

Formative experiences between Cattle and humans

A positive human-animal relationship is the key to success - scientific studies and practical tips for everyday life

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Wild animals from the Suckler cow husbandry

Suckler cow farming in particular is associated with animal-friendly husbandry, but unfortunately it is also increasingly associated with shy and sometimes even aggressive animals. Nervous behavior and stress reactions in animals usually arise from fear of humans. This is due to the fact that direct contact between humans and animals, which automatically occurs in dairy farming through milking twice a day, is eliminated in extensive farming. People and animals meet less often, often only when necessary measures have to be carried out, such as removing ear tags, castrating male calves, vaccinations and providing medication to sick animals. These procedures are unpleasant for the animals and usually cause stress and pain

connected - and remain permanently negatively anchored in the animals' memory. This connection and the cows' strong maternal instinct usually lead to shy and sometimes aggressive animals.

Through the right and sustainable investment in a positive human-animal relationship, stress and difficult handling of extensively kept cattle can be counteracted in advance. Two factors are crucial to achieving this goal: firstly, understanding the behavior of the cattle; Only those who know a lot about the nature and behavior of animals can behave appropriately and, secondly, know how to handle cattle safely and correctly. In order to deepen this knowledge, on the one hand, scientific studies were carried out with cattle from extensive pasture fattening (see *Lebendige Erde* 4/2009,

pp. 44–47) as well as from suckler cow farming (see below) and a FiBL information sheet, which will be published shortly, was written for farmers, veterinarians and other interested parties

Positive human contact is always worthwhile

A Swiss study carried out by FiBL, Frick and ETH Zurich showed that positive human contact, carried out early in the life of calves from suckler cows (CH label: Natura Beef), has a very positive effect on their later behavior towards people.

In the experiment, 27 calves (Limousin and Limousin x dairy breed crosses) were divided into the control or treatment group after birth. Only the young animals in the treatment group received

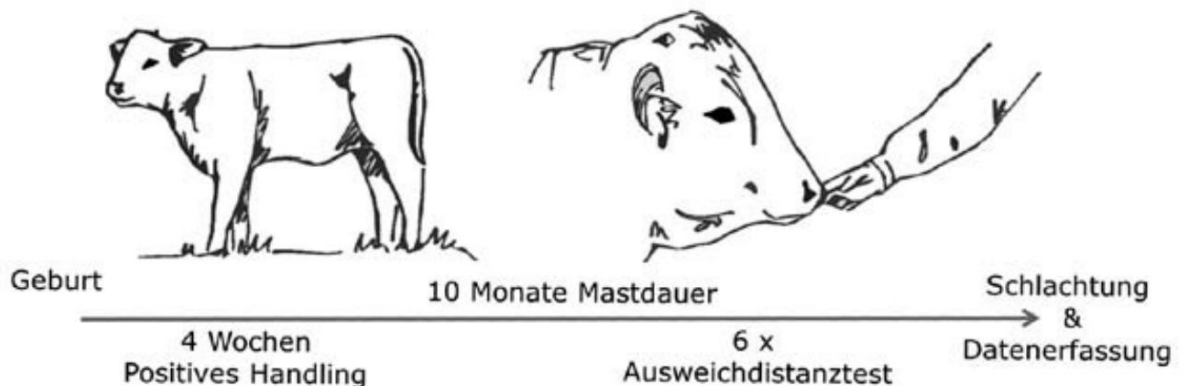


Fig. 1:

Process of treatment
and examination

Positive treatments within the first month of life: on the second, third and fourth days of life and on another three days: once a week within the following three weeks (Figure 1).

A treatment lasted a total of 20 minutes, interrupted by a 30-minute break and was based on the TTouch method© (see box). An avoidance distance test was carried out a total of six times on the farm with each animal (from the control and treatment groups).

During this standardized test, a person who is initially unknown to the animals approaches each of the animals from the front, with an outstretched arm and lowered gaze. This test records the extent to which the stranger can approach the animals, or at what distance the animal flees or allows itself to be touched.

Within the Natura Beef label, the young animals remain on the farm from birth until slaughter at ten months. The day of slaughter is also the day of weaning. All animals were accompanied to the slaughterhouse on the day of slaughter in order to carry out further observations. In order to be able to draw additional conclusions about the animals' fear of strangers, the behavior of the animals inside the stunning box was assessed using a score (Fig. 2). For the physiological assessment of the animals' reactions



Based on the situation at the slaughterhouse, spot blood samples from all animals were collected and then analyzed in the laboratory for cortisol, glucose and lactate levels. These parameters indicate the animal's stress-indicating reactions, with cortisol being a stress hormone and lactate and glucose being metabolic products whose levels in the blood are increased in stressful situations. In addition, entrecôte samples from each carcass were examined in the meat laboratory for the meat quality parameters cooking loss (water released after cooking for one hour), meat color and shear force (force required to cut up a cooked sample).

The results of the avoidance distance tests clearly showed that the positive

Treated animals kept a significantly shorter avoidance distance from people and therefore behaved less shyly towards people in the stable and on the pasture (see graphic on page 44 below). These results fit well with the lower defensive behavior that the treated animals showed inside the stunning box at the slaughterhouse. The blood samples from the treated calves tended to have lower cortisol concentrations and the meat samples from the treated animals had lower shear force values, meaning that the meat was more tender than that of the untreated calves. The results clearly show that positive treatment at the beginning of the animals' lives reduces the shyness of extensively kept calves towards people.

make contact with the animal, and the human-animal relationship

Actively cultivating hunger reduces stress for both sides. The T-Touch method has proven lasts.

TTouch© method

The TTouch© method, developed by the Canadian Linda Tellington-Jones in the 1970s, has so far been used successfully mainly on pets and horses for therapeutic purposes and to reduce stress. The basic element of the TTouch© is a 1-¼ circle made by each person

can be learned quickly and easily. However, the hand does not simply glide over the skin, but gently moves it in a circular shape. Ideally, you imagine a clock and start at six o'clock, describe a whole circle and continue until nine o'clock. Linda Tellington

Jones recommends always treating new areas of the body with TTouch©. In our experience, the circles really encourage the animal's attention and also make the person carrying out the activity concentrate very much on what they are doing.

ur research

The new FiBL information sheet "Species-appropriate handling of extensively kept cattle" will be published soon and will then be available as a free download at www.shop.fibl.org

for ordering in the print version. The leaflet costs €7.50 and has 12 pages

Further results can be found in the author's dissertation: Probst, JK, 2013. Stress reduction in slaughter cattle by im-proving the human-animal relationship. Dissertation ETH No. 21357

and that this can still be measured nine months later in the animals' behavior and in stress-indicating parameters.

Use ear tags sensibly

This study clearly shows that it is worth investing in the human-animal relationship in the first weeks of the calves' lives. At the same time, it makes sense to think about the sensible management of interventions that are perceived negatively by the animal. At the latest when attaching the ear tags, it is essential to come into contact with the calf. However, if this procedure is carried out close to birth, the calves have not yet gotten used to a body feeling without ear tags (don't forget: the animals themselves see the tags because they are within their field of vision) and also spend approx. 80% of her time lying down. According to observations, calves that had the ear tags inserted on the first day of life have less

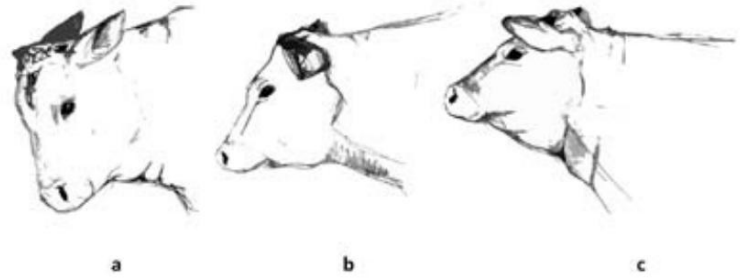


Fig 2: Shy or not shy? Behavior in the anesthesia box: from stressed (a) to calm (c)

Defensive behavior when touched on the head was shown in animals marked on the second day of life.

The first few days after birth are therefore ideal for carrying out essential management measures (e.g. castration) straight away and, on the other hand, for the young animals to have positive experiences with people. Try to establish calm contact with the calf and cow as often as possible without having to perform any necessary action on the animal! Cattle have a very good memory, are excellent observers, learn quickly and, above all, always. In the worst case, learn

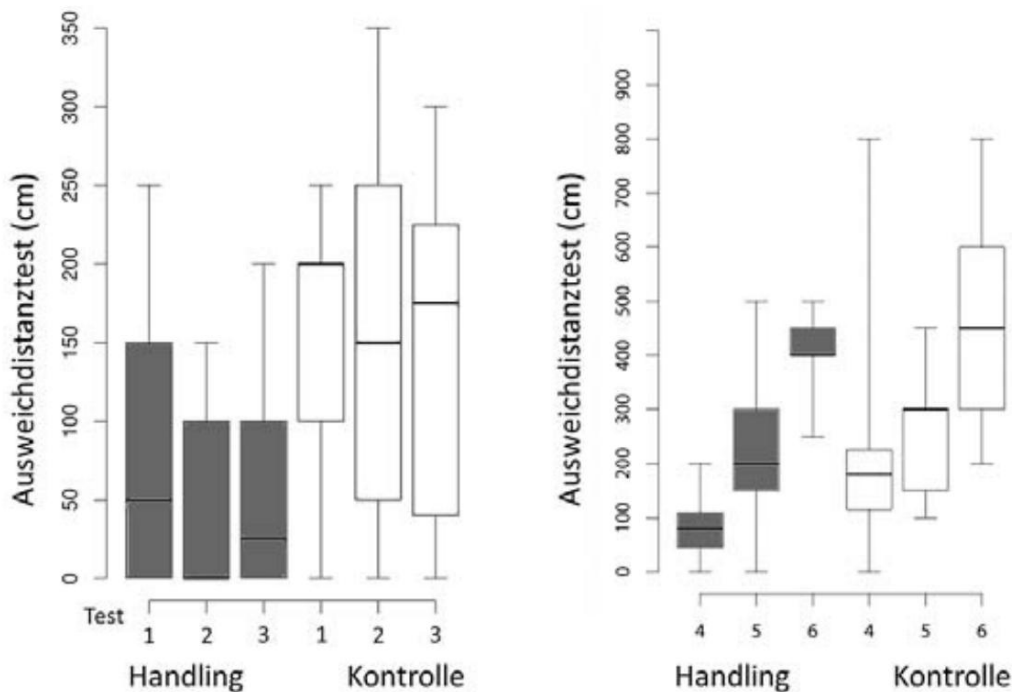
They know that they will face stress and pain if the farmer comes closer to them than just the feed. In the best case scenario, they learn that it is pleasant and interesting to be in contact with people. Internalize that every behavior you show when dealing with animals, whether positive or negative, has a lasting influence on the animals' trust in humans. The more frightening the action was, the more lasting it will be remembered and, consequently, the reaction to it will be typical of the species in the future - with escape and/or or attack behavior.

Investing sustainably in the human-animal relationship in your own herd also means investing in the mother cows. The more sociable the cow, the calmer the calf will be when dealing with people. That's why it makes a lot of difference, on the one hand, to build a good relationship with the already adult cows (if this doesn't already exist) and to raise the offspring on your own farm and to build a positive relationship with these young animals at an early stage, as described above .

Circular touches called TTouch

The TTouch© method (see box), as used in the above-mentioned experiment, is well suited to enhancing contact between humans and animals. In particular

Fig. 3: Avoidance distances of the treated delted and untreated Animals in the stable on the left and in the pasture on the right."



For shy animals, it is advisable to first get them used to the presence of humans in their immediate vicinity before making contact.

If there are safety barriers and the animals cannot be touched while they are not restrained, the restrained animal should slowly be accustomed to being in the immediate vicinity of humans. When making first contact, it has proven to be a good idea to gently touch the animals with the back of your hand - this touch appears less threatening and is more likely to be permitted. For very shy animals, it is recommended to use an approx. 50 cm long (willow) branch as an arm extension for initial contact.

Focus your touching on areas that the animals also use for social grooming - the cheek, the dewlap, the chest and the withers region. Observe the animal's reactions and use this as a basis for how you proceed in terms of pressure and intensity.

If the animals are initially so upset that they cannot find the touch relaxing, you should first reward the animal by moving away from it. That sounds strange at first, but what we want is exactly the opposite, it is



However, it is a very good method to maintain the animal's trust.

However, only move away if the animal shows a desired reaction, e.g. B. holds still and presses its body against you.

This allows the animal to learn to anticipate your behavior in an initially upset mode - and that is reassuring. Once the cattle have learned to keep still, they can move on to the next step, namely making actual contact. Here too you can

Continue in the same manner until the cattle are ready to tolerate the touch. Then the circular TTouches are ideal for creating a pleasant touch and therefore a positive sensation. It is advisable to train the TTouches with a trusted person beforehand, so that helpful tips regarding the speed and pressure of the touches can be exchanged before practicing with an animal. |

Especially suckler cow farmers should get their animals used to people early on; with positive experiences.

Practical recommendations

- Establish positive contact with the animal, even if there is no need for intervention,
- most effective when the animals are still young are;
- work early enough with potential mother animals.
- Create more positive than negative contacts.
- Cattle have often learned to recognize from people's body language that they are about to have an unpleasant experience.
- Insert ear tags into the calves as early as possible. The later the ear tags are inserted, the sooner the calves are able to connect the pain directly to the human.
- Establish a good relationship with the mother animals, ideally starting before the birth.
- Stop breeding with mother cows that exhibit extremely "wild" and unpredictable behavior.