

2016 Alaska Region Marine Mammal Stranding Summary

Kate Savage, Protected Resources Division
National Marine Fisheries Service, Alaska Region
POB 21668
Juneau, Alaska 99802
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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 2016 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 study of pathology. Known subsistence takes are not included nor are fishery observer reports included 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). As of 2016, stranding reports no longer include live entanglements, which are assessed separately. 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:

<http://www.fakr.noaa.gov/protectedresources/strandings.htm>

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.

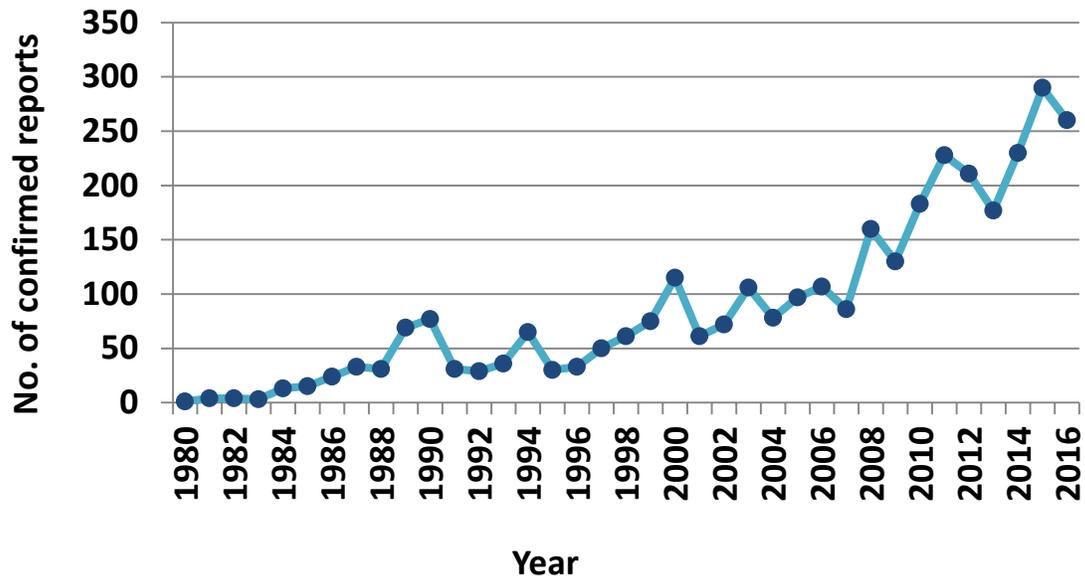


Figure 1. Number of confirmed stranding reports by year, 1980 – 2016.

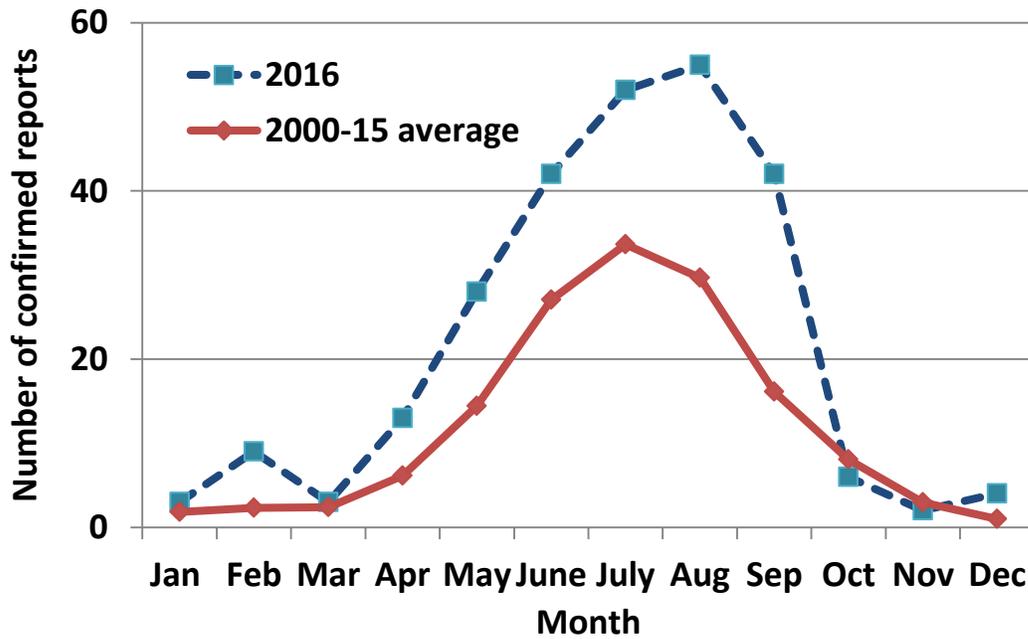


Figure 3. Number of confirmed stranding reports by month, 2016 compared to the 2000-2015 average.

C. Stranding reports by order and species.

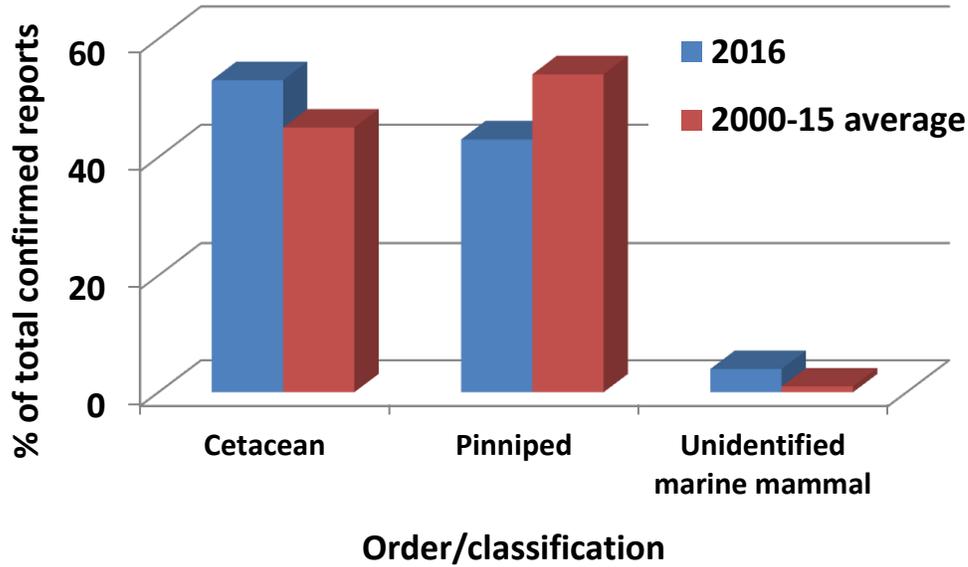


Figure 4. Contribution of confirmed cetacean, pinniped and unidentified marine mammal reports to total reports, 2016 compared to the 2000-2015 average.

Species	Number of annual reports		Percent of total annual reports		
	2016	Average 2000-15	2016	Average 2000-15	Range
Humpback whale	29	13	11.2%	9.2%	0.9 - 18.1%
Unidentified cetacean	27	8	10.4%	5.7%	0 - 13.3%
Beluga whale - other	18	6	6.9%	3.9%	2.3 - 16.5%
Gray whale	18	11	6.9%	7.6%	1.3 - 41.7%
Harbor porpoise	12	5	4.6%	3.2%	1.1 - 8.5%
Killer whale	10	3	3.9%	2.2%	0.8 - 6.6%
Cook Inlet beluga whale	8	9	3.1%	6.4%	1.7 - 17.9%
Bowhead whale	6	2	2.3%	1.5%	0 - 4.8%
Fin whale	3	1	1.2%	1.0%	0 - 4.8%
Dall's porpoise	3	1	1.2%	0.7%	0.4 - 2.8%
Minke whale	2	1	0.8%	0.9%	0.9 - 4.2%
Sperm whale	1	1	0.4%	0.7%	0.4 - 1.9%

Table 1. Contribution of cetacean species to total confirmed reports, 2016 compared to the 2000-2015 average.

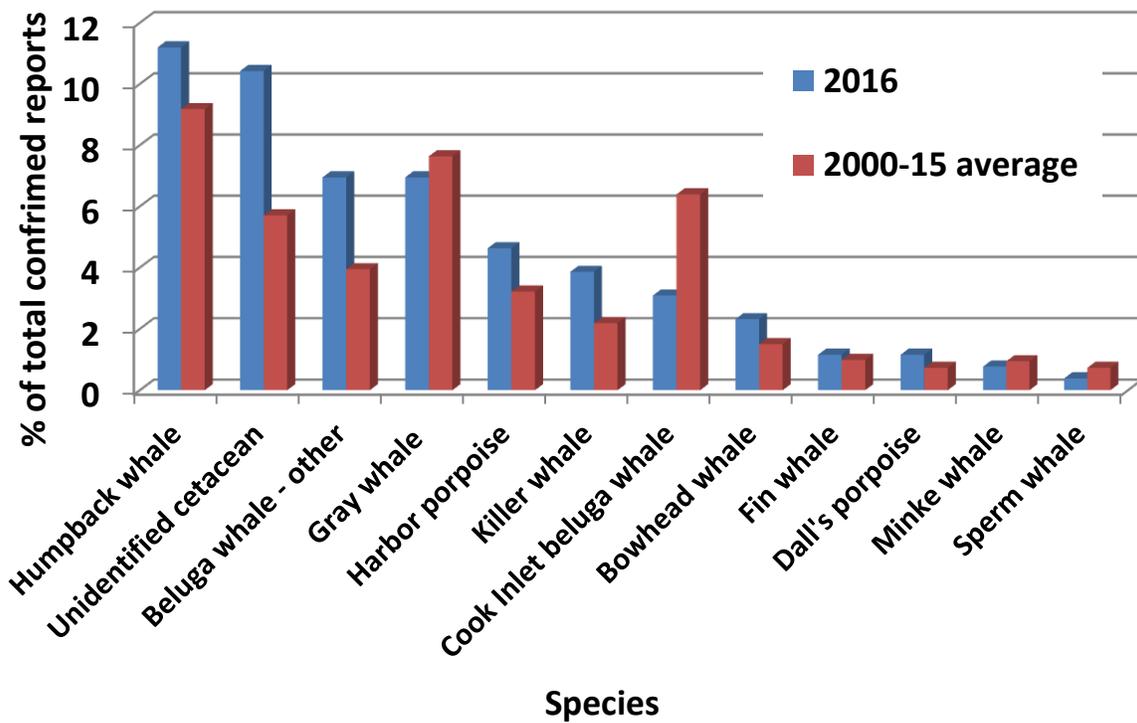


Figure 5. Contribution of cetacean species to total confirmed reports, 2016 compared to the 2000-2015 average.

Species	Number of annual reports		Percent of total annual reports		
	2016	2000-15 average	2016	2000-15 average	Range, 2000-15
Steller sea lion	37	30	14.29%	18.20%	9.8-27.7%
Harbor seal	27	23	10.42%	15.80%	7.8-23.1%
Unidentified pinniped	21	9	8.11%	5.90%	0-16.5%
Ringed seal	21	11	8.11%	7.80%	0.9-40.8%
Spotted seal	3	2	1.16%	1.50%	0-3.9%
Bearded seal	1	4	0.39%	2.70%	0-5.6%
California sea lion	1	<1	0.39%	0.20%	0-1.2%

Table 2. Contribution of pinniped species to total confirmed reports, 2015 compared to the 2000-2014 average.

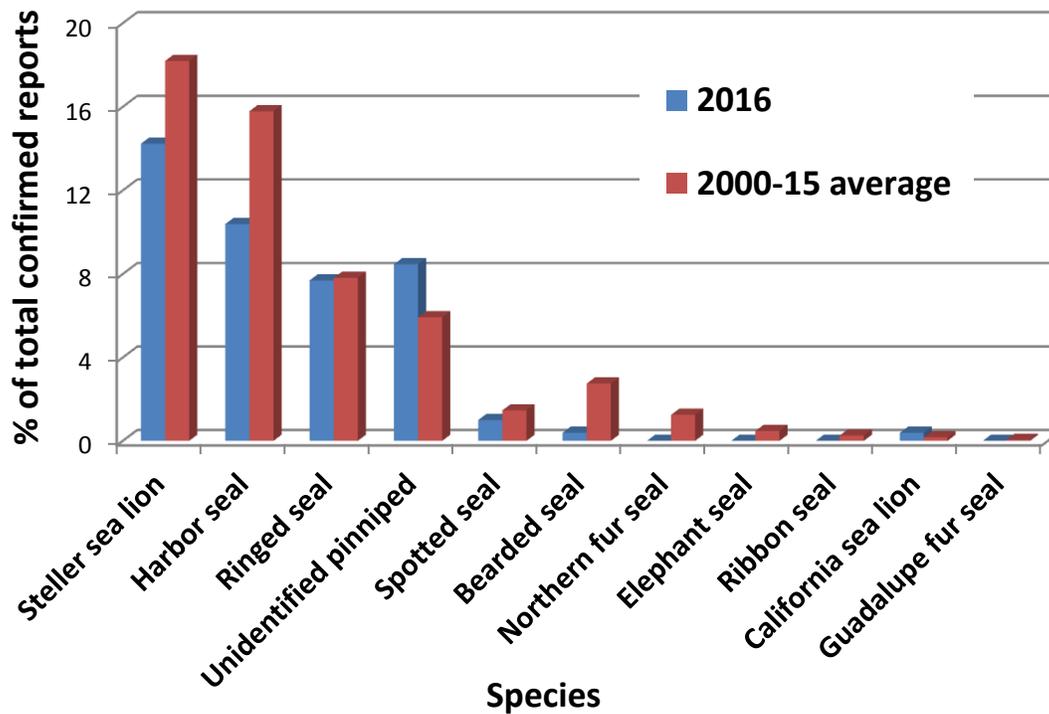


Figure 6. Contribution of pinniped species to total confirmed reports, 2016 compared to the 2000-2015 average.

D. Stranding reports by initial presentation

<i>Month</i>	<i>Events</i>	<i>Animals</i>
Jan	3	3
Feb	9	9
Mar	3	3
Apr	13	13
May	28	28
June	42	48
July	52	52
Aug	55	55
Sep	42	43
Oct	6	6
Nov	2	2
Dec	4	4
Total	259	266

Table 3. Number of confirmed stranding reports in 2016 by month of initial sighting, number of events, and number of animals.

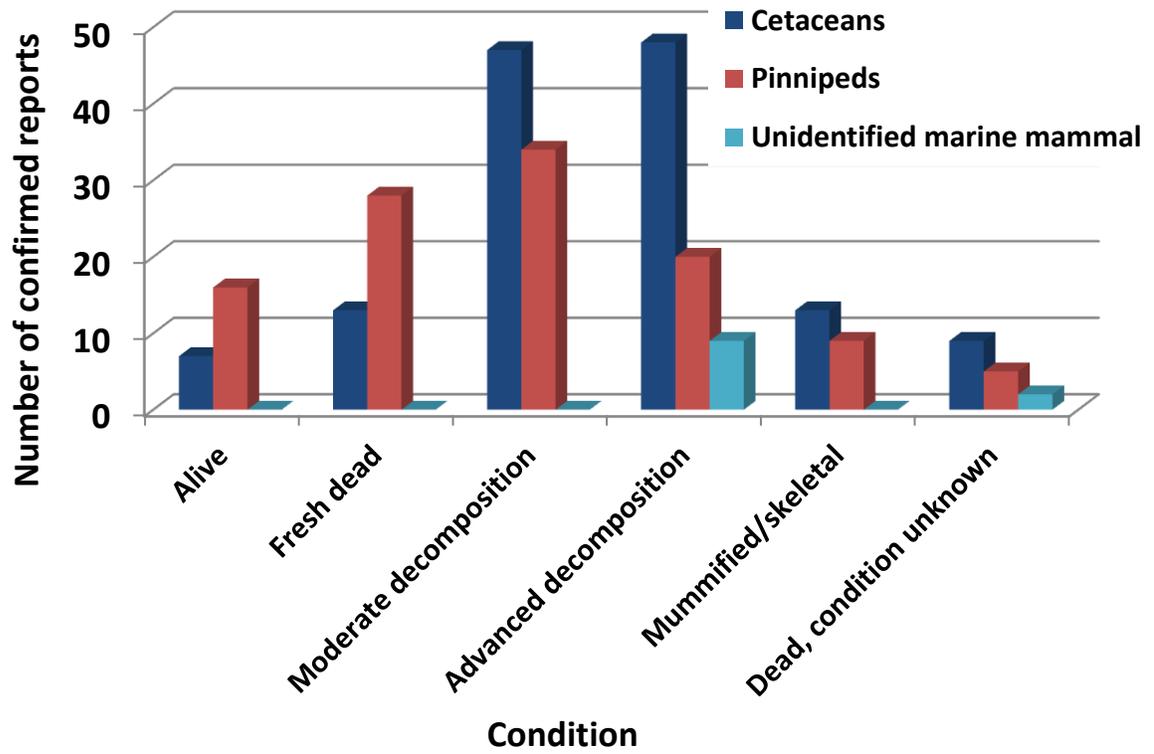


Figure 7. Number of confirmed stranding reports in 2016 by initial condition.

Species	Initial Condition			Total No. Reports
	Alive	Dead	Condition Unknown	
Humpback whale	1	28		
Unidentified cetacean	1	26		
Beluga whale - other	1	17		
Gray whale	2	16		
Harbor porpoise	1	11		
Killer whale		10		
Cook Inlet beluga whale		8		
Bowhead whale		6		
Fin whale	1	2		
Dall's porpoise		3		
Minke whale		2		
Sperm whale		1		
<i>Cetacean Total</i>	7	129		137
Steller sea lion	4	33		
Harbor seal	8	19		
Ringed seal	2	19		
Unidentified pinniped	0	21		
Spotted seal	2	1		
Bearded seal		1		
California sea lion		1		
<i>Pinniped Total</i>	16	95		111
Unidentified marine mammal	0	11	0	
<i>Marine Mammal Total</i>	24	235	0	259

Table 4. Number of confirmed standings reported in the Alaska Region in 2016 by initial condition, species, and number of animals.

E. Reports by Location

Area	Species	No.	
<i>Arctic</i>	Unidentified pinniped	19	
	Ringed seal	18	
	Gray whale	8	
	Unidentified cetacean	8	
	Unidentified marine mammal	8	
	Bowhead whale	6	
	Spotted seal	2	
	Minke whale	2	
	Killer whale	1	
	Bearded seal	1	
	Beluga whale	1	
	Harbor porpoise	1	
	<i>Arctic Total</i>		75
	<i>Bering Sea</i>	Beluga whale	17
Unidentified cetacean		8	
Killer whale		6	
Gray whale		4	
Humpback whale		3	
Ringed seal		3	
Unidentified marine mammal		3	
Steller sea lion		2	
Harbor seal		2	
Minke whale		1	
Spotted seal		1	
Unknown Pinniped		1	
<i>Bering Sea Total</i>		51	
<i>Gulf of Alaska</i>	Humpback whale	20	
	Steller sea lion	9	
	Gray whale	5	
	Unidentified cetacean	5	
	Harbor seal	2	
	Harbor porpoise	1	
	Cuvier's beaked whale	1	
	Unidentified pinniped	1	
<i>Gulf of Alaska Total</i>		44	

<i>Southcentral</i>	Harbor seal	15
	Cook Inlet beluga	8
	Steller sea lion	7
	Harbor porpoise	5
	Humpback whale	4
	Unidentified cetacean	4
	Fin whale	2
	Gray whale	1
	Killer whale	1
	Sperm whale	1
	<i>Southcentral Total</i>	49
<i>Southeast Alaska</i>	Steller sea lion	19
	Harbor seal	7
	Harbor porpoise	5
	Humpback whale	3
	Dall's porpoise	3
	Killer whale	2
	Unidentified pinniped	1
	Unidentified cetacean	1
	<i>Southeast Total</i>	41

Table 5. Number of confirmed strandings reported in the Alaska Region in 2016 by subarea and species.

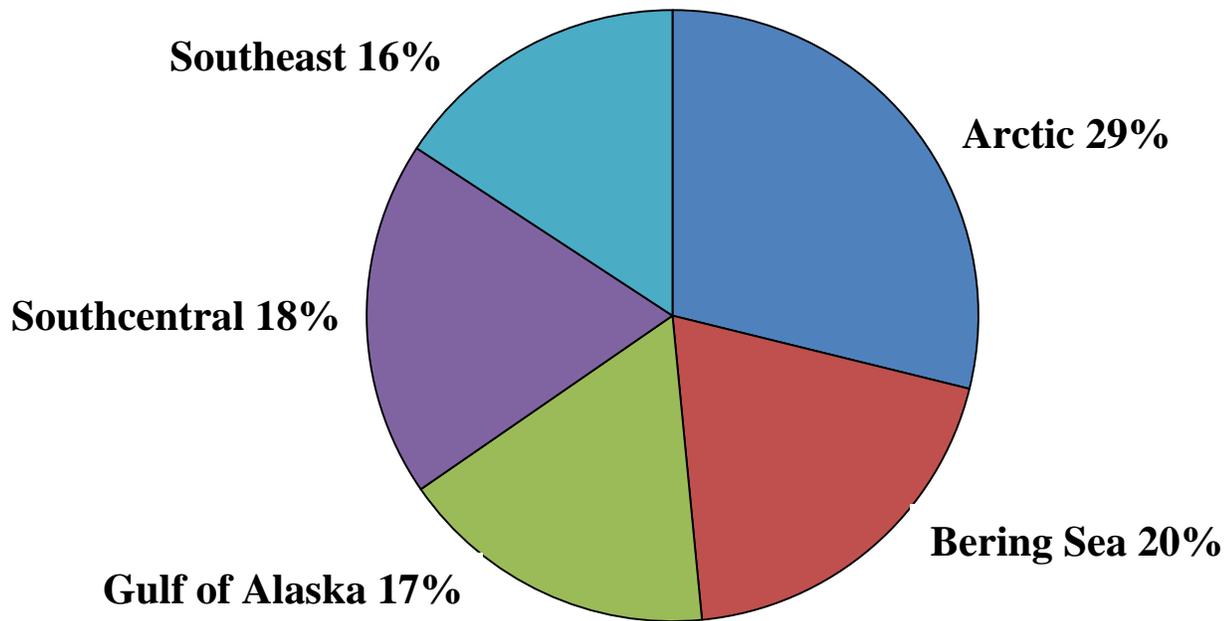


Figure 8. 2016 confirmed stranding reports by subarea.

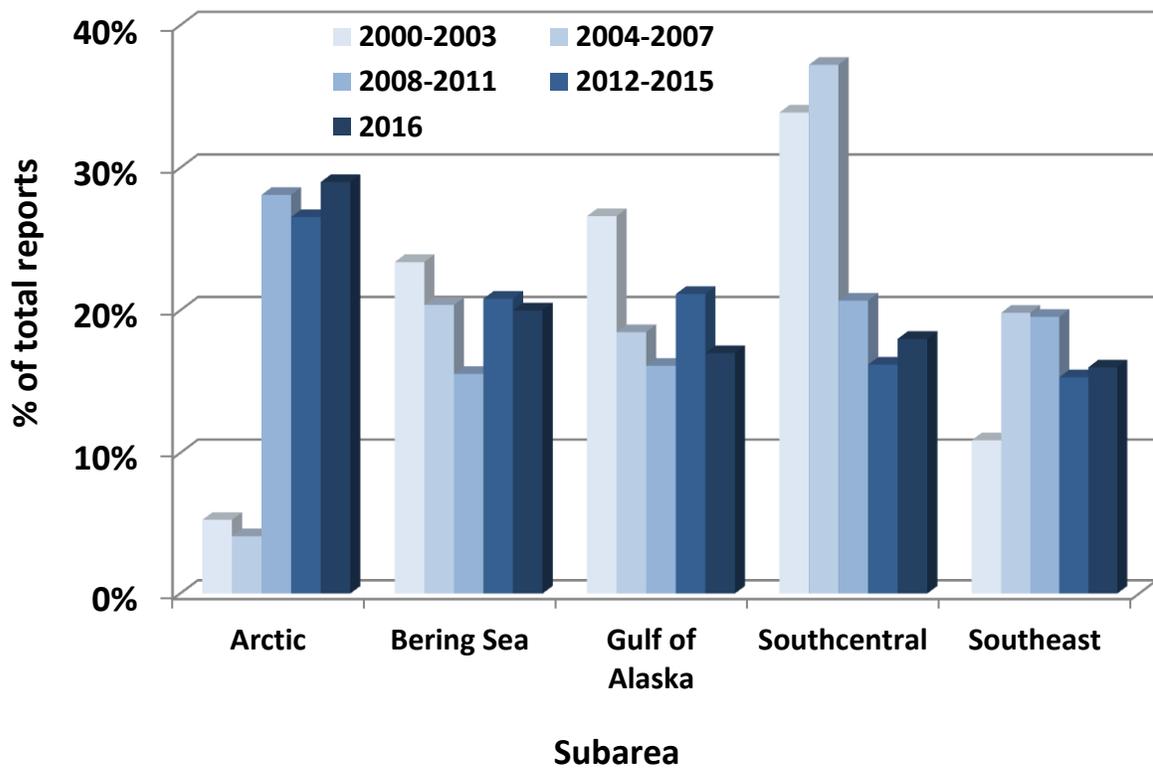


Figure 9. Contribution of regional subareas to confirmed stranding reports over time.

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 fishery interactions in which marine mammals become entangled in fishery gear, or alternately ingest fishing gear, and also interactions with marine debris. Other human interactions include ship strikes, where vessels collide with animals either foraging or traversing, and gunshot injuries, where harmful interaction is intentional.

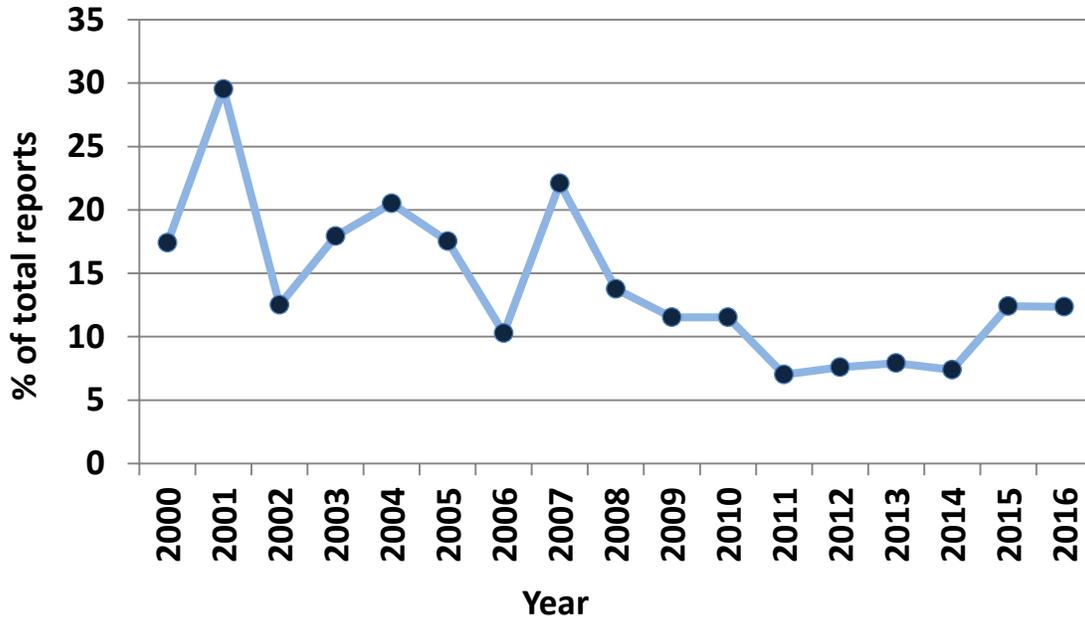


Figure 10. Percentage of total confirmed reports involving human interaction by year.

Species	Non-human interaction	Human Interaction (HI)				Total HI	Total reports	% HI
		Entangle ment	Ship strike	Firearm injury	Other			
Harbor seal	16			6	5	11	27	40.7%
Fin whale	2		1			1	3	33.3%
Steller sea lion	27	5		5		10	37	27.0%
Spotted seal	2				1	1	3	33.3%
Humpback whale	25	1	3			4	29	13.8%
Beluga whale - CI	7				1	1	8	12.5%
Ringed seal	19			1	1	2	21	9.5%
Harbor porpoise	11	1				1	12	8.3%
Unidentified cetacean	26		1			1	27	3.7%

Table 6. 2016 confirmed stranding reports involving human interaction, by species.

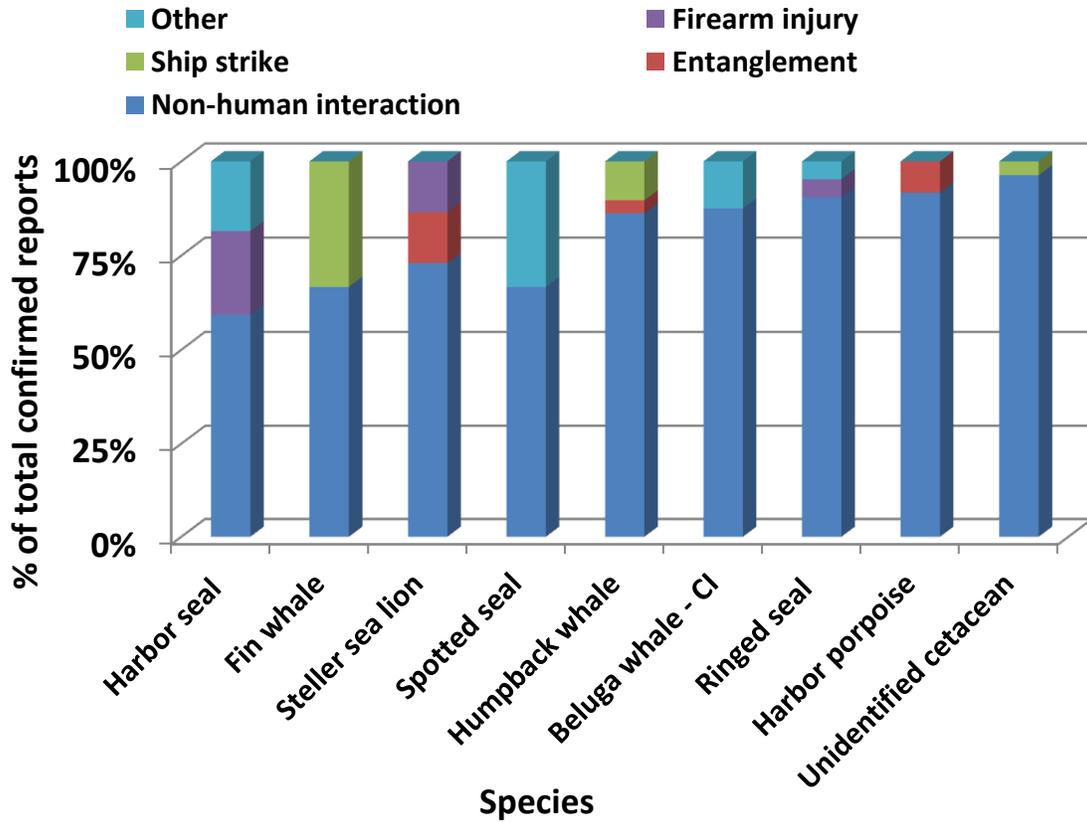


Figure 11. 2016 confirmed stranding reports involving human interaction, by species.

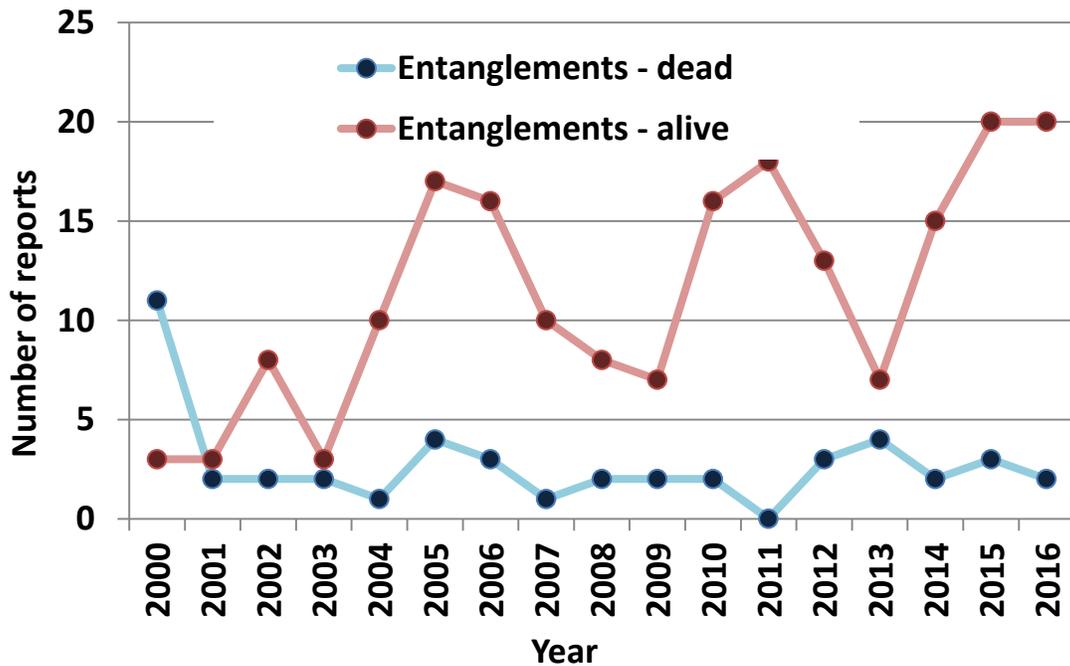


Figure 12. Reports of dead and live cetacean entanglements, 2000 – 2016.

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
Spotted seal	Rehab/Transferred	1
	<i>Spotted seal total</i>	1
Ringed seal	Died	1
	<i>Ringed seal total</i>	1
Harbor seal	Rehab/Released	4
	<i>Harbor seal total</i>	4
Total		6

Table7. 2016 Alaska Region live strandings handled by the Alaska SeaLife Center for rehabilitation by species, outcome, and number of animals.