AN IMPROVED BALCHATRI TRAP FOR BUZZARDS

M B Schmitt
98 The Sentinel
28 Van der Merwe Street
Hillbrow 2001

and

S Baur
65 Married Quarters
Grootvlei Mine
Springs 1560

During a study on the Steppe Buzzard Buteo buteo vulpinus it became apparent that our trapping success was unsatisfactory. Many buzzards escaped from the trap after being "claw-hooked" only, some birds showed no reaction at all. This was even more disappointing as the density of buzzards in the Transvaal is much lower than in the Western Cape.

Our original trap can be described as follows: 320mm base diameter, overall height 150mm, double cone construction of approximately 60° and 130° included angle, covered with ½" chicken wire, single wall, painted light brown with 40 nooses 60mm diameter, 0.3mm thick. 2 Mastomys mice were used in the traps. Mass 2,3 kg total.

Although we were still using the same trap as at the begining of

the study in October, 1976, several changes were made from October, 1977 onwards.

These changes were as follows:-

1 Nooses were increased to 85mm diameter and the number reduced to 34.

2 Noose thickness was increased from 0,33mm to 0,6mm

3 One Mastomys mouse instead of two was placed in the trap, however the mouse was exchanged frequently

4 The trap was repainted with colourless lacquer and, in the set stage, covered with muddy reddish soil which gave the trap a non-reflective appearance.

As these changes were gradual, we have only compared trapping success of the first three months of our study with the last three months of our study.

First three months: 48 drops - 11 buzzards captured
(22,9% success rate)

Last three months: 156 drops - 90 buzzards captured
(54,5% success rate)

Applying the Chi-square test we arrive at a value of $\chi^2 = 6,56$. This indicates that the difference in success rates is significant (p 0,025).

In establishing our success rate, we have counted all drops, irrespective of whether the birds were already ringed or showed no reaction to the bait at all or whether the birds were

far away (300m). The maximum distance between trap and bird was 226m when the bird was captured.

Very few articles have been published on balchatri trapping success rates. Biggs and Von Maltitz (Safring News 1973, Vol. 2, No. 1: 6-10) arrive at an average success rate of 32% for all raptors, with only eight buzzards being trapped out of a total of 188 captures. Siegfried and Broekhuysen (Die Vogelwarte 1971, Vol. 26: 78-86) arrive at a trapping success rate of 31,5% for adult steppe buzzards and 51,8% for juveniles. However these rates were based on numbers of birds reacting positively to the trap and not on overall number of drops.

Contrary to Siegfried and Broekhuysen (1971) who only waited for 5 minutes for a buzzard to react we always waited a minimum of 15 minutes and in cases where the buzzard stood next to the trap, we waited up to one hour.

Furthermore it should be mentioned that with our trapping method no consideration was given to the safety of the mice, resulting in an average mortality rate of one mouse per 7 captured buzzards. We can only recommend to exchange mice frequently but do not agree with Frost (Safring News 1974, Vol. 3 No. 2) who suggests a double wall trap, as this might deter suspicious buzzards from approaching the trap.