

Horse behaviour: mares and foals.

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As man and horses have lived together for thousands of years, the study of horse behaviour has always been important. We need to understand the horse as an highly social prey-animal. This article is about mares and foals, because I think this is very interesting. How foals slowly become more independent from its mother and how they interact with the rest of the herd. How the mothers behaviour is affected by pregnancy and foal. Pregnancy among mares lasts for approximately 335-340 days and usually results in one foal. Twins are rather rare.

Development of independence:

A study on how the foals gradually develop more independence from their mothers prove that this is a process that takes time. The foal is vulnerable in its first period of life, and it needs to be protected.

Welsh pony mares and foals were studied, and they were usually found to be within 1 or 5m of each other during the first week of the foal's life and gradually spent more time at greater distances as the foals became older. There was an overall levelling of the trend during the 9th–15th weeks of life of the foal, followed by a second period of change during weeks 16–24. Through weeks 21–24, mares and foals spent at least half of their time within 5m of each other. During the first 8 weeks of the foal's life, a mare remained close by when it was relaxing, either by grazing in a circle around it or by standing upright beside it. Mares and foals were most likely to be close together when they were resting upright with the other ponies in the herd and most likely to be far apart when the foal was playing. There was no difference between males and females in the development of independence. [1]

Mothers rank:

The influence of maternal rank and experience on patterns of maternal care and social relationships of foals were investigated in a herd of Sorraia horses.

Social interactions and spatial relationships of 13 foals (seven females and six males) were examined from birth to 10 months of life, within the three major periods of foal development. Conflict over suckling between dam and foal was not generally affected by rank and experience, but higher-ranking mothers allowed more suckling during late lactation than lower-ranking mothers. Foals of higher-ranking mares spent more time close to the mother during socialization. Maternal rank and experience did not significantly affect maternal protectiveness, foal independence from the mother or the development of affiliative relationships between foals and group members. Foals of higher-ranking mares received lower frequencies of aggression from other horses only in the first month of life. Dominance relationships among foals depended mainly on aggressiveness and were not associated with maternal rank. [2]

Group dynamics and social behaviour of mares before and after foaling:

Group dynamics and the social behaviour of mares were investigated in the periods before and after foaling during two non-consecutive years, in a herd of Icelandic horses consisting of adult mares and geldings, fillies(young females), and colts(young males).

There were significant changes in the social behaviour and interactions of mares after foaling, compared both to their own behaviour before foaling and to that of barren control mares.

After foaling, mares with foals separated off into a distinct subgroup, whereas barren control mares increased interaction with the rest of the herd; it is presumed that separation served to keep the foals at a safe distance from the more boisterous geldings and sub-adults; alternatively, it could have been the result of mutual attraction between the foals. In general, the linear dominance order was correlated strongly with age, and the top-ranking mares were older mares that had not yet begun a senescent loss of physical condition which resulted in a later slight drop down the hierarchy.

There was no consistent relationship between dominance rank and the pattern of preferred recipients of affiliative interactions, while familiarity was a more important determining factor than kinship in the selection of a preferred partner for affiliative interactions. The preferred partner for proximity was often the same individual as that for allogrooming, suggesting that proximity was a result of an active process rather than of passive acceptance. The presence of adult geldings in the herd did not seem to change the social behaviour of mares as compared to that described for feral horses, and did not appear to negatively affect behaviour during parturition, mare-foal bonding or maternal care. [3]

Aggression and social spacing, before and after weaning:

Aggression and social spacing were studied in 14 light horse mares and their foals living at pasture.

Significant correlations were found between mare rank and the rank of foals both prior to and after weaning (weaning is the stage in the foals life where it no longer feed on its mothers milk). Before weaning, the rank of the foal was significantly correlated with birth order. No significant correlation between birth order and foal rank was found for the post-weaning hierarchy. An animal's gender had no significant effect on foal rank or the choice of preferred associate. Both prior to and after weaning, foals associated preferentially with the foal of their mothers most preferred associate. In addition, significant positive correlations were found between rank of mares and foals and the rate at which they directed aggression to other herd members. [4]

Dominance relationships and aggression of foals:

A herd of 15 Belgian brood-mares and ten foals was studied.

There was also a significant relationship between a foal's rank and its total aggression or aggression rate per subordinate post-weaning. Higher ranking foals had higher rates of aggression. Over 80% of threats were directed down the dominance hierarchy. The play-rank order of the foals, scored by the number of times a foal left a play bout, was not significantly correlated with the rank order as scored by agonistic interactions.

Suckling:

Developmental changes in time spent suckling and related mother-foal behaviour are described in an unmanaged herd of Camargue horses. Male foals spent about 40% more time suckling than females during the first 8 weeks. Body weight did not differ between the sexes but time-budgets did: males grazed less and were more active. If pregnant, the typical

multiparous mare nursed her foals for 35–40 weeks, males and females alike, and weaned them 15 weeks before the next foaling. Primiparae lactated longer and weaned closer to the next foaling by 5 weeks. The mares played an active role in regulating the time spent suckling in early, and particularly in late lactation. [5]

Conclusion:

After foaling, mares with foals separate from the herd into a subgroup.

The development of independence happens gradually among horses, and mare and foal is more likely to be separated when the young one is playing. In the wild, this would be a good opportunity for predators to hunt the foal.

When it comes to feeding of the foal, the mares regulate the time spent suckling.

We also see that the dominance relationships among foals depends more on aggressiveness than on the mothers rank, and higher ranking foals have higher rates of aggression.

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