



# Estimating Subsistence Halibut Harvests in Alaska, 2003 - 2016



Drying halibut, Akhiok, Kodiak Island, Alaska

**James A. Fall**  
**Division of Subsistence,**  
**Alaska Department**  
**of Fish & Game**

**NPFMC Social Science**  
**Planning Team Workshop**

**Anchorage, Alaska**

**May 8, 2018**



**Project funded through a grant  
from the  
National Marine Fisheries Service:  
No. NA16NMF4370166**

**For the full study findings, see:**

Fall, James A. and David Koster. 2018. Subsistence Harvests of Pacific Halibut in Alaska, 2016. Alaska Department of Fish and Game, Division of Subsistence Technical Paper No. 436. Anchorage.

Set hook for halibut, Nikolski, 1992

# Project Background

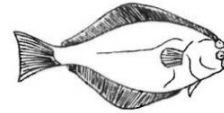
- New subsistence regulations in effect May 2003
- 118 communities and 123 tribes eligible, plus residents of designated rural areas
- Registration requirement (SHARC)
- Regulations have provision for collecting harvest data
- Latest report covers the 12<sup>th</sup> year of the harvest assessment program (harvests in 2016)
- Due to funding constraints, the project did not document 2013 or 2015 harvests and will not document 2017 harvests
- New project for study year 2018, begins 10/18

# Methods

- Mailed survey is primary data collection method; response voluntary
- Mailed to all persons holding SHARCs during 2016: 8,779
- Three rounds of mailings (most years)
- Supplemented by contacts & interviews in 5 communities in southeast and western AK for 2016 (varies by study year)
- Harvests of some non-SHARC holders (146 in 2016) included in estimates
- Total target group in 2016 = 8,925 potential fishers

**SUBSISTENCE HALIBUT  
HARVEST SURVEY 2016**

National Marine Fisheries Service &  
AK Dept. Fish & Game/Division of Subsistence  
*(please make address changes as needed)*



**2  
0  
1  
6**

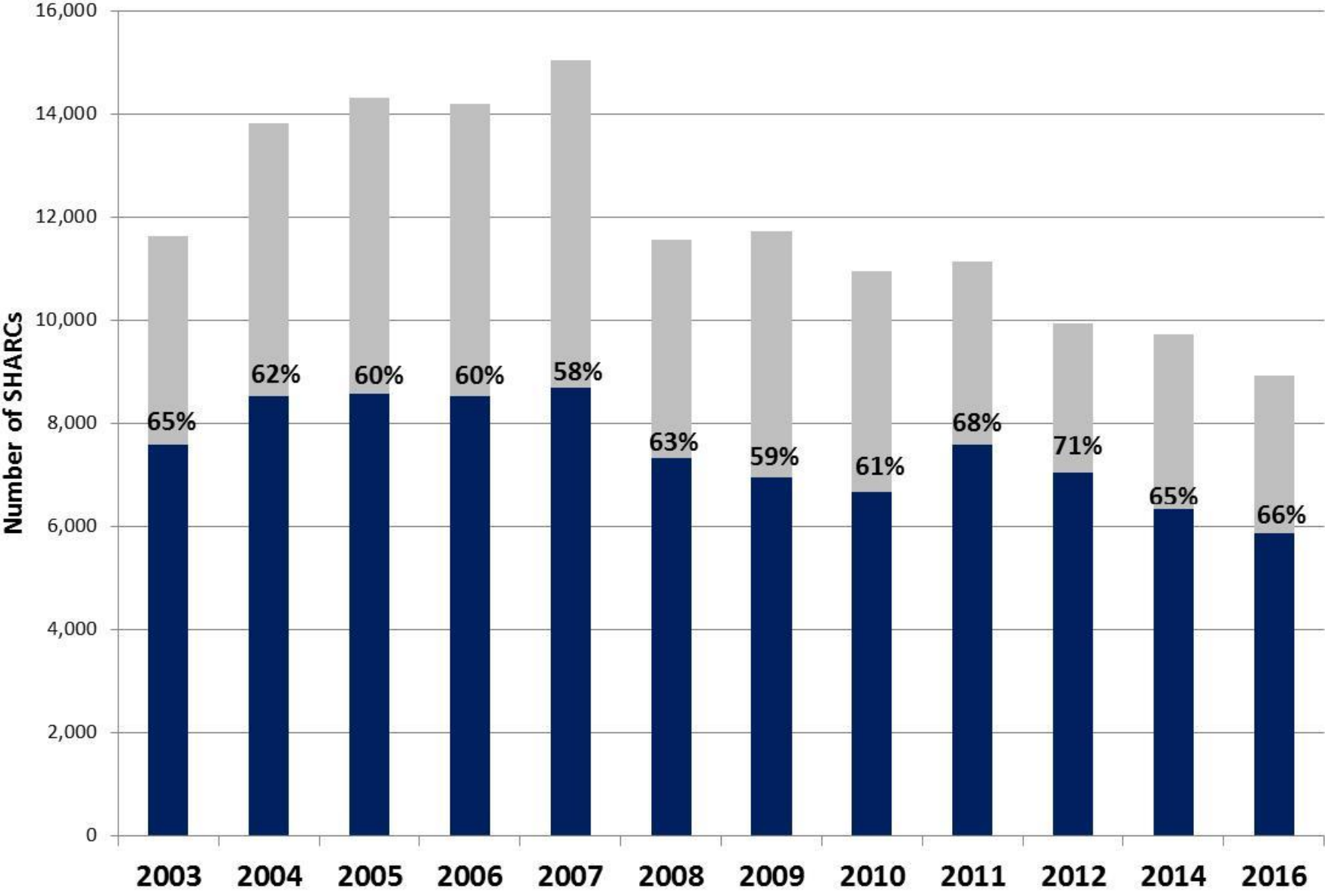
SHARC Holder's Name			
First Name	M.I.	Last Name	
Mailing Address			
Number and street or PO Box	City	State	Zip code
Community of Residence	Daytime Telephone	SHARC Number	
Tribe (if you are on a tribal role)		Exp. Date:	
<b>Please answer each question to the best of your knowledge</b>			
1. Did you <b>subsistence</b> fish for halibut during 2016? <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span> <small>(Please check one. If No, skip to question #5)</small>			
2. How many halibut did you harvest with set hook gear (long-line, skate) while subsistence fishing during 2016? <small>("Set hook gear" is hook-and-line set with anchors and buoys. Please write in both the number and <u>pounds</u> of halibut. Pounds should be round (live) weight.)</small>			
2a. Number of halibut	2b. Pounds of halibut	2c. How many hooks did you usually set?	2d. Water body, bay or sound usually fished
_ _ _ _	_ _ _ _	_ _ _ _	_ _ _ _
3. How many halibut did you harvest with hook-and-rod or hand-held lines while subsistence fishing during 2016? <small>(Please write in both the number and pounds of halibut. Do not count fish reported in Question 6. Pounds should be round (live) weight.)</small>			
3a. Number of halibut	3b. Pounds of halibut	3c. Water body, bay or sound usually fished	
_ _ _ _	_ _ _ _	_ _ _ _	
4. How many trips did you take to fish for subsistence halibut in 2016? <small>(Please include trips where halibut was targeted but none were caught)</small>			
_ _			
5. Did you sport fish for halibut during 2016? <small>(Please check one)</small> <span style="float: right;"><input type="checkbox"/> Yes <input type="checkbox"/> No</span>			
6. How many halibut did you harvest while <b>sport fishing</b> during 2016? <small>(Please write in both the number and pounds of halibut. Do not count fish reported in Question 3. Pounds should be round (live) weight.)</small>			
6a. Number of Halibut	6b. Pounds of Halibut	6c. Water body, bay or sound usually fished	
_ _ _ _	_ _ _ _	_ _ _ _	
<b>THANK YOU!</b>		<b>QUESTIONS?</b>	
Please mail the completed survey to: Subsistence Halibut Harvest Survey Alaska Dept. Fish & Game/Div. of Subsistence 333 Raspberry Road Anchorage AK 99518-1599		Regarding the survey: ADF&G 1-907-267-2353 Regarding your SHARC card: NMFS at 1-800-304-4846 (option 2) dfg.sub.halibut@alaska.gov	

Under AS 16.05.815, Alaska state law prevents the transfer of certain information based on confidentiality. Such information includes, but is not limited to, personal information contained in fish and wildlife harvest and usage data; fish tickets; fish ticket computer runs; intents to operate; processor annual reports; log books or other catch records; and individual or vessel harvest records that are correlated to their harvest or effort. Individual data collected in this survey is confidential under this statute.

# Sample Achievement for 2016

- **5,862 surveys returned**, of 8,925 potential fishers
- **Sampling fraction of 66%**
- **High rates of return** achieved in most larger communities with the most SHARCs issued

# SHARC Survey Achievement, 2003-2012, 2014 & 2016

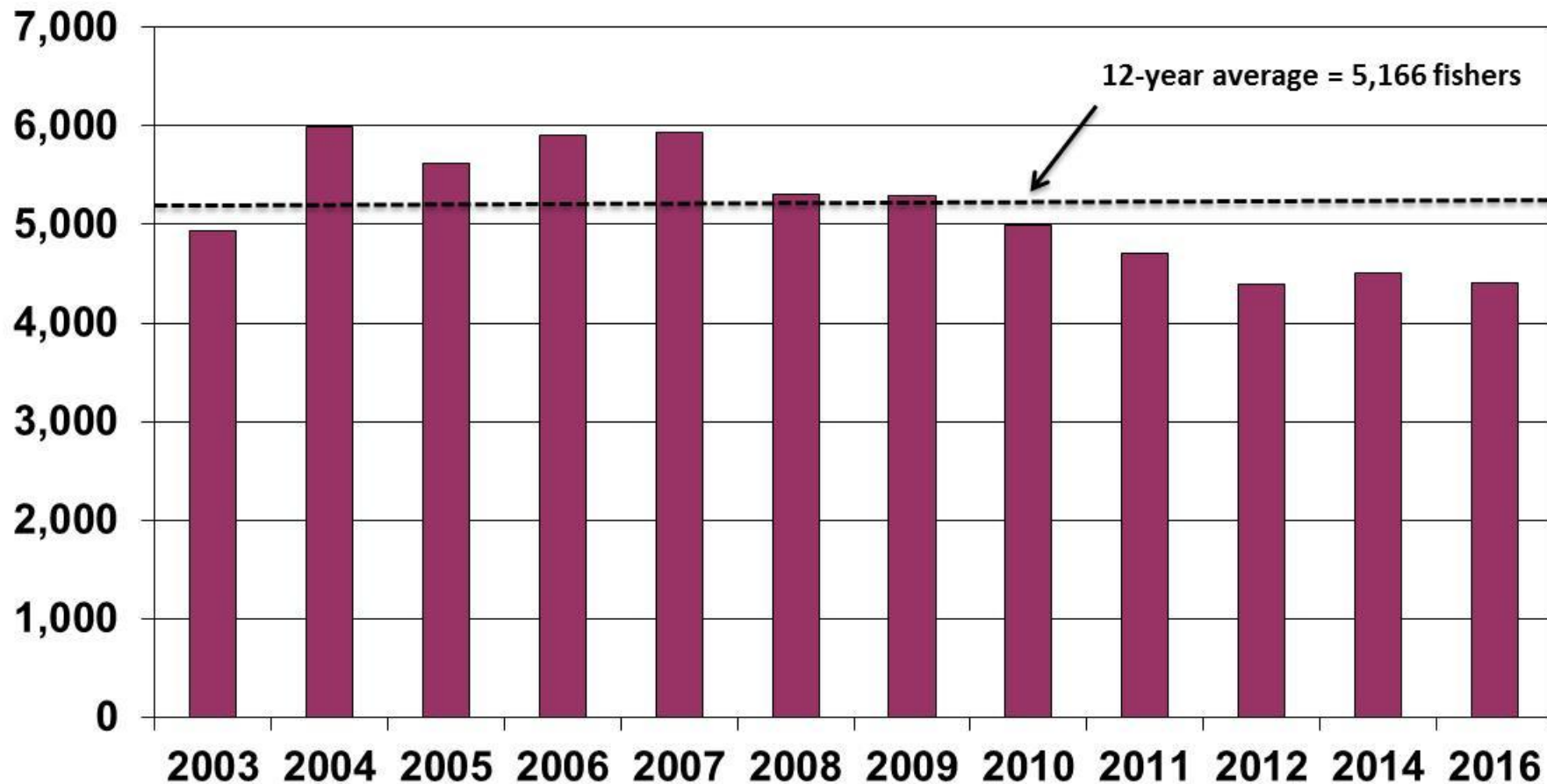


# Study Findings: Halibut 2016

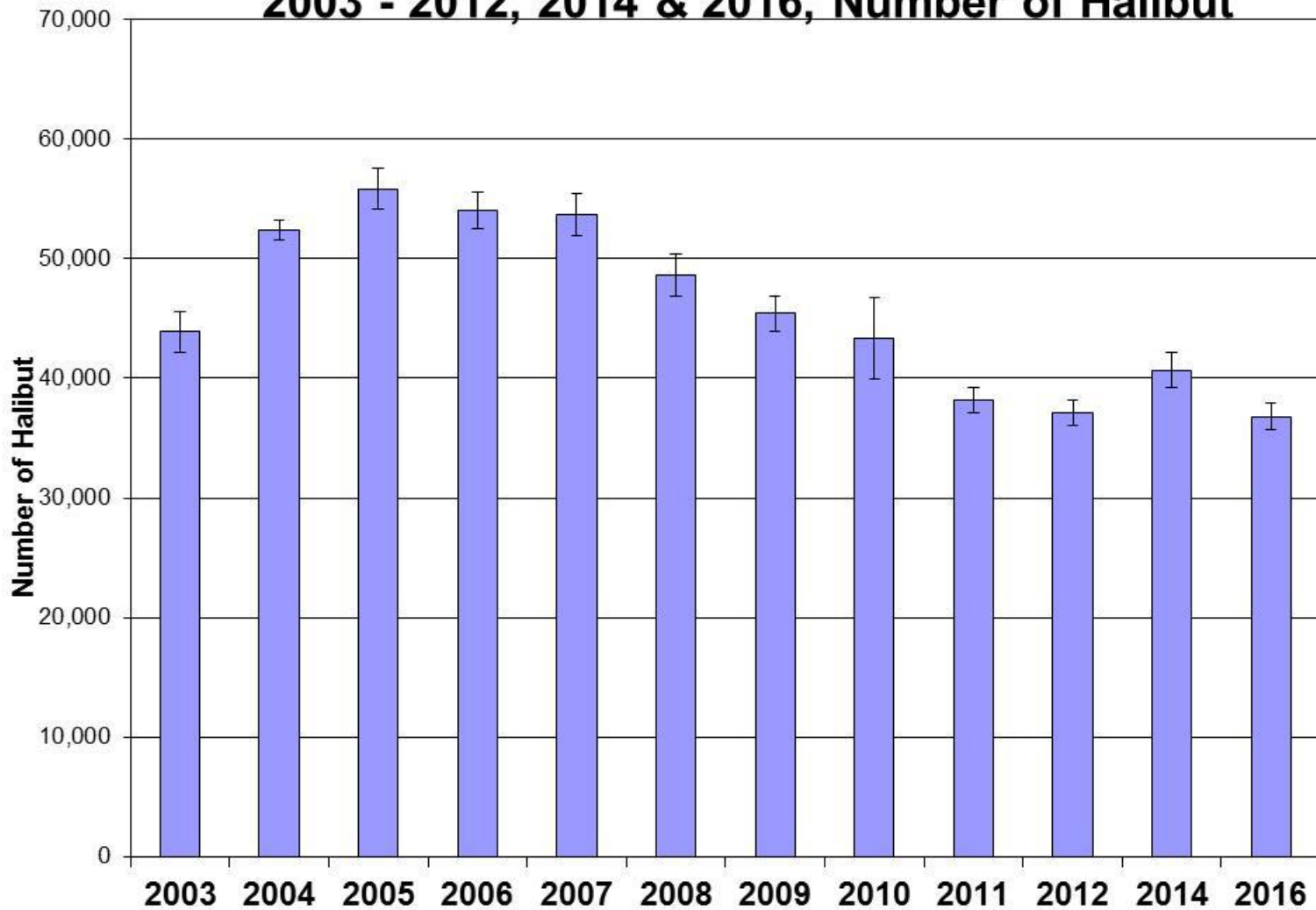
- Estimated number of **subsistence fishers = 4,408**
- Estimated subsistence harvest = **36,815 halibut**
- Estimated subsistence harvest = **727,178 lbs** net weight (= 75% of round weight) (19.8 lbs/fish)
- **60% of harvest occurred in Area 2C** (SE Alaska), 31% in Area 3A (SC Alaska), & 6% in Area 4E (East Bering Sea Coast)
- 75% of harvest taken with setline gear; 25% with hand-operated gear



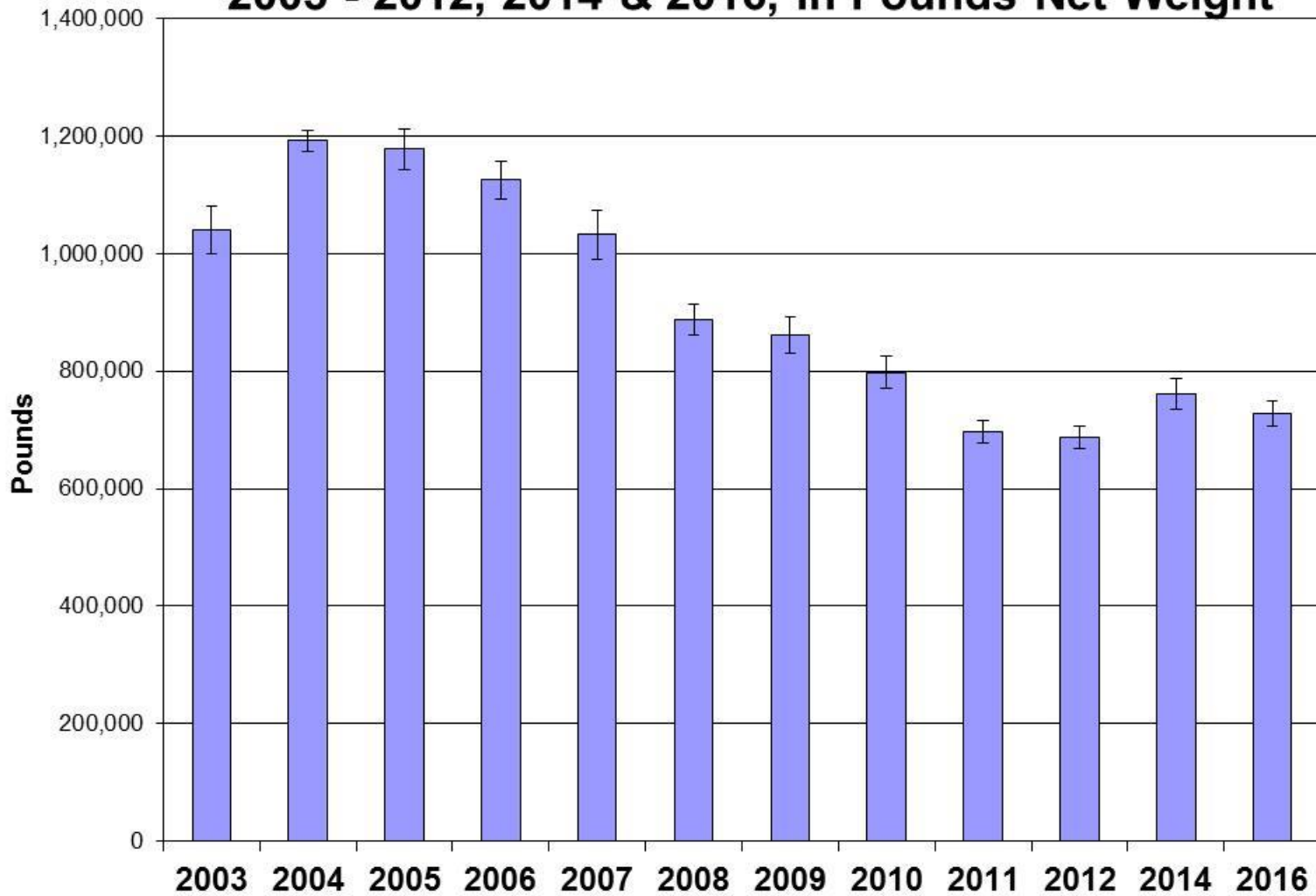
# Estimated Number of Individuals Subsistence Fishing for Halibut in Alaska, 2003-2012 , 2014 & 2016



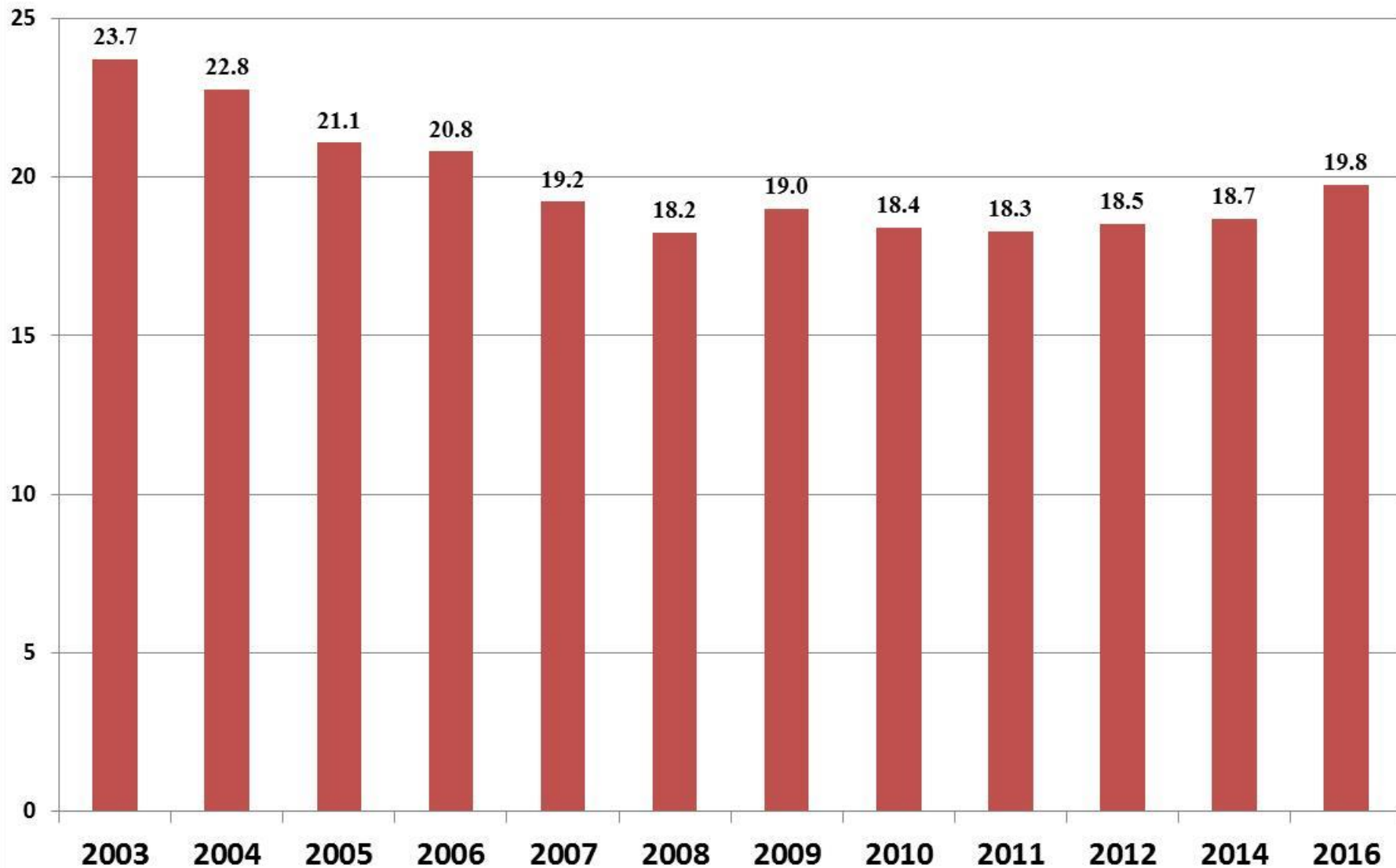
## Estimated Subsistence Harvests of Halibut in Alaska, 2003 - 2012, 2014 & 2016, Number of Halibut



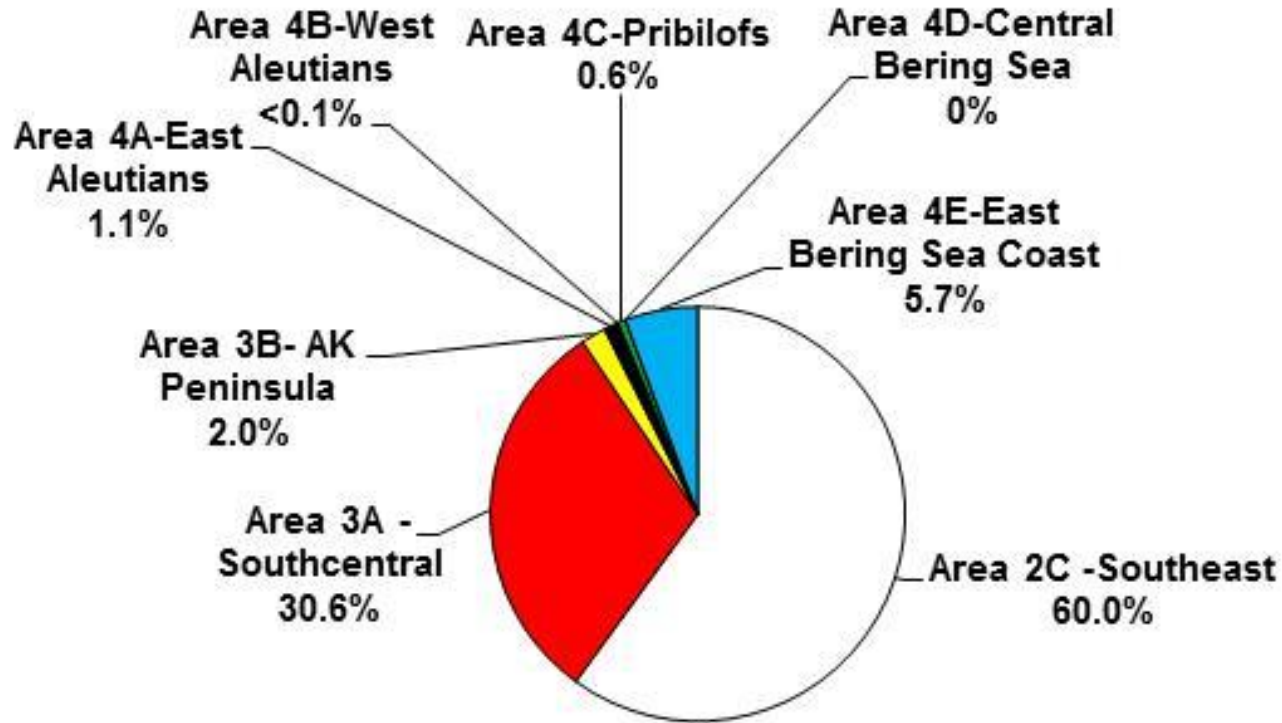
## Estimated Subsistence Harvests of Halibut in Alaska, 2003 - 2012, 2014 & 2016, in Pounds Net Weight



## Average net weight of halibut (lb per fish) in the Alaska subsistence fishery, 2003 - 2012, 2014 & 2016

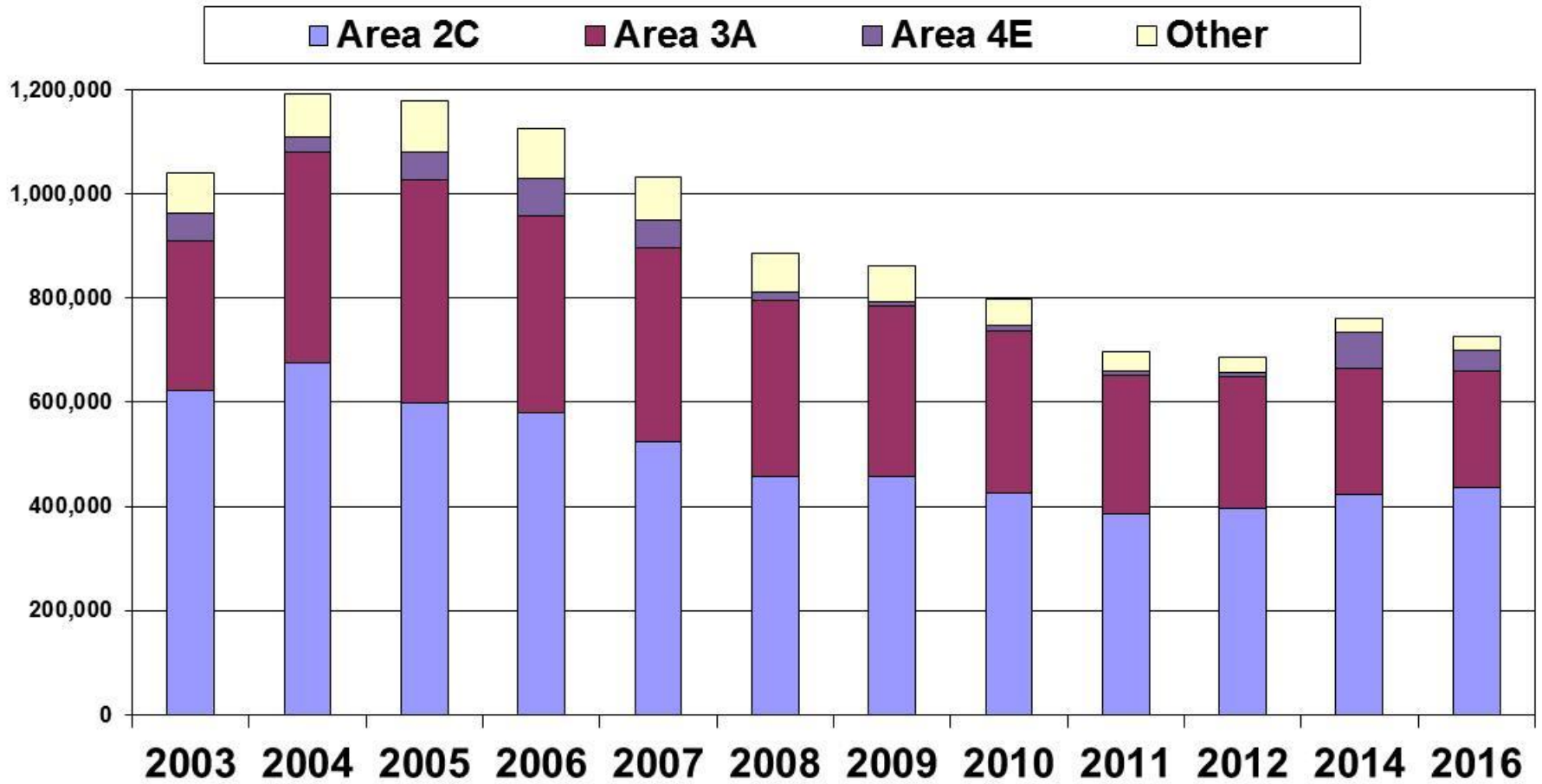


## Percentage of Subsistence Halibut Harvest by Regulatory Area Fished, 2016

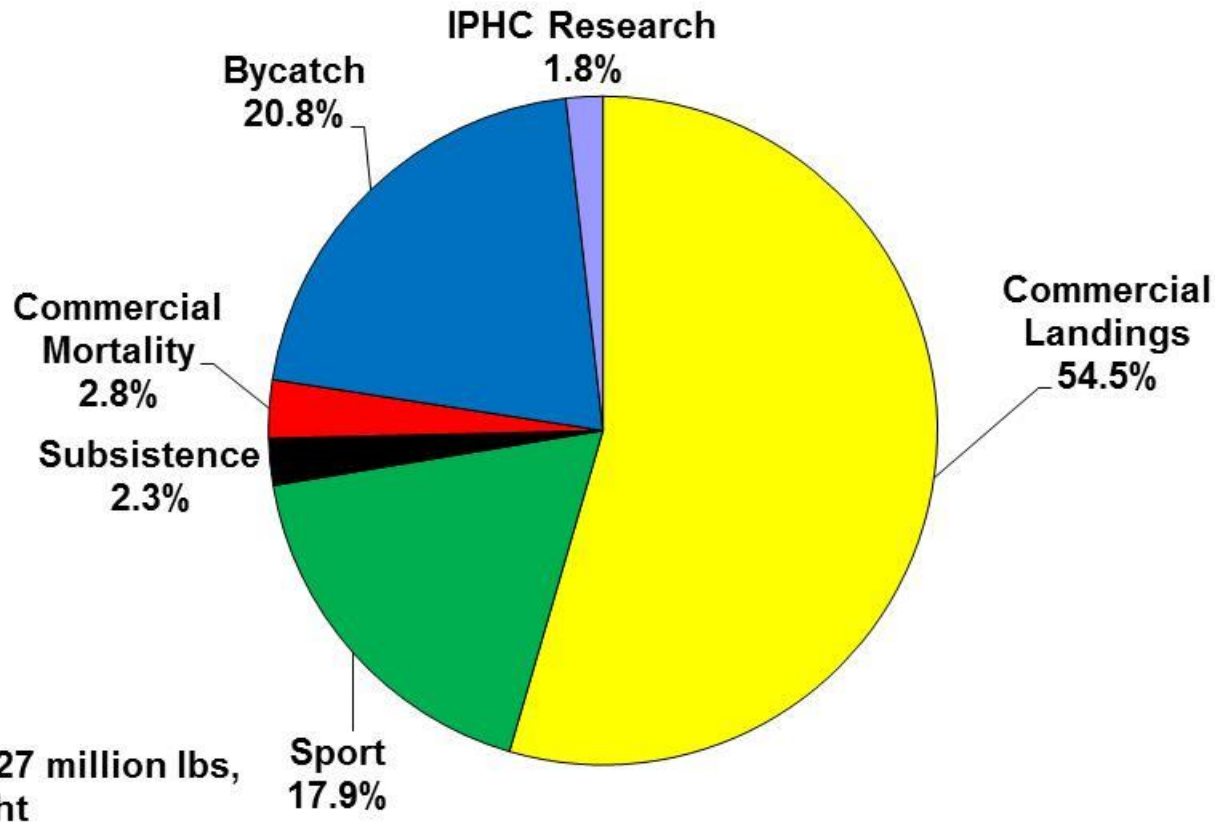


N= 727,178 pounds net weight

# Estimated Subsistence Harvests of Halibut in Alaska, 2003 - 2012, 2014 & 2016 (lbs net weight), by Area



# Halibut Removals, Alaska, 2016



- Subsistence harvests by area ranged from 6.4% in Area 2C to 0.4% in Area 3B

# Conclusions: Harvest Survey, 2016

- Overall, 2016 harvest survey was a success: good response rates and overall reliable harvest estimates
- Can discern some general patterns in the fishery since the new regulations came into effect
- Reasons for overall decline in harvests likely complex and require further investigation
- Concerns about nonrenewal of SHARCs, especially in certain regulatory areas
- Need to supplement mailed SHARC survey with in-person survey in portions of Area 4
- Recommendation to continue harvest monitoring





# For More Information

- Division of Subsistence Website: [www.subsistence.adfg.state.ak.us](http://www.subsistence.adfg.state.ak.us) and go to publications for final report
- Or: call us at 907-465-4147, or 465-3617, or 267-2353
- Or write: ADF&G, Division of Subsistence, 333 Raspberry Road, Anchorage, AK, 99518
- Or contact NMFS at: 1-800-304-4846 (option 2) or [www.fakr.noaa.gov/ram/subsistence/halibut.htm](http://www.fakr.noaa.gov/ram/subsistence/halibut.htm)