



Fifty Years of Peace and Science

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IP 55

Agenda Item: CEP 8a

Presented by: Australia, SCAR

Original: English

Improvements to the Alien Species Database

Improvements to the Alien Species Database

Information Paper submitted by Australia and SCAR

Abstract

The Australian Antarctic Data Centre is considering ways to modify the Biodiversity Database to improve the management of non-native species records. A new facility to associate images with species records could assist with species identification, and an online data entry form could provide a consistent format for entering and distributing new records. Feedback from Members on these enhancements would be welcome.

Background

The 2006 New Zealand workshop on 'Non-native Species in the Antarctic' recommended establishing a common database for recording new species (ATCM XXIX/WP13). This recommendation was reflected in the five-year work plan adopted at CEP X, which included as a suggested action 'establish a database of non-native species occurrences in Antarctica'.

At CEP XI the Committee endorsed Australia's proposal (in ATCM XXXI/WP16) to use the Biodiversity Database, maintained by the Australian Antarctic Data Centre (AADC), as the central database of non-native species (sometimes called alien species) occurrences in the Antarctic region (Final Report para. 267).

The Biodiversity Database supports the SCAR program Evolution and Biodiversity in the Antarctic (EBA) (<http://www.eba.aq>), and contains records of native and non-native species from the Antarctic and sub-Antarctic. The database is accessible from the AADC website at <http://data.aad.gov.au/aadc/biodiversity/index.cfm>, and the tab 'Bioregions and Aliens' provides a short-cut to non-native species records.

Possible improvements to the Alien Species Database

Associating images with records of non-native species

The AADC has developed a database to manage information concerning collection events associated with the IPY project Aliens in Antarctica (see <http://data.aad.gov.au/aadc/biodiversity/aliens/>). The database allows images of items collected (e.g. seeds, invertebrates etc) to be uploaded and associated with the records. An example is shown in Attachment A.

Associating images with non-native species records in the Biodiversity Database could also be useful, and the AADC is considering modifying that database. In particular, images could assist with identification of non-native species by experts worldwide, including from other National Antarctic research programs and beyond. Images of the location of observation or collection could also help put the record in context.

Online form for entering non-native species records

To streamline and provide structure to the process for submitting non-native species records, the AADC is also considering developing a standard online form. An example is shown in Attachment B. A final working version could be embedded in the Aliens pages of Biodiversity Database. The system could be set up to automatically direct new records to one or more 'gatekeepers', who could assist with species identification.

Australia and SCAR would welcome feedback from Members on these possible enhancements to the Alien Species Database, or other suggestions for improvements.

Attachment A. Example of images associated with a non-native species record

Australian Antarctic Division
Conditions of use

Australian Antarctic Data Centre

Aliens in Antarctica Collecting event

Navigation

- Maps, charts, and geographic information
- Observational data
- Online tools and guidelines

Biodiversity and ecosystem processes are threatened worldwide by human introductions of non-indigenous (alien) species. This database contains samples of propagules collected as part of the International Polar Year (IPY) project 170.

Barcode : IPY_S_50785 [\(edit\)](#)

Collecting event :

When collected:

Type : Individual

Ship :

Port :

Prior visitation areas :

Location of samples : Niek Gremmen

Items inspected

Item code	Description	Seeds found	Weight (g)
Not described			0
(edit)	1 propagules described.		

Propagule Id	Propagule Type	Images
a		  
(edit)		<p>Image 1 - © IPY 2009 Image 2 - © IPY 2009 Image 3 - © IPY 2009</p>

Identifications

Family: Poaceae - Taxa: *Poa annua* [Identification Status: Certain by Niek Gremmen on 1-Jan-20

[add another Identification](#) ↗

Attachment B. Possible standard form for entering non-native species records**Personal entering the record:**

- Name:
- Email address:

Are you recording an:

- Observation: Yes / No
- Collection: Yes /No

Name of observer / collector:**Date of observation / collection:****Location of observation / collection:**

- Named location:
- Latitude, Longitude:
- Habitat type:
- Image of location: [upload]

Specimen information: [if a collection was made]

- Location where is the specimen stored:
- Specimen catalogue number:
- Image of specimen: [upload]

Has the observed / collected non-native species been identified? Yes / No

If yes:

- Name of person who made the identification:
- Degree of certainty: Certain / Uncertain
- Common name:
- Family:
- Genus:
- Species:

Do you consider this non-native species to be a threat to the local environment? Yes / No / Possibly / Don't know

- Please provide reasons for your answer:

Notes:

For example: species abundance at the observation / collection location; does the species appear to be either restricted to the site it was found in or does the species have the ability to spread?

Supporting information:

- Please upload supporting documentation