

# Sport Harvest Data for Areas 2C and 3A

**For the North Pacific Fishery Management Council  
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# Overview

- 2009 estimates revised for Area 2C
- 2010 preliminary estimates were finalized
- 2011 harvest projections
- Crew harvest
- Logbook-SWHS comparisons

# 2009 Area 2C estimates revised

- Some data omitted in estimating average weight

	<b>Sector</b>	<b>Original</b>	<b>Revised</b>
Average Weight (lb)	Charter	23.2	23.3
	Non-charter	17.1	17.3
	Total	19.9	20.0

	<b>Sector</b>	<b>Original</b>	<b>Revised</b>
Yield (M lb)	Charter	1.245	1.249
	Non-charter	1.123	1.133
	Total	2.368	2.383

# 2010 estimates finalized (yield M lb)

Sector	Area 2C	Area 3A
Charter	1.086	2.698
Non-charter	0.885	1.587
Total	1.971	4.285

# 2011 projections methods

- Charter:
  - Previous year's SWHS scaled to change in logbook
  - Use logbook data through July
- Non-charter
  - Single exponential forecast
- All projections done by subarea then summed
- Separated 2C and 3A portions of Glacier Bay subarea

# Area 2C charter projection - 2011

Area	Logbook thru July		Ratio	2010 SWHS	2011 Projection
	2010	2011			
Ketchikan	2,747	2,451	0.8922	3,174	2,832
Pr. Wales	8,152	8,045	0.9869	9,480	9,356
Pburg/Wrang	1,358	895	0.6591	3,731	2,459
Sitka	9,476	10,735	1.1329	14,762	16,723
Juneau/Hai/Skag	3,038	3,321	1.0932	3,353	3,665
Glacier Bay	5,758	5,386	0.9354	6,600	6,174
<b>Total</b>	<b>30,529</b>	<b>30,833</b>		<b>41,100</b>	<b>41,209</b>

# Area 3A charter projection - 2011

Area	Logbook thru July		Ratio	2010 SWHS	2011 Projection
	2010	2011			
Central CI	44,728	45,265	1.0120	45,781	46,331
Lower CI	54,012	57,278	1.0605	63,629	67,477
Kodiak/AK Pen	6,841	7,314	1.0691	13,381	14,306
North Gulf	31,510	34,765	1.1033	33,359	36,805
E PWS	5,343	5,052	0.9455	8,843	8,361
W PWS	3,041	2,984	0.9813	8,511	8,351
Yakutat	1,997	1,683	0.8428	3,956	3,334
Glac Bay (3A)	98	700	7.1429	102	726
<b>Total</b>	<b>147,570</b>	<b>155,041</b>		<b>177,562</b>	<b>185,691</b>

# Changes in average net weight (lb)

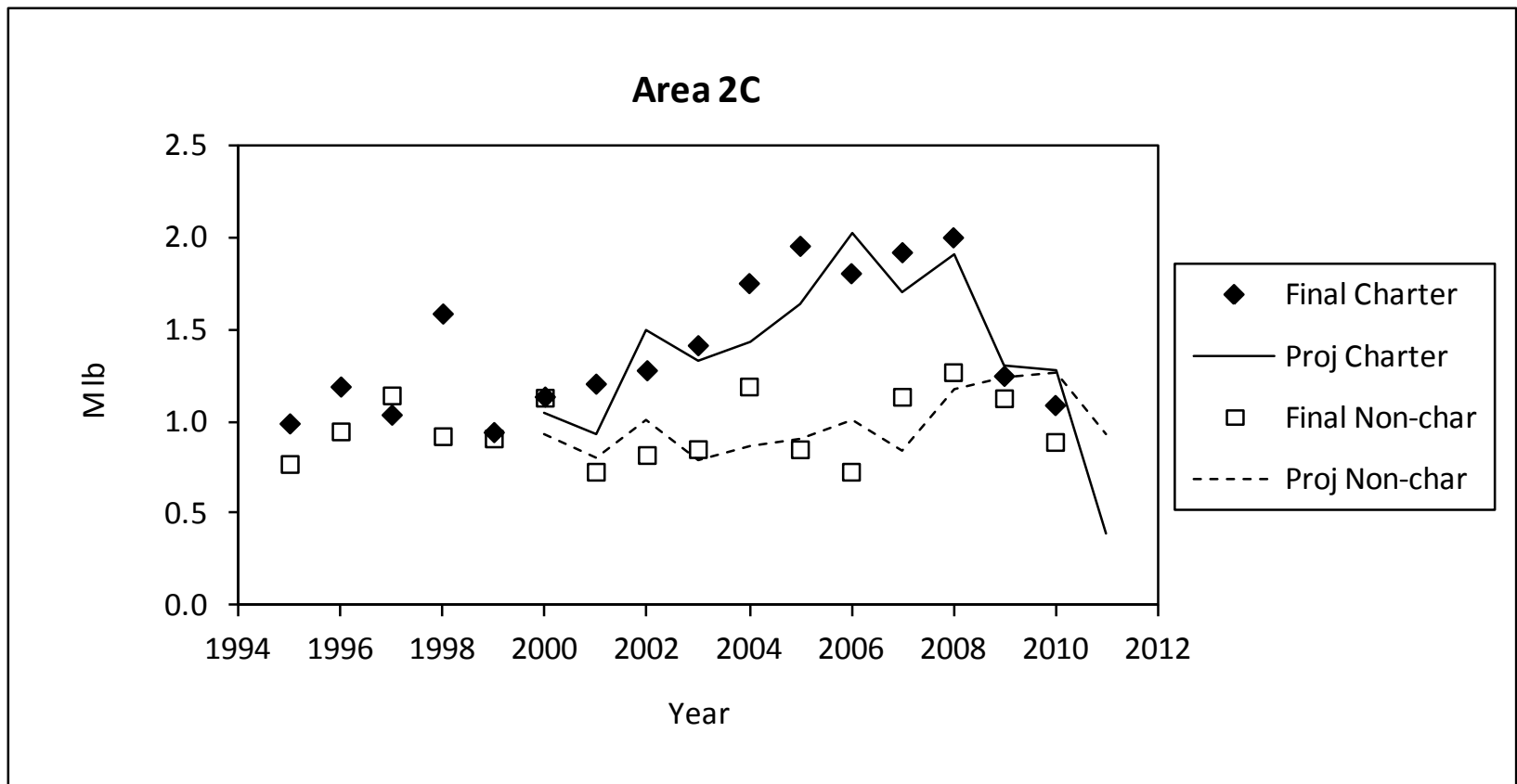
Sector	Year	Area 2C	Area 3A
Charter	2010	26.4	15.2
	2011	9.4	15.3
Non-charter	2010	16.7	12.8
	2011	16.4	12.6



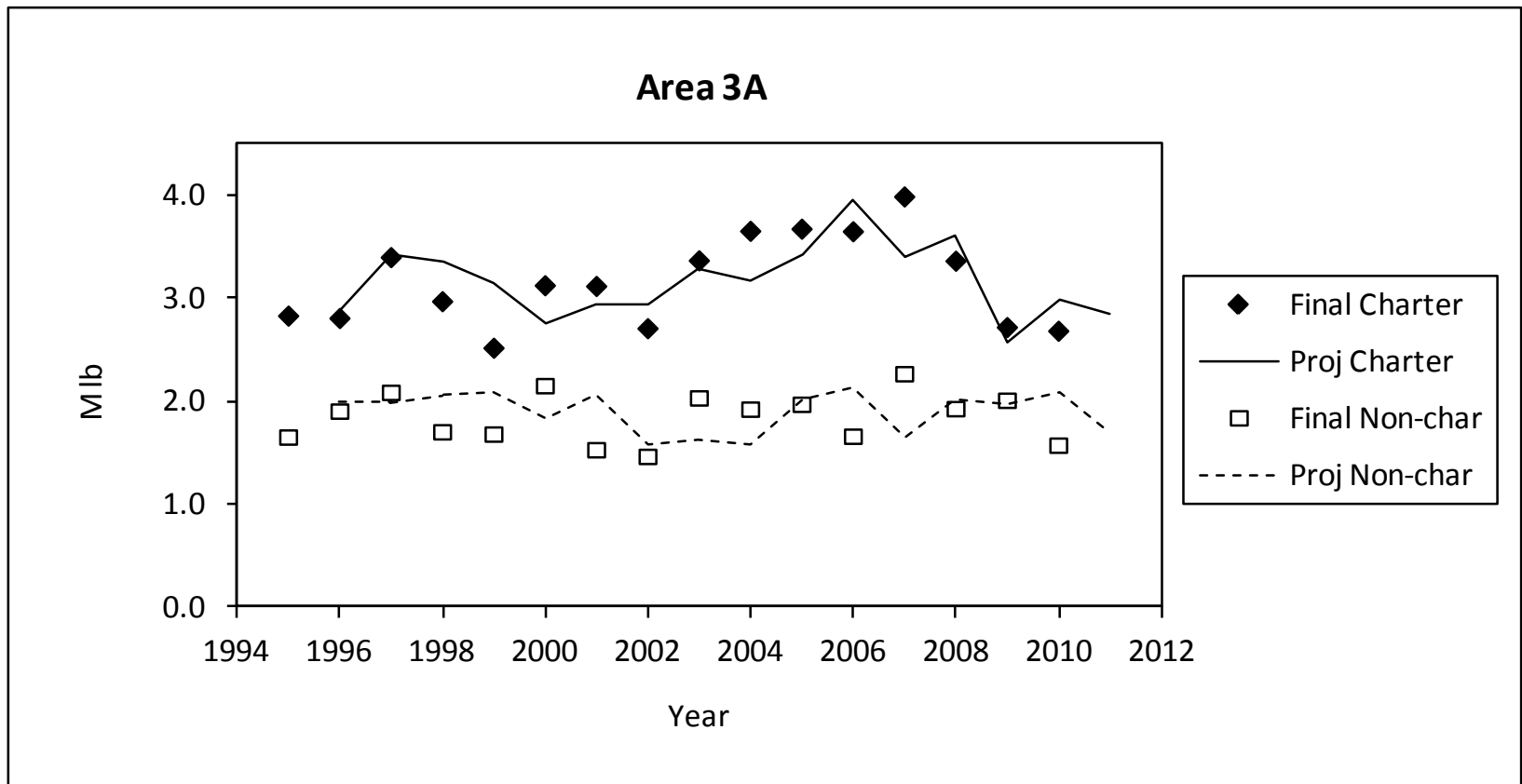
# 2011 projections (yield M lb)

Sector	Area 2C	Area 3A
Charter	0.388	2.837
Non-charter	0.925	1.704
Total	1.313	4.541

# Historical yield projections (var. methods)



# Historical yield projections (var. methods)

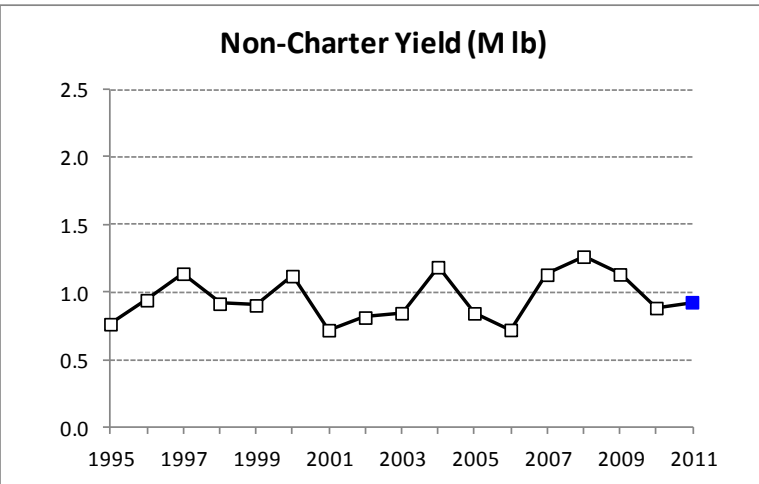
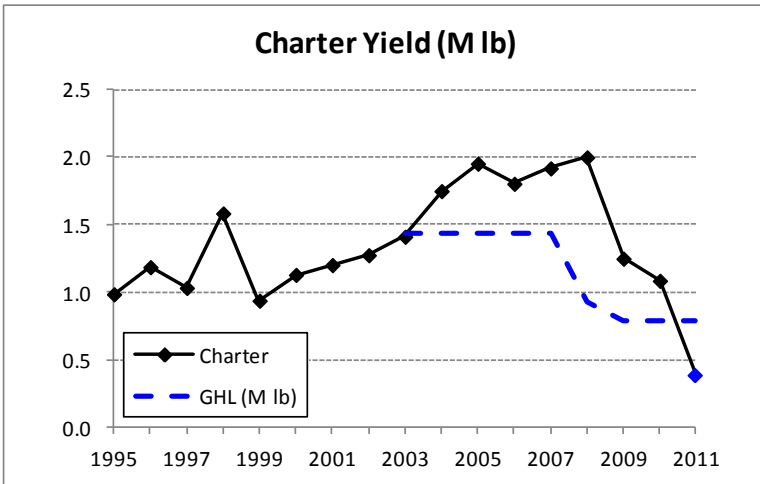
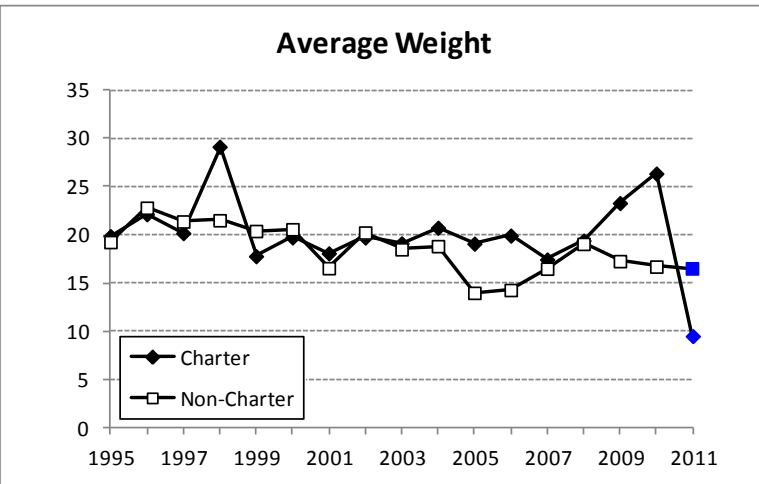
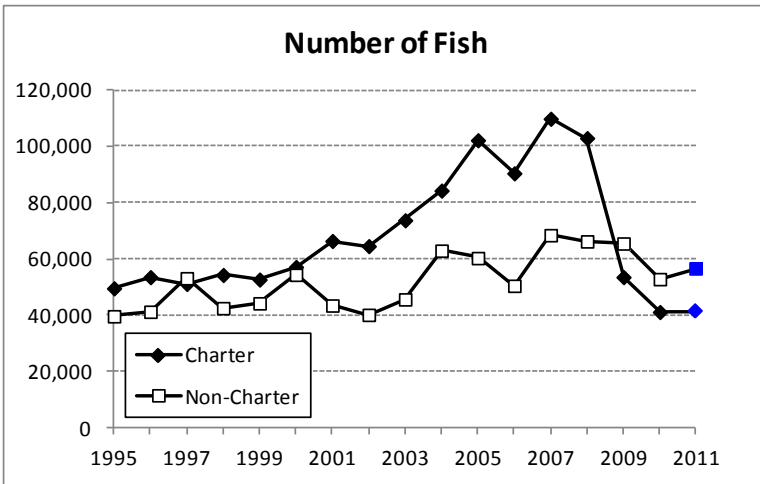


# Yield projection errors\*

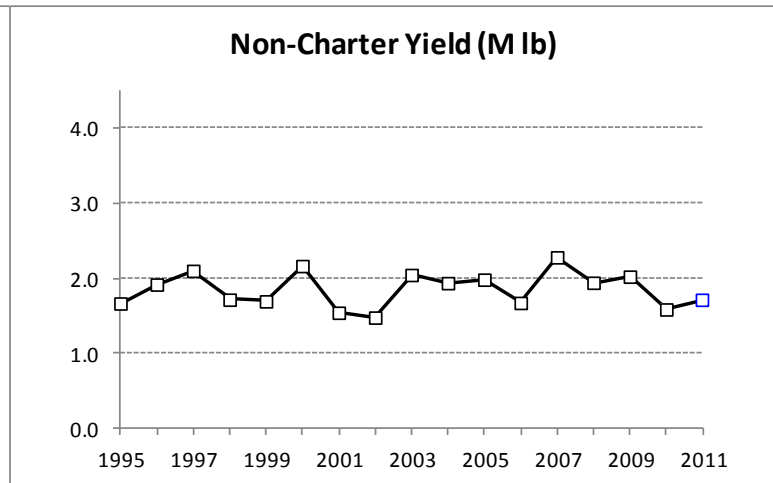
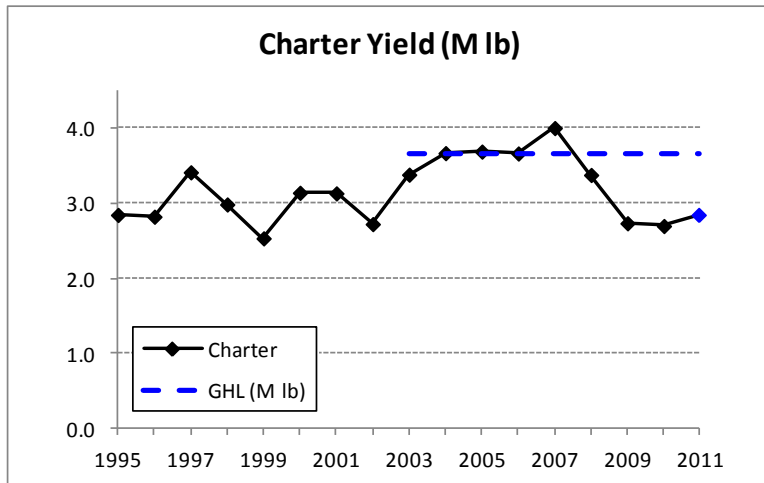
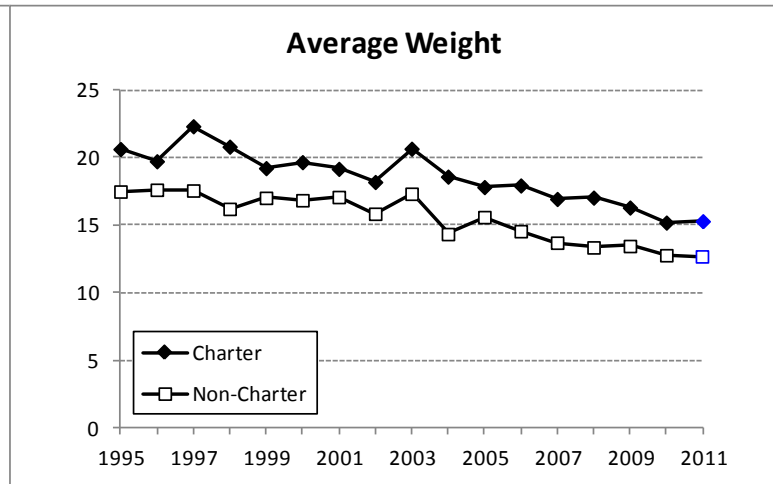
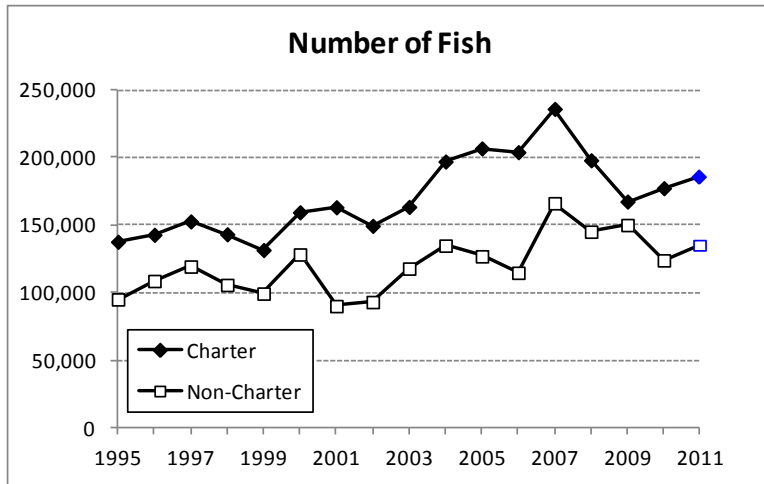
Area	Sector	Min	Max	Average
2C	Charter	-23%	+18%	-3%
	Non-charter	-15%	+24%	+1%
3A	Charter	-27%	+43%	+5%
	Non-charter	-28%	+34%	+4%

\*Errors are relative to the final estimate. E.g., a positive error indicates the projection was higher than the final estimate.

# Area 2C



# Area 3A



# Crew Harvest - Area 3A

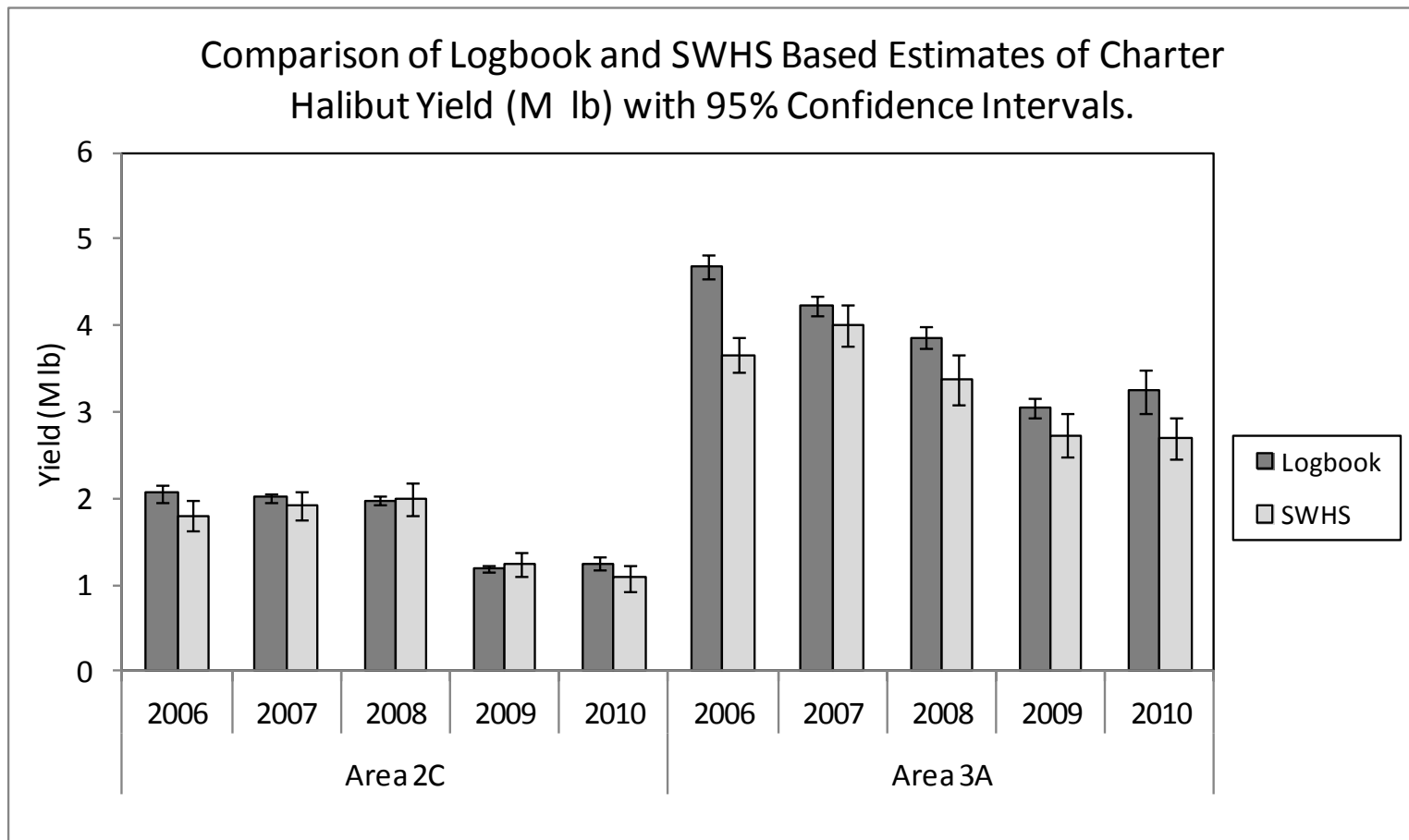
Year	Remarks	% crew
2006	Crew harvest allowed	10.5%
2007	Crew harvest prohibited May 1 - Dec 31	0.1%
2008	Crew harvest prohibited May 24 - Sep1	0.5%
2009	Crew harvest prohibited May 23 - Sep1	0.7%
2010	Crew harvest allowed	5.7%

# Logbook versus SWHS

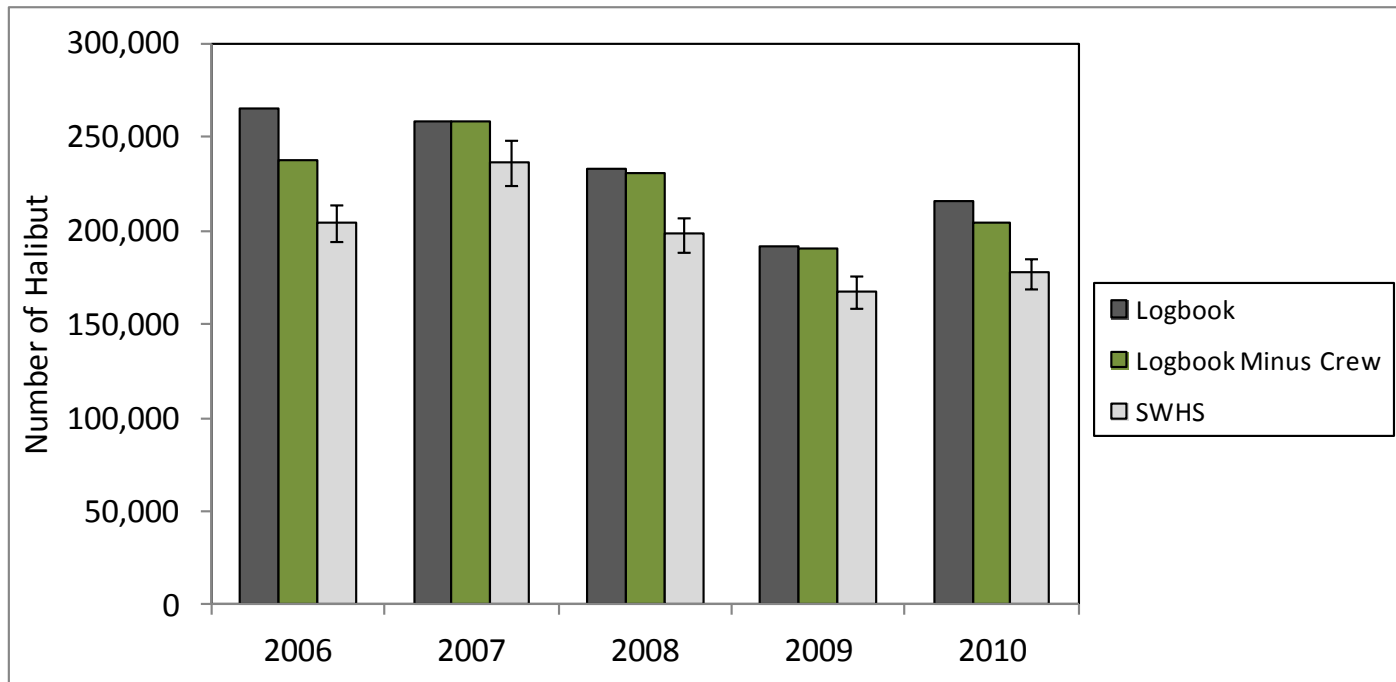
Area	Year	Logbook(M lb)	SWHS (M lb)	Difference	Average Difference
Area 2C	2006	2.063	1.804	14.4%	5.6%
	2007	2.015	1.918	5.1%	
	2008	1.974	1.999	-1.3%	
	2009	1.187	1.249	-5.0%	
	2010	1.249	1.086	15.0%	
Area 3A	2006	4.689	3.664	28.0%	15.9%
	2007	4.229	4.002	5.7%	
	2008	3.865	3.378	14.4%	
	2009	3.044	2.734	11.3%	
	2010	3.238	2.698	20.0%	



# Logbook versus SWHS



# Logbook versus SWHS - corrected for crew harvest



Version	Range of Differences
Logbook	9.4% - 30.3%
Minus Crew	9.3% - 16.8%

# Advantages of Logbooks

- Logbooks not subject to recall bias, verified and signed by client.
- Location of harvest and port of landing more accurate than SWHS.
- Crew harvest explicitly reported.
- Can monitor accuracy through periodic comparisons to creel survey data and SWHS estimates.
- End-of-year harvest projections closer to final.

# End-of-year harvest projections

		Projection of SWHS			Projection of Logbook		
Area	Year	Projection	Final	Error	Projection	Final	Error
2C	2008	98,051	102,965	-4.8%	108,211	106,645	+1.5%
	2009	51,972	53,602	-3.0%	52,457	51,058	+2.7%
	2010	46,816	41,202	+13.6%	44,278	47,576	-6.9%
3A	2008	210,380	198,108	+6.2%	226,047	232,621	-2.8%
	2009	157,155	167,599	-6.2%	183,486	192,032	-4.5%
	2010	196,076	177,460	+10.5%	219,409	216,420	+1.4%

# Questions?

