

5 Summary

Tapirs belong to the least studied and well known large mammals of our time. This comparative study conducted in zoological gardens for the first time investigated the behaviour of these animals and the reactions of the visiting public in the sense of an integral zoo biology. From 1997 until 2000, research took place in the zoos of Berlin, Dortmund, Heidelberg, Munich, Nuremberg, Wuppertal (Germany), Zurich (Switzerland), Los Angeles, and San Diego (California, USA). Ethological methods, i.e., focal animal sampling, continuous recording, counts of visitors, and surveys, lead to revealing results including some 40 individuals of the four species, the Asian (*Tapirus indicus*), lowland (*T. terrestris*), Baird's (*T. bairdii*), and mountain tapir (*T. pinchaque*), as well as more than 25,000 zoogoers during 1,628 hours of observation.

Differences in behaviour are generally more conspicuous between individuals than between the species. Some patterns of the Asian and the lowland tapir are of a special quality. All tapirs show an equal "scratching down" reaction. Activities in the course of the day are influenced by maintenance conditions, e.g. feeding and locking. The availability of food reduces resting periods which range between 46.7% and 87.4%. During the day, the animals remain 65.2% resting, 26.6% moving, and 8.2% feeding in mean on the outdoor enclosure. The mean time spent in pools is 12 minutes, preferably for defecation and resting in hot days. In mixed species exhibits, contacts of tapirs become more important to anteaters or capybaras than to conspecifics. The distance between two individuals indicates the degree of social relationship. Tapirs proof consciousness and skill in manipulating objects, especially when representing nutritional items. They learn quickly, but they have little perseverance.

Public attention is favoured by a good visibility and a high activity level of the animals. Depending on the exhibit, the amount of observers varies between 26.1% and 94.4%. Viewpoints like inlets or platforms help to increase the number of observers. When resting camouflaged, individuals receive up to 37.3% less attention compared to phases of activity. The mean observation time of a tapir is 46 seconds. It rises to the maximum with keeper contacts. Visitors give best judgements to naturally shaped enclosures including a variety of plants, a rich supply of water, and mixed species exhibits along with well located and clearly arranged signboards. The mountain tapir is higher accepted than the more conspicuous Asian tapir. 57.0% of the people asked by the survey know tapirs from zoo visits. The systematic classification of this animal group is hard to find by laymen. Comparisons and confusions with 86 different species, all above with anteaters, give proof to this fact.

Tapirs are adaptive to live in zoological gardens and display a variety of their natural behaviour under appropriate conditions. However, further improvements in keeping and presenting these endangered species are recommendable to meet the mission of preserving survivable populations and educating the public. This study therefore provides specific suggestions.