

Strandings of Oceania Database Webinar

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Outline of webinar

- Marine mammals in the Pacific
- What is a stranding/incident?
- Strandings in the region
- Strandings of Oceania database
- Tutorial

Pacific marine mammals

- Over half of world's known species of whales and dolphins, plus dugongs
- Seven species are threatened with extinction
- Some migratory, some resident species



Fin whale (*Balaenoptera physalus*)



Sperm whale (*Physeter macrocephalus*)



Cuvier's beaked whale (*Ziphius cavirostris*)



Long finned pilot whale (*Globicephala melas*)



Risso's dolphin (*Grampus griseus*)



Bottlenose dolphin (*Tursiops truncatus*)



Striped dolphin (*Stenella coeruleoalba*)



Short-beaked common dolphin (*Delphinus delphis*)



PACIFIC ISLAND COUNTRY OR TERRITORY

SPECIES	AS	GI	FSM	FI	FP	GU	KI	MI	NANG	NI	NMI	PA	PNG	PI	SA	SI	TOK	TO	TU	VA	WF	
Australian humpback dolphin <i>Sousa sahalensis</i>														X								
Blainville's beaked whale <i>Mesoplodondensirostris</i>		X		X	X	X	X			X	X	X		?	X	?						
Blue whale <i>Balaenoptera musculus</i>				?			?	X						X		X			X			
Blue whale, Pygmy <i>B. m. brevicauda</i>		X								X												
Bottlenose dolphin <i>Tursiops spp</i>	X	?	?	X	X	X	X	X		?		X	?	X		X	X		X	X	X	
Bryde's whale <i>Balaenoptera edeni</i>				X	?	X									X							

What is a marine mammal incident?

- Incident = live stranding, beachcast, entanglement, ship strike etc
- One individual \leftrightarrow many individuals



Short-finned pilot whale, New Caledonia, 2013

Why do whales strand?

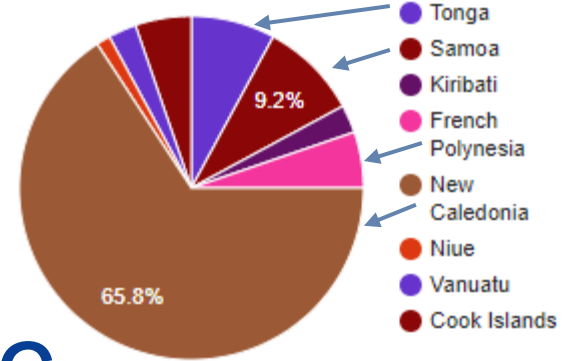
We don't really know! But maybe...

- Old or sick
- Birthing
- Injured
- Navigational error
- Social bonding

More info: <https://www.projectjonah.org.nz/why-whales-strand/>



Distribution by Country of Reported Encounters



Strandings in the Pacific



Why do we collect data from these events?

- Source of info on species identity and diversity.
- Understand threats to species and populations.



Cuvier's beaked whale, Rarotonga, 2007

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for a Blue Pacific

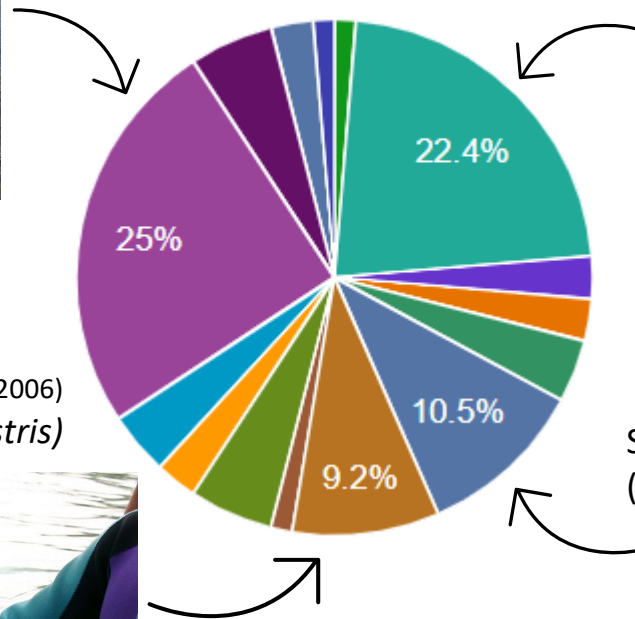


Dugong (New Caledonia, 2011)
(*Dugong dugong*)



Sperm whale (New Caledonia, 2012)
(*Physeter macrocephalus*)

Species Distribution



Cuvier's beaked whale (Rarotonga, 2006)
(*Ziphius cavirostris*)

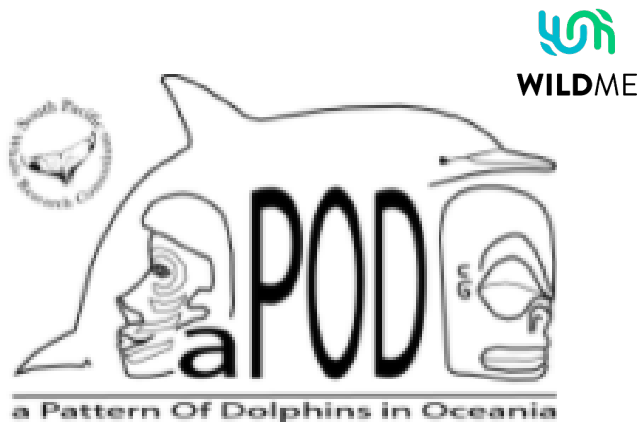


Short-finned pilot whale (New Caledonia, 2009)
(*Globicephala macrorhynchus*)



History of dataset






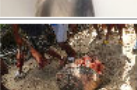
- Original platform no longer supported.
- Data would be lost.



Results Table Matching Images/Videos Mapped Results Results Calendar Analysis Export

Stranding Search Results

Below are Strandings that matched your search.

	Number	Taxonomy	Submitter	Date	Location	Country
		▲▼	▲▼	▲▼	▲▼	▲▼
	79	<i>Stenella longirostris</i>	C Scott Baker	2017-07-18 23:00	Tabiteuea North	Kiribati
	77	<i>Physeter macrocephalus</i>	Karen Stone	2016-08-16	Kenutu, Vava'u	Tonga
	76	<i>Tursiops aduncus</i>	marc oremus	2016-06-13	Plum	New Caledonia
	75	<i>Physeter macrocephalus</i>	Juney Ward	2015-11-19	Reef	Samoa
	74	Unidentified baleen whale	Allan Bowe	2015-10-17 16:00	Famuafoou Island Vava'u	Tonga
	70	<i>Globicephala macrorhynchus</i>	Christina Shaw	2015-08-23 10:00	Eratap Lagoon, Efate	Vanuatu

- Moved to WildMe's modern platform, Flukebook.
- Caveat: website designed for photo-identification catalogues, not strandings data. Serves as a basic data record until a point when a more purpose-built option can be developed.

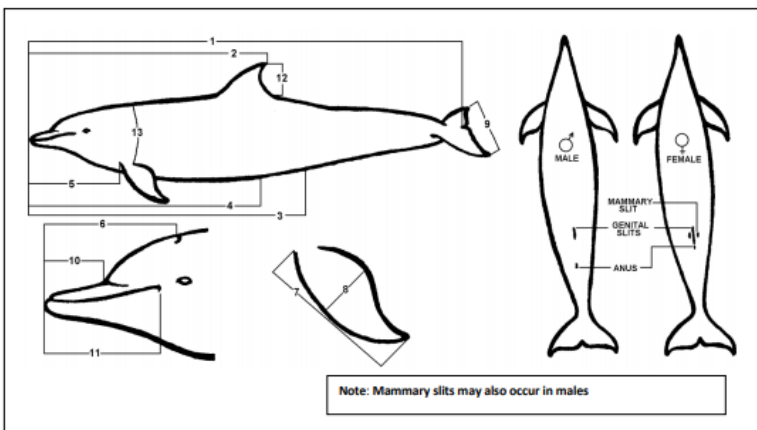


WILDME

- Stranding form for data collection in the field – download and print from [SPREP website](https://www.sprep.org).



Pantropical spinner dolphin, New Caledonia, 2013



Recording data



PACIFIC ISLANDS REGION – STRANDINGS OF OCEANIA PROJECT WHALE, DOLPHIN & DUGONG – STRANDING / ACCIDENT / DEATH REPORT

Take a photo of this completed form and send, along with other photos, to Karen Baird at SPREP, karenb@sprep.org or submit data and photos on flukebook.org. See the SPREP website for more info. *required field

Record Identification #:		Examination date:	
*Your name/s and affiliation:	*Contact email:	*Date animal initially found/reported:	Time animal found/reported:

LOCATION INFORMATION		
*Description (village/district/island):		
*Country:	Latitude:	Longitude:

EVENT INFORMATION				
Pre-stranding/beaching behaviour:				
*Event type:	Beachcast (dead)	Live stranding	Floating at sea	Other:
*Number of animals:	Individual	Mother/calf pair	Mass stranding	
Condition of animal/s (circle option and provide numbers if more than one animal):				
Alive	Freshly dead	Moderate decomposition	Advanced decomposition	Mummified/skeleton
*Response (circle all that apply):				
Refloat (successful)	Refloat (unsuccessful)	Refloat (partially successful – indicate numbers)	No. survived: No. died:	Other:
Post mortem	Burial	Left to decay naturally	Disposal at sea	Other:

ANIMAL INFORMATION				
*Species (if unsure, describe):				
Sex:	Male	Female	Unknown	
Age class:	Adult	Juvenile	Calf	Unknown
*Total length (cm):	Additional measurements are available over the page.			
*Photos:	Yes	No	Photographer name and email:	
Photos are very important, focus on:				
<ul style="list-style-type: none"> The complete scene Lateral (side on) body of the animal Dorsal fin, flipper, fluke Head region including the mouth/teeth Genital (ventral/under side) Scars and marks on the body – wounds, lesions, parasites etc 				
Samples taken?	Yes	No	Describe:	

Additional information (circumstances, injuries, scars, indications of cause of death, post mortem results etc):



Sustainable, transformative and resilient for a Blue Pacific

- Get a login for Flukebook from SPREP – recommend one person as representative of organisation to have an account.
- SPREP will add you to the project.
- You submit your “encounter”, including photos and add it to the ‘Strandings of Oceania’ project.
- Can add biological samples and results.
- Thorough guidance on the SPREP website.

OR

- Send your data sheets and photos to SPREP to upload.

Submitting data

Projects (multi-select)

Strandings of Oceania



Biological Samples

+ Add biological sample

Sample ID	Attributes	Analyses
NC13-161	Dataset ID: EC2013-08 Institution ID: Operation Cetaces Preservation method: Alcohol Tissue type: Tissue sample	<ul style="list-style-type: none"> + Add haplotype + Add microsatellite markers + Add genetic sex determination + Add biological/chemical measurement

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Encounter of APOD29 (deceased)

An encounter is a sighting of a single animal at a specific location and time. [Learn more.](#)

[Tweet](#) [Share 0](#)

Location [Edit](#)

Description: Mont Dore, baie de Boulari

Location ID: Pacific Ocean → New Caledonia

Country: New Caledonia

Water depth: Unknown

Note: If you zoom in too quickly, Google Maps may claim that it does not have the needed maps. Zoom back out, wait a few seconds to allow maps to load in the background, and then zoom in again.



Date [Edit](#)

2006-01-31

Verbatim Event Date: None

Attributes [Edit](#)

Taxonomy *Feresa attenuata*

Status: dead

Sex: unknown

Noticeable scarring:

Behavior: None

Group Role: None

Patterning code: None

Life stage:

Additional comments:

Four animals, including three males and one female, were found dead, and morphometrics, including dental counts, were collected. Two live mature males of 236 and 246 cm total length (TL), respectively, were closely monitored and sampled via blood analysis. As it was not likely to survive, the second animal was euthanized and necropsied. Following the euthanasia of the larger animal, the smaller one, which was probably staying out of social solidarity, returned on its own to the open sea.

Gallery



Clua, E. E., C. A. Manire, and C. Garrigue. 2014. Biological Data of Pygmy Killer Whale (*Feresa attenuata*) from a Mass Stranding in New Caledonia (South Pacific) Associated with Hurricane Jim in 2006. *Aquatic Mammals* 40-DOI 10.1578/AM.1540.1572.2014.



Sustainable, transformative and resilient for a **Blue Pacific**

Viewing and Using the data

- Use your Flukebook login and follow SPREP guidance to search and download the data

OR

- Explore the data on the Pacific Environment Portal (via the SPREP website)

PACIFIC ENVIRONMENT PORTAL
Environmental Information for Decision Making

Strandings of Oceania Database

VIEW

REVISIONS

Biodiversity Coastal and Marine

Data and Resources



Strandings of Oceania Database Protocols
Strandings of Oceania Database Protocols for data users

DOWNLOAD



Stranding of Oceania form
Complete form and send, along with other photos, to Karen Baird at SPREP...

DOWNLOAD



Strandings of Oceania Database data export

PREVIEW

DOWNLOAD



Stranding of Oceania form
word version

DOWNLOAD

<https://pacific-data.sprep.org/dataset/strandings-oceania-database>

- 76 encounters so far
- 1991 - 2021

Strandings of Oceania Database data export



strandings_of_oceania_database_export_17062021.xls

Data Preview: Note that by default the preview only displays up to 100 records. Use the pager to flip through more records or adjust the start and end fields to display the number of records you wish to see.

GRID	GRAPH	MAP	76 records		«	1	-	76	»	Search data ...	GO »	FILTERS	FIELDS	
ID	occur...	deci...	deci...	verba...	country	year	month	day	subm...	beha...	sex	lifeSt...	genus	sp
APOD74	EC202...	-21.61...	165.4...	Bourail	New C...	2021	5	29	cgarri...		female	adult	Dugong	^
APOD75	862f2...	-13.67	-172.42	Savai'i	Samoa	2021	3	31	jward	Obser...	unkno...	unkno...	Ziphius	
APOD46	711ae...	-18.78...	-174.6...	Late	Tonga	2019	11	18	hanna...		unkno...		Balaen...	
APOD48	bc1bb...	-1.191...	174.7...	Tabite...	Kiribati	2017	7	18	hanna...	strand...	unkno...		Stenella	
APOD47	fccc61...	-1.191...	174.7...	Tabite...	Kiribati	2017	7	18	N/A	strand...	unkno...		Stenella	
APOD49	51d33...	-18.70...	-173.9...	Kenet...	Tonga	2016	8	16	hanna...		unkno...	adult	Physet...	
APOD50	86c06...	-22.27...	166.6...	Plum	New C...	2016	6	13	hanna...		male	juvenile	Tursiops	
APOD51	4ef0c9...	-13.84...	-171.7...	Reef	Samoa	2015	11	19	hanna...		male	adult	Physet...	
APOD52	ea550...	-18.88...	-173.9...	Famua...	Tonga	2015	10	17	hanna...		unkno...	adult	Balaen...	
APOD53	9bfc1...	-17.78...	168.3...	Eratap...	Vanuatu	2015	8	23	hanna...	Was s...	male		Globic...	
APOD54	1fd4de...	-22.67...	167.4...	Ile de ...	New C...	2015	1	13	hanna...		unkno...		Kogia	
APOD57	18ba5...	-22.00...	165.9...	Boulou...	New C...	2014	12	0	hanna...		unkno...		Dugong	
APOD72	e20ae...	-20.62...	164.3...	Kouma...	New C...	2014	11	24	hanna...		unkno...	juvenile	Dugong	
APOD73	4ba79...	-22.31...	166.3...	Paita, ...	New C...	2014	10	10	hanna...		unkno...		Dugong	
APOD69	76fd0...	-21.81...	165.7...	La Foa	New C...	2014	7	23	hanna...		unkno...	adult	Dugong	
APOD33	b5b66...	-17.57...	-149.7...	Moorea	French...	2014	5	5	hanna...		female		Stenella	
APOD30	bf6da2...	-22.65...	167.4...	Ile des...	New C...	2014	4	22	hanna...	strand...	unkno...	adult	Kogia	
APOD71	a7324...	-22.20...	166.3...	Paita, ...	New C...	2014	2	10	hanna...		male	adult	Dugong	
APOD68	d81a5...	-21.36...	165.1...	Poya, ...	New C...	2014	2	7	hanna...		unkno...	calf	Dugong	
APOD32	45bae...	-16.89...	-151.4...	Raiatea	French...	2014	1	14	hanna...		male		Ziphius	v

Let's complete the dataset!

- If you have data about beach cast or stranded whales, dolphins or dugongs, send it to SPREP to be included in the regional database.
- Don't forget photos!



Cuvier's beaked whale, French Polynesia, 2014

For more info

- SPREP website: <https://www.sprep.org/ioe/strandings-of-oceania-database>
- Inform – Pacific Environment Portal: <https://pacific-data.sprep.org/dataset/strandings-oceania-database>
- Wildme guidance: <https://docs.wildme.org/product-docs/en/wildbook/getting-started-with-wildbook/>
- Email: Hannah Hendriks (hannahh.ext@sprep.org) or Karen Baird (karenb@sprep.org)



Thanks to the South Pacific Whale Research Consortium, especially Prof Scott Baker for support in this project and for the initial establishment of aPOD (a Pattern of Whales and Dolphins) off which this was built.