group (HOTZEL; MACHADO FILHO, 2004).

In order for adult pigs, which are newly introduced into the group, to avoid many collisions, a lot of space must be provided. If the rearing place is divided into adequate sleeping and feeding spaces, as well as an exercise area, the pigs can be out of sight of each other. Newly arrived pigs at the breeding site may be better received if they are placed, at first, in enclosures close to the main creation, as this will allow the main group to already feel the presence of the new animal (BEATTIE; CONNELL; MOSS, 2000).

Pigs practice a large number of collective behaviors. This innate character represents a protection for these animals in nature, since they are almost always together. Since pigs like to eat together, every pig needs a place to eat.

If the pigs are to receive amounts of different feeds, they must be kept separately in a feeder until this trough is empty, otherwise the animals of higher rank drive away the lower ones. The lower ranking pigs must wait until the higher-ranking pigs eat. To avoid agonism between the animals, which can even cause injuries, the provision of hay, silo or straw for consumption and distraction promotes moments of reduced stress and favors the well-being of all (BECKER, 2010).

In nature, at dusk, the pigs look for a sheltered place and to this they transport materials for the construction of a nest, where the materials can be agglomerated with grass and other materials. In this environment, everyone sleeps together in groups (HOTZEL; MACHADO FILHO, 2004).

In this environment, they lie down on the soft, in a dry and warm place. That is why the presence of straw bedding in the pigsty greatly improves the comfort of these animals. However, if it's cold, they pile up against each other to keep warm, and in hot weather, on the other hand, they stay away from each other, trying to balance the temperature of the environment (BECKER, 2010).

Following a natural hygiene protocol, in the morning, the pigs leave the nest in order to do their physiological needs outside the nest and thus keep their living environment clean (HOTZEL; MACHADO FILHO, 2004).

Pigs cannot sweat. To cool off during hot summer days, wallow in mud baths. The muddy water that covers the pigs' skin evaporates and thus carries away body heat. Since, for hygienic reasons, mud baths are not possible in pens, pigs should be bathed from time to time, so that they can better balance their body temperature (BECKER, 2010).

Under natural conditions, pregnant sows near farrowing isolate themselves from the herd for a few days before giving birth, and during this time build a nest made of twigs, hay and grass. It is in this nest that they will have their young and after a few days, the sow takes her young to the group (HOTZEL; MACHADO FILHO, 2004).

As in wild boar, the sow demonstrates this innate behavior to build a nest. A few hours before birth, the sow becomes restless and begins to gather straw with her snout. In order to satisfy this instinct, she needs a lot of straw. A nest is important, otherwise the piglets may get cold, which is not advised, as it can lead to the death of the litter (HOTZEL; MACHADO FILHO, 2004).

Newly hatched pups crawl towards the mother's udder and the umbilical cord breaks. Often they start sucking within minutes of birth. During the first few days a hierarchy is established; this means that each piglet has its own nipple, which it defends against the others (AVMA, 2014; BECKER, 2010).

After the birth of the first piglets, the sow usually gets up and sniffs the newborns, which gives her a recognition of the offspring and the piglets an identification of the hand. When the sow prepares to sleep in the nest, she collects her young and carefully lies down. Despite this innate protective mechanism, it happens that some sows, because they are stressed or are clumsy, sometimes crush a piglet (AVMA, 2014; BECKER, 2010).

2 Conclusions

Carrying out research and studies directed towards ethology, and the interaction of this knowledge with the actions of veterinarians prove to be a valuable tool that provides great efficiency in the prevention of various pathologies and expansion of better results for breeders, as well as for swine herds.

CREDIT AUTHORSHIP CONTRIBUTION STATEMENT

The author GDF participated solely in all stages of the development of this study.

DECLARATION OF INTEREST

The author declares that there is no conflict of interest with the participants or collaborators of this article, either directly or indirectly.

FUNDING SOURCE

The author declares that no funding is applicable to this research.

REFERENCES

- AVMA (AMERICAN VETERINARY MEDICAL ASSOCIATION). **Welfare implications of teeth clipping, tail docking and permanent identification of piglets:** literature review. American Veterinary Medical Association: 2014. Available from: <https://www.avma.org/resources-tools/literature-reviews/welfare-implications-teeth-clipping-tail-docking-and-permanent-identification-piglets>. Accessed on: 22 feb. 2023.
- BECKER, G. **Estereotipias de Matrizes Confinadas.** Concórdia: Embrapa suínos e aves, 2010. p. 63-68. Available from: http://www.cnpsa.embrapa.br/sgc/sgc_publicacoes/morias2001_bettina.pdf. Accessed on: 22 feb. 2023.
- BEATTIE, V. E.; O'CONNELL, N. E.; MOSS, B. W. Influence of environmental enrichment on the behaviour, performance and meat quality of domestic pigs. **Livestock Production Science**, v. 65, n. 1-2, p. 71-79, 2000. Available from: [https://doi.org/10.1016/S0301-6226\(99\)00179-7](https://doi.org/10.1016/S0301-6226(99)00179-7).
- FURTADO, G. D.; DE BRITO, S. A. P.; DUARTE, G. D.; SOBRAL, F. E. da S.; CHRISTOFFERSEN, M. L. IMPORTÂNCIA DA ETOLOGIA APLICADA PELOS VETERINÁRIOS PARA A SÍNDROME DE ADAPTAÇÃO EM ANIMAIS DE ZOOLOGICO. **Environmental Smoke**, v. 5, n. 3, p. 38-41, 2022. Available from: <https://doi.org/10.32435/envsmoke.20225338-41>.
- HOTZEL, M. J.; MACHADO FILHO, L. C. P. Bem-estar animal na agricultura do século XXI. **Revista de Etologia**, v. 6, n. 1, p. 3-15, 2004. Available from: http://pepsic.bvsalud.org/scielo.php?script=sci_arttext&pid=S1517-28052004000100001&lng=pt&nrm=iso. Accessed on: 22 apr. 2023.