

Proposed research on Bushpig as a damage causing animal in protected area buffer zones in the Garden Route.

Across the African continent, bushpigs are considered a nuisance by farmers due to their persistent and often devastating crop raiding. Of the species known to damage crops, which include elephant (*Loxodonta africana*), hippopotamus (*Hippopotamus amphibius*), buffalo (*Syncerus caffer*), vervet monkey (*Cercopithecus aethiops arenarius*), porcupine (*Hystrix africaeaustralis*) and warthog (*Phacochoerus africanus*), bushpig falls within the top three species that cause the most crop damage or account for the most raiding incidents.

Bushpig occurrence is widespread in the southern Cape forests, including those managed by South African National Parks (SANParks). The Garden Route National Park (GRNP), proclaimed in 2009, is surrounded by numerous smallholdings and farmland, many of which border indigenous afrotemperate forest, which is ideal bushpig habitat. A large body of scientific literature exists on the human wildlife interface (HWI) on agricultural lands neighbouring protected areas in the rest of Africa and particularly on damage causing animals (DCAs) such as bushpig. However, the literature is scant for areas surrounding the southern Cape forests. The most comprehensive research on bushpig in the Cape was conducted by Dr Armin Seydack in the 1990s, but his research mainly focused on ecological aspects of the species with a minor focus on bushpig as a DCA on farmlands. Information on the extent of potential conservation challenges related to bushpig damage is therefore vague and relies mostly on hearsay and infrequent incident reports.

In 2020, the PMSA brought it to the attention of SANParks that bushpig are causing damage to neighbouring private landowners' maize crops in the Knysna area. PMSA, SANParks and some affected farm managers discussed the matter in late 2020 and the farmers indicated that they are open to further investigation and research on the issue, driven by SANParks. SANParks approached collaborating researchers with experience in the field of human and wildlife conflict at Nelson Mandela University (NMU, George Campus), to establish a joint research project. NMU and SANParks researchers and managers visited one of the farms most affected by bushpig damage and experienced a very positive reception from the farmer who pledged his support for research on bushpig behaviour and potential solutions to reduce damage. This is an important step in better understanding drivers of bushpig landscape use and behaviour, which will be important for trialling alternative approaches to reduce their impacts.

The field visit helped researchers gain context-specific insights to formulate a plan of action for the research investigation, which is currently being fine-tuned. In the meantime, SANParks and NMU are expanding camera trapping efforts to collect crucial baseline data on bushpig behaviour on the farm that was visited. It is envisaged that this will be expanded to other areas in future. Better understanding local bushpig behaviour will enable evaluation of different damage mitigation methods with the aim of then trialling potential approaches that enable trade-offs to be made between biodiversity conservation and agricultural production through reducing damage to crops and livelihoods.

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