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Aspects of the Feeding Ecology of Avifauna at an Inland Airport, South Africa

Ordino Kok
University of the Free State, P.O. Box 339, Bloemfontein 9300, South Africa

Lettie Kok
University of the Free State, P.O. Box 339, Bloemfontein 9300, South Africa

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Ordino and Lettie Kok, Department of Zoology and Entomology, University of the Free State, P.O. Box 339, Bloemfontein 9300, South Africa

Bloemfontein airport, situated in the central Free State, experiences the greatest number of bird-aircraft collisions at South African airports, relative to its (low) air traffic. In an attempt to rectify the situation, aspects of the feeding ecology of birds presenting a potential hazard at the airport were investigated. Plant surveys indicated that the study area can be classified as a dry *Cymbopogon – Themeda* veld type in a relatively good condition. Using 270 pitfall traps over a continuous period of 15 months, it was established that more than twice as many ground-living invertebrates, mainly insects, occurred in grass kept permanently short (average height 22 cm) compared to those in undisturbed long grass (average height 57 cm). Based on 4,843 birds from 51 species posing a threat to aviation and which were shot as part of an ongoing management programme extending over 11 years, medium-sized, ground-living birds such as crowned plovers (*Vanellus coronatus*), blacksmith plovers (*V. armatus*), whitewinged korhaans (*Eupodotis afraoides*), doublebanded coursers (*Smutsornis africanus*), spotted dikkops (*Burhinus capensis*), cattle egrets (*Bubulcus ibis*), Swainson's francolins (*Francolinus swainsonii*) and Orange River francolins (*F. levaillantoides*) dominated the local bird population. Crop and/or stomach analyses of these birds indicate that insects, mainly Isoptera but also Coleoptera and Orthoptera, collectively constitute their main food source. The Isoptera, more specifically the harvester termite (*Hodotermes mossambicus*), is, moreover, the only important prey taxon showing a conspicuous utilization peak during the relative food shortage of the dry season. A significant and sustained decrease in harvester termite numbers and activities was accomplished by administering Gaucho-treated bait in disturbed grass areas, thereby reducing the availability of food and, hopefully, also bird numbers and bird-aircraft collisions. Implementation of a so-called long grass policy as a control strategy should have a similar effect.