Tutorial for the World Register of Introduced Marine Species (WRiMS)

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1. How to log in to WRiMS

Go to <u>http://marinespecies.org/introduced/</u> and log in.

If you lost your password, go to http://marinespecies.org/introduced/aphia.php?p=lostpass

If you have any problems logging in, contact info@marinespecies.org

V	Construction Construction Construction Construction Construction A gateway to introduced, cryptogenic & previously considered alien species Image: Construction Image: Construct
W	/RiMS Editors' log in
Fo	those taxa where you have editor's rights, links will be shown to allow you to go in edit/add mode
	E-mail
	Password
	Log in
Ifyo	u have any problems logging in, please contact us.
[Lo	st password]
	Website and databases developed and hosted by VLIZ - Page generated 2024-02-26 - contact: info@marinespecies.org

2. How to search for a taxon in WRiMS

Go to "**Search taxa**". If you are logged in, you are automatically in the advanced search, with more search options.

Start typing the taxon name in the search box for Scientific Name. Click on "**Search**". You are redirected to the taxon details page of the species.

							You are logge Dekeyzer, St [Logout] [My
Search	Scientific Name	~	begins	with	~	Pterois volitans	
	Authority		begins	with	~		
Status	(any)		~	🗌 quara	ntine	non-che	cked taxa
	Unacceptreaso	i contains					
Rank	lower or equal t	D	~	Kingdor	n	~	
	Belongs to	e.g. Mollusca					C rememb
Environment	Marine	(any)		~	Brack	ish (any)	
	Fresh	(any)		~	Terres	strial (any)	
Flags	Fossil	(any)		~	Imag	ge (unknown)	
	Org. name	(any)		~			
Context	Show	(all)		~	Aphia (e	verything)	
	Exclude	(None)		~			
Note	(any)				~	begins with	
Editor	(anyone)			~	Action	(any)	
	After 1996-	01-01			Before	2024-02-26	
	Search						
	Courch						

3. How to add a new species to the WRiMS context

When you are logged in, you see all taxa in the Aphia database, and not just the taxa that have the WRiMS context (this is different than what a user sees).

When a species does not have the WRiMS context yet, the text on the taxon details page will appear grey to you (as in the screenshot below), and above the name, it will say "shown on website/context: No".

To add this species to the WRiMS context, click on **[add]** above the name. The text will change from grey to black.



4. How to remove a species from the WRiMS context

To remove a species from the WRiMS context, scroll down to the bottom of the page and go to the **Contexts module**. Click on [edit contexts].

Sources (7) Documented of	distribution (62)	Specimens (0)	Notes (45)	Attributes (22)	Vernaculars (5)
Links (34) Images (36)	Contexts (9)	Responsible edito	rs (2)		
edit contexts]					
Context	Descriptio	n	date	action	by
☆ AfReMaS [view]	African Re Species	gister of Marine	2016-03-06	created	db_admin
☆ CaRMS [view]	Canadian Species	Register of Marine	2016-03-06	created	db_admin
☆ ChaRMS [view]	Chinese R Species	egister of Marine	2016-03-06	created	db_admin
🔶 FishBase	FishBase		2009-06-16	checked	Bailly, Nicolas
☆ HKRMS [view]	Hong Kon Species	g Register of Marine	2016-03-06	created	db_admin
☆ Introduced species	-	ister of Introduced ecies (WRiMS)	2016-03-06	created	db_admin
ጵ New Zealand	The New Z Biodiversit	ealand Inventory of y	2016-03-06	created	db_admin
☆ NWARMS [view]		ecies Register for the tern Atlantic Ocean	2016-03-06	created	db_admin
☆ Traits [view]	Marine Sp	ecies Traits	2018-03-06	created	db_admin

A pop-up will appear. Deselect the context "Introduced species" and click on Update.

5. How to search if a source is already in WRiMS

Every piece of information in WRiMS should be linked to a source, preferably published literature.

Before you add a new source, you should check if that source is already available in WRiMS, to avoid duplication.

Go to "References" in the top menu.

The best way is to use the Source name field and to use wild cards. A convenient way of searching is e.g. "Source name begins with [Last name first author]%[year] (e.g. Horton%2018)".

Never use the entire reference to search. Click on "Search".

Intro Sea	arch taxa Browse taxa Distributions Terminolog References Statistics Online sources Tutorial	Log out
		You are logged in Dekeyzer, Stefanie [Logout] (My Aphie
Source name	begins with v e.g. Linnaeus, AlgaeBase,	
Author	contains v	
Year	is in full	
Journal	begins with	
Title	begins with	
DOI	is in full	
Zoobank LSID	is in full	
Source type	(any) Vusage (any)	~
Limit to	Linked taxa e.g. Mollusca	
	Sources with full text attached	
Terms	Taxonomic (any) v	
	Geographical (any) v	
	Bibliographical (any)	
Context	Include Aphia (everything) V Exclude (None)	~

6. How to add a new source to WRiMS

Go to "References" in the top menu. Click on [Add source].

Intro Sea	arch taxa Browse taxa Distributions Terminology References Statistics Online s	sources Tutorial Log out
		You are logged i Dekeyzer, Stefar [Logout] [My Aph
Source name	begins with	
Author	contains ~	
Year	is in full V	
Journal	begins with V	
Title	begins with 🗸	
DOI	is in full	
Zoobank LSID	is in full	
Source type	(any) Vusage (any)	~
Limit to	Linked taxa e.g. Mollusca	
	Sources with full text attached	
Terms	Taxonomic (any) ~	
	Geographical (any) ~	
	Bibliographical (any)	
Context	Include Aphia (everything) V Exclude (Non	e)

Sources are stored in a so-called "atomized" way. The "Source name" field is split up into 6 fields: Digital Object Identifier (DOI), author, year, title, journal and suffix (volume, pages, etc.). When entering new sources, these fields can be filled in manually, but sources can also be completed and/or atomized automatically when the DOI, ZooBank LSID or full citation is available.

Paste the DOI, ZooBank LSID or full citation in the first field. If the "**auto**" box is checked, atomized fields will be completed automatically. You can also opt to uncheck the "auto" box and do the atomization manually by clicking on "**Parse**".

Automatic sou	irce atomiz	ation								
a 	uto 🗹 Parse Copy>name Reset all	Paste DOI [parse]	, ZooBank	(LSID or ful	ll citation a	atomized fi	elds may be co	mpleted auto	omatically, or cli	ck
SourceID*	(Autonumbe	r)								
DOI										
Zoobank LSID										
Authors										
Year										
Title										
Journal										
Suffix										
Name* Generate										
Туре*	The name fiek	d is generated fro	om the fields	s authors, journ	nal, title, yea	r and suffix	[generate]			
Link	Publication	1								
Note										
IMIS-ID				[looku	p]					
Full text	Choose F	ile No file	e chosen							
		ons: jpg, png, gif, ess (PDF subm								
Abstract					-					
Terms										
	Geog	graphical	(any)							J
	Biblio	graphical	(any)							

Make sure the parsing of the fields was done correctly; a manual check is highly recommended to verify the automatically parsed data. If mistakes occurred, you can edit the fields manually. In case of manual changes, don't forget to click on "**Generate**", to complete the source name field.

It is also possible to add additional information (note, abstract, etc.), and to upload the full text publication. The maximum file size is set at 800MB. If you would like to add many sources (bulk upload), upload a larger file or if you would experience any problems during the uploading, please contact us.

If all fields are filled in correctly, click "Add", and the atomized source will be added to the database.

Aphia add s	SOUICE Dekeya	logged in as: zer, Stefanie :] [My Aphia]
auto 🕑 🛛 Parse	Paste DOI, ZooBank LSID or full citation atomized fields may be completed automatically, or click [parse]	I [inv Aprila]
Copy>name	10.1080/00222933.2013.825020	
Reset all		
SourceID*	(Autonumber)	
DOI	10.1080/00222933.2013.825020	
Zoobank LSID		
Authors	Lim, BJ.; Min, GS.	
Year	2014	
Title	Two new species of hyperbenthic calanoid copepods (Crustacea: Calanoida: Arietellidae) from South Korea	
Journal	Journal of Natural History	
Suffix Ø	48(9-10): 523-542	
Name [*] Generate	Lim, BJ.; Min, GS. (2014). Two new species of hyperbenthic calanoid copepods (Crustacea: Calanoida: Arietellidae) from South Korea. Journal of Natural History. 48(9-10): 523-542.	
	The name field is generated from the fields authors, journal, title, year and suffix [generate]	
Type [*]	Publication V	
Link		
Note		
IMIS-ID	[lookup]	
Full text	Choose File No file chosen	
	(valid extensions: jpg, png, gif, tif, pdf, doc, docx, txt, rtf - max file size 800MB) OpenAccess (PDF submissions are moderated, only the DMT team can tick this box)	
Abstract		
Geographical		
term	(any) (+)	
Bibliographical	(any) 🔻	
term		
Taxonomic term	(any) v	
	Add	
	[Back to search]	

The automatic atomization of sources is based on external services: CrossRef, ReFindit and FreeCite. More information can be found <u>here</u>.

We highly recommend to use the automatic parsing and atomization of sources (i.e. if the DOI or ZooBank LSID is available), since this significantly reduces the risk of having duplicate sources in the database.

7. How to add a new species distribution to WRiMS

All information related to the origin, occurrence and invasiveness of a taxon is linked to distributions.

See <u>https://www.coastalwiki.org/introduced/</u> for the terms and definitions used for origin, occurrence and invasiveness.

Scroll down to the bottom of the page and go to the **Documented distribution module**.



To add a new distribution, you have two options:

- a) Add a new distribution by selecting a place name from a pick list [add distribution]
- b) Add a new distribution by selecting an area on a map [add map distribution(s)]

a) How to add a new distribution to WRiMS – selecting place name from picklist

Click on [add distribution] (see image above). This will open a new window "Aphia add distribution record".

Aphia add d	istribution re	ecord					
Geounit*	For cardinal direct	tions, syntax i.e. : [North]	[West] [c	oast of]	Region		
	e.g. North Sea						
	[new geounit]						
Status	valid 🗸						
Source	Add existing source	ce:					
Unaccept Reason	[Pick]						/// remember
Unaccept Source	Add existing source	e:					
Valid Taxon Type	[Pick] Pterois volitans (Linnaeus, 1758)	Uagra	ant			
Introduction	Origin	(select)		~	Invasiveness	(select)	~
	Occurrence	(select)		~			
Note							
Latitude	•	doc dog and					
Longitude		dec. deg 🗸 🗸					
Depth	°[dec. deg 🗸					
	Shallow		Deep			Units	m ~
Altitude			Units	m	~		
Abundance	Min		Max				
Begin Date	Begin	J		#	month unknown	🔲 day unkno	own
End Date				_	month unknown		
	End	_	_	Ê			
	Cancel Ad	d					

Some explanation about the different fields:

• Geo Unit (mandatory): Start typing the place name and select the correct option from the pick list.

Please note that we aim to standardize all distributions in WRiMS to:

- a) IHO Sea Areas
- b) Marine Regions (intersect between IHO Sea Areas and Exclusive Economic Zones (EEZs))

More information about these geo units can be found on http://www.marineregions.org/sources.php

Don't use Nations since we are dealing with marine species.

- Status (highly recommended): There are 3 possibilities for the status of a distribution record:
 - Valid: the record is certainly valid.
 - Doubtful: doubts on whether the species really lives there.
 - Inaccurate: taxon cited for this area, but it does not live there (e.g. misidentification).
- Source (mandatory)

Here you can add the source for the taxon distribution. If the source is already available in the database, type "author"%" year" in the source box and click on 'Pick'. A picklist will appear with all combinations of the author and year you provided. Select the right one. If the source is not available yet in the database, see "<u>How to add a new source to WRiMS</u>".

• Unaccept Reason (highly recommended in case of misidentification)

Reason why the distribution is doubtful or inaccurate (e.g. misidentification).

• Unaccept Source (highly recommended in case of misidentification)

Source where the doubt or inaccuracy regarding a specific distribution is explained.

• Type (not applicable for introduced species)

For more information, see the WoRMS manual: http://www.marinespecies.org/aphia.php?p=manual

• Origin, Invasiveness, Occurrence (mandatory)

Select the correct terms (for more information: https://www.coastalwiki.org/introduced/).

• Note (highly recommended)

Here you can enter the detailed location information (e.g. a certain beach, caught by fishermen).

• Latitude and longitude (highly recommended)

If desired and/or available, you can add the coordinates of the point location where the introduced species was recorded. You can choose between the decimal or DMS (Degrees, Minutes, Seconds) format, click on DMS to switch. For decimals, do not forget to use the minus sign for South and West. For example 40S = -40.

• Depth (optional)

The depth at which the introduced species was recorded in that area.

• Abundance (optional)

Any information about how many introduced species were documented for this distribution.

• Begin date (highly recommended)

The begin date is used to document the year (and perhaps even month and day if available) of introduction or first report.

If all necessary fields are filled in, click on "Add".

b) How to add a new distribution to WRiMS - selecting area on map

This option is recommended when 1 source mentions several areas where the species occurs. This option can be seen as a more rapid way to enter many distributions from one source. When working with this map option, only 1 type of layer can be used, e.g. all added distributions need to be IHO's or Marine Regions.

<u>However</u>, when using this map entry tool, it is not possible to add occurrence and invasiveness. For this you will need to edit the distribution once it is added to the species page (see further below).

Click on **[add map distributions]**. This will open a new window "Aphia add distribution record". Select one or more geo units on the map.

Aphia add distribu	ution record	
	Layer EEZ v Background GEBCO v	
•	Select an appropriate (standard) layer and select one or more geo units on the map	
	Antarctic 2001MI zone beyond the coastine	
Status	valid v	
Source	Add existing source:	
Unaccept Reason	[Pixt]	emember
Unaccept Source	Add existing source:	
	(Pick)	11.
Valid Taxon	Pterois volitans (Linnaeus, 1758)	
Introduction	Origin (select) v	
Note		
Latitude	dec. deg v	
Longitude	° dec. deg v	
Depth	Shallow Deep Units m	~
Altitude	Units m v	
Abundance	Min Max	
Begin Date	Begin 🗎 ท month unknown 🗋 day unknown	
End Date	End in month unknown day unknown	
	Cancel Add	

Some explanation about the different fields:

• Layer (mandatory)

Select the appropriate (standard) layer (IHO or Marine Regions for WRiMS).

Background

Background of the map. You can choose between World continents, World Ocean Base or GEBCO.

- Status (highly recommended): There are 3 possibilities for the status of a distribution record:
 - Valid: the record is certainly valid.
 - Doubtful: doubts on whether the species really lives there.
 - Inaccurate: taxon cited for this area but it does not live there (misidentification).

• Source (mandatory)

Here you can add the source for the taxon distribution. If the source is already available in the database, type "author"%" year" in the source box and click on 'Pick'. A picklist will appear with all combinations of the author and year you provided. Select the right one. If the source is not available yet in the database, see further below "<u>How to add a new source to WRiMS</u>".

• Unaccept Reason (highly recommended in case of misidentification)

Reason why the distribution is doubtful or inaccurate (e.g. misidentification).

• Unaccept Source (highly recommended in case of misidentification)

Source where the doubt or inaccuracy regarding a specific distribution is explained.

• Origin (mandatory)

Select the correct terms (for more information: <u>https://www.coastalwiki.org/introduced/</u>).

When using this map entry tool, it is not possible to add occurrence and invasiveness. For this you will need to edit the distribution once it is added to the species page (see further below).

If all the necessary geo units are selected and all information is filled in, click on "Add".

Rease rote that information regarding abundance, impact, management, population trends, and vector dispersal is not entered at the distribution level but is stored in a note at species level. See further below "<u>How to add a note to WRiMS</u>".

All distribution information entered can be found on the distribution details page. Click on **[details]** next to the distribution you want to view. A pop-up window will appear.



istribution editable: Yes, s	shown on website/context: Yes		
Geounit	Belizean part of the Caribbean Sea (Ma	rine Region) (origin: alien)	
Source		lantic and Caribbean Sea. Aquatic Invasions.	lionfish [Pterois volitans (Linnaeus, 1758) and P. miles 4(3): 473-479. available online at http://
Note	Location : Turneffe Atoll Year first introduced or recorded : First c	confirmed report in December 2008, Turneffe	Atoli.
Introduction Origin	Alien		
Invasiveness	Uncertain		
Occurrence	Uncertain		
Begindate	2008		
Context	[edit contexts] Introduced species		
Edit history	Date 2014-08-20 12:57:26Z 2015-01-20 03:05:09Z 2021-02-03 09:12:50Z	action created changed changed	by Pagad, Shyama Pagad, Shyama Valls Domedel, Georgina

8. How to edit a distribution in WRiMS

Click on [edit] next to the distribution you want to change.



The same pop-up will appear as when you add a new distribution.

Make the necessary changes and click on "Update".

One case where you might need to edit an existing distribution, is that you have to change the status of the distribution to doubtful or inaccurate.

In case of a doubtful distribution or species misidentification, you need to edit the following fields:

Status:

- Valid: the record is certainly valid
- Doubtful: doubts on whether the species really lives there
- Inaccurate: taxon cited for this area but it is clear that it does not live there (e.g. misidentification)

Unaccept Reason:

• Here you can type the reason why the distribution is doubtful or inaccurate (e.g. misidentification).

Unaccept Source:

• Pick the source where the doubt or inaccuracy regarding a specific distribution is explained.

The doubtful or inaccurate distributions will appear as such in the distribution list on the taxon detail page. They will also appear orange on the map below the distribution list.



9. How to delete a distribution in WRiMS

Click on [delete] next to the distribution you want to change.



A new window will appear:

You proposed to delete the distribution Alboran Sea for the taxon Amaroucium inversum Pérès, 1959 The distribution will only be deleted after verification by the Database Management Team	
Please include the reason why the distribution should be deleted:	
Your email * mrius@ceab.csic.es (for notification) Are you sure?	
Yes Cancel	
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Provide a reason why the distribution should be deleted. The WoRMS Data Management Team will receive an email with your delete request and will delete the distribution in the database.

Once the distribution has been deleted, the WoRMS Data Management Team will inform you by email.

10. How to add a note to WRiMS

All information related to abundance, impact, management, population trends, and vector dispersal is not entered at the distribution level but is stored in a note at species level.

For the terms and definitions used, see <u>https://www.coastalwiki.org/introduced/</u>.

Scroll down to the bottom of the page and go to the **Notes module**.

Sources (7)	Documented	distribution (62)	Specimens (0)	Notes (45)	Attributes (22)	Vernaculars (5)		
Links (34)	Images (36)	Contexts (9)	Responsible edito	rs (2)				
[add note]								
FROM REGIONAL OR THEMATIC SPECIES DATABASE								
Introduced species abundance in North Atlantic Ocean (IHO Sea Area) : Fluctuating [details] [edit] [delete]								
1 Introduced species abundance in Honduran part of the Caribbean Sea (Marine Region) : Common [details] [edit] [delete]								
🏫 Introduced species abundance in Caribbean Sea (IHO Sea Area) : Common [details] [edit] [delete]								
1 Introduced species impact Bahamas part of the North Atlantic Ocean (Marine Region) Outcompetes native species for resources and/or Space [details] [edit] [delete]								
🖈 Introduced species impact Bahamas part of the North Atlantic Ocean (Marine Region) Alters trophic interactions [details] [edit] [delete]								

Click on [add note].

A pop-up window will appear:

Aphia add note		
Note*		
		10.
Note type*	Importance 🗸	
Language*	A Homonymy	
Source(s)	Human impact Identification	
	Importance Introduced species abundance Introduced species impact Introduced species management Introduced species population Introduced species population trend Introduced species remark Introduced species vector dispersal	remember
	Introduction	

• Note (mandatory)

For Abundance, Impact, Pathways/vector, use the terms as listed in <u>https://www.coastalwiki.org/introduced/</u>

Rease note: We strive to keep the information in the notes as structured as possible, and to keep the link with the species distribution.

Therefore we recommend to use the following structure: "in [area] (type) : term" (e.g. in United States part of the North Pacific Ocean (Marine Region) : Ships).

• Note type (mandatory)

For WRiMS, 7 note types are relevant (see screenshot above): Introduced species abundance, Introduced species impact, Introduced species management, Introduced species population, Introduced species population trend, Introduced species remark, and Introduced species vector dispersal.

For more information about the used terminology and definition, go to https://www.coastalwiki.org/introduced/

• Language (mandatory)

English

• Source (mandatory)

Here you can add the source for the note. If the source is already available in the database, type "author"%"year" in the source box and click on 'Pick'. A picklist will appear with all combinations of the author and year you provided. Select the right one. If the source is not available yet in the database, see "<u>How to add a new source to WRIMS</u>".

If all necessary fields are filled in, click on "Add".

11. How to edit a note in WRiMS

Click on [edit] next to the note you want to change.



The same pop-up will appear as when you add a new note.

Make the necessary changes and click on "Update".

12. How to delete a note in WRiMS

Click on [delete] next to the note you want to change.



A new window will appear:

You proposed to delete the note Genetic nomenclature abbreviation: Apacca for the taxon Aplidium accarense (Millar, 1953) The note will only be deleted after verification by the Database Management Team							
Please include the reason why the note should be deleted:							
Your email * mrius@ceab.csic.es (for notification)							
Are you sure? Yes Cancel							
Website and databases developed and hosted by VLIZ · Page generated 2024-02-26 · contact: info@marinespecies.org							

Provide a reason why the note should be deleted. The WoRMS Data Management Team will receive an email with your delete request and will delete the note in the database.

Once the note has been deleted, the WoRMS Data Management Team will inform you by email.

Final note:

As thematic editor, you cannot add/change taxonomic information yourself. These rights are reserved to the WoRMS taxonomic editors (list available at <u>http://www.marinespecies.org/aphia.php?p=editors</u>).

If you would come across any taxonomic issues (wrong species, missing species, etc..), please let us know at <u>info@marinespecies.org</u>, with sufficient information (e.g. source) and we will cross-check with the responsible taxonomic editor(s).

The other way around, taxonomic editors may have more recent information or taxonomic insights that might be in contradiction with what some alien papers mention. In these cases, communication between the WRiMS and WoRMS editors will be set up, to make the information in WRiMS as correct and up-to-date as possible.

Taking into account the above, we recommend to not delete wrong information from WRiMS, but to flag it as being incorrect, specifically for the distribution information. This way, it can be avoided that someone else re-enters this incorrect information and that we need to go through the correction-process again.