



DEPARTMENT OF FORESTRY, FISHERIES AND THE ENVIRONMENT South African National Antarctic Programme (SANAP)

ENVIRONMENTAL IMPACTS

Prior to the completion of the form, please note the following:

1. One form to be completed in respect of each SANAP project proposal submitted.
2. Details for each year of the project applied for to be outlined in each block.
3. Insufficient information may prejudice the environmental acceptability of the project.
4. Researchers are requested to provide sufficient information in their answers to allow DSI/NRF and DFFE, in conjunction with the Prince Edward Islands Advisory Committee (PEIAC) and the Tristan Biodiversity Advisory Group (T-BAG), to make a thorough, complete and accurate evaluation of the environmental impact of the project.
5. IT IS THUS IMPORTANT TO DISCUSS ANY POTENTIAL IMPACT/S YOUR STUDY WILL HAVE ON THE ENVIRONMENT AND BIOTA, AND DESCRIBE MITIGATING ACTIONS WHICH YOU PROPOSE TO MINIMIZE OR ELIMINATE THESE IMPACTS.
6. To assist you in completing this form for research on Marion and/or Prince Edward Island, please refer to the Prince Edward Islands Management Plan (PEIMP) and for Gough Island to the Gough and Inaccessible Island World Heritage Site management plan (GIIMP) - *copies available on request (see end of form for contact details).*

In addition to the information required in sections 1-4 below, the following guidelines are provided to assist applicants with questions relating to the potential environmental impact/s when preparing their project proposals:

1. Proposals should clearly outline all field methods, work programmes, deployments of equipment, camp sites, and the timing of research activities, as well as any modifications for the duration of the project, i.e. a projection of activities for subsequent years MUST be provided in each block for the duration of the project.
2. The researcher should list aspects of the proposed activity or activities that might cause an impact/s on the environment and biota (e.g. visual impact or other forms of disturbance).
3. In making assessments of potential impacts, the researcher should briefly consider the nature, duration and intensity of the likely environmental effects, including the following:
 - a. the existing environment, its variability or dynamic nature, resilience to change, sensitivity to disturbance, previous disturbance, protected status, etc;
 - b. cumulative and possible indirect impacts;
 - c. the probability of accidents and their environmental consequences;
 - d. the adequacy of existing information and knowledge; and
 - e. necessary and possible amelioration/rehabilitation.
4. A map of the area should be included (sketch if necessary) to assist the interpretation of this section of the research application.

1. PROJECT LOCATION (please indicate appropriate location):

Marion Island

Prince Edward Island

Both Marion and Prince Edward Island

Gough Island

Antarctica (SANAE IV)

Antarctica (Other) – please specify: _____

2. DURATION OF PROJECT: _____ 20____ to _____ 20____

3. PRELIMINARY ENVIRONMENTAL EVALUATION

- *If you answer "Yes" to any of the questions below, please include a full description of the proposed activity, including proposals for mitigating and monitoring the impact/s.*
- *It is important that you provide maps detailing the proposed research areas (if these are hand drawn sketches, please scan and attach electronically).*

WILL YOU, OR THOSE WORKING ON YOUR PROJECT:

a. Use a radionuclide? Yes No

If Yes, complete the following:

Radionuclide	Chemical form	Quantity (Curies)	Half Life (Years)

Detail procedures you will take to ensure that no radiation will enter the Antarctic or sub-Antarctic environment from use or spillage:

b. Take any hazardous substances (chemicals, radioactive material, stable isotopes, etc.) to the Antarctic or sub-Antarctic environment? Yes No

If Yes, complete the following:

Hazardous Substance	Formula	Quantity	Use

Unused chemicals will be: Left at SANAE IV / Marion / Gough Base
 (please indicate) Returned to South Africa
 Other

Detail disposal procedure in all instances:

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- c. **Release any hazardous substances (chemicals, etc.) to the Antarctic or sub-Antarctic Environment?** Yes ____ No ____

If Yes, detail the need to release, the amounts involved and the location:

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- d. **Use explosives?** Yes ____ No ____

If Yes, complete the following:

Explosive Type	Number of detonations	Charges per detonation (kg)	Total weight (kg)

How will the explosives be used?

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Detail any precautions taken to minimise disturbance to any wildlife or plants:

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- e. **Collect, capture, kill (destructive sampling) any terrestrial, freshwater or marine plants or animals?**

Yes ____ No ____

If Yes, for each species (apart from those taken using plankton nets or trawl), estimate the proportion of the local population you will be sampling or disturbing:

Species	Method	Number	Proportion of population sampled (%)	Proportion of population disturbed

Describe the mitigating measures that will be employed to minimize potential / actual negative impacts of sampling procedures on the affected populations, e.g. training and experience of field workers, minimisation of disturbance to wildlife and the environment, transport and holding facilities if capturing animals, minimisation of pain and suffering if killing animals:

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f. **Restrain, tag, band (non-destructive sampling for handling, marking or other purposes) any terrestrial, freshwater or marine plants or animals?** Yes ____ No ____

If Yes, for each species (apart from those taken using plankton nets or trawl), estimate the proportion of the local population you will be restraining (include period of restraint), tagging, banding and disturbing:

Species	Method	Number	Proportion of population sampled (%)	Proportion of population disturbed

Describe the mitigating measures that will be employed to minimize the potential / actual negative impacts of sampling procedures, e.g. training and experience of field workers, minimization of disturbance to wildlife and the environment including minimisation of stress to handled animals, prevention of loss or destruction of eggs/chicks/pups, etc:

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g. **Enter any Protected Area in Antarctica (Antarctic Specially Protected/Managed Areas – ASPA/ASMAs), or restricted area on Marion and/or Prince Edward (refer to PEIMP for zonation) and/or Gough Island (refer to GIIMP)?**
Yes ____ No ____

If Yes, complete the following:

Name of Protected Area	Duration of Visit	Total person-days

Detail the type of work which will be carried out within the Protected Area:

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Detail why the work must be carried out within the Protected Area:

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h. **Take to the Antarctic or sub-Antarctic region any animal, plant (including seeds, micro-organisms or soil)?** Yes ____ No ____

If yes, complete the following:

Species	Quantity

Detail why these materials need to be taken to the Antarctic or sub-Antarctic:

Detail the quarantine procedures you will undertake to ensure that there is no release to the Antarctic or sub-Antarctic environment:

i. **Significantly disturb by flooding, sampling, trampling, camp operations or any other means any ice-free area (bare ground / vegetated areas)?** Yes ____ No ____

If Yes, complete the following:

Routes to be taken	Number of samples	Surface area to be disturbed	Total person-days

Briefly describe any such significant disturbance:

Detail any steps you will take to minimise such disturbance and, if relevant, rehabilitate disturbed areas:

j. **Take or remove any physical (non-biological) specimens, e.g. rocks, fossils, etc.?**

Yes ____ No ____

If yes, detail the general area and types of specimens to be collected:

Location	Specimen	Type	Total Number or Weight	Surface area affected

k. **Make use of new or existing camp/field sites?**

New ____ Old ____ Both old and new ____

If new, list these sites by name, if available, and GPS position (or on map) and indicate why a previously impacted site cannot be used:

Site (name)	Location (GPS position)	Reason for new site

i. Track previously untracked ground? Yes ____ No ____

If Yes, state why this is necessary:

Please indicate:

Routes to be taken	Total person-days	Environmental safety precautions taken

m. Install equipment, markers, stakes, cairns etc. that will be left in the field?

Yes ____ No ____

If Yes, detail location and type of marker, stake, duration, etc. *(please motivate if markers at the Prince Edward Islands and on Gough Island are not unpainted, plastic markers, as prescribed):*

Location	Type of marker	Duration in field	Motivation if not unpainted, plastic

n. Expect your activities to have an environmental impact not covered in the above?

Yes ____ No ____

If yes, fully detail impacts:

o. Expect the proposed activity to have more than a minor or transitory (>6months) impact?

Yes ____ No ____

If yes, briefly describe:

p. Intend to operate an Unmanned Aerial Vehicle (UAV) in the Antarctic or sub-Antarctic?

Yes ____ No ____

If yes, kindly include a motivation for the use of the UAV:

**Please note that in accordance with the South African Civil Aviation Authority (SACAA) Regulations and COMNAP Guidelines, the UAV will need to be registered and the pilot will need to have a licence to operate the UAV*

- q. **Generate any waste (other than usual personal waste) during the execution of your project-related activities?** Yes ____ No ____

If yes, please indicate the type (e.g. packaging materials) and volumes of waste to be generated:

Type of Waste e.g. plastic, wooden pallets, fuel cans, etc.	Volume

4. PERMIT REQUIREMENTS (PLEASE REFER TO PEIMP):

- i. Zone 1 - Service Zone (provide details):

- ii. Zone 2 - Natural Zone (provide details):

- iii. Zone 3 - Wilderness Zone (provide details):

- iv. Zone 4 – Limited Access Zone, e.g. bird colonies, lava tunnels, historic sites, etc. (provide details and motivation – all areas to be specified):

- v. Zone 5 - Protected Area Zone (Prince Edward) (provide details and motivation):

- vi. Research Permit (provide details):

- vii. Collection Permit (provide details – number of samples to be collected, etc.):

- viii. Prince Edward Islands' waters (including offshore) (provide details – number of samples to be collected, etc.):

Should you require any assistance with the completion of this form, please contact:

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