Bilan des échouages de mammifères marins

Saint-Pierre et Miquelon / 2019

DTAM 975
direction des Territoires, de l'Alimentation et de la Mer

Réseau National Echouages

Sommaire

Liste des Sigles et Abréviations

CV : carte verte = accréditation pour intervenir sur des espèces de mammifères marins protégées mortes.
Les détenteurs de la CV sont considérés comme des correspondants du RNE et sont mandatés par l'Observatoire Pelagis par délégation : arrêté du Ministère de l'Environnement, de l'Énergie et de la Mer du 17/06/2016

RNE : Réseau National d'Echouage
Mis en place en 1972, est le principal outil de suivi des échouages de mammifères marins.

Il **est constitué de correspondants locaux** qui se tiennent prêts à intervenir lorsqu'un cas se présente. Ces derniers pouvant être des associations, des organismes d'état, des collectivités ou encore des particuliers bénévoles. Ils sont répartis sur toute la façade maritime française.

Le réseau est coordonné par l'Observatoire PELAGIS sous la tutelle du Ministère chargé de l'Environnement (Note du 27 avril 2017 relative à l'exploitation scientifique des échouages).

Ses activités et engagements sont régis par la Charte du RNE. Les décisions concernant le fonctionnement du Réseau sont prises par un comité de pilotage composé de représentants institutionnels et scientifiques ainsi que de représentants des correspondants par façade maritime.

Depuis plus de 40 ans, avec plusieurs centaines de volontaires, **le RNE a permis la constitution de la plus importante série historique concernant les mammifères marins** en France, c'est aussi une des plus longues d'Europe.

Observatoire PELAGIS : *Systèmes d'Observation pour la Conservation des Mammifères et Oiseaux Marins* (UMS 3462), rassemble les programmes d'observation et d'expertise sur la conservation des populations de mammifères et oiseaux marins ainsi que la gestion des bases de données associées. Son adossement au laboratoire de recherche CEBC (UMR 7372 - CNRS & Université de La Rochelle) permet la valorisation des données d'observatoire par la recherche. **L'unité repose sur un ensemble de bases de données et une banque de prélèvements biologiques**.

Les principales actions concernent le suivi de l'**abondance** et de la **démographie**, la détermination de la **distribution** et des habitats critiques ainsi que l'estimation des paramètres biologiques des mammifères et oiseaux marins. Différentes méthodes sont mises en œuvre pour y parvenir notamment **le suivi des échouages**, les **observations en mer**, la **télémétrie** ou encore l'**acoustique**.

De plus l'Observatoire PELAGIS assure la production de synthèses et rapports réglementaires, l'évaluation de scénarios de gestion et d'unités de conservation, et l'entretien des bases de données sur les prédateurs supérieurs marins.

L'expertise pratiqué dans le cadre de l'Observatoire PELAGIS est principalement un appui scientifique aux politiques publiques de conservation des mammifères et oiseaux marins. Dans une moindre de mesure, c'est aussi parfois une assistance aux opérateurs socio-économiques du monde maritime.

Plusieurs niveaux existent :

- satisfaire aux engagements internationaux de la France relatif à la conservation des populations de mammifères et d'oiseaux de mer dans les eaux françaises ;

- contribuer à la mise en œuvre des obligations françaises en matière de conservation des mammifères et des oiseaux de mer ;

- soutenir scientifiquement les politiques françaises de protection des mammifères et oiseaux de mer (exemple : approche espèces protégées DEB ; approche espaces protégés AAMP) ;

- soutenir scientifiquement les gestionnaires d'espaces naturels d'importance pour les mammifères et oiseaux marins ;

- accompagner scientifiquement les opérateurs socio-économiques pour l'évaluation et la réduction des effets de leur activité sur les populations de mammifères ou d'oiseaux de mer.

Assise juridique

Les cétacés et autres mammifères marins sont des espèces protégées par la convention de Washington dite CITES (Convention on International Trade of Endangered Species) publiée par décret n°78-959 du 30 août 1978 et modifiée par l'arrêté interministériel du 1er juillet 2011 fixant la liste des mammifères marins protégés sur le territoire national et les modalités de leur protection. Leur transport et toute autre intervention, les concernant, sont réglementés.

La circulaire DNP/CFF n°01/01 du 18 octobre 2001 précise les modalités et procédures d'intervention.

La note du 27 avril 2017 précise les obligations de signalement des mammifères marins échoués ou à la dérive, morts ou en détresse, pour leur exploitation scientifique par les agents de l'État.

Actualités échouages

La mise en place progressive du protocole d'échouage validé fin 2016 et son actualisation ont pris plus de sens du fait de la formation carte verte de plusieurs agents (de la DTAM, ONCFS, Fédération de chasse, voire d'individuels) devenant de fait des correspondants autorisés à intervenir et à rapporter les échouages. Un certain nombre de points restent à améliorer mais la dynamique amorcée est sans commune mesure plus positive que par le passé.

La désignation début 2019 d'un agent de l'antenne de Miquelon, opérant uniquement sur les missions biodiversité a encore amélioré la qualité des données recueillies.

La présence de détenteur de la carte verte sur Miquelon, a changé radicalement l'efficacité de recensement.

Le bilan

On avait recensé moins d'échouages en 2018 qu'en 2017 (pour des raisons strictement internes). Les observations de 2019 sont sans commune mesure avec les données passées. Avec un total de 58 (n=58) échouages recensés et documentés, on atteint un sommet dans les recensements.

L'année 2019 aura été marquée par plusieurs évènements d'échouage.

➔ Le nombre d'échouages recensés est sans précédent

➔ La part du phoque du Groenland sur l'ensemble continue d'apporter son lot (PG : 24/58=41%) de surprises pour une espèce qui, il y a 4 ans à peine, n'était pas connue comme visiteur régulier dans les eaux de l'archipel. Le nombre de dépouilles recensées et analysées cette année est sans commune mesure avec les années précédentes grâce à un travail soutenu des agents en charge de la biodiversité et une prospection régulière mais également grâce à une meilleure identification des acteurs et une information plus fluide de la part des informateurs potentiels.

➔ Les autres espèces de phoques présents dans l'archipel constituent une quantité minime au prorata des recensements (HG :16 % ; PV :16 %): mais demeurent un « bruit de fonds » d'intérêt du fait de leur statut de résidents permanents ou partiels.

Au total, les phoques tous confondus représentent un peu moins de 75 % des échouages.

➔ L'évènement de l'année est incontestablement les échouages de 2 *cachalots pygmés (Kogia breviceps)* (adulte et veau) rapportés en fin d'année et qui intéressent vivement la communauté scientifique *(cf Annexe 2)*. Des prélèvements plus conséquents ont été opérés pour satisfaire les attentes et demandes.

➔ À signaler également la mention d'un cachalot adulte par les autorités canadiennes et dérivant dans le Sud de la ZEE SPM qui mette en lumière un travail plus collaboratif au niveau régional qu'il serait bon d'entretenir et/ou de développer.

45 des 58 cadavres répertoriés l'ont été au premier semestre 2019 avec une répartition assez bien équilibrée entre le premier et le deuxième trimestre.

10 espèces ont été concernées cette année. Et plusieurs échouages ont nécessité l'expertise de l'équipe de PELAGIS.

Dans l'ensemble, nous n'avons pas constaté de morts par piégeage dans les engins de pêche ou accident par collision sauf pour un dauphin échoué en août qui présentait les traces et les signes de stress dus à un enchevêtrement avec un cordage vraisemblablement.

Une réunion du groupe phoques organisée par le ministère nous a permis de faire une présentation des comptages et résultats d'échouages pour SPM en 2018 en présence de Cécile Vincent.

Une invitation à participer au RNE nous a été adressée, à laquelle nous n'avons pu donner suite.

Remarques

Il faut reconnaître que l'accès plus régulier et plus aisé par l'équipe de Miquelon améliore les recensements et change la donne.

Il est à signaler que cette année, aucune plainte pour nuisances (odeurs, putréfaction…) de riverains, nécessitant une intervention avec des engins lourds, n'a été signalée. Alors que de plus en plus d'informateurs nous contactent pour signalement d'échouages.

Les résultats

Code	Date	Espèce		Nbre	Sexe	Lieu dit	GPS	Ile	Recenseurs
2018-12-04GB	04/12/18	Delphinus delphis	Dauphin commun	1	F	Rivage sud	47°05.921' -56°22.385'	2=Miquelon	Gianni Boissel, Ludovic Orsiny
2018-12-06GB	06/12/18	Lagenorhynchus acutus	Dauphin à flancs blancs	1	0	Dune de Mirande	47°04.718' -56°18.857'	2=Miquelon	Gianni Boissel, Ludovic Orsiny
2019-01-08FU	08/01/19	Phoca vitulina	Phoque commun	1	M	Port SP	46.774823' -56.169238	1=Saint Pierre	Frank Urtizberea, Emilie Briand
2019-01-19GB	19/01/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Dune du Ouest	47°099316 -56°389553	2=Miquelon	Gianni Boissel, Ludovic Orsiny
2019-01-27FU	27/01/19	Cystophora cristatata	Phoque à capuchon	1		Port de Saint Pierre	46°77.5731' -56°17.7406'	1=Saint Pierre	Frank Urtizberea, Daniel Koelsch
2019-02-01GB	01/02/19	Pagophylus groenlandica	Phoque du Groenland	1	F	Dune du Ouest		2=Miquelon	Gianni Boissel, Ludovic Orsiny
2019-02-17GB	17/02/19	Phocoena phocoena	Marsouin	1	0	Dune du Ouest	47°096554 -56°388277	2=Miquelon	Gianni Boissel, Ludovic Orsiny
2019-03-14GB	14/03/19	Halichoerus grypus	Phoque gris	1	F	Dune du Ouest	47°06.146' -56°23.597'	2=Miquelon	Gianni Boissel, Ludovic Orsiny, Daniel Koelsch
2019-03-14,1GB	14/03/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Etang du chapeau	47°5.455' -56°19.989'	2=Miquelon	Gianni Boissel, Ludovic Orsiny
2019-03-15JL	15/03/19	Physeter macrocephalus	Cachalot	1	0	ZEE	46°08.34' -56°19.59'	5=A la dérive	Jack Lawson
2019-03-22,1GB	22/03/19	Halichoerus grypus	Phoque gris	1	0	Dune Ouest	46°55.780' -56°19.685'	3=Langlade	Gianni Boissel
2019-03-22,2GB	22/03/19	Halichoerus grypus	Phoque gris	1	0	Dune Ouest	46°57.498' -56°20.113'	3=Langlade	Gianni Boissel
2019-03-22,3GB	22/03/19	Halichoerus grypus	Phoque gris	1	0	Dune Ouest	46°55.941' -56°19.710'	3=Langlade	Gianni Boissel
2019-03-22,4GB	22/03/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Dune Ouest	46°56.129' -56°19.750'	3=Langlade	Gianni Boissel
2019-03-22,5GB	22/03/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Dune Ouest	46°56.207' -56°19.757'	3=Langlade	Gianni Boissel
2019-03-22,6GB	22/03/19	Phoca vitulina	Phoque commun	1	0	Dune Ouest	46°55.528' -56°19.663'	3=Langlade	Gianni Boissel
2019-03-22,7GB	22/03/19	Phoca vitulina	Phoque commun	1	0	Dune Ouest	46°55.528' -56°19.663'	3=Langlade	Gianni Boissel
2019-03-22,8GB	22/03/19	Phocoena phocoena	Marsouin	1	M	Mère Durant	47°0.293' -56°21.539'	2=Miquelon	Gianni Boissel
2019-03-24GB	24/03/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Fond de l'anse	47°7.024' -56°22.776'	2=Miquelon	Gianni Boissel
2019-04-03GB	03/04/19	Pagophylus groenlandica	Phoque du Groenland	1	F	Ruisseau du renard	47°2.224' -56°23.066'	2=Miquelon	Gianni Boissel
2019-04-10GB	10/04/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau pointe au cheval	47°0.558' -56°21.957'	2=Miquelon	Gianni Boissel
2019-04-15,1GB	15/04/19	Halichoerus grypus	Phoque gris	1	0	Dune Ouest	46°56.081' -56°19.727'	3=Langlade	Gianni Boissel
2019-04-15,2GB	15/04/19	Halichoerus grypus	Phoque gris	1	0	Dune Ouest	46°55.859' -56°19.688'	3=Langlade	Gianni Boissel
2019-04-15,3GB	15/04/19	Halichoerus grypus	Phoque gris	1	0	Scierie	46°52.212' -56°20.784'	3=Langlade	Gianni Boissel
2019-04-15,4GB	15/04/19	Halichoerus grypus	Phoque gris	1	0	Dune Ouest	46°58.528' -56°20.545'	3=Langlade	Gianni Boissel
2019-04-15,5GB	15/04/19	Lagenorhynchus albirostris	Dauphin à bec blanc	1	M	Dune du Ouest	46°55.429' -56°19.649'	2=Miquelon	Gianni Boissel
2019-04-15,6GB	15/04/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Dune Ouest	46°55.462' -56°19.651'	3=Langlade	Gianni Boissel
2019-04-15,7GB	15/04/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Scierie	46°52.182' -56°20.806'	3=Langlade	Gianni Boissel
2019-04-15,8GB	15/04/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Dune Ouest	46°54.361' -56°19.688'	3=Langlade	Gianni Boissel

Code	Date	Espèce		Nbre	Sexe	Lieu dit	GPS	Ile	Recenseurs
2019-04-19,1GB	19/04/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Cap de la Demoiselle	47°4.078' -56°16.704 '	2=Miquelon	Gianni Boissel
2019-04-19,2GB	19/04/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Cap de la Demoiselle	47°4.090' -56°16.819 '	2=Miquelon	Gianni Boissel
2019-04-19,3GB	19/04/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Anse des grosses	47°1.847' -56°23.112'	2=Miquelon	Gianni Boissel
2019-04-19,4GB	19/04/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Anse des grosses	47°1.862' -56°23.107'	2=Miquelon	Gianni Boissel
2019-05-06,1GB	06/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Barachois Ouest	46°59.767' -56°21.124'	2=Miquelon	Gianni Boissel
2019-05-06,2GB	07/05/19	Halichoerus grypus	Phoque gris	1	0	Ruisseau du renard	47°02.376' -56°23.055'	2=Miquelon	Gianni Boissel
2019-05-06,3GB	07/05/19	Indéterminé	0	1	0	Ruisseau Carcasse	47°03.029' -56°23.288'	2=Miquelon	Gianni Boissel
2019-05-06,4GB	07/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau de la Carcasse Sud	47°3.025' -56°23.285'	2=Miquelon	Gianni Boissel
2019-05-06,5GB	07/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau du renard	47°2.384' -56°23.055'	2=Miquelon	Gianni Boissel
2019-05-06,6GB	07/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau de la carcasse	47°3.025' -56°23.285'	2=Miquelon	Gianni Boissel
2019-05-06,7GB	07/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau du renard	47°2.384' -56°23.055'	2=Miquelon	Gianni Boissel
2019-05-06,8GB	07/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau du renard	47°2.363' -56°23.056'	2=Miquelon	Gianni Boissel
2019-05-06,9GB	07/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau du renard	47°2.365' -56°23.057'	2=Miquelon	Gianni Boissel
2019-05-06,10GB	07/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau renard	47°2.363' -56°23.056'	2=Miquelon	Gianni Boissel
2019-05-06,11GB	07/05/19	Pagophylus groenlandica	Phoque du Groenland	1	0	Ruisseau renard	47°2.365' -56°23.057'	2=Miquelon	Gianni Boissel
2019-056-25FU	25/06/19	Phoca vitulina	Phoque commun	1	F	Grand Barachois Ouest	46°98443 -56°34860	2=Miquelon	Frank Urtizberea, Daniel Koelsch
2019-056-25,1FU	25/06/19	Phoca vitulina	Phoque commun	1	0	Grand Barachois Ouest	46°990218 -56°347535	2=Miquelon	Frank Urtizberea, Daniel Koelsch
2019-056-25,3FU	25/06/19	Phoca vitulina	Phoque commun	1	F	Grand Barachois Ouest	46°997104 -56°352551	2=Miquelon	Frank Urtizberea, Daniel Koelsch
2019-07-02FU	02/07/19	Halichoerus grypus	Phoque gris	1	M	Diamant	46°755865' -56°217266'	1=Saint Pierre	Frank Urtizberea
2019-07-22GB	22/07/19	Lagenorhynchus albirostris	Dauphin à bec blanc	1	0	Dune Ouest	46°55.792' -56°19.686'	2=Miquelon	Gianni Boissel
2019-07-30GB	30/07/19	Phoca vitulina	Phoque commun	1	0	Grand Barachois Ouest	47°0.121' -56°21.352'	2=Miquelon	Gianni Boissel
2019-08-12FU	12/08/19	Phoca vitulina	Phoque commun	1	0	Port de Saint Pierre	46°774862' -56°169113'	1=Saint Pierre	Frank Urtizberea, Emilie Briand
522019-08-12FU	12/08/19	Phoca vitulina	Phoque commun	1	M	Port SP	46°774871' -56°169057	1=Saint Pierre	Frank Urtizberea, Daniel Koelsch
2019-08-21GB	21/08/19	Delphinus delphis	Dauphin commun	1	F	Ruisseau Debons	46°52.376' -56°20.696'	3=Langlade	Gianni Boissel
2019-08-30GB	30/08/19	Delphinus delphis	Dauphin commun	1	F	Fond de l'anse	47°07.032' -56°22.762'	2=Miquelon	Gianni Boissel, Stéphanie Bialoux
2019-10-19GB	19/10/19	Kogia breviceps	Cachalot pygmé	1	F	Etang du Chapeau	47.09775' -56.34574'	2=Miquelon	Gianni Boissel, JM Bernard
2019-10-19,1GB	19/10/19	Kogia breviceps	Cachalot pygmé	1	F	Etang du Chapeau	47.084645 -56.3240196	2=Miquelon	Gianni Boissel, JM Bernard
2019-10-22GB	22/10/19	Delphinus delphis	Dauphin commun	1		Banc de galets Est village Miquelon	47° 6.338' 56° 22.809'	2=Miquelon	Gianni Boissel, Daniel Koelsch
19/10/24GB	24/10/19	Phoca vitulina	Phoque commun	1		Roche à la biche	47°5.807' 56° 21.439'	2=Miquelon	Gianni Boissel, Daniel Koelsch

Annexe 1


ST MSS 6000 Mission: TC950-2018-181 VIDEO
Video: 2019-03-15 15:06:45 N46°08.34' W056°19.59' 100° 2001 ft 169.4 kts EO/IR
EO/IR: N46°08.69' W056°19.03'
Aircraft: 2019-03-15 15:06:46 N46°08.34' W056°19.56' 100° 2001 ft 169.4 kts
15MR2019 AUTO VIC
15:06:51 * * COR-A
UTC+0.0
LOW 1000 COL AUTO ∞
DFLT 50
N
-02-
-03-
-04-
LI:DISARM
LI:LOW
ACFT
8 29 30 31 32 33
TGT LOS
46:08:21N 100° 048° 46:08:42N
56:19:35W 1930FT 0.6NM 56:19:02W

Annexe 2

***Kogia breviceps* - (Blainville, 1838)**

ANIMALIA - CHORDATA - MAMMALIA - CETARTIODACTYLA - PHYSETERIDAE - Kogia - breviceps

Common Names: Pygmy Sperm Whale (English), Cachalot pygmée (French), Cachalote Cabeza Chica (Spanish; Castilian), Cachalote Pigmeo (Spanish; Castilian)

Synonyms: No Synonyms

Taxonomic Note:
It was only in 1966 that the two species in the genus *Kogia* (*K. breviceps* and *K. sima*) were recognized as distinct (Handley 1966, Chivers *et al.* 2005). No subspecies have been described (Committee on Taxonomy 2018). The cryptic behavior and similar external morphology of the two species mean that records are often not displayed at the species level and are instead combined into *Kogia* spp.

Red List Status
LC – Least Concern

Red List Assessment

Assessment Information

Date of Assessment: 2019-08-08

Assessor(s): Kiszka, J., Braulik G.

Reviewer(s): B. Taylor, Reeves, R.

Regions: Global

Assessment Rationale

The Pygmy Sperm Whale is distributed in deep oceanic waters of the tropical and temperate Atlantic, Indian and Pacific Oceans, from approximately 50°S to 50-60°N. Despite the expansion of cetacean research in oceanic waters, there is still very limited information on the distribution, abundance, behaviour or population structure of Pygmy Sperm Whales globally. This is largely due to the short surfacing interval, cryptic surface behavior and long, deep dives which make these whales extremely challenging to observe at sea. There is no information on global abundance or trends but numerous stranding records and high detection rates during acoustic surveys indicate that this species is not as uncommon as visual surveys would suggest. Unlike some beaked whales, Pygmy Sperm Whales do not seem to experience significant impacts from exposure to anthropogenic noise, and they also do not appear to be bycaught frequently in fishing gear. However, because they are so rarely observed, declines would be difficult to detect and therefore a 30% global reduction over three generations (36 years; Taylor *et al.* 2007) cannot be ruled out.

The Pygmy Sperm Whale was classified as Data Deficient (DD) on the IUCN Red List in 2008 and it remains extremely data-poor. The Guidelines (Version 11, 2014) state that: "If the data are so uncertain that both CR and LC are plausible categories, the taxon can be listed as DD". In this instance the number of sightings and strandings and the wide pan-tropical distribution preclude the species being classified as Critically Endangered and DD therefore cannot be applied. The Pygmy Sperm Whale is therefore classified as Least Concern on the assumption that it is widely distributed and there are areas of known concentration, no major threats are known to occur across the majority of its range and it is likely to be more common than would be suggested from sighting surveys (due to its cryptic behavior).

Distribution

Geographic Range

Pygmy Sperm Whales occur in deep oceanic waters of the temperate and tropical Atlantic, Indian and Pacific Oceans, from approximately 50°S to 50-60°N. The southern distribution includes New Zealand, Tasmania and South Africa, and the northern distributional limits extend to Canada, the United Kingdom and Japan. They are mostly observed over shelf breaks and in insular slope waters (Jefferson *et al.* 2015, McAlpine 2018). Pygmy Sperm Whales are rarely recorded in the Mediterranean Sea, the Persian Gulf, the Red Sea or shallower waters of SE Asia (McAlpine 2018; Notarbartolo di Sciara *et al.* 2017). The range of *Kogia breviceps* is still poorly understood, though a lack of live sighting records may be due more to their inconspicuous behaviour than to rarity. Stranding records suggest that the species is locally common in some areas such as off South Africa or the southeastern USA (Plön 2004, Hodge *et al.* 2018). The Pygmy Sperm Whale was reported by Weir (2010) has not yet recorded in West Africa, but this may be due to the lack of surveys in that region.

Map Status

Map Status	How the map was created, including data sources/methods used:	Data Sensitive?	Justification	Geographic range this applies to:	Date restriction imposed:
Done	-	-	-	-	-

Biogeographic Realms

Biogeographic Realm: Afrotropical, Australasian, Indo-Malayan, Nearctic, Neotropical, Oceania, Palearctic

Occurrence

Countries of Occurrence

Country	Presence	Origin	Formerly Bred	Seasonality
American Samoa	Extant	Native	-	Resident
Angola	Extant	Native	-	Resident
Anguilla	Extant	Native	-	Resident
Antigua and Barbuda	Extant	Native	-	Resident
Argentina	Extant	Native	-	Resident
Aruba	Extant	Native	-	Resident
Australia	Extant	Native	-	Resident
Australia -> Tasmania	Extant	Native	-	Resident
Bahamas	Extant	Native	-	Resident
Bangladesh	Extant	Native	-	Resident
Barbados	Extant	Native	-	Resident
Belgium	Extant	Native	-	Resident
Belize	Extant	Native	-	Resident
Benin	Extant	Native	-	Resident
Bermuda	Extant	Native	-	Resident

Country	Presence	Origin	Formerly Bred	Seasonality
Bonaire, Sint Eustatius and Saba	Extant	Native	-	Resident
Bonaire, Sint Eustatius and Saba -> Bonaire	Extant	Native	-	Resident
Bonaire, Sint Eustatius and Saba -> Saba	Extant	Native	-	Resident
Bonaire, Sint Eustatius and Saba -> Sint Eustatius	Extant	Native	-	Resident
Brazil	Extant	Native	-	Resident
British Indian Ocean Territory	Extant	Native	-	Resident
Brunei Darussalam	Extant	Native	-	Resident
Cambodia	Extant	Native	-	Resident
Cameroon	Extant	Native	-	Resident
Canada	Extant	Native	-	Resident
Canada -> Nova Scotia	Extant	Native	-	Resident
Cape Verde	Extant	Native	-	Resident
Cayman Islands	Extant	Native	-	Resident
Chile	Extant	Native	-	Resident
Chile -> Juan Fernández Is.	Extant	Native	-	Resident
China	Extant	Native	-	Resident
Christmas Island	Extant	Native	-	Resident
Cocos (Keeling) Islands	Extant	Native	-	Resident
Colombia	Extant	Native	-	Resident
Comoros	Extant	Native	-	Resident
Congo	Extant	Native	-	Resident
Congo, The Democratic Republic of the	Extant	Native	-	Resident
Cook Islands	Extant	Native	-	Resident
Costa Rica	Extant	Native	-	Resident
Cuba	Extant	Native	-	Resident
Curaçao	Extant	Native	-	Resident
Côte d'Ivoire	Extant	Native	-	Resident
Denmark	Extant	Native	-	Resident
Djibouti	Extant	Native	-	Resident
Dominica	Extant	Native	-	Resident
Dominican Republic	Extant	Native	-	Resident

Country	Presence	Origin	Formerly Bred	Seasonality
Ecuador	Extant	Native	-	Resident
El Salvador	Extant	Native	-	Resident
Equatorial Guinea	Extant	Native	-	Resident
Eritrea	Presence Uncertain	Native	-	Seasonal Occurrence Uncertain
Fiji	Extant	Native	-	Resident
France	Extant	Native	-	Resident
French Guiana	Extant	Native	-	Resident
French Polynesia	Extant	Native	-	Resident
Gabon	Extant	Native	-	Resident
Gambia	Extant	Native	-	Resident
Germany	Extant	Native	-	Resident
Ghana	Extant	Native	-	Resident
Gibraltar	Extant	Native	-	Resident
Grenada	Extant	Native	-	Resident
Guadeloupe	Extant	Native	-	Resident
Guam	Extant	Native	-	Resident
Guatemala	Extant	Native	-	Resident
Guernsey	Extant	Native	-	Resident
Guinea	Extant	Native	-	Resident
Guinea-Bissau	Extant	Native	-	Resident
Guyana	Extant	Native	-	Resident
Haiti	Extant	Native	-	Resident
Honduras	Extant	Native	-	Resident
Hong Kong	Extant	Native	-	Resident
India	Extant	Native	-	Resident
Indonesia	Extant	Native	-	Resident
Iran, Islamic Republic of	Extant	Native	-	Resident
Ireland	Extant	Native	-	Resident
Isle of Man	Extant	Native	-	Resident
Jamaica	Extant	Native	-	Resident
Japan	Extant	Native	-	Resident
Japan -> Honshu	Extant	Native	-	Resident
Jersey	Extant	Native	-	Resident

Country	Presence	Origin	Formerly Bred	Seasonality
Kenya	Extant	Native	-	Resident
Kiribati	Extant	Native	-	Resident
Korea, Democratic People's Republic of	Extant	Native	-	Resident
Korea, Republic of	Extant	Native	-	Resident
Liberia	Extant	Native	-	Resident
Macao	Extant	Native	-	Resident
Madagascar	Extant	Native	-	Resident
Malaysia	Extant	Native	-	Resident
Maldives	Extant	Native	-	Resident
Marshall Islands	Extant	Native	-	Resident
Martinique	Extant	Native	-	Resident
Mauritania	Extant	Native	-	Resident
Mauritius	Extant	Native	-	Resident
Mayotte	Extant	Native	-	Resident
Mexico	Extant	Native	-	Resident
Micronesia, Federated States of	Extant	Native	-	Resident
Montserrat	Extant	Native	-	Resident
Morocco	Extant	Native	-	Resident
Mozambique	Extant	Native	-	Resident
Myanmar	Extant	Native	-	Resident
Namibia	Extant	Native	-	Resident
Nauru	Extant	Native	-	Resident
Netherlands	Extant	Native	-	Resident
New Caledonia	Extant	Native	-	Resident
New Zealand	Extant	Native	-	Resident
Nicaragua	Extant	Native	-	Resident
Nigeria	Extant	Native	-	Resident
Niue	Extant	Native	-	Resident
Norfolk Island	Extant	Native	-	Resident
Northern Mariana Islands	Extant	Native	-	Resident
Oman	Extant	Native	-	Resident
Pakistan	Extant	Native	-	Resident

Country	Presence	Origin	Formerly Bred	Seasonality
Palau	Extant	Native	-	Resident
Panama	Extant	Native	-	Resident
Papua New Guinea	Extant	Native	-	Resident
Peru	Extant	Native	-	Resident
Philippines	Extant	Native	-	Resident
Pitcairn	Extant	Native	-	Resident
Portugal	Extant	Native	-	Resident
Portugal -> Azores	Extant	Native	-	Resident
Puerto Rico	Extant	Native	-	Resident
Russian Federation	Presence Uncertain	Native	-	Seasonal Occurrence Uncertain
Réunion	Extant	Native	-	Resident
Saint Helena, Ascension and Tristan da Cunha	Extant	Native	-	Resident
Saint Kitts and Nevis	Extant	Native	-	Resident
Saint Lucia	Extant	Native	-	Resident
Saint Martin (French part)	Extant	Native	-	Resident
Saint Pierre and Miquelon	Extant	Native	-	Resident
Saint Vincent and the Grenadines	Extant	Native	-	Resident
Samoa	Extant	Native	-	Resident
Sao Tomé and Principe	Extant	Native	-	Resident
Senegal	Extant	Native	-	Resident
Seychelles	Extant	Native	-	Resident
Sierra Leone	Extant	Native	-	Resident
Singapore	Extant	Native	-	Resident
Sint Maarten (Dutch part)	Extant	Native	-	Resident
Solomon Islands	Extant	Native	-	Resident
Somalia	Extant	Native	-	Resident
South Africa	Extant	Native	-	Resident
South Africa -> Eastern Cape Province	Extant	Native	-	Resident
South Africa -> KwaZulu-Natal	Extant	Native	-	Resident
South Africa -> Northern Cape Province	Extant	Native	-	Resident
South Africa -> Western Cape	Extant	Native	-	Resident

Country	Presence	Origin	Formerly Bred	Seasonality
Spain	Extant	Native	-	Resident
Sri Lanka	Extant	Native	-	Resident
Suriname	Extant	Native	-	Resident
Taiwan, Province of China	Extant	Native	-	Resident
Tanzania, United Republic of	Extant	Native	-	Resident
Thailand	Extant	Native	-	Resident
Timor-Leste	Extant	Native	-	Resident
Togo	Extant	Native	-	Resident
Tokelau	Extant	Native	-	Resident
Tonga	Extant	Native	-	Resident
Trinidad and Tobago	Extant	Native	-	Resident
Turks and Caicos Islands	Extant	Native	-	Resident
Tuvalu	Extant	Native	-	Resident
United Arab Emirates	Extant	Native	-	Resident
United Kingdom	Extant	Native	-	Resident
United States	Extant	Native	-	Resident
United States -> Hawaiian Is.	Extant	Native	-	Resident
United States -> Washington	Extant	Native	-	Resident
Uruguay	Extant	Native	-	Resident
Vanuatu	Extant	Native	-	Resident
Venezuela, Bolivarian Republic of	Extant	Native	-	Resident
Viet Nam	Extant	Native	-	Resident
Virgin Islands, British	Extant	Native	-	Resident
Virgin Islands, U.S.	Extant	Native	-	Resident
Wallis and Futuna	Extant	Native	-	Resident
Western Sahara	Extant	Native	-	Resident
Yemen	Extant	Native	-	Resident

FAO Area Occurrence

	Presence	Origin	Formerly Bred	Seasonality
21. Atlantic - northwest	Extant	Native	-	-
27. Atlantic - northeast	Extant	Native	-	-
31. Atlantic - western central	Extant	Native	-	-
34. Atlantic - eastern central	Extant	Native	-	-
41. Atlantic - southwest	Extant	Native	-	-
47. Atlantic - southeast	Extant	Native	-	-
51. Indian Ocean - western	Extant	Native	-	-
57. Indian Ocean - eastern	Extant	Native	-	-
61. Pacific - northwest	Extant	Native	-	-
67. Pacific - northeast	Extant	Native	-	-
71. Pacific - western central	Extant	Native	-	-
77. Pacific - eastern central	Extant	Native	-	-
81. Pacific - southwest	Extant	Native	-	-
87. Pacific - southeast	Extant	Native	-	-

Population

There are no estimates of global Pygmy Sperm Whale abundance. Estimates of local or regional abundance are few, particularly because of the cryptic nature of this species as well as the difficulty of distinguishing *K. breviceps* from *K. sima* at sea. Abundance estimation is challenging because these whales dive for long periods and are inconspicuous when they surface. Therefore, visual surveys have a very low probability of detection (at or well below approximately 35%) (Barlow 1999; Hodge *et al.* 2018).

In the Gulf of Mexico, the most recent abundance estimates for Pygmy and Dwarf Sperm Whales combined is 186 (CV=1.04) from a summer survey conducted in 2009 and covering the waters from the 200m isobath to the seaward extent of the US EEZ (Garrison 2016). Earlier estimates in the Gulf of Mexico that again combined both *Kogia* species were from 1991-1994 (547, CV=0.28), 1996-2001 (742, CV=0.29) and 2003-2004 (453, CV=1.04) generated from surveys all conducted between April and August (Mullin and Fulling 2004, Mullin 2007). In the western North Atlantic, the best abundance estimate is 3,785 individuals (CV=0.47) from a summer survey conducted in 2011 from the waters of central Florida to the lower Bay of Fundy (Palka 2012, Garrison 2016). *Kogia* strand frequently on beaches of the southeastern United States. For example, between 1978 and 1987, Odell (1991) documented that *Kogia* spp. was the second most frequently stranded cetacean taxon, after the common bottlenose dolphin (*Tursiops truncatus*), from North Carolina to Texas. From 2007–2015, 17 strandings of *Kogia* spp. were documented in Virginia, 81 in North Carolina, and 112 on the Atlantic coast of Florida (Hodge *et al.* 2018). The large number of strandings in these states suggests that *Kogia* are a common component of the US Atlantic cetacean fauna, despite the fact that these species are seldom detected during visual surveys in these waters (Garrison *et al.* 2010). This was confirmed by a recent study that compared the detections of *Kogia* between visual survey and passive acoustic methods along the U.S. Atlantic coast, concluding that *Kogia* are indeed relatively common in shelf break and slope waters of the western North Atlantic between Virginia and Florida, and that they are not readily available to visual surveys in this region (Hodge *et al.* 2018).

The latest abundance estimate from the Hawaiian EEZ is 7,138 (CV=1.12) from a 2002 shipboard survey (Barlow 2006). A 2010 survey throughout the Hawaiian EEZ did not result in any *Kogia* sightings (Bradford *et al.* 2013). In Hawaiian waters, the Pygmy Sperm Whale is the second most frequently recorded stranded cetacean species, with 35 strandings documented between 1963 and 2008 (Shallenberger 1981, Nitta 1987, Maldini *et al.* 2005) again suggesting they are relatively common but rarely sighted in the region. Off the west coast of the US (Washington, Oregon and California), the best estimate of Pygmy Sperm Whale abundance is the geometric mean of 4,111 (CV=1.12) based on shipboard line-transect surveys in 2008 and 2014 (Barlow 2016). In the southwestern Indian Ocean, aerial survey data resulted in an abundance of 683 (both species of *Kogia* aggregated) in the Mozambique Channel, the Seychelles and the Mascarene Islands (Laran *et al.* 2017). Florida (USA) and South Africa have the highest reported stranding rates of this species in the world, which suggests that *Kogia* spp. are relatively abundant in these regions (Credle 1988, Plön 2004).

Population genetic analyses conducted on southern hemisphere samples revealed a high haplotype and nucleotide diversity, but a lack of phylogeographic structure which indicates a high degree of gene flow among populations (Plön 2004).

The sum of the existing abundance estimates from various regions is over 10,000 individuals but surveys have covered only a small fraction of the entire habitat of the species and abundance estimates. Also, the estimates are often imprecise and negatively biased. Total global abundance is likely much higher than 10,000.

Population Information

Current Population Trend: Unknown

Severely fragmented?	Justification
No	-

Habitats and Ecology

At-sea observations of Pygmy Sperm Whales are rare, and therefore their habitat preferences remain poorly understood. Nevertheless, it is established that they occur over continental and insular slope waters, as well as in deep oceanic waters. Off the main Hawaiian Islands, small-boat dedicated surveys conducted from 2000 to 2012 showed that Pygmy Sperm Whales occur mostly in waters deeper than 2000 m (Baird *et al.* 2013). Elsewhere, sightings are often aggregated with those of Dwarf Sperm Whales, which makes a detailed assessment of their habitat preferences challenging (e.g. Mullin *et al.* 2004). In the Gulf of Mexico, Baumgartner *et al.* (2001) recorded sightings most frequently in water depths between 400 and 1,000 m, with some sightings extending into much deeper waters (up to 3,500 m).

A number of studies have described the diet and feeding ecology of Pygmy Sperm Whales around the globe. Their diet consists primarily of oceanic cephalopods, but includes fish, shrimp and swimming crabs (Ross 1979, Beatson 2007, Spitz *et al.* 2011). Small mesopelagic squid (particularly Histiothidae and Cranchiidae) contribute significantly to the diet of Pygmy Sperm Whales (Beatson 2007, Spitz *et al.* 2011). Cephalopods are the primary prey of Pygmy Sperm Whales in Hawaiian waters judging by the fact that they comprised 78.7% of prey abundance and 93.4% of the biomass in stomachs of stranded specimens, with 38 species from 17 different families represented (West *et al.* 2009). Morphological adaptations such as their "false gills" and ability to squirt ink suggest that the evolution of *Kogia* spp. was shaped in part by high predation pressure, particularly from sharks and killer whales (Plön 2004).

IUCN Habitats Classification Scheme

Habitat	Season	Suitability	Major Importance?
10.1. Marine Oceanic -> Marine Oceanic - Epipelagic (0-200m)	-	Suitable	Yes
10.2. Marine Oceanic -> Marine Oceanic - Mesopelagic (200-1000m)	-	Suitable	Yes
10.3. Marine Oceanic -> Marine Oceanic - Bathypelagic (1000-4000m)	-	Suitable	Yes

Systems

System: Marine

Use and Trade

General Use and Trade Information

Pygmy Sperm Whales are hunted on a small scale in a few places but not often or on a large scale (Jefferson *et al.* 1993).

Subsistence:	Rationale:	Local Commercial:	Further detail including information on economic value if available:
Yes	-	-	-

National Commercial Value: Yes

International Commercial Value: No

End Use	Subsistence	National	International	Other (please specify)
1. Food - human	true	true	-	-

Trend in level of total offtake from wild sources: Unknown

Trend in level of total offtake from domesticated sources: Not cultivated

Threats

Small numbers of Pygmy Sperm Whales have been taken in coastal whaling operations off Japan, Indonesia, Taiwan, the Lesser Antilles, and Sri Lanka (Jefferson *et al.* 1993). However, the extent of takes is extremely small. They have also been caught incidentally in drift gillnet fisheries in Sri Lanka, Thailand, California and in the north-east Atlantic (Jefferson *et al.* 1993, Barlow *et al.* 1997, Perez *et al.* 2001). In 2005, a large series of unusual stranding events over about 3 weeks in and around Taiwan included several *Kogia* (Wang and Yang 2006; Yang *et al.* 2008), with at least two of them Pygmy Sperm Whales (Yang *et al.* 2008). It is unknown if military, seismic or other loud noise-producing human activities were implicated in these strandings. Pygmy sperm whales are known to have died from plastic ingestion (Tarpley 1989). The neurotoxin domoic acid (DA) was detected in urine and fecal samples recovered from 24 of 41 Pygmy Sperm Whales stranded along the U.S. Atlantic coast from 1997 to 2008, suggesting that exposure to these toxins from harmful algal blooms should be a concern (Fire *et al.* 2009).

Threats Classification Scheme

Threat	Timing	Scope	Severity	Impact Score
5.4.3. Biological resource use -> Fishing & harvesting aquatic resources -> Unintentional effects: (subsistence/small scale) [harvest]	Ongoing	-	-	Low Impact: 3
9.4. Pollution -> Garbage & solid waste	Ongoing	-	-	Low Impact: 3
9.6.3. Pollution -> Excess energy -> Noise pollution	Ongoing	-	-	Low Impact: 3
11.5. Climate change & severe weather -> Other impacts	Future	-	-	No/Negligible Impact: 1

Conservation

The species is listed in Appendix II of CITES. Research is needed to determine the impact of threats on this species.

Conservation Actions In- Place

Included in international legislation	Note
Yes	CITES Appendix II

Subject to any international management/trade controls	Note
Yes	-

Research Needed

Research	Note
1.2. Research -> Population size, distribution & trends	-
1.5. Research -> Threats	-
3.1. Monitoring -> Population trends	-

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Saint-Pierre et Miquelon 2019

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Service Agriculture, Alimentation, Eau et Biodiversité