

A descriptive study of social behaviour when mixing a new goat group: how gentle can it be?

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INTRODUCTION & AIM

When regrouping pregnant goats, blows can occur because form part of their social behaviour⁽¹⁾. Whenever goats have to be regrouped, agonism behaviors are observed more frequently^(2,3). This could induce abortions and impairment of animal welfare.

The aim was to observe whether agonism and aggression behaviours could be mitigated through habituation among goats that must be fused into a herd.

METHOD

The study was performed at the small ruminant farm of the Facultad de Medicina Veterinaria y Zootecnia from the Universidad Autónoma de Yucatán (UADY).

In this farm, 70 resident, pregnant adult goats, and a new group of 24 non-pregnant goats purchased from a local farm were used. All were in good health state, the protocol was approved by the Bioethics Committee (UADY, ref# CB-CCBA D-2014-003). Prior to mix, both groups remained apart for a period higher than one month. The habituation was considered as the repeated and gradual exposure in frequency and intensity of stimuli without negative or positive consequences for animals⁽⁴⁾. A four-step program (Fig. 1) exposed all them to:

- 1) Three days of 10 min. of vocalizations records from both groups plus exposition to hair and faeces from the other group of goats
- 2) Three days of ride on leash in groups of three goats from the new group, in front of the resting pen of the resident goats
- 3) Four days grazing in a same paddock separate with wire mesh
- 4) Two day grazing together in a same paddock, with qualitatively observations of behaviour through scan sampling⁽⁵⁾.



Figure 1. Four step program for goats' habituation between residents pregnant animals and a new group of non-pregnant goats

Observations were performed during 10 min at day in step 1, and one hour on steps 2 to 4, tracking agonist and aggression behaviour in both groups of goats.

RESULTS & DISCUSSION

As results, in a qualitative description, all goats displayed vocalizations and sniffing during the steps one and two. On step two, a half of them showed attempts to bite (Fig.2)

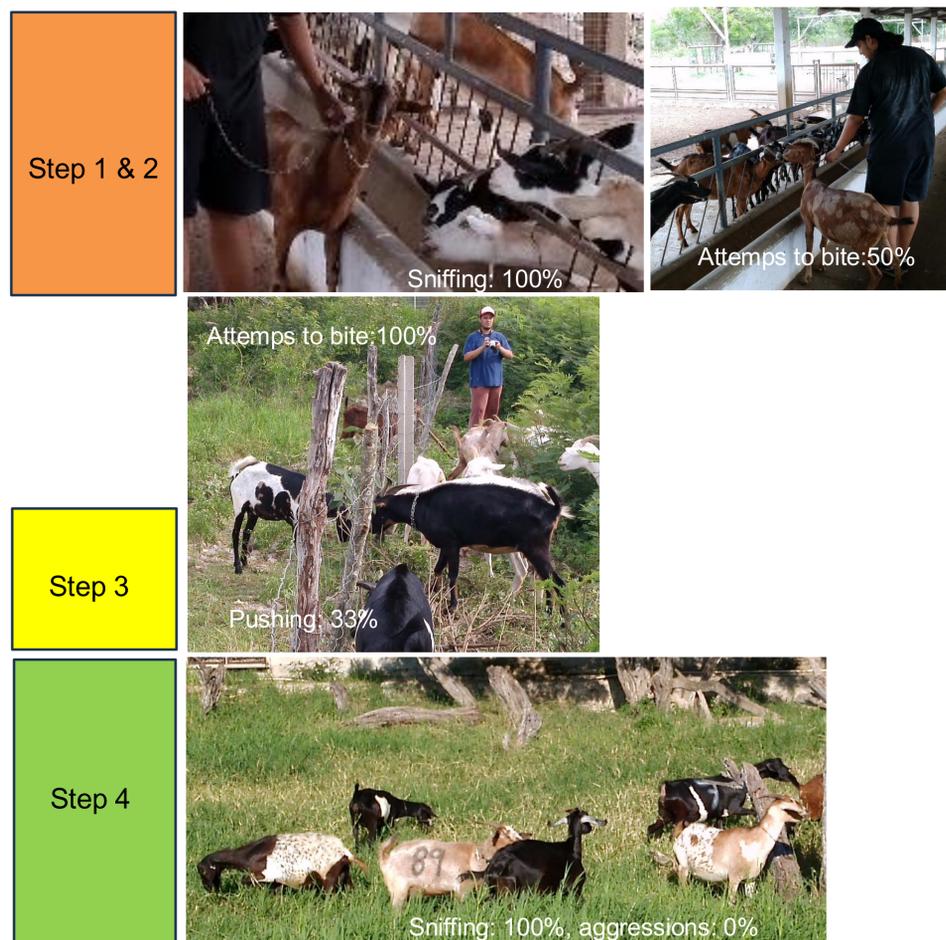


Figure 2. Main behaviors displayed during habituation of pregnant residents goats and a new group of non-pregnant animals.

A third of goats pushed with their head to a goat from the other group during step three. On this step it was also displayed bite attempts by all goats. Finally at step 4 only sniffing was observed, and no aggressions events were performed by 100% of animals (Fig. 2).

In the present study, gradualness was applied both to the novelty implied by the confrontation with new individuals in a stable herd, and to the social behavior of establishing the new hierarchy. The latter is key to obtain habituation⁽⁶⁾.

While steps one to three were a time consumption process, they enabled a smooth hierarchical stablismnt. By implementing habituation, the social behavior of goats is not repressed, only managed to express itself without detriment to their welfare.

CONCLUSION

We concluded that after 12 days of habituation an absence of aggressive behaviour and a low intensity of agonism can be obtained, contributing to animal welfare when mixing goats.

FUTURE WORK / REFERENCES

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