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Short Communication

## ABNORMAL AND STEREOTYPIC BEHAVIOUR IN A PARAKEET

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## ABSTRACT

An adult male parakeet was brought with a history of excessive screaming and walking back and forth for the past three months and on arrival of the owner the bird stops exhibiting this .The female companion passed away three month back and was replaced by two female companion but they ended up fighting. Stereotypic behaviour is common in captive birds due to thwarted natural behaviour. A bird doesn't want to get bored in his cage—if he does, he may resort to monotonous activities like pacing to entertain him. Abnormal behaviour in caged birds can be prevented by enrichments like swings, ladders that keep the bird occupied.

KEY WORDS: Parakeet, Stereotypic beaviour, Enrichment-reg.

## INTRODUCTION

Stereotypies are abnormal repetitive, unvarying, and functionless behaviours that are often exhibited by captive and domesticated birds (e.g., Mason, 1991). Abnormal behaviours are expressions of captive animals in absence of their normal environment (Wiepkema, 1985). Abnormal behaviours are indicative of poor housing and management and the animals often attempts to escape or cope with the adverse environment by expressing these behaviours (Broom, 1991., Dantzer, 1991). All abnormal behaviours are not mainly due to adverse environments. On reaching puberty, most of birds show behavioural distortions like restlessness, screaming, aggression and other stereotypies. Crowding a large number of birds in a relatively small cage causes unfavourable environment which is known to increase aggression and may due to inability of the birds to develop stable social hierarchy due to increased number of social interactions and inability to avoid one another in a reduced private space (Wiepkema and Van Hoof, 1977).

#### METHODOLOGY

An adult male parakeet was brought with a history of excessive screaming and walking back and forth for the past three months and on arrival of the owner the bird stops exhibiting this. Observation of its behaviour showed excessive screaming and pacing from which is developed only after death of its female companion.

## **Enrichment protocol:**

A larger sized cage was provided. Social enrichment is the most effective enrichment method to reduce abnormal behaviours which can be done by providing female companion in a separate cage kept in visual contact. After about two weeks of visual contact and observing their communication, the female bird was allowed into the male bird's cage.

Feeding enrichment by hanging and hiding feed was done facilating birds to spend more time while foraging and also

do some amount of work while foraging. Physical enrichment was done by providing dark hiding places, ladders, swings and perches of various size which increased complexity of cage and provided alternate perching site and more climbing and swinging opportunities.

#### RESULTS

The stereotypies observed in this bird are excessive screaming and pacing which is observed frequently in short intervals. After providing various enrichments to the bird like social enrichment, foraging enrichment and physical enrichment, the frequency of stereotypies was reduced to a considerable extent. The bird was able to keep itself occupied by various activities like foraging and playing with its companion

#### DISCUSSION

Abnormal behaviours takes months to develop and take considerably longer to reverse. These behaviours cannot be corrected in short time period even using several enrichments. Minimum 100 reverses may be required to reverse the bird's conditioning. Various types of enrichments should be introduced in a rotational manner like a trial and error basis for a long period of time until recovery of the bird. Abnormal behaviours can also be controlled by proper management alone.

Use of environmental enrichment gadgets is known to have beneficial effects in animals with brain damage and disturbed motor functions, and in increased arborization of dendrites in brain (Mohammed, 2002). Enriched captive environments have improved learning abilities, increased cortical thickness and weight, increased size, number, and complexity of nerve synapses, and a higher ratio of RNA to DNA (Renner and Hackett Renner, 1993; Shepherdson, 1998; Widman, 1992). The importance of environmental enrichment is to provide animal greater choice of activity and to have control over both social and spatial environment by improving the quality of captive environment (Newberry, 1995 and Staufacher, 1995).

Foraging enrichments were chosen to provide an opportunity for the parrots to perform some amount of work to receive foods such as seeds, fruits, and nuts. These enrichments required that the parrots chew through barriers, manipulate objects through holes, sort through inedible material, or open containers. All foraging enrichments were filled with both edible and inedible items.

Physical enrichments were chosen to increase the physical complexity of the cage. They provided alternate perching sites, climbing or swinging opportunities, or movable objects that could be manipulated with the beak, feet, or both. Hanging of cages should be avoided and it has to be placed on a fixed basement.

## REFERENCES

Broom, D.M. (1991) Assessing welfare and suffering. Behavioural Processes, 25, 117-123.

Dantzer, R. (1991) Stress, sterwtypies and welfare. Behavioural Processes, 25, 95-102.

Mason, G.J. (1991b) Stereotypies and suffering. Behavioural Processes, 25, 103-1 15.

Mohammed, A.H., Zhu, S.W., Darmopil, S., Hjerling-Leffler, J., Ernfors, P., Winblad, B., Diamond, M.C., Eriksson, P.S., Bogdanovich, N. (2002) Environmental enrichment and the brain. In: Hofman MA, Boer GJ, Holtmaat AJGD, Van Someren EJW, Verhaagen J, Swaab DF, eds. Progress in Brain Research. Vol 138. Amsterdam: Elsevier Science BV. Renner MJ, Hackett Renner C. 1993. Expert and novice intuitive judgements about animal behaviour. Bull Psych Soc 31:551-552

Shepherdson, D.J. (1998) Tracing the path of environmental enrichment in zoos. In: Shepherdson DJ, Mellen JD, Hutchins M, eds. Second Nature: Environmental Enrichment for Captive Animals. Washington: Smithsonian Institution Press. P- 112

Stauffacher, M. (1995) Environmental enrichment, fact and fiction. Scand J Lab Anim Sci 22:39-42.

Widman, D.R., Abrahamson, G.C., Rosellini, R.A. (1992) Environmental enrichment: The influence of restricted daily exposure and subsequent exposure to uncontrollable stress. Physiol Behav 51:309-318.

Wiepkema, P.R. (1985) Abnormal behaviour in farm animals: ethological implications. Netherlands Journal of Zoology, 35,279-299.

Wiepkema, P.R., & van Hooff, J.A.R.A.M. (1977) Agressief gedrag; oonaken en functies [Aggressive behavior: Cause and function]. Utrecht, The Netherlands: Bohn, Scheltema, and Holkema.