

2020 Alaska Region Marine Mammal Stranding Summary

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A. Stranding report description and acknowledgement

Strandings of cetaceans (whales, dolphins, and porpoises) and pinnipeds (seals and sea lions) that occurred in Alaskan waters and were reported to the National Marine Fisheries Service, Alaska Region (NMFS) in 2020 are summarized here. Stranding events cover animals found dead (floating and beached), and also reports of most live stranded, mass stranded, abandoned, sick, or injured animals. Live strandings of Cook Inlet belugas with no on-hands response are not included here. 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, ranging 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 10 - 13). More information and the criteria for strandings in this summary can be found in the 2017 Examiners Guide.

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 greatly appreciated 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.

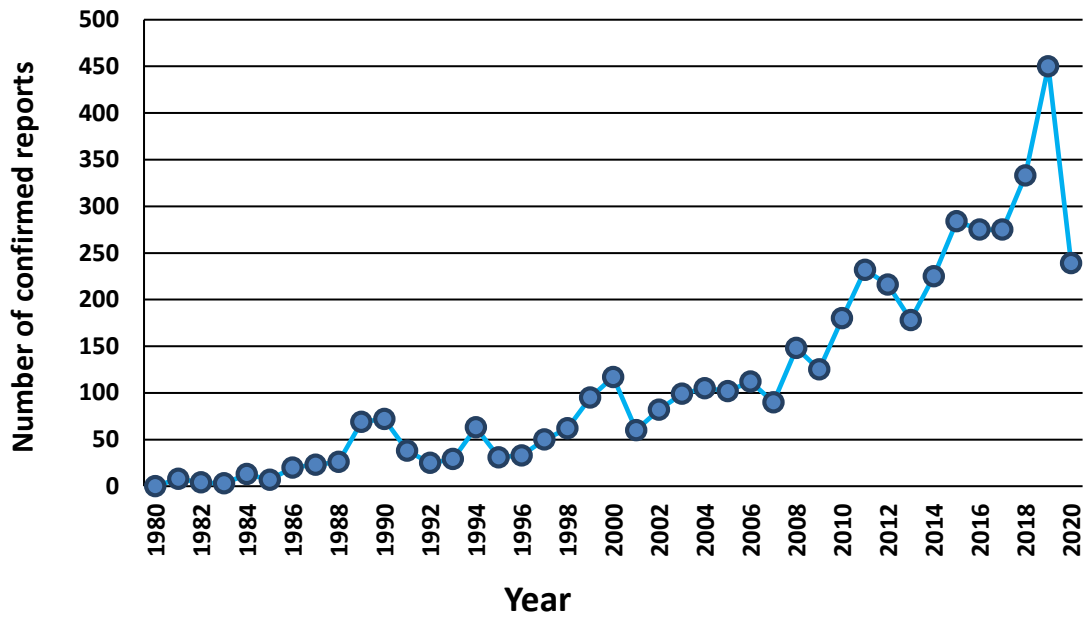


Figure 1. Number of confirmed stranding reports by year, 1980 – 2020.

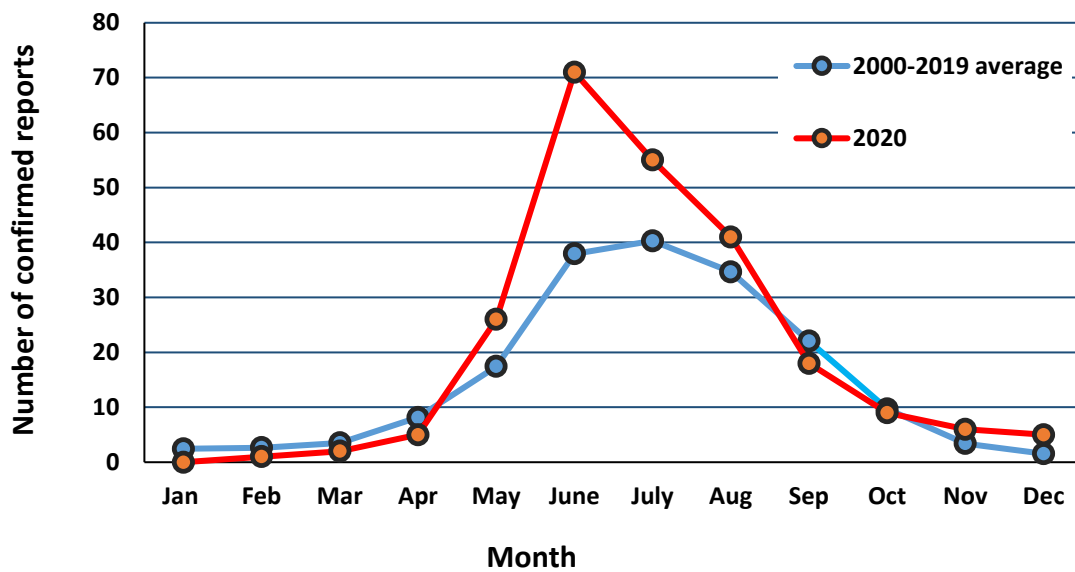


Figure 2. Number of confirmed stranding reports by month, 2020 compared to the 2000-2019 average.

C. Stranding reports by order and species.

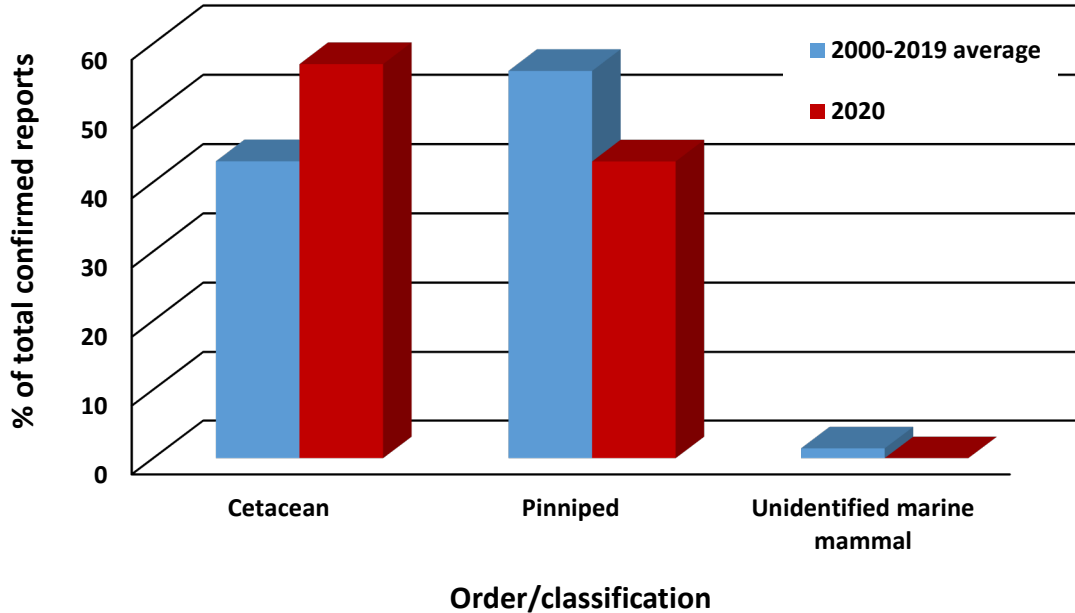


Figure 3. Contribution of confirmed cetacean, pinniped, and unidentified marine mammal reports to total reports, 2020 compared to the 2000-2019 average.

Table 1. Contribution of cetacean species to total confirmed reports, 2020 compared to the 2000-2019 average.

Species	Number of annual reports		Percent of total annual reports		
	2020	2000-2019 average	2020	2000-2019 average	Range
Gray whale	47	14.2	19.67	7.70	0 - 40.2
Unidentified cetacean	22	14.5	9.21	7.84	1.7 - 15.6
Humpback whale	16	11.9	6.69	6.45	0.9 - 13.5
Beluga whale – other*	14	7.9	5.86	4.28	1.3 - 19.7
Harbor porpoise	12	6.4	5.02	3.44	0 - 8.8
Beluga whale - Cook Inlet*	9	8.6	3.77	4.66	1.1 - 16.2
Fin whale	4	1.4	1.67	0.73	0 - 4.9
Killer whale	4	3.4	1.67	1.82	0 - 6.7
Dall's porpoise	2	1.6	0.84	0.84	0 - 3.4
Minke whale	2	1.4	0.84	0.76	0 - 3.7
Cuvier's beaked whale	2	0.6	0.84	0.33	0 - 4.8
Unidentified beaked whale	1	0.1	0.42	0.05	0 - 0.4

* Due to their geographic isolation and conservation status, Cook Inlet belugas are tracked separately from the other 4 stocks of beluga whales in Alaska.

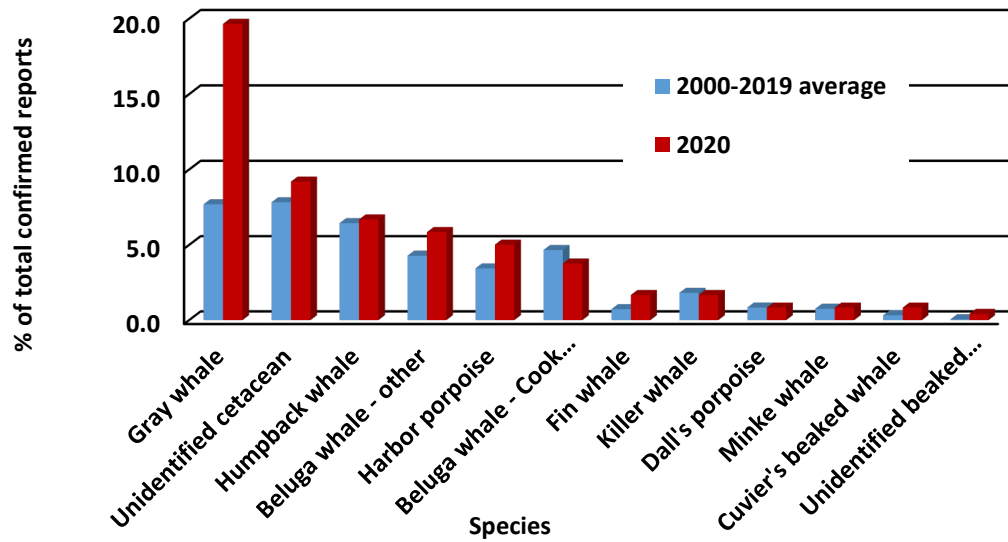


Figure 4. Contribution of cetacean species to total confirmed reports, 2020 compared to the 2000-2019 average.

Table 2. Contribution of pinniped species to total confirmed reports, 2020 compared to the 2000-2019 average.

Species	Number of annual reports		Percent of total annual reports		
	2020	2000-2019 average	2020	2000-2019 average	Range
Steller sea lion	39	29.9	16.3	28.9	8.7 - 28.9
Harbor seal	25	24.7	10.5	23.8	7.1 - 22.5
Ringed seal	9	15.3	3.8	14.7	0.9 - 41.4
Unidentified pinniped	10	14.4	4.2	13.9	0 - 27.6
Bearded seal	10	9.4	4.2	9.0	0 - 12.5
Spotted seal	8	4.7	3.3	4.5	0 - 6.6
Northern fur seal	3	4.0	1.3	3.8	0 - 16.2

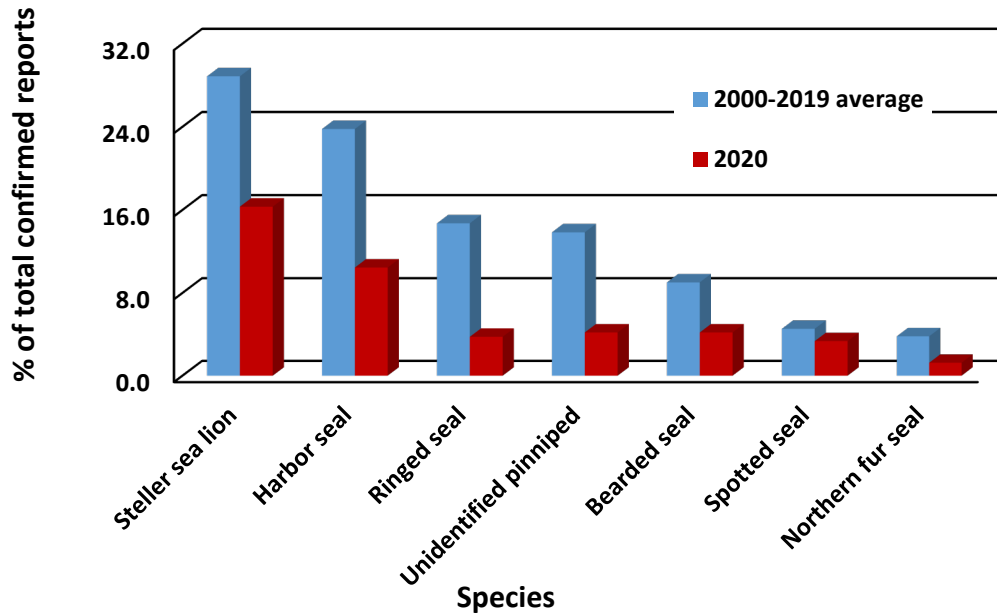


Figure 5. Contribution of pinniped species to total confirmed reports, 2020 compared to the 2000-2019 average.

D. Stranding reports by initial presentation

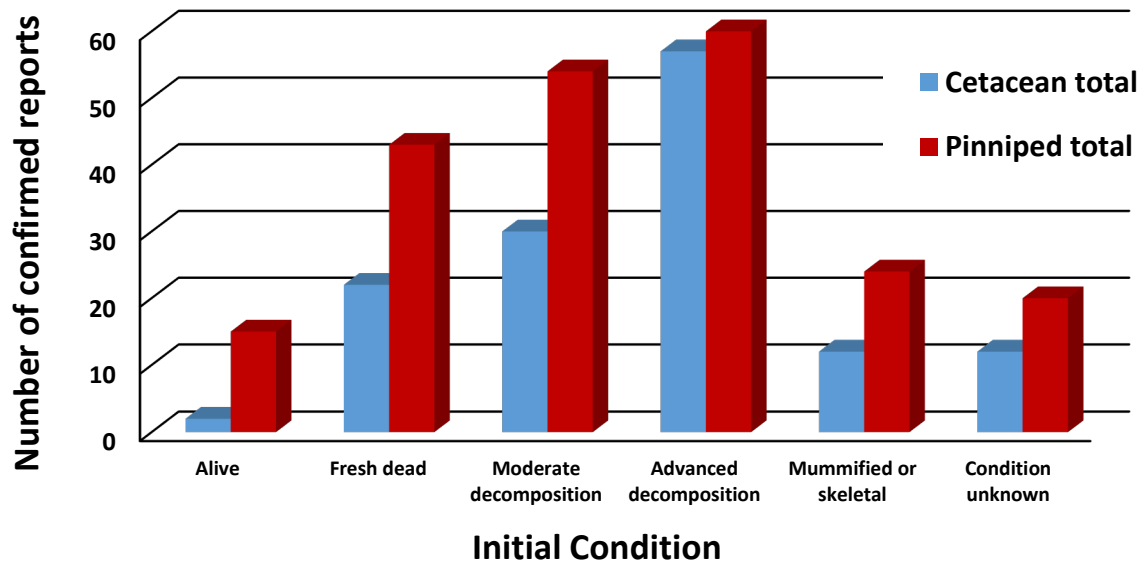


Figure 6. Number of confirmed stranding reports in 2020 by initial condition.

Table 3. Number of confirmed standings reported in the Alaska Region in 2020 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
Gray whale	1	2	14	26	3	1
Unidentified cetacean	0	0	0	10	6	6
Humpback whale	0	1	3	10	0	2
Beluga whale - other	0	2	5	2	2	3
Harbor porpoise	1	11	0	0	0	0
Beluga whale - Cook Inlet	0	2	2	5	0	0
Fin whale	0	2	0	2	0	0
Killer whale	0	0	3	1	0	0
Minke whale	0	0	2	0	0	0
Dall's porpoise	0	2	0	0	0	0
Beaked whale - Cuvier's	0	0	1	1	0	0
Beaked whale - Unidentified	0	0	0	0	1	0
<i>Cetacean Total</i>	2	22	30	57	12	12
Bearded seal	0	2	6	1	0	1
Harbor seal	9	5	3	4	0	4
Northern fur seal	1	2	0	0	0	0
Ringed seal	2	4	3	0	0	0
Spotted seal	1	1	2	4	0	0
Steller sea lion	0	7	8	11	12	1
Unidentified pinniped	0	0	1	8	0	1
<i>Pinniped Total</i>	13	21	23	28	12	7
<i>Unidentified marine mammal Total</i>	0	0	0	0	0	0

E. Reports by Location

Table 4. Number of confirmed strandings reported in the Alaska Region in 2020 by subarea and species.

Species	Arctic	Bering Sea	Southcentral	Gulf of Alaska	Southeast	Total
Gray whale	6	15	5	20	1	47
Steller sea lion		4	11	16	8	39
Harbor seal		2	11	5	7	25
Unidentified cetacean	5	3	3	9	2	22
Humpback whale	1	1	7	7		16
Beluga whale - other		14				14
Harbor porpoise	5	3	2	1	1	12
Unidentified pinniped	3	7				10
Bearded seal	2	8				10
Beluga whale - Cook Inlet			9			9
Ringed seal	7	2				9
Spotted seal	4	4				8
Fin whale		2		2		4
Killer whale		1	1	1	1	4
Northern fur seal		2		1		3
Minke whale	1	1				2
Beaked whale - Cuvier's				2		2
Dall's porpoise				1	1	2
Beaked whale - Unidentified			1			1
Total	34	69	50	65	21	239

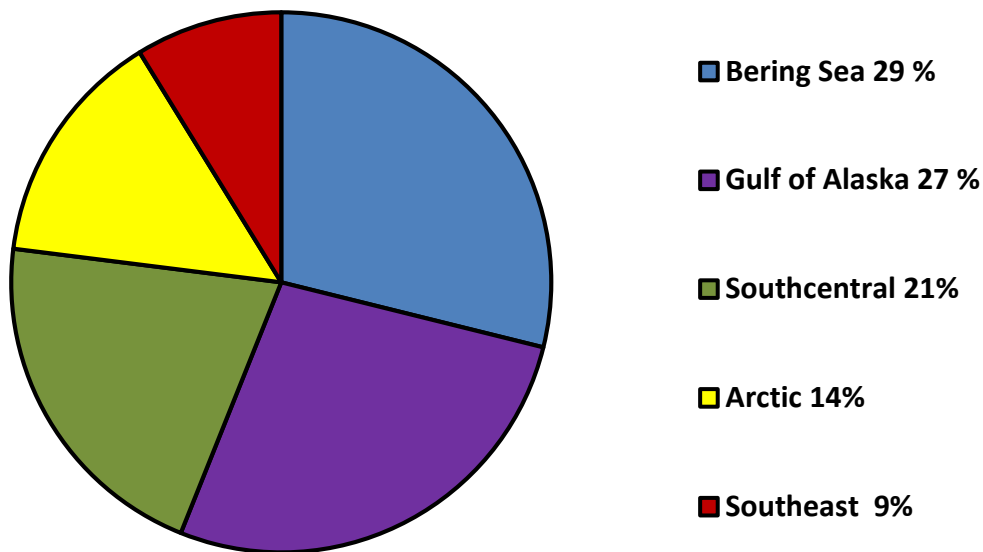


Figure 7. 2020 confirmed stranding reports by subarea.

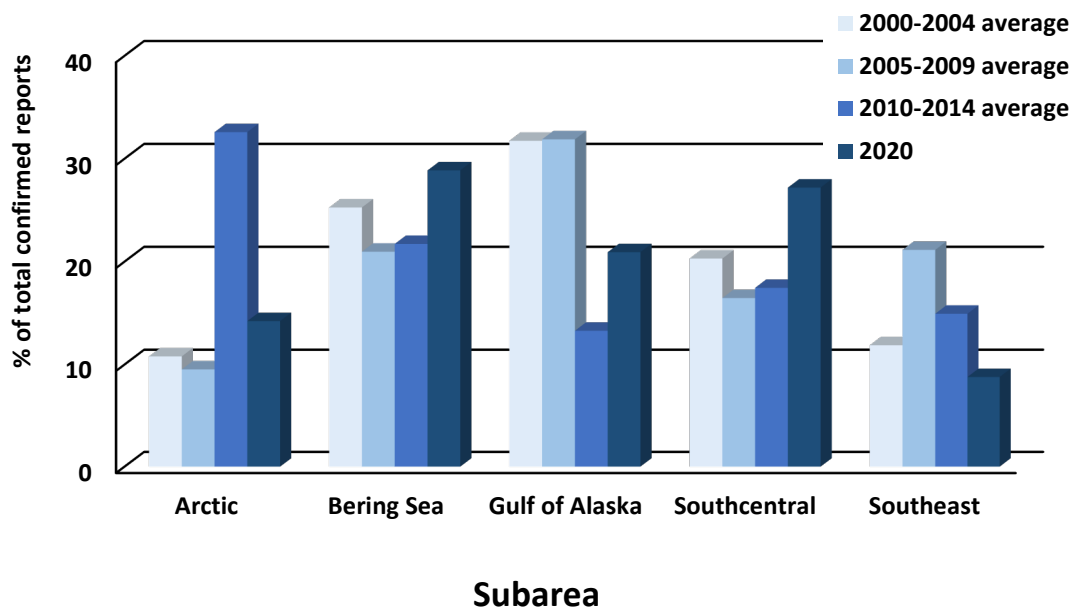


Figure 8. Contribution of regional subareas to confirmed stranding reports over time.

F. Reports involving human interaction

There is a wide range in species susceptibility to human interaction due to 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 associated with orphaned/abandoned animals are included in reports from the Alaska SeaLife Center, the only rehabilitation facility in the region, on page 13.

Table 5. 2020 confirmed reports involving human interaction by species and as a percentage of all reports. Only species with at least one reported human interaction are included below.

Species	Human Interaction (HI)				Total HI	Total annual reports**	% HI
	Entanglement	Vessel strike	Firearm injury (suspected or confirmed)	Picked up and released or transferred to ASLC			
Northern fur seal	6				6	8	75
Harbor seal			1	8	9	25	36
Steller sea lion	9		3		12	46	26
Humpback whale	7	2			9	25	36
Beluga whale - other			1		1	14	7
Harbor porpoise	5				5	12	42
Unidentified cetacean	1				1	23	4
Gray whale	1				1	48	2
Fin whale		1			1	4	25
Ringed seal	2			2	4	9	44
Spotted seal				1	1	8	13
Total	31	3	5	11	50		

**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

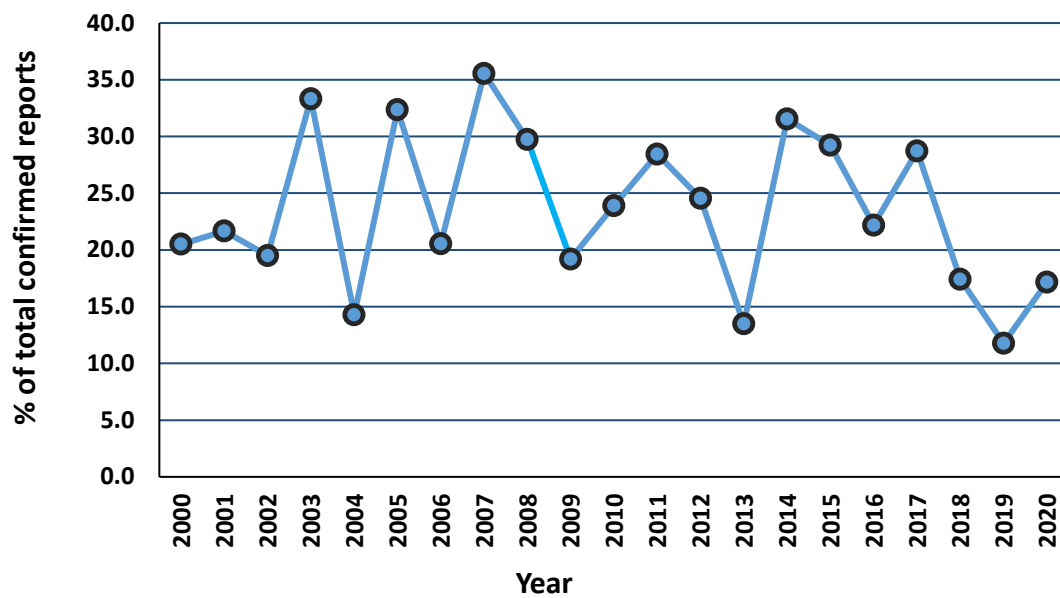


Figure 9. Percentage of total confirmed reports involving human interaction (entanglement, vessel strike or firearm injury) by year, 2000 – 2020.

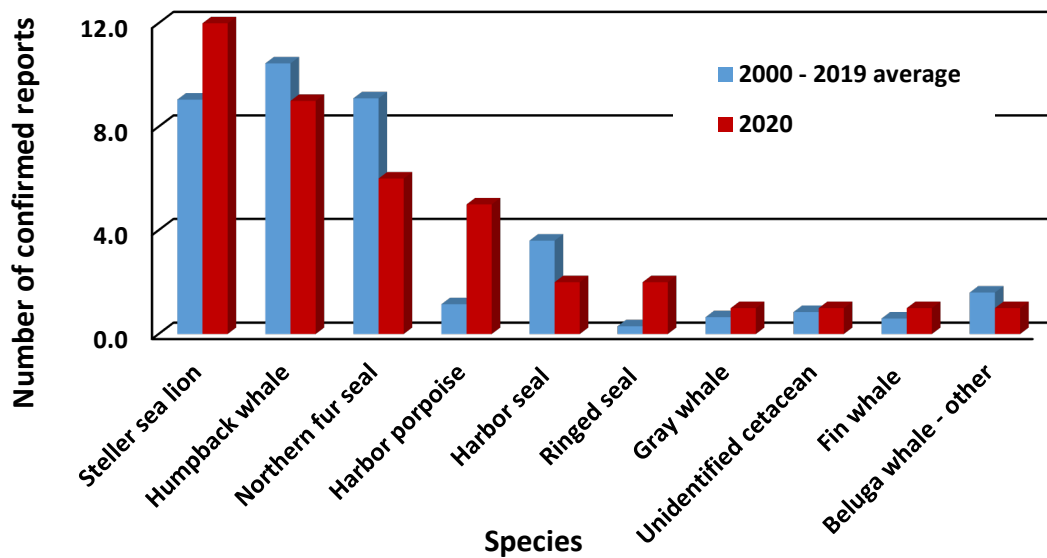


Figure 10. 2020 reports involving confirmed human interaction by species, not including orphaned/abandoned animals collected for rehabilitation.

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 6. 2020 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	1
	Rehab/Released	6
	<i>Harbor seal total</i>	7
Ringed seal	Died	1
	<i>Ringed seal total</i>	1
Total		8