

2017 Alaska Region Marine Mammal Stranding Summary - updated

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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 2017 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, including 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://alaskafisheries.noaa.gov/pr/strandings>

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.

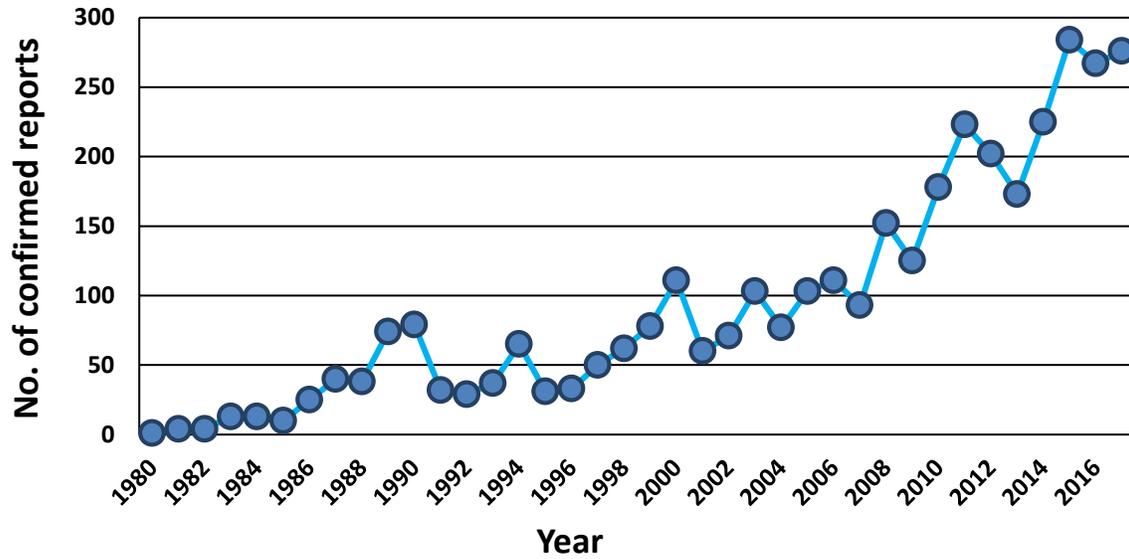


Figure 1. Number of confirmed stranding reports by year, 1980 – 2017.

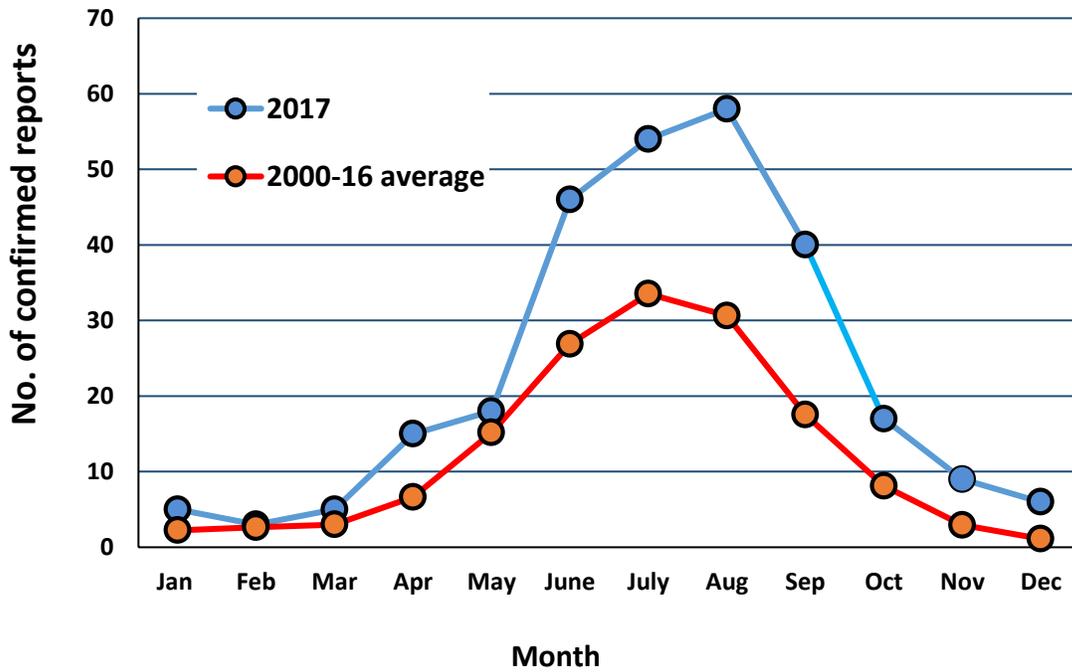


Figure 2. Number of confirmed stranding reports by month, 2017 compared to the 2000-2016 average.

C. Stranding reports by order and species.

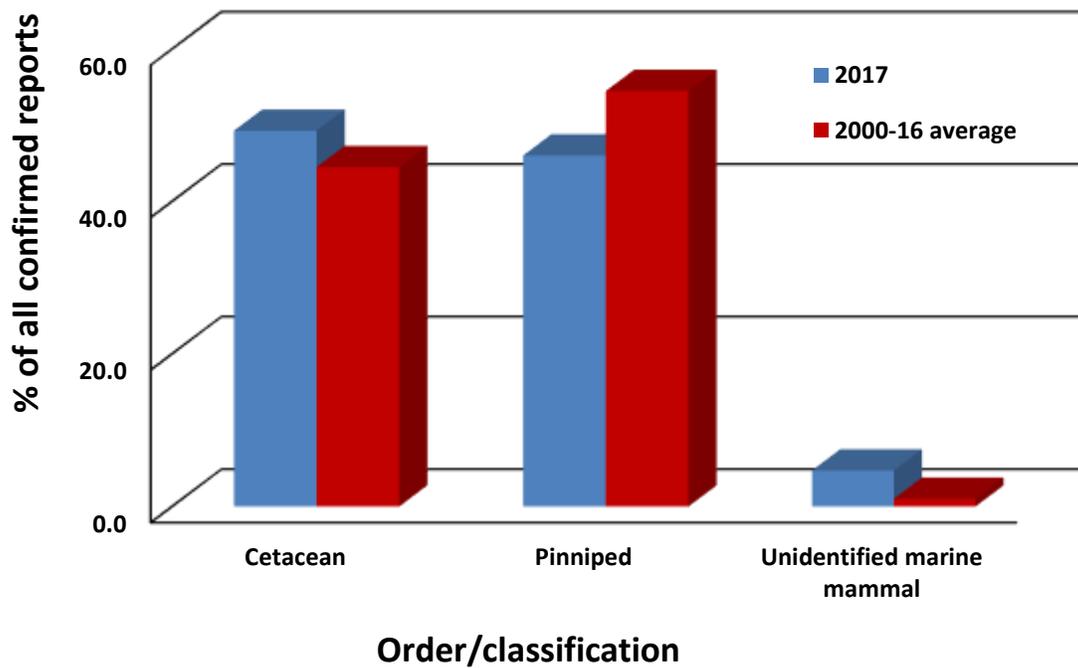


Figure 3. Contribution of confirmed cetacean, pinniped and unidentified marine mammal reports to total reports, 2017 compared to the 2000-2016 average.

Species	Number of annual reports		Percent of total annual reports		
	2017	2000-2016 average	2017	2000-2016 average	Range
Unidentified cetacean	42	11	15	7	2.9 - 29.7
Humpback whale	22	12	8	8	1.1 - 29.2
Gray whale	16	12	6	8	0 - 50.6
Beluga whale - other	15	7	5	4	0.8 - 21.3
Beluga whale - Cook Inlet	13	10	5	6	4.0 - 43.7
Harbor porpoise	9	5	3	3	0 - 20.4
Stejneger's beaked whale	7	1	3	1	0 - 9.5
Killer whale	3	4	1	2	1.9 - 12.8
Dall's porpoise	3	1	1	1	0 - 5.7
Sperm whale	3	1	1	1	0 - 4.3
Bowhead whale	1	3	0	2	0 - 6.9
Fin whale	1	2	0	1	0 - 11.1
Cuvier's beaked whale	1	1	0	0	0 - 11.6

Table 1. Contribution of cetacean species to total confirmed reports, 2017 compared to the 2000-2016 average.

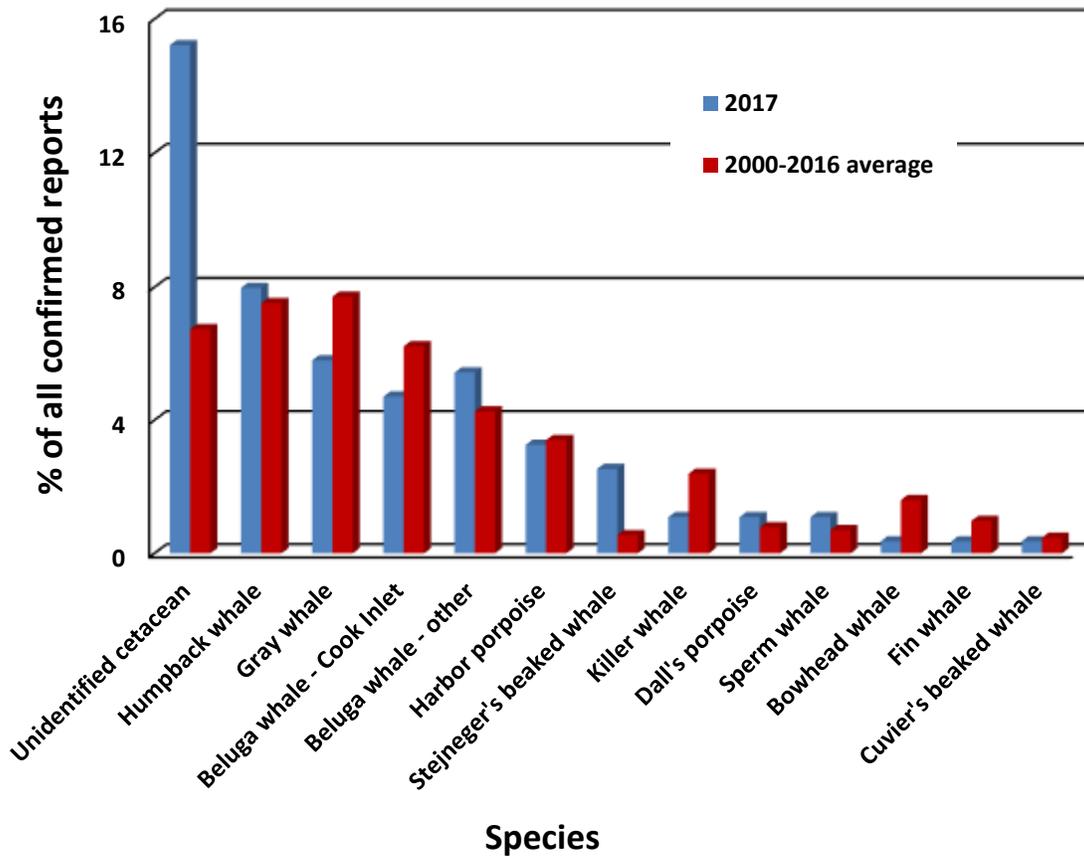


Figure 4. Contribution of cetacean species to total confirmed reports, 2017 compared to the 2000-2016 average.

Species	Number of annual reports		Percent of total annual reports		
	2017	2000-2016 average	2017	2000-2016 average	Range
Steller sea lion	36	28	13	19	17.1 - 50.7
Harbor seal	35	23	13	15	15.4 - 52.9
Ringed seal	16	12	6	8	1.7 - 53.1
Unidentified pinniped	14	9	5	6	0 - 24.7
Northern fur seal	10	2	4	1	0 - 28.1
Spotted seal	9	2	3	1	0 - 5.9
Bearded seal	7	4	3	3	0 - 12.6

Table 2. Contribution of pinniped species to total confirmed reports, 2017 compared to the 2000-2016 average.

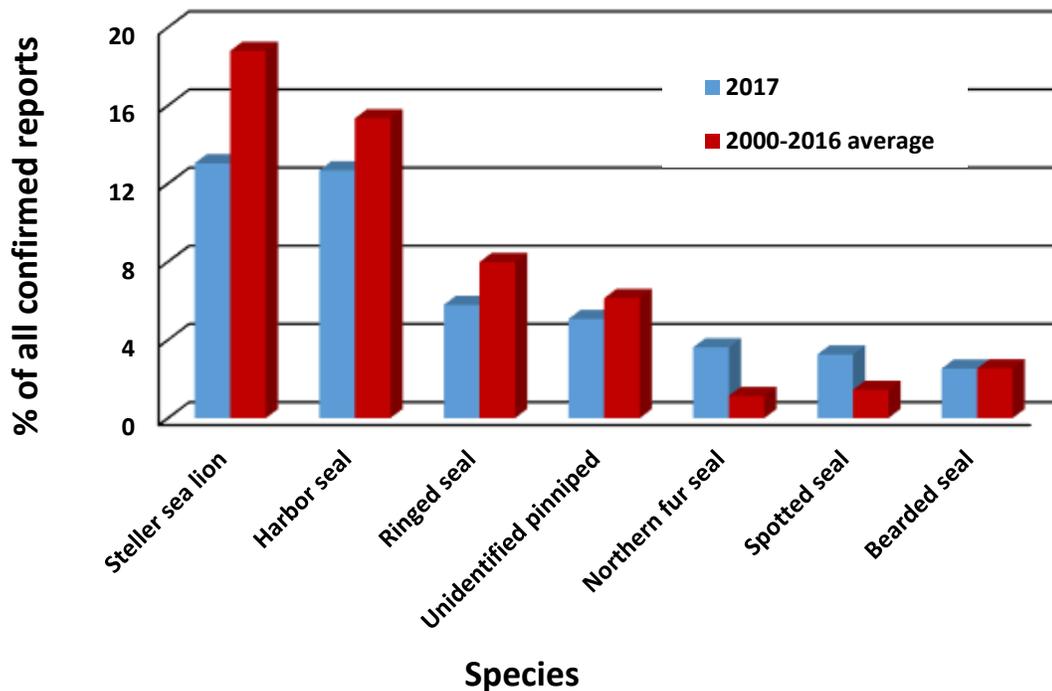


Figure 5. Contribution of pinniped species to total confirmed reports, 2017 compared to the 2000-2016 average.

D. Stranding reports by initial presentation

<i>Month</i>	<i>Events</i>	<i>Animals</i>
Jan	5	5
Feb	3	3
Mar	4	5
Apr	15	15
May	17	18
June	46	46
July	52	54
Aug	55	58
Sep	40	40
Oct	17	17
Nov	9	9
Dec	6	6
Total	269	276

Table 3. Number of confirmed stranding reports in 2017 by month of initial sighting, number of events, and number of animals.

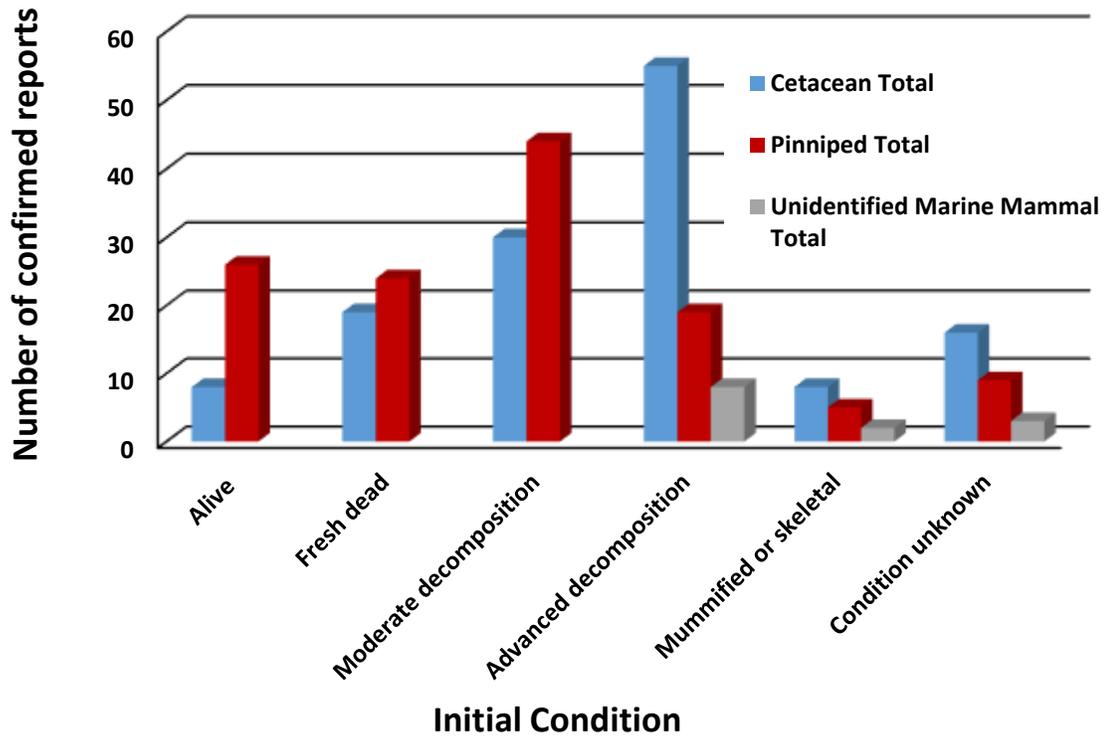


Figure 6. Number of confirmed stranding reports in 2017 by initial condition.

Species	Initial Condition					
	Alive	Fresh dead	Moderate decomposition	Advanced decomposition	Mummified or skeletal	Condition unknown
Unidentified cetacean		1	3	22	6	11
Humpback whale		6	6	6	1	3
Gray whale		3	3	10		
Cook Inlet beluga whale	1		8	4		
Beluga whale - other		1	3	8	1	2
Harbor porpoise	1	4	3			
Stejneger's beaked whale	3		2	2		
Dall's porpoise	1	2				
Sperm whale	1		1	1		
Killer whale		1		2		
Bowhead whale		1				
Fin whale	1					
Cuvier's beaked whale			1			
<i>Cetacean Total</i>	8	19	30	55	8	16

Harbor seal	10	10	6	4	1	5
Steller sea lion	5	8	16	6		
Ringed seal	2	1	11	1		1
Northern fur seal	7	2	1			
Unidentified pinniped	1		3	6	3	1
Spotted seal	1	3	4		1	
Bearded seal			3	2		2
<i>Pinniped Total</i>	26	24	44	19	5	9

Unidentified marine mammal				8	2	3
<i>Unidentified Marine Mammal Total</i>				8	2	3

Table 4. Number of confirmed standings reported in the Alaska Region in 2017 by initial condition, species, and number of animals.

E. Reports by Location

Species	Arctic	Bering Sea	Southcentral	Gulf of Alaska	Southeast	Total
Harbor seal		4	21	3	8	36
Steller sea lion		5	10	13	7	35
Unidentified cetacean	10	22	3	5	2	42
Humpback whale		6	8	6	2	22
Gray whale	6	6	1	3		16
Cook Inlet beluga			13			13
Beluga whale - other	3	12				15
Ringed seal	8	8				16
Unidentified pinniped	8	4	2			14
Northern fur seal		10				10
Harbor porpoise		3	4	2		9
Unidentified marine mammal	6	7				13
Stejneger's beaked whale		4		3		7
Spotted seal	4	5				9
Bearded seal	6	1				7
Killer whale			1	2		3
Dall's porpoise			1	1	1	3
Sperm whale				3		3
Fin whale					1	1
Cuvier's beaked whale					1	1
Bowhead whale		1				1
	51	98	64	41	22	276

Table 5. Number of confirmed strandings reported in the Alaska Region in 2017 by subarea and species.

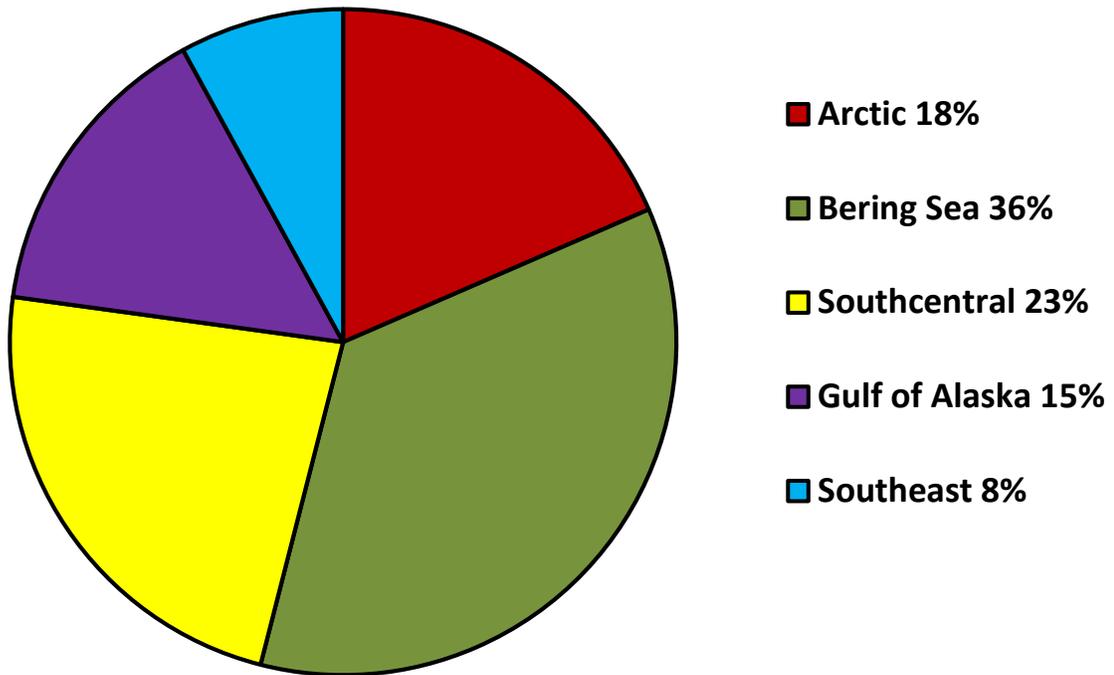


Figure 7. 2017 confirmed stranding reports by subarea.

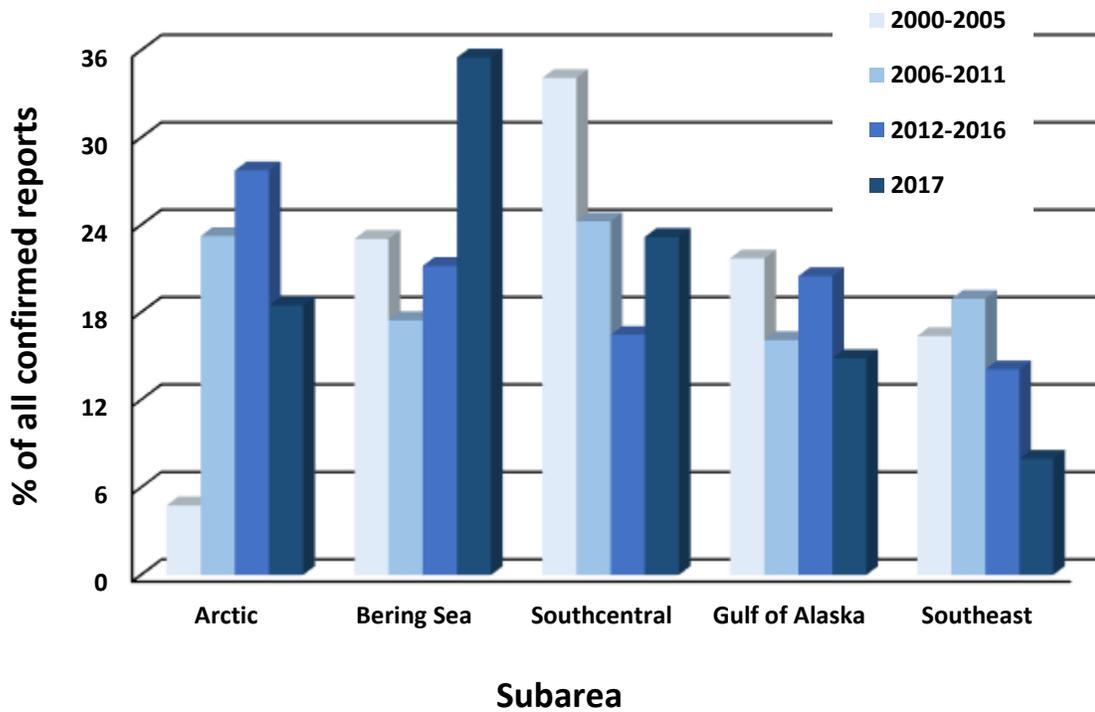


Figure 8. Contribution of regional subareas to confirmed stranding reports over time.

F. Reports involving human interaction

There is a wide variety 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. The incidence of these events is greater than the number tracked 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.

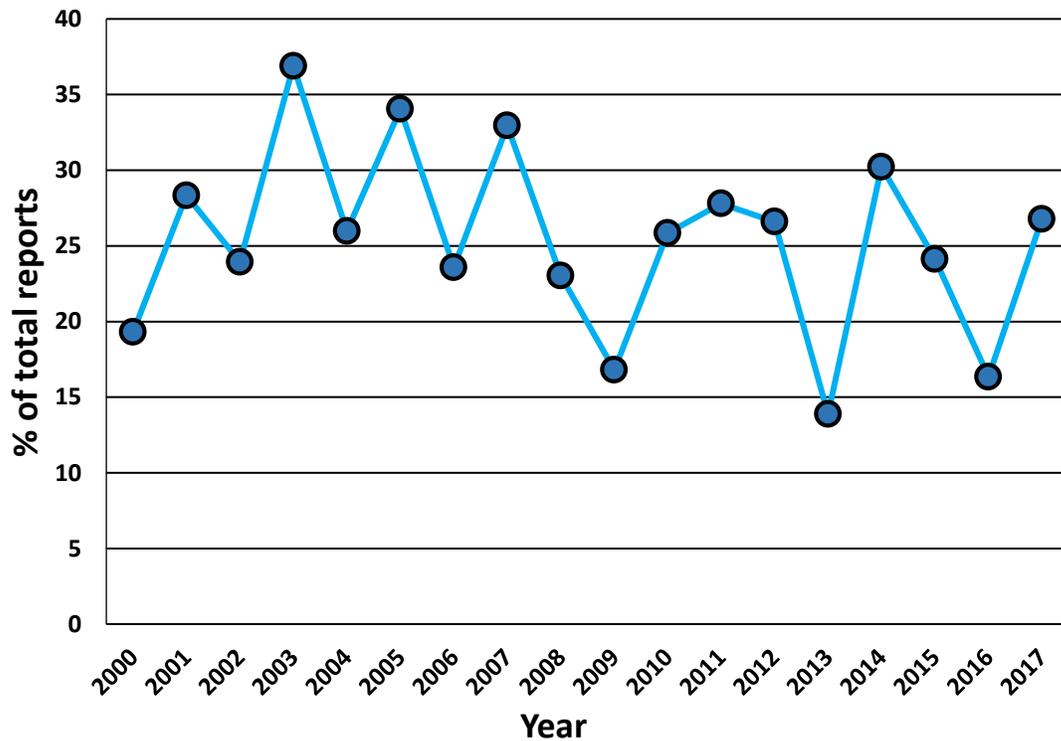


Figure 9. Percentage of total confirmed stranding reports involving human interaction by year.

Species	Non-human interaction	Human Interaction (HI)					Total reports	% HI
		Entanglement	Vessel strike	Firearm injury (suspected or confirmed)	Picked up as abandoned or hazed	Total HI		
Steller sea lion	23	24		5		29	52	56%
Northern fur seal	2	18		1		19	21	90%
Humpback whale	21	5	7			12	33	36%
Harbor seal	25	1		7	3	11	36	31%
Unidentified cetacean	34	3	1			4	38	11%
Bowhead whale	1	2				2	3	67%
Ringed seal	10	1				1	11	9%
Gray whale	14	1				1	15	7%
Sperm whale	2		1			1	3	33%

Table 6. 2017 confirmed stranding reports involving human interaction, by species.

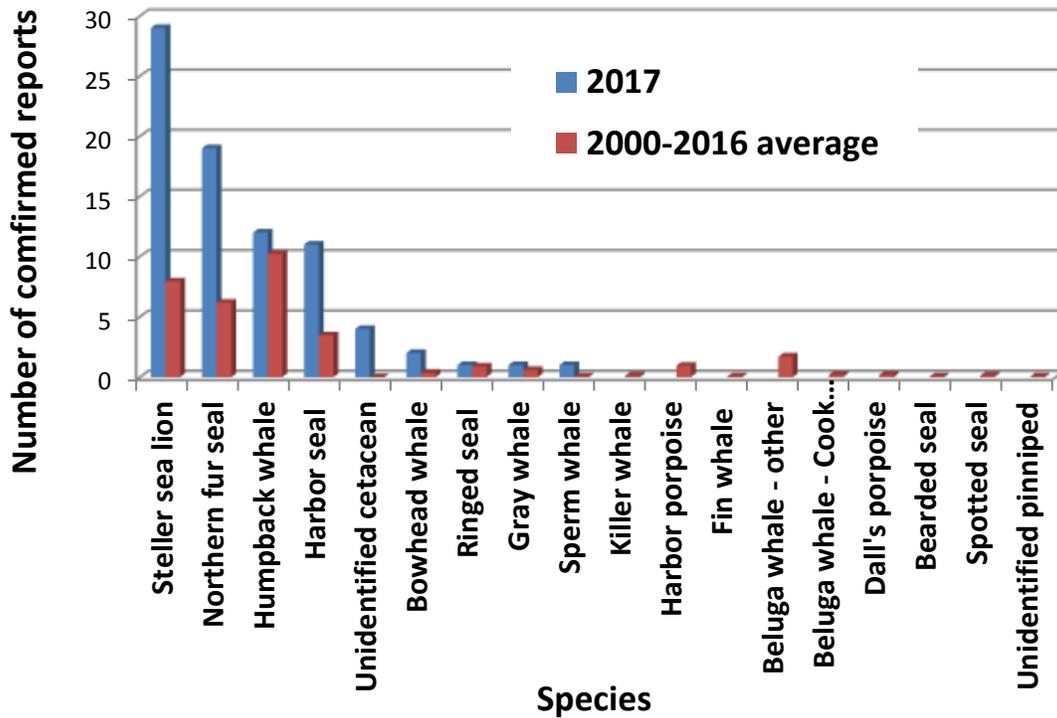


Figure 10. 2017 confirmed stranding reports involving human interaction, by species.

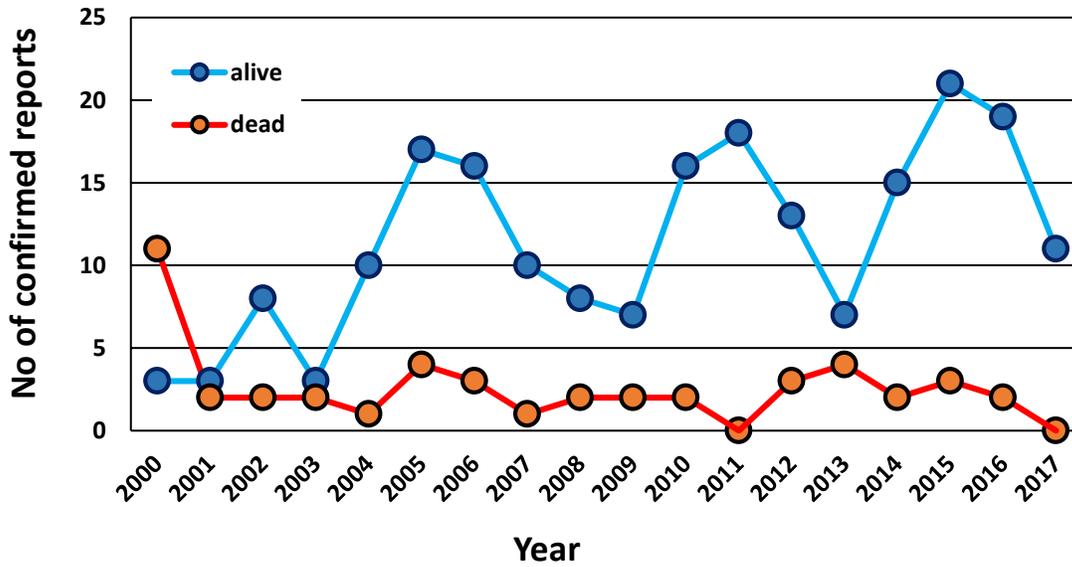


Figure 11. Reports of dead and live cetacean entanglements, 2000 – 2017.

G. Alaska Sealife Center

The Alaska Sealife Center is the only facility that is qualified to rescue, retain, rehabilitate and release marine mammals in Alaska.

Species	Outcome	Animals
Harbor seal	Euthanized	1
	Died	1
	Rehab/Transferred	2
Harbor seal total		4
Ringed seal	Rehab/Transferred to Long Marine Lab permit, housed at ASLC	1
Ringed seal total		1
Northern fur seal	Rehab/Released (in California)	1
Northern fur seal total		1
Cook Inlet beluga	Rehab	1
Cook Inlet beluga		1
Total		7

Table 7. 2017 Alaska Region live strandings handled by the Alaska SeaLife Center for rehabilitation by species, outcome, and number of animals.