

SESSION: ex Humanities in the South African National Antarctic Program**MARS Themes:**

Earth systems observations

Title:

An assessment of the status of biological invasions and their management on the Prince Edward Islands

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Abstract:

The Prince Edward Islands (PEIs) are sub-antarctic islands that have the highest level of protection afforded to any natural area under South African law. Because of this, strict biosecurity measures are in place. However, new introductions of alien taxa still occur. The National Status Report on Biological Invasions in South Africa (2022) - to be launched January 2024 - applied and tested a set of 20 indicators on the PEIs that encompass pathways, species, sites, and interventions. Based on these indicators we discuss the status of biological invasions and their management on the PEIs, highlight gaps and recommend steps to improve management of new detected taxa. A species list of alien taxa on the PEIs has been developed, which uses the Darwin core metadata, and we aim to include this dataset into SAPRI's repository. The pathways along which alien species can be introduced to the PEIs are as contaminants on goods and as stowaways. Out of 93 taxa historically introduced, 44 are currently present on Marion Island, 26 of which are known to be invasive. Prince Edward Island has only eight alien taxa, all invasive. The house mouse is the most harmful alien species on Marion Island, and is feeding on several plant and invertebrate species as well as adult and hatchling seabirds, with impacts on ecosystem functioning. A plan to eradicate the house mouse ('Mouse-Free Marion') has been developed and is due to be implemented in 2025 if sufficient funding is raised.

Format:

oral presentation

Keywords: (add ; between keywords)

invasion impacts; invasion pathways; invasion history

