

2018 Alaska Region Marine Mammal Stranding Summary

Kate Savage, Protected Resources Division
National Marine Fisheries Service, Alaska Region
POB 21668
Juneau, Alaska 99802
January 28, 2019

Contents

A. Stranding report description and acknowledgement.....	2
B. Stranding reports by year and month.....	3
Figure 1. Number of confirmed stranding reports by year, 1980 – 2018.	
Figure 2. Number of confirmed stranding reports by month, 2018 compared to the 2000-2017 average.	
C. Stranding reports by order and species.....	4 - 6
Figure 3. Contribution of confirmed cetacean, pinniped, and unidentified marine mammal reports to total reports, 2018 compared to the 2000-2017 average.	
Table 1 and Figure 4. Contribution of cetacean species to total confirmed reports, 2018 compared to the 2000-2017 average.	
Table 2 and Figure 5. Contribution of pinniped species to total confirmed reports, 2018 compared to the 2000-2017 average.	
D. Stranding reports by initial presentation	6 - 8
Table 3. Number of confirmed stranding reports in 2018 by month of initial sighting, number of events, and number of animals.	
Figure 6. Number of confirmed stranding reports in 2018 by initial condition.	
Table 4. Number of confirmed strandings reported in the Alaska Region in 2018 by initial condition, species, and number of animals	
E. Reports by location.....	9, 10
Table 5. Number of confirmed strandings reported in the Alaska Region in 2018 by location and species.	
Figure 7. Distribution of 2018 Alaska Region confirmed stranding reports	
Figure 8. Contribution of regional subareas to confirmed stranding reports over time.	
F. Reports involving human interaction.....	11 - 13
Table 6. 2018 confirmed stranding reports involving human interaction.	
Figure 9. Percentage of total confirmed reports involving human interaction by year, 2000 - 2018.	
Figure 10. Confirmed stranding reports involving human interaction by species, 2018 compared to the 2000-2017 average.	
Figure 11. Reports of dead and alive large whale entanglements, 2000 – 2018.	

G. Alaska Sealife Center.....13
Table 7. 2018 Alaska Region live strandings handled by the Alaska SeaLife Center for rehabilitation by species, outcome, and number of animals.

A. Stranding report description and acknowledgement

Strandings of cetaceans (whales) and pinnipeds (seals and sea lions) that occurred in Alaskan waters and were reported to the National Marine Fisheries Service, Alaska Region (NMFS) in 2018 are summarized here. Stranding events cover animals found dead (floating and beached), and also reports of live stranded, mass stranded, abandoned, sick, or injured animals. Strandings include all marine mammals under NMFS jurisdiction. Marine mammal species managed by the U.S. Fish and Wildlife Service (polar bear, sea otter, and walrus) are not included. Reports are made by expert members of the marine mammal community as well as members of the general public with varying degrees of knowledge regarding marine mammal biology and ecology. The extent to which reported stranded animals have been examined is variable, from no examination to the performance of a full necropsy and analysis of pathology. Known subsistence takes are not included nor are fishery observer reports unless the animal was observed outside of statistical reporting protocols (and thus would not be included by the observer program as part of their watch data set). Variability in historic numbers between annual reports may reflect the addition of new reports or changing criteria for reports that are included as strandings. Not all reports of injured marine mammals are considered strandings and entered into Marine Mammal Health and Stranding Response Program’s (MMHSRP) National Stranding Database. As of 2017, stranding reports no longer include entanglements or vessel strikes, unless the event resulted in mortality or a response was deemed necessary. Instead, reports of live entanglements or vessel strikes are collected regionally and assessed separately (pages 11 - 13). Further information on criteria for strandings in this summary may be found at: www.nmfs.noaa.gov/pr/health/levela/examiners_guide_2017.pdf

All of the reports included have been confirmed, which means they are accompanied by some level of verification. Reports involving human interaction, such as ship strikes, fishery interactions/entanglements, and firearm injury, are also included with a high level of confirmation.

Further stranding information and references are available at the NMFS Alaska Region webpage: <https://www.fisheries.noaa.gov/alaska/marine-life-distress/alaska-marine-mammal-stranding-network>

This summary is made possible by the efforts of the Alaska Marine Mammal Stranding Network, along with partner organizations, agencies, and members of the public who have reported stranding events to NMFS throughout the year.

B. Stranding reports by year and month.

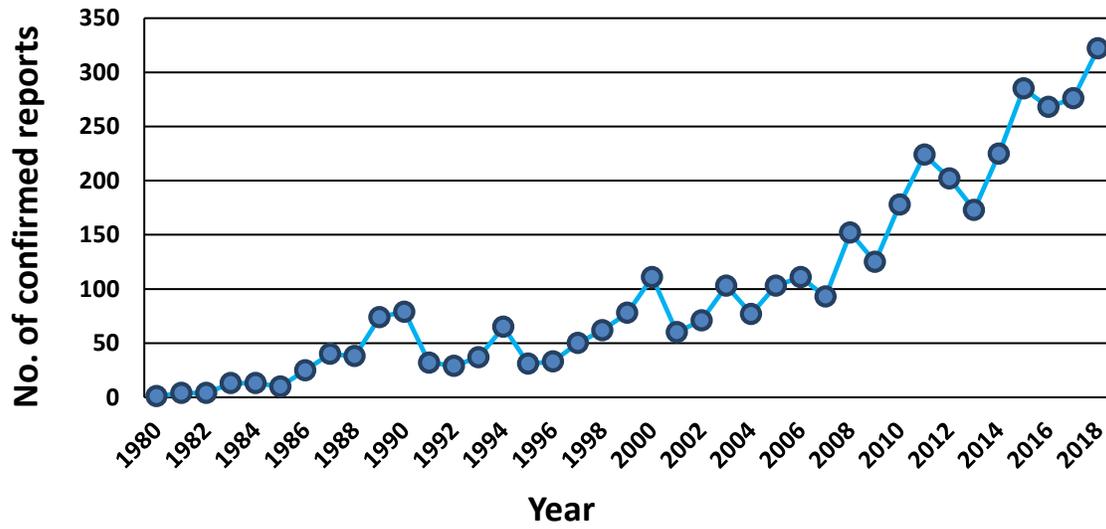


Figure 1. Number of confirmed stranding reports by year, 1980 – 2018.

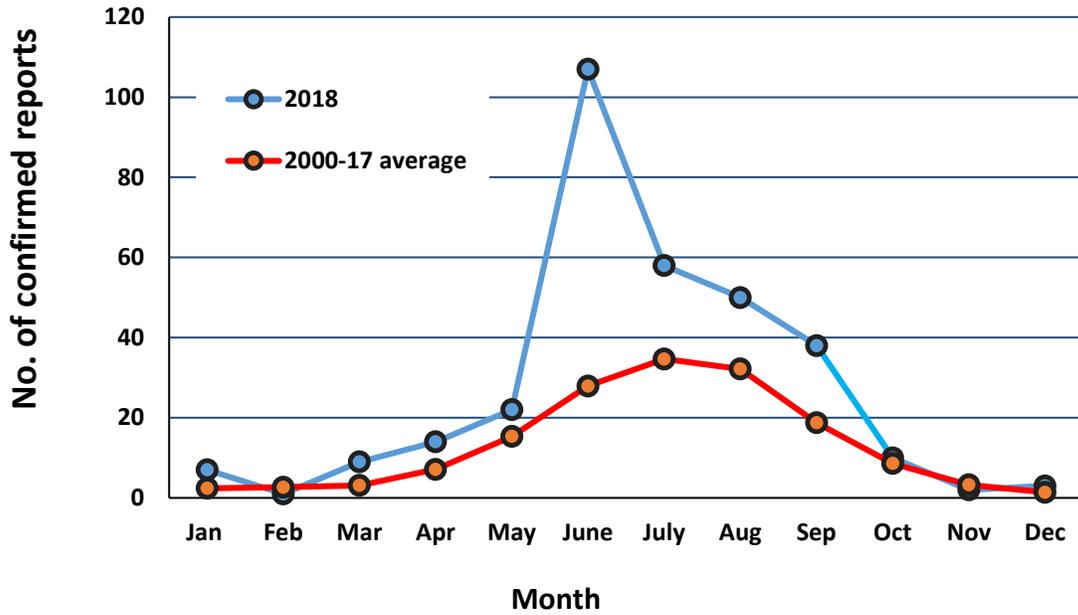


Figure 2. Number of confirmed stranding reports by month, 2018 compared to the 2000-2017 average.

C. Stranding reports by order and species.

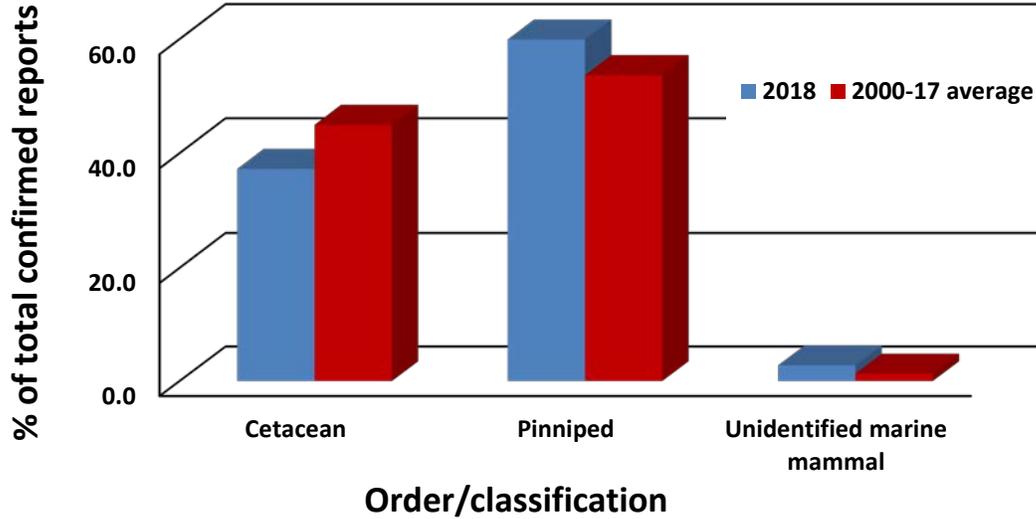


Figure 3. Contribution of confirmed cetacean, pinniped, and unidentified marine mammal reports to total reports, 2018 compared to the 2000-2017 average.

Table 1. Contribution of cetacean species to total confirmed reports, 2018 compared to the 2000-2017 average.

Species	Number of annual reports		Percent of total annual reports		
	2018	2000-2017 average	2018	2000-2017 average	Range
Unidentified cetacean	29	12	9.0	7.5	2.9 - 29.7
Humpback whale	19	12	5.9	7.5	1.1 - 29.2
Gray whale	19	12	5.9	7.4	0 - 50.6
Beluga whale - other	11	7	3.4	4.4	0.8 - 21.3
Harbor porpoise	9	5	2.8	3.4	0 - 20.4
Stejneger's beaked whale	8	1	2.5	0.7	0 - 9.5
Beluga whale - Cook Inlet	7	9	2.2	6.0	4.0 - 43.7
Bowhead whale	7	2	2.2	1.5	0 - 6.9
Killer whale	3	4	0.9	2.3	1.9 - 12.8
Dall's porpoise	3	1	0.9	0.8	0 - 5.7
Sperm whale	3	1	0.9	0.7	0 - 4.3
Fin whale	1	1	0.3	0.9	0 - 11.2
Minke whale	1	1	0.3	0.8	0 - 8.6

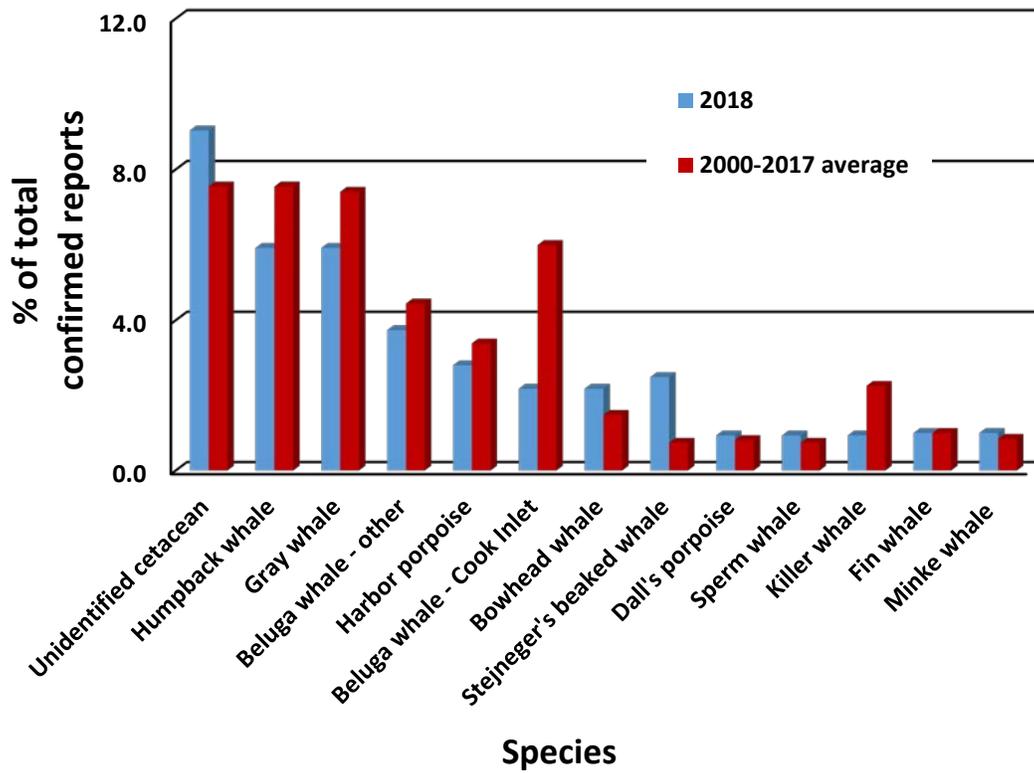


Figure 4. Contribution of cetacean species to total confirmed reports, 2018 compared to the 2000-2017 average.

Table 2. Contribution of pinniped species to total confirmed reports, 2018 compared to the 2000-2017 average.

Species	Number of annual reports		Percent of total annual reports		
	2018	2000-2017 average	2018	2000-2017 average	Range
Ringed seal	44	12	13.7	7.8	1.7 - 53.1
Bearded seal	36	4	11.2	2.5	0 - 12.6
Steller sea lion	29	29	9.0	18.2	17.1 - 50.7
Harbor seal	29	24	9.0	15.0	15.4 - 52.9
Unidentified pinniped	24	10	7.5	6.0	0 - 24.7
Spotted seal	21	3	6.5	1.6	0 - 7.1
Northern fur seal	9	3	2.8	1.7	0 - 28.1
California sea lion	1	0.3	0.3	0.2	0 - 2.8

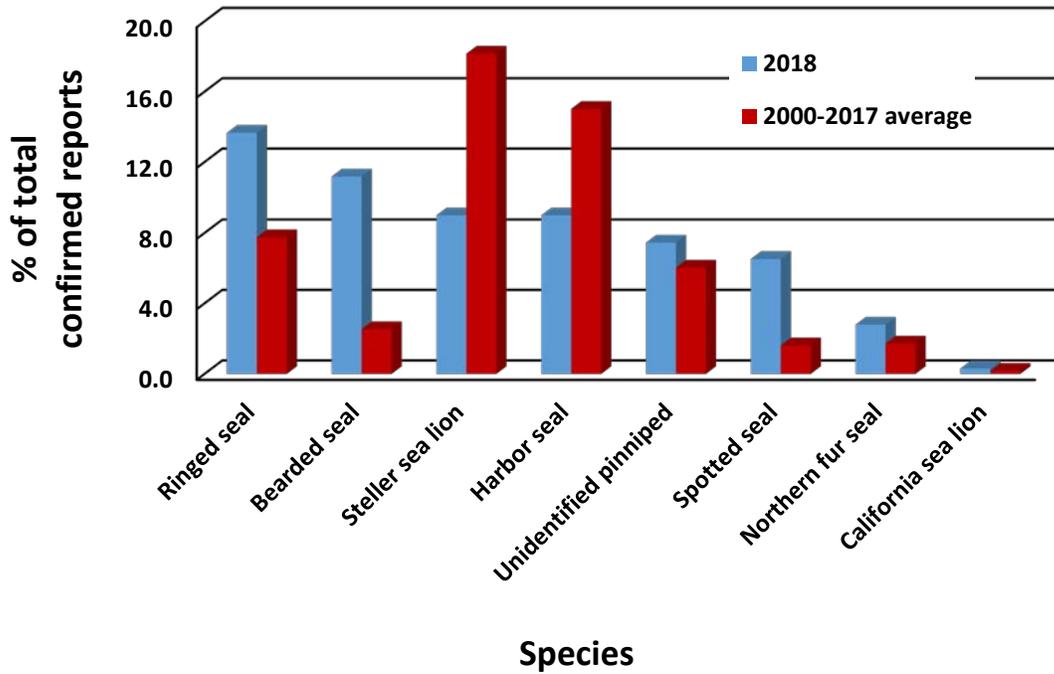


Figure 5. Contribution of pinniped species to total confirmed reports, 2018 compared to the 2000-2017 average.

D. Stranding reports by initial presentation

Table 3. Confirmed stranding reports in 2018 by month of initial sighting, number of events, and number of animals.

<i>Month</i>	<i>Events</i>	<i>Individuals</i>
Jan	7	7
Feb	1	1
Mar	9	9
Apr	14	14
May	21	21
June	59	107
July	59	59
Aug	40	50
Sep	38	38
Oct	10	10
Nov	2	2
Dec	4	4
Total	264	322

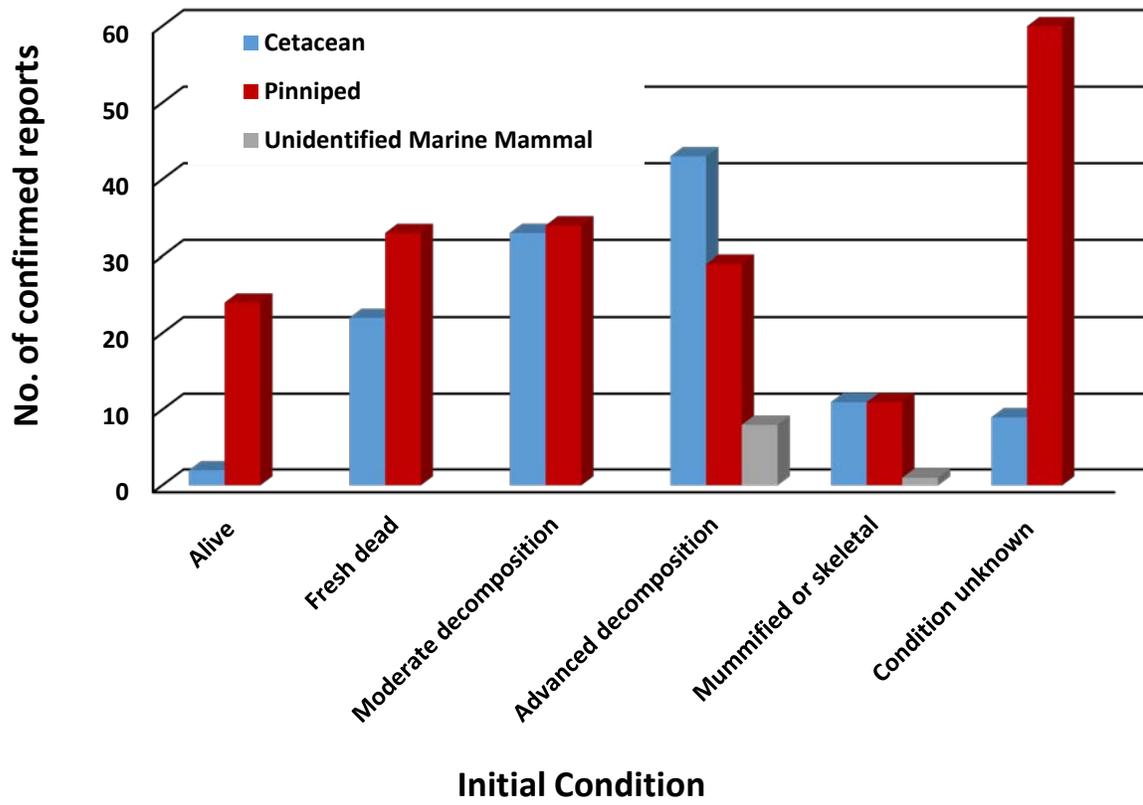


Figure 6. Number of confirmed stranding reports in 2018 by initial condition.

Table 4. Number of confirmed standings reported in the Alaska Region in 2018 by initial condition, species, and number of animals.

Species	Initial Condition					
	Alive	Fresh dead	Moderate decomposition	Advanced decomposition	Mummified or skeletal	Condition unknown or variable
Unidentified cetacean		2	4	14	5	3
Humpback whale		1	7	8	1	2
Gray whale		1	6	12		
Beluga whale - other		7	1	1	1	1
Harbor porpoise	1	7	1			
Stejneger's beaked whale		1	7			
Cook Inlet beluga whale			3	3	1	
Bowhead whale			2	3	2	
Dall's porpoise		2	1			
Sperm whale				1		2
Killer whale				1	1	1
Fin whale	1					
Minke whale			1			
<i>Cetacean Total</i>	2	21	33	43	11	10
Ringed seal	6	3	16	7	1	11
Bearded seal		1		6	1	28
Steller sea lion	4	12	3	7	1	2
Harbor seal	4	16	3	3	2	1
Unidentified pinniped			4	5	5	10
Spotted seal	1		8	1	1	10
Northern fur seal	9					
California sea lion		1				
<i>Pinniped Total</i>	24	33	34	29	11	62
Unidentified marine mammal				8	1	
<i>Unidentified Marine Mammal Total</i>				8	1	

E. Reports by Location

Table 5. Number of confirmed strandings reported in the Alaska Region in 2018 by subarea and species.

Species	Arctic	Bering Sea	Southcentral	Gulf of Alaska	Southeast	Total
Ringed seal	8	36				44
Bearded seal	4	32				36
Harbor seal		1	16	5	7	29
Steller sea lion		1	1	12	15	29
Unidentified cetacean	7	12	1	6	3	29
Unidentified pinniped	4	19			1	24
Spotted seal	4	17				21
Humpback whale		7	2	6	4	19
Gray whale	8	6		5		19
Beluga whale - other		11				11
Northern fur seal		9				9
Harbor porpoise		4	2	1	2	9
Unidentified marine mammal	3	5	1			9
Stejneger's beaked whale		8				8
Bowhead whale	7					7
Cook Inlet beluga			7			7
Killer whale		2			1	3
Dall's porpoise		1	1		1	3
Sperm whale		2	1			3
Minke whale			1			1
California sea lion				1		1
Fin whale				1		1
Total	45	174	33	37	34	322

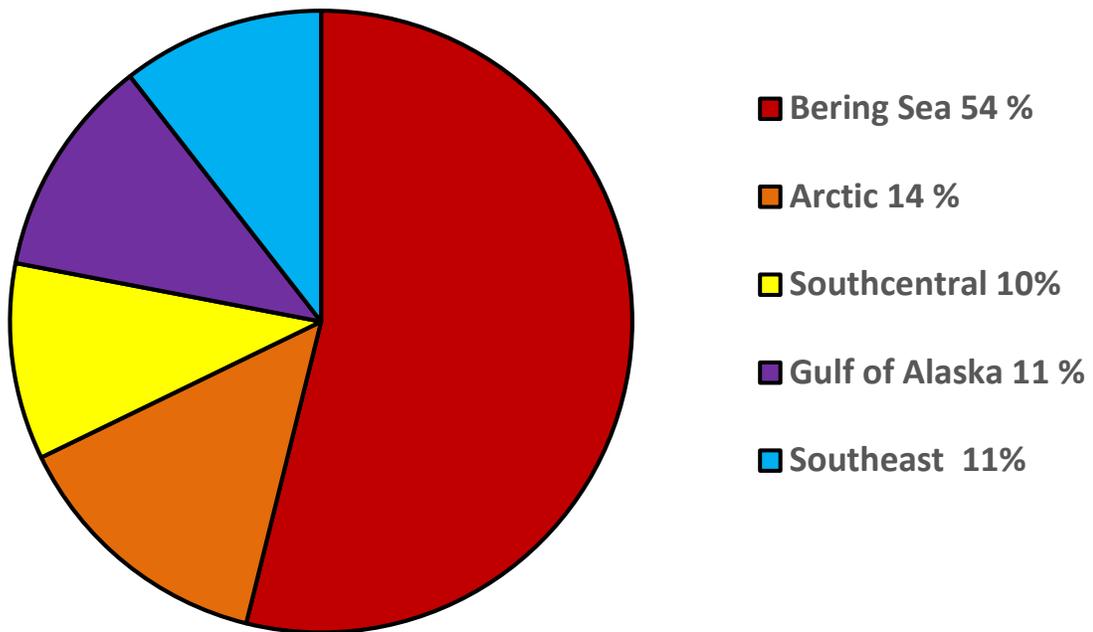


Figure 7. 2018 confirmed stranding reports by subarea.

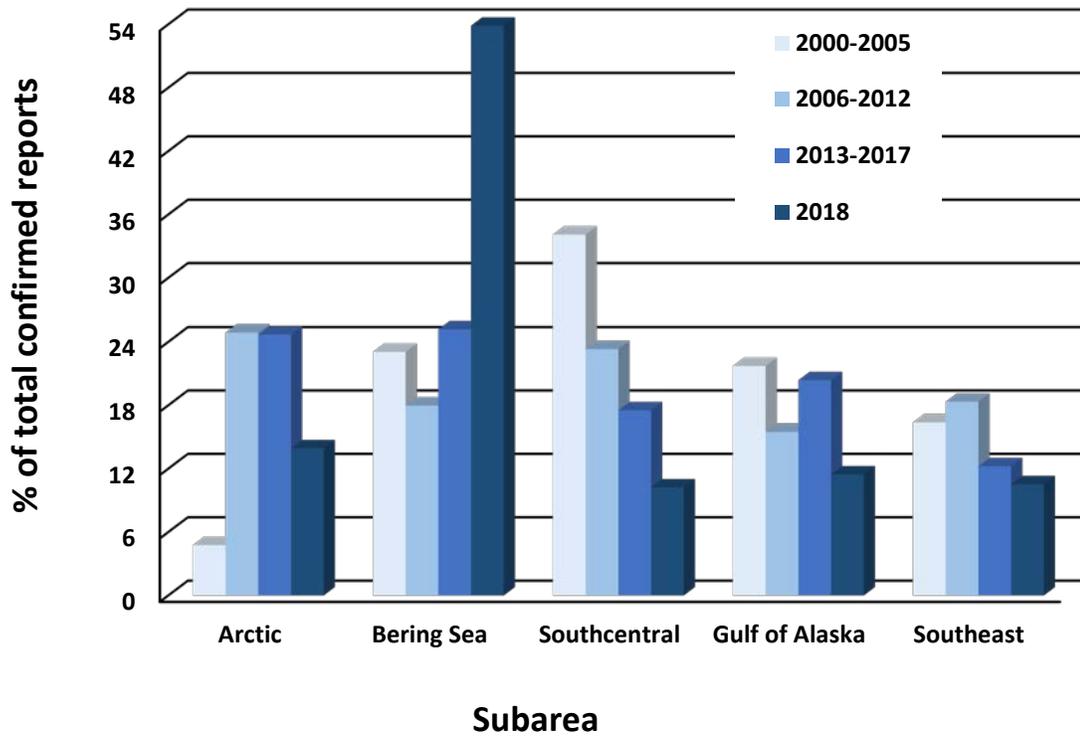


Figure 8. Contribution of regional subareas to confirmed stranding reports over time.

F. Reports involving human interaction

There is a wide range in species susceptibility to human interaction due to features of life history and geographical overlap. The most common human interactions in stranding reports are entanglements. These include interactions in which marine mammals either become entangled in fishery gear, ingest fishing gear, or interact with marine debris. Other human interactions include ship strikes, where vessels collide with animals either foraging or traversing; and firearm injuries, where harmful interaction is intentional. All reports that NMFS receives are assessed for human interaction. A report is deserving of a “no human interaction” classification only if completely examined. If a complete examination is not possible, human interaction is classified as “could not be determined”. NMFS also received many reports because of an observed human interaction. The incidence of these events is greater than the number recorded in the MMHSRP’s National Stranding Database as only events that result in mortality or a response are recorded as strandings. For example, there are far more reports of live entangled Steller sea lions than of sea lions either reported dead from entanglements or for which a response has been mounted, but only the latter two qualify as strandings and are entered into the MMHSRP national database. All reports of human interaction, regardless of whether they are classified as strandings, are tracked by NMFS Alaska Region and are included below. Human interactions subsequent to other issues (e.g., abandoned harbor seal pup retrieved for rehab) are not included here.

Table 6. 2018 confirmed reports involving human interaction by species and as a percentage of all reports

Species	Human Interaction (HI)				Total annual reports**	% HI
	Entanglement	Vessel strike	Firearm injury (suspected or confirmed)	Total HI		
Northern fur seal	15			15	15	100.0
Harbor seal	1		4	5	29	17.2
Steller sea lion	14		2	16	38	42.1
Humpback whale	9	5		14	29	48.3
Beluga whale - other	3			3	11	27.3
Harbor porpoise	2			2	9	22.2
Unidentified cetacean	1			1	30	3.3
Ringed seal				0	34	0.0
Spotted seal				0	11	0.0
Fin whale		1		1	1	100.0
Total	45	6	6	57	207	

*Healthy Steller sea lion sedated and relocated
 **These include all reports received for the species, including reports of stranded animals where evidence of human interaction was either not present or could not be determined and all reports of human interaction

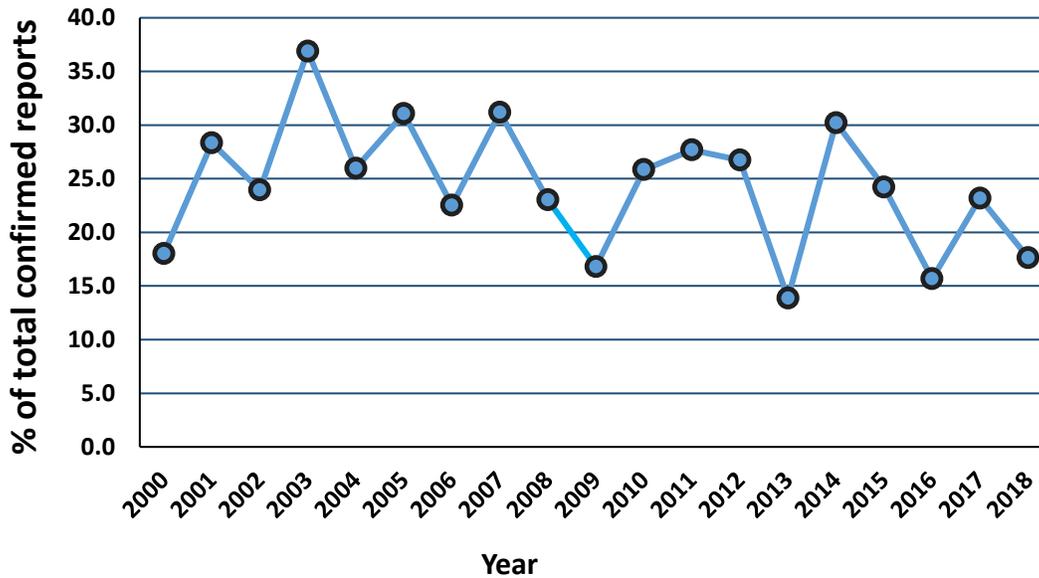


Figure 9. Percentage of total confirmed reports involving human interaction by year, 2000 – 2018.

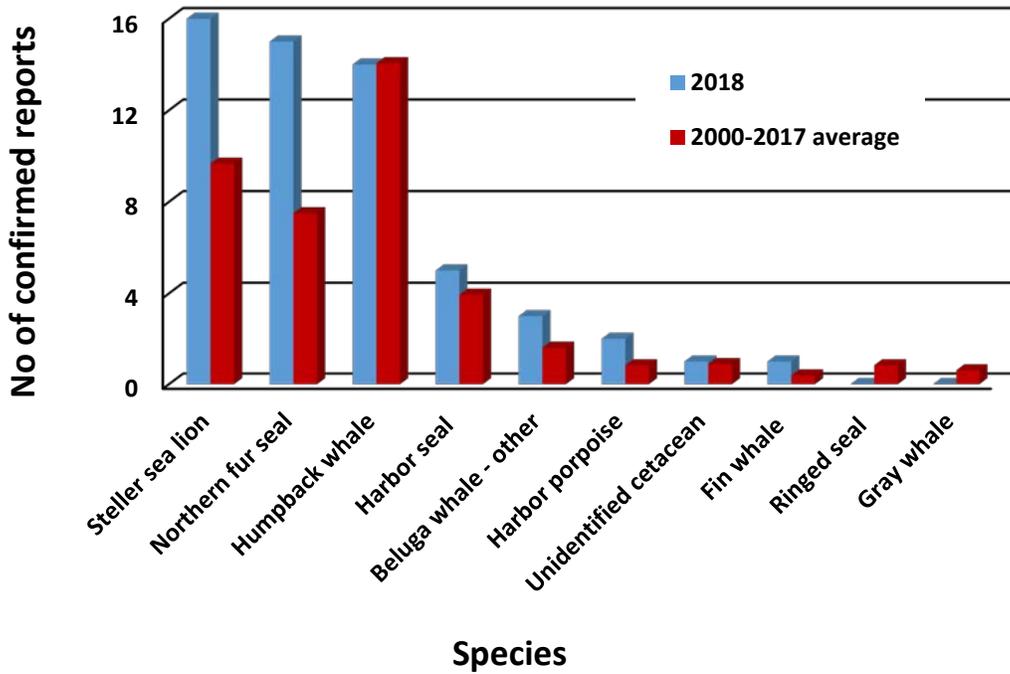


Figure 10. 2018 reports involving confirmed human interaction, by species.

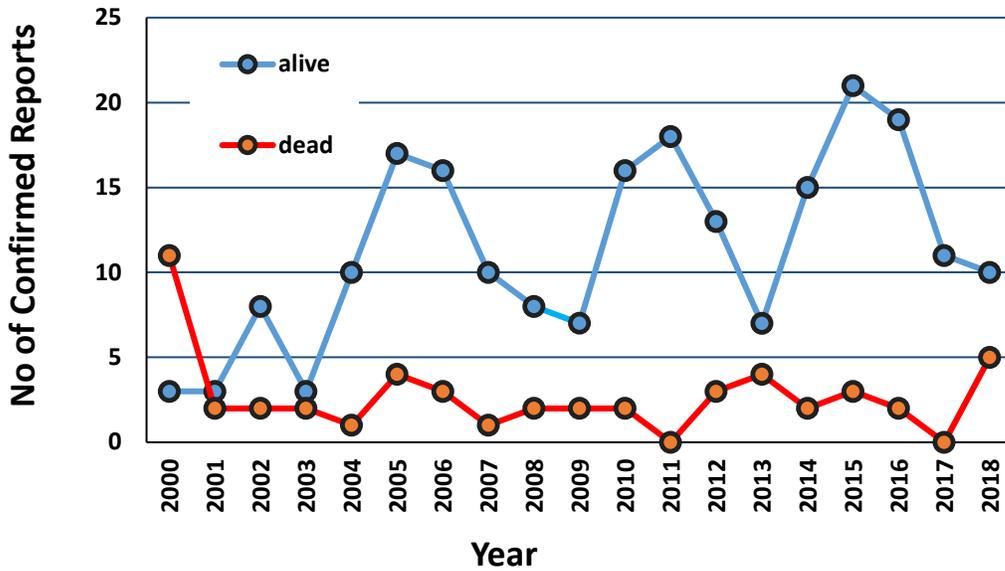


Figure 11. Reports of dead and live cetacean entanglements, 2000 – 2018.

G. Alaska SeaLife Center

The Alaska SeaLife Center is the only facility that is qualified to rehabilitate and release marine mammal species under NMFS jurisdiction in Alaska.

Table 7. 2018 Alaska Region live strandings handled by the Alaska SeaLife Center for rehabilitation by species, outcome, and number of animals.

Species	Outcome	Animals
Harbor seal	Died	2
	Rehab/Released	2
	<i>Harbor seal total</i>	4
Ringed seal	Died	1
	Rehab/Deemed non-releasable, housed at ASLC	2
	<i>Ringed seal total</i>	3
Spotted seal	Died	1
	<i>Spotted seal</i>	1
Cook Inlet beluga	Rehab/Transferred to SeaWorld, San Antonio, TX	1
	<i>Cook Inlet beluga</i>	1
Total		9