





Decision support tool for the management of freshwater fish incursions

A user manual for incidental reporting

Stephen Saddlier Silvana Acevedo















Decision support tool for the management of freshwater fish incursions

A user manual for incidental reporting

Stephen Saddlier Silvana Acevedo

Arthur Rylah Institute for Environmental Research

123 Brown Street, Heidelberg, Victoria 3084 2012 An IA CRC Project









Disclaimer: The views and opinions expressed in this report reflect those of the authors and do not necessarily reflect those of the Australian Government or the Invasive Animals Cooperative Research Centre. The material presented in this report is based on sources that are believed to be reliable. Whilst every care has been taken in the preparation of the report, the authors give no warranty that the said sources are correct and accept no responsibility for any resultant errors contained herein, any damages or loss whatsoever caused or suffered by any individual or corporation.

Published by: Invasive Animals Cooperative Research Centre.
Postal address: University of Canberra, ACT 2600.
Office Location: University of Canberra, Kirinari Street, Bruce ACT 2617.
Telephone: (02) 6201 2887
Facsimile: (02) 6201 2532
Email: contact@invasiveanimals.com
Internet: http://www.invasiveanimals.com

Web ISBN: 978-1-921777-43-1

© Invasive Animals Cooperative Research Centre 2012

This work is copyright. The Copyright Act 1968 permits fair dealing for study, research, information or educational purposes. Selected passages, tables or diagrams may be reproduced for such purposes provided acknowledgement of the source is included. Major extracts of the entire document may not be reproduced by any process.

This document should be cited as: Saddlier SR and Acevedo S (2012). *Decision support tool for the management of freshwater fish incursions – A user manual for incidental reporting.* PestSmart Toolkit publication, Invasive Animals Cooperative Research Centre, Canberra, Australia.

Cover image: Keith Bell



Contents

Pre	face	iv
1.	Registering for access and logging in	. 1
2.	Creating a report	3
3.	Entering report data	4
	3.1 Sighting details	4
	3.2 Fish details	4
	3.3 Capture details	7
	3.4 Waterbody details	8
4.	Additional comments	8
5.	Online reporting summary	9
6.	Submission of online reporting summary	9
7.	Links	9



Preface

This document provides instructions for the use of the Decision support tool for the management of freshwater fish incursions. The tool is located on the web at http://www.feral.org.au/dss/

The information provided will be assessed to determine whether a follow-up interview is warranted. Interviews are conducted by appropriately qualified state government staff to collect additional vital details on the fish incursion. This information helps to inform management decisions about fish sampling, control, or eradication.



1. Registering for access and logging in

The log-in page is the tool's front page where new users register for access, and registered users log-in to begin using the tool. Basic information about the tool is also provided. Registration is important because it ensures that information can be stored in the database and retrieved later and a follow-up phone call or email can be made to the user if more information is required.

To register as a new user, select the 'register here' link on the login page (see below).



A new window will open to record the user's contact details.

This information will enable fishery managers to contact the user to clarify details about the incident reported. This is vital to ensure a timely and accurate response to a new fish incursion. Name and email address is the minimum information required. While not mandatory, additional fields such as address, postcode, telephone number and affiliated organisation (if any) are also helpful in terms of getting in contact about the report.



Once the registration details are entered, select the 'Register' button (see below).

fer	al.org.au
L)	
Register For This Site	
E-mail	
First Name	
Last Name	
Address	
Suburb/City	
Postcode	
Phone number	
Organisation	
A password will be e-mailed to you.	
Register	Click here to register

The user will then be notified by email of their username (ie email address) and an autogenerated password, which is used to log onto the tool.

If the user can't remember a previously provided username or password, the 'can't remember your username or password?' link can be used to verify details, after which the username or password will be emailed.



2. Creating a report

Click on the 'Create new incidental report' button in the 'Community Users' box.



Community Users

For recreational or commercial fishers and the general public.

User Manual

Create new incidental report

Users can generate multiple reports because there might be more than one new invasive species at a particular location, or there might be a number of locations where a particular new invasive species has been recorded. In order to distinguish one report from another, a unique report title is required. It is highly recommended that the user incorporates the species (if known), the location of capture and the date of capture into the report name.

For example, if a giant snakehead (*Channa micropeltes*) is reported from the Paroo River in New South Wales on the 15th of February 2011 then, the report title would be 'Paroo River snakehead 15 February 2011'. Once this is entered, select 'Next' or to finish the report at a later stage, select 'Save and exit'.

The date that the report is created will be automatically generated by the tool.





3. Entering report data

3.1 Sighting details

This section of the report provides information about the person who sighted the fish, the date of sighting and the location where the specimen was sighted or captured. There are five steps as follows:

- 1. Enter the name (given name and family name) of the person who sighted the fish.
- 2. Record the day, month and year of the sighting using the 'calendar' function.
- Enter the location details: location may be selected from (i) a map (use the +,- to zoom in and out and double click on the map to select the location), or (ii) by entering a global positioning system (GPS) location (latitude/longitude or map grid of Australia easting and northing coordinates).
- 4. A written description of the location should be provided in the dialogue box, including any road names, landmarks or road directory coordinates.
- 5. Attach a drawing or photo of the location using the 'Browse' button. This information is vital to determine the exact location so that management of the site and species can be accurately targeted.

Use one of the f	ollowing options to de Maps Provide	escribe the location	of the incursion.	ocation	4	
Double-click	on a location or centry y b tertown o Horsham o conte o demnope Horsham o Arara tertown o Horsham o o Per Warranbool O	o Moutamer van Hill O chura O chura O chura O chura O chura O sheppart Bendigo O sheppart Bendigo O seo vice o Sheppart Melboure Geolong O Angiesea O Fran	incursion location.	Bundaga Balavao Holaroook Jundabyne Woomeo Baimsdale	a Nowra Map Satell Betehanen O Bega Austral Capit Territo	ite ian al ry
Google Latitude: -3	7.66805937398484	Map data @2011	Wonthagel Bass Strait Europa Technologies, 5.435552784546	Google, Whereis(R), 1	Sensis Pty Ltd - <u>Terms -</u>	of Us



3.2 Fish details

Information provided in the 'Fish details' section of the report helps to determine whether the fish in question has been accurately identified. If there is any doubt as to its correct identification, a list of registered taxonomists is provided so that a specimen (if one exists) can be forwarded for study. If a specimen does not exist, a number of tools are provided to assist with identification, including the ability to attach a photograph of the specimen (for expert examination) and links to websites that provide identification tools, taxonomic keys and images of a large range of fish species. There are five steps, as follows:

- 1. Enter the number of specimens captured or observed.
- 2. Select whether a specimen is available: options are 'Yes' or 'No'. If a specimen is available, the most appropriate fish taxonomist (ie one in the same state) should be selected from the dropdown list for the specimen to be sent for expert identification. Provide the relevant taxonomist with contact details as well as details of the fish sighting (the taxonomist will provide details on how the specimen should be delivered).
- 3. Upload a photo: if a photo is available of the specimen, the '**Browse**' button can be used to upload a picture or picture/s to the website to aid in identification.
- 4. Enter information about formal identification: the user can select 'Yes' or 'No' from the options to indicate whether the specimen has been formally identified. If the specimen has been formally identified, the taxonomist who identified the specimen can be selected from the dropdown menu. If the name of the person who identified the specimen is not in the list, provide the name, organisation and identification experience of the person who identified the specimen. If a specimen is not available for identification, select 'No' from the options. Record the assumed species (or common name) of the fish in the dialogue box provided.
- 5. Enter other identifying physical attributes such as body shape, mouth shape, tail shape and other characteristics of the specimen, including:
 - number of barbels (slender whisker-like organs)
 - number of spines in the dorsal fin
 - number of spines in the anal fin
 - colour
 - unusual markings.



- How many specimens were captured?
- 2 Is there a specimen of the fish available? * O Yes O No
- 3 Upload a picture of the fish if you have one available
- 4 Has the specimen of the fish been formally identified? * C Yes C No

Browse...

5 Please describe the fish

Body shape:	Mouth shape:	Tail shape:
C Fusiform or streamline (e.g. barracuda)	C Large	c Continous
C Laterally compressed (flattened from side to side, e.g. angelfish)	C Small	c 📢 Lunate
C Depressed (flattened from top to bottom, e.g. stingrays)	C Anterior	o Forked
C Eel-like shape (e.g. moray eel)	O Dorsal	o Truncate
	O Ventral	c
Other attributes		
Barbels Number 💌		
Spines in dorsal fin		
Spines in anal fin		
If available please provide a drawing showing fish attribu Browse_	tes (e.g. position of barbells)	
Colour		
Describe any unusual marking in the fish		



3.3 Capture details

This section of the reporting collects information on whether the fish was observed or captured and, if captured, the type of gear used and the amount of capture effort. This information will help to provide an estimation of the likely population size. The level of effort undertaken at other sites (where this species was not observed or captured) is also important to indicate whether this species might have spread more widely than the reported capture site.

From the list, select the technique used to capture the specimen and enter the amount of effort (in hours) each method was used at the site.

If multiple traps, nets, or fishing rods were used, include the total number of hours for each type of gear. For example, if sampling was done for a total of three hours, using a combination of dip-netting for that three-hour period and five bait traps, the total effort would be three hours for dip-netting and 15 hours (three hours x five traps) for bait traps.

If the technique used is not on the list, describe the method used in the 'Other - please specify': - dialogue box provided.

Step 4: Capture details	
How was the specimen captured/observed?	How many hours did spend undertaking this activity?
Cast nets	hours
Bait fishing	hours
Lure fishing	hours
Bait traps	hours
Dip-netting	hours
Other - please specify:	
« Back	Cancel Save and exit Next



3.4 Waterbody details

This section of the reporting records and analyses information on the physical attributes of the waterbody where the capture or observation was made, to enable basic decisions on the best type of eradication or control options available. Information required includes waterbody (creek, lake) and site access. There are four steps, as follows:

- 1. Select the waterbody that best describes the capture location, from the options in the dropdown box.
- 2. Record if there are any physical barriers present: options are 'Yes', 'No' or 'Unknown'. If 'Yes' is selected, describe the location and type of barrier in the dialogue box provided.
- 3. a). Record whether the site is accessible by vehicle: options are 'Yes' or 'No'. If 'Yes' is selected, a dialogue box will open where further details can be provided, such as ease of access and any special requirements (eg 4WD).

b). Record whether the site is accessible by boat (ie small aluminium punt) by selecting either the 'Yes' or 'No' box. If the site is accessible (ie 'Yes'), a dialogue box will open where further details can be provided, such as ease of access and any special requirements (eg boat with a draft of no more than 20cm).

4. Record whether the fish was captured or observed on private land: the options are 'Yes' or 'No'. If 'Yes' is selected, provide details of the land owner.

	d. CICCK		J	
Are there any physical barriers be the waterbody and other waterwa	etween ys?	O Yes O No	O Unknown	
Site access				
Is the site accessible by vehicle?	O Yes O N	10		
Is the site accessible by boat?	O Yes O No			
vvas the fish caught in a:				
Private property O Yes O No				



4. Additional comments

Additional comments that were not covered in the questionnaire can be added in the dialogue box provided.

5. Online reporting summary

After completion of the 'Additional information' section, an online report summary will be produced for you to review. Make sure that all the information entered is accurate and that all questions have been completed. A copy of the report can then be printed.

6. Submission of online reporting summary

Select the **'Submit report'** option to submit the report to the appropriate state representative. It is likely you will be contacted by email or telephone to discuss the report in more detail.

7. Links

The links page provides a range of extra information that is likely to be useful to people completing the report, as well as to management staff planning fish sampling or control/eradication.



Acknowledgements

This manual is a component of the Invasive Animals Cooperative Research Centre (IA CRC) project, 'Development of a decision support tool for management of freshwater fish incursions in Australia' (Project No. 9.F.2), funded by the IA CRC and undertaken by the Victorian Department of Sustainability and Environment's Arthur Rylah Institute for Environmental Research (DSE ARI).

The project team thanks the project's steering committee — Wayne Fulton (IA CRC), John Koehn and Tarmo Raadik (DSE ARI), Karen Weaver and Bill O'Connor (DSE Biodiversity and Ecosystem Services), Jon Presser (Department of Primary Industries, Fisheries Victoria), John Diggle (Inland Fisheries Service, Tasmania), John Gilliland (Department of Primary Industries and Resources, South Australia), Mike Braysher (University of Canberra), Mark Lintermans (University of Canberra), Matt Britzel (Department of Territory and Municipal Services, Australian Capital Territory), Heleena Bamford (Murray-Darling Basin Authority), Helen Cribb (Department of Resources-Primary Industry, Fisheries and Resources, Northern Territory), Jane Frances, Melissa Walker and Jamie Knight (Department of Industry and Investment, New South Wales), Zafer Sarac (Queensland Department of Employment, Economic Development and Innovation), Paul Hardiman (Australian Department of Environment, Water, Heritage and the Arts) and Andrew Hill (Department of Fisheries, Western Australia) – for their input and valuable comments on early versions. Jed MacDonald (SARDI), Phil Papas and Joanne Kearns (DSE ARI) are also thanked for reviewing drafts.

