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CRECHE COMPOSITION IN A GROUP OF ANGUS CALVES

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Ruminant creches consist of groups of young animals that are in spacial proximity of one another and separate from other conspecifics. Often an adult female of the species is nearby. Irregular configurations and numbers of individuals in groups make creches difficult to define. In this study a creche consisted of three or more calves. The nearest neighbor of each of them was another member of the group, which persisted for at least six minutes in the same location. Fifteen black and eight red Angus calves ranging from 63 to 167 days of age and their dams were observed in scan samples twice daily for 6 days on a ranch in south-central Brazil. Twenty-eight creches were studied. The animals' activities, associations among individual calves in creches and the identities of nearby cows were recorded. There was no discernable sex or color discrimination within creches. The calves tended to be with the same creche companions more often than with different companions during different observations (t = 6.54, df = 44, p < 0.001). Six of the 23 cows accounted for 80% of all cows near the creches. Fifteen of the 28 creches were accompanied by at least one cow. The nearby cow was the dam of one of the calves in the same creche on eight occasions, and she was the dam of a calf in a different but concurrently extant creche six times. Kinship is probably a factor in the proximity of adult cows to creches. Previous studies showed that familiarity is more important than kinship in determining social relationships in adult herds. Long-term familiarity and subsequent social preferences might have origins in alliances formed by calves in creches.