

# Winter foraging of endangered Red-crowned and White-naped cranes in the Korean Demilitarized Zone (DMZ).

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**Abstract** - We determined how presence of heterospecific individuals in the vicinity of a focal individual affects the behavior of two critically endangered species of cranes on their wintering grounds at Cheolwon in the Korean Demilitarized Zone (DMZ). The Red-crowned crane, *Grus japonensis*, is larger than the White-naped crane, *Grus vipio*, and it dominates the White-naped crane in aggressive interactions. We showed that the dominant species increases foraging activity in the presence of the subordinate species presumably because of scrounging of the food from the subordinate. Because interspecific interactions may affect avian endangerments this behavioral findings should be taken into account when managing winter refuges for the two endangered crane species.

**Key words** : DMZ, dominance, endangered species, group size, *Grus japonensis*, *Grus vipio*, conservation.

Fig. 1. Activity budgets of the Red-crowned (RCC in part A) and the White-naped (WNC in part B) cranes in the presence and in the absence of heterospecifics. The mean proportions of four categories of behavior (Feeding, Locomotion, Resting, and Alert) presented here are based on proportions recorded for 5-34 individual RCCs and 8-20 individual WNCs (sample sizes shown above the bars). Two observation periods are considered separately: December 2002 and January/February 2003.

