

Insects getting more attention in Kruger

By Hendrik Sithole and Johann Oelofse

The eruption of two insect species in the Mooiplaas Ranger Section within a short successive period caught the attention of not only personnel in the KNP Conservation Services, but everyone in the vicinity of the section.



During the latter half of March Section Ranger Johann Oelofse discovered a huge colony of strange bees that had turned the Mopani football field into a mini moon landscape by their nest excavations in the soil. This eruption of the soil nesting bee, *Megachale* species, resulted in the

closure of the Mopani soccer field for more than two weeks. One can say soccer, the number sport in South Africa, took a back stage so that a bee can complete its lifecycle without interruptions! According to Dr van Noort, the bareness of the field due to sport activities provided suitable habitat for the bees to build their nest aggregations throughout the field, which is typical of soil nesting bees. These nesting colonies are very uncommon and Section Ranger Oelofse can only recall having witnessed similar behaviour by these insects on two occasions previously, once in Shingwedzi rest camp and another time in the middle of the dirt road near Red Rocks, both incidents during the middle 1980's.



Barely a month had lapsed before an even more spectacular outbreak by a small green stink bug, *Piezodorus purus*, erupted over the Mooiplaas area and took the spotlight from the soil nesting bee. The bug was distributed in many parts of KNP, but managed to reach phenomenal plague proportions over the Mooiplaas Ranger Section and especially the Rangers house and staff living quarters.



Although there was a similar eruption during the same period of 1993 and the odd smaller eruption during a few interim years, this season's outbreak lasted for five weeks during which dwellings were totally inundated by these tiny creatures as soon as darkness fell. At sunset one could hear their buzz as they flew in scores of thousands from the plains below the Mooiplaas koppie to settle against the walls and windows of the houses.

Nothing could stop them as they headed indoors. Being only the size of a little-finger nail and very flat, the determined insects managed to crawl in through closed steel window frames and cracks of door frames in their thousands. The air conditioner in the Rangers house became



so clogged by the multitude that crawled into it, that it had to be removed and sent away for clearing and servicing. All this resulted in extreme discomfort to inhabitants, as every night –for five weeks- brought hours of vacuuming and sweeping the next morning to render a house inhabitable again. Two full vacuum bags and a quarter-full 10lt bucket of sweepings became par for the course!

It is not fully known what triggers these outbreaks, but it is suspected that it associated with favourable climatic conditions and less availability of natural enemies of these insects. Good rainfalls we received in most of KNP could have resulted in the imbalances of these insects to their natural enemies. The rains might have asynchronised the interaction by providing favourable conditions for the insects to breed while their natural enemies such as parasitoids and predators were no longer active¹.

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