

7. Summary

This work deals with the environmental enrichment of two spectacled bears (*Tremarctos ornatus*) at the zoological garden in Basel. The two males, which lived together, were given access to three objects (hanging log, floats and filled logs) in each case on 12 days respectively. In order to establish whether the bears' behaviour was altered by use of the objects, nine modes of behaviour were defined. These were obtained using five minute intervals, in accordance with the scan-sampling method, while the basis data and levels of activity were collected and then compared using histograms. The population of only two bears was too small to make a general conclusion about the effects of the enrichments possible. For this reason, no statistical tests were used. Both bears demonstrated behavioural change as a result of the environmental enrichment. The highest change was reached in social and metabolic behaviour and the lowest in locomotive behaviour.

On average, activity increased, while both passivity and abnormal behaviour decreased. Both bears played with all three objects. Here Chaparri spent the longest time with the 'filled logs' and Nobody with the 'floats'.

There was a seeming correlation between the time of day and modes of behaviour, but they were most probably caused by the keepers' schedule.

In addition there was an olfactory test (coffee, vinegar, cow hides, the dung of lions, Somali wild asses and otters). The bears sniffed at the odours for only a short time.

They were generally more preoccupied with foraging for groundnut and raisins.

As an addition to the study, the visitors' level of interest was also studied, to establish what effect the activity or passivity of the bears had on the visitor's interest level (single persons and groups). Highly significant differences could be established. The visitors preferred the active bears.

Conclusion: The environmental enrichment of captive bears has a positive influence on both the animals' behaviour and the visitors' interest level.