

PERFORMANCE REPORT

STATE: Alaska

GRANT NO.: F-10-33

GRANT TITLE: Sport Fish Investigations in Alaska

PERIOD COVERED: July 1, 2017 – June 30, 2018

STUDY NO. AND TITLE: S-1-1 Southeast Alaska Marine Harvest Studies

STUDY OBJECTIVES:

1. Coordinate the collection of catch, harvest, and biological information from salmon, other salmonids, and groundfish caught in marine waters around Juneau, Ketchikan, Sitka, Craig, Petersburg, Wrangell, Haines, Skagway, Elfin Cove, Gustavus, and Yakutat.
2. Coordinate activities related to electronic hand-held data capture that compliment and are necessary for development and implementation of the centralized database to house recreational (sport) marine effort, catch, and harvest data and other biological information.
3. Estimate the contribution (relative) of Alaska and non-Alaska hatchery Chinook salmon by coded-wire-tag lot to the Juneau, Ketchikan, Sitka, Craig/Klawock, Petersburg, Wrangell, Haines, Skagway, Elfin Cove, Gustavus, and Yakutat marine boat sport fisheries in 2017.
4. Estimate the relative contribution of Alaska and non-Alaska hatchery coho salmon by coded-wire-tag lot to the Juneau, Ketchikan, Sitka, Craig/Klawock, Petersburg, Wrangell, Gustavus, Elfin Cove, and Yakutat marine boat sport fisheries in 2017.
5. Estimate the age composition of the spring marine boat Chinook harvest in Ketchikan, Juneau, Petersburg, Wrangell, Haines, and Skagway in 2017.
6. Estimate the mean net weight of Pacific halibut harvested by the private and charter sectors in Sitka, Juneau, Ketchikan, Craig/Klawock, Petersburg/Wrangell, Gustavus/Elfin Cove, and Yakutat in 2017.
7. Obtain otolith samples and sex identification from 550 black rockfish at the port of Sitka for age/sex structure determination of sport harvested fish in 2017.
8. Estimate the mean net weight of lingcod harvested by the private and charter sector in Sitka, Juneau, Ketchikan, Craig/Klawock, Petersburg/Wrangell, Gustavus/Elfin Cove, and Yakutat in 2017.

RESULTS/DISCUSSIONS:

Objective 1: The Southeast Alaska Marine Harvest Studies Coordinator provided oversight of the program's fisheries biologists and helped with operational planning, hiring of field technicians, and implementation of the onsite marine harvest studies program conducted in the marine waters around

Juneau, Ketchikan, Sitka, Craig, Petersburg, Wrangell, Haines, Skagway, Elfin Cove, Gustavus, and Yakutat. The field season durations were July 1 to late August or early September 2017 depending upon the sampled port, and then again from late April/early May to June 30, 2018. When inseason sampling or data issues arose, the coordinator provided, or helped with, supervision of the field technicians in the field season.

Objective 2: The Southeast Alaska Marine Harvest Studies Coordinator provided assistance and input with activities related to electronic hand-held data capture that compliment and are necessary for development and implementation of the centralized database to house recreational (sport) marine effort, catch, and harvest data and other biological information during July 1 2017 to June 30 2018.

Objective 3: Coded-wire-tag sampling of Chinook salmon at ports throughout Southeast Alaska during 2017 was used to identify the relative contribution of Chinook salmon (in marine sport harvest) originating from Alaska and non-Alaska hatcheries. The ports sampled include Juneau, Ketchikan, Sitka, Craig/Klawock, Petersburg, Wrangell, Haines, Skagway, Gustavus, Elfin Cove, and Yakutat. Results of this sampling effort in 2017 are summarized in Table 1.

Table 1.—Estimates of hatchery origin Chinook salmon contribution sampled from marine boat fisheries (sport) at various ports throughout Southeast Alaska in 2017.

Location	% Alaska Hatcheries	% Non-Alaska Hatcheries
Juneau	90.6	0.4
Ketchikan	31.6	10.2
Sitka	6.7	19.6
Craig/Klawock	5.7	24.5
Petersburg	62.9	0.4
Wrangell	9.1	0.1
Haines	0.0	0.0
Skagway	0.0	0.0
Gustavus	0.0	17.8
Elfin Cove	7.6	22.0
Yakutat	10.8	35.4

Objective 4: Coded-wire-tag sampling of coho salmon at ports throughout Southeast Alaska during 2017 was used to identify the relative contribution of coho salmon (in marine sport harvest) originating from Alaska and non-Alaska hatcheries. The ports sampled include Juneau, Ketchikan, Sitka, Craig/Klawock, Petersburg, Wrangell, Gustavus, Elfin Cove, and Yakutat. Results of this sampling effort in 2017 are summarized in Table 2.

Table 2.—Estimates of hatchery origin coho salmon contribution sampled from marine boat fisheries (sport) at various ports throughout Southeast Alaska in 2017.

Location	% Alaska Hatcheries	% Non-Alaska Hatcheries
Juneau	6.7	0.0
Ketchikan	6.1	0.2
Sitka	22.4	0.4
Craig/Klawock	44.7	0.0
Petersburg	12.1	0.0
Wrangell	13.0	0.0
Gustavus	9.2	0.0
Elfin Cove	9.3	0.1
Yakutat	10.8	0.0

Objective 5: The 2017 Chinook salmon scale samples from late April to June 20th have been read, and the age composition estimates are presented in Tables 3 and 4 below. Note that Ketchikan and Skagway scales were not yet read, and there was no Chinook salmon sport fishery harvest in Haines in 2017. The main age group in Juneau (56%), Petersburg (53%), and Wrangell (41%) was 1.3.

Tables 3 and 4.—Age composition in terms of counts (top table) and percentage (bottom table) of the spring Chinook salmon in Ketchikan, Juneau, Petersburg, Wrangell, Haines, and Skagway sampled in 2017 sport fisheries during late April to June 20, 2017.

port	Age-0.2	Age-0.3	Age-0.4	Age-0.5	Age-1.1	Age-1.2	Age-1.3	Age-1.4	Age-1.5	Total	Comment
Ketchikan	NA	NA	NA	NA	NA	NA	NA	NA	NA	579	Scales have not been read yet
Juneau	1	4				11	25	4		45	
Petersburg	1	27	8	1	3	24	91	17		172	
Wrangell		4	1			23	30	15	1	74	
Haines	0	0	0	0	0	0	0	0	0	0	No harvest
Skagway	0	0	0	0	0	0	0	0	0	0	No harvest

port	Age-0.2	Age-0.3	Age-0.4	Age-0.5	Age-1.1	Age-1.2	Age-1.3	Age-1.4	Age-1.5	Total	Comment
Ketchikan	NA	NA	NA	NA	NA	NA	NA	NA	NA	579	Scales have not been read yet
Juneau	2.2%	8.9%	0.0%	0.0%	0.0%	24.4%	55.6%	8.9%	0.0%	76% ^a	
Petersburg	0.6%	15.7%	4.7%	0.6%	1.7%	14.0%	52.9%	9.9%	0.0%	83% ^a	
Wrangell	0.0%	5.4%	1.4%	0.0%	0.0%	31.1%	40.5%	20.3%	1.4%	64% ^a	
Haines	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	No harvest
Skagway	NA	NA	NA	NA	NA	NA	NA	NA	NA	0	No harvest

^a Percent of the total number of scales were readable and from which an age could be determined

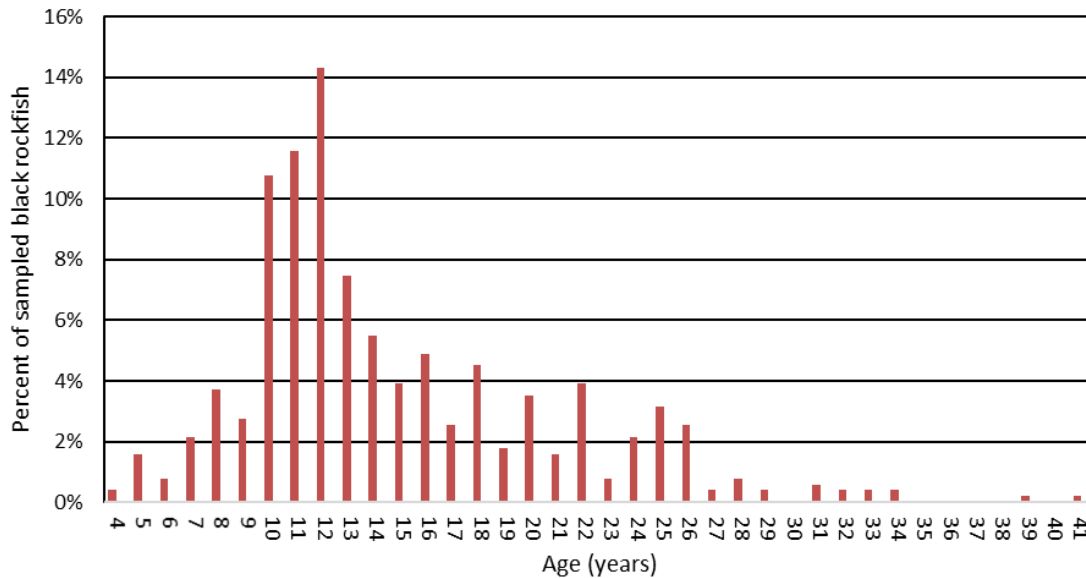
Objective 6: The average net weight of Pacific halibut harvested in Southeast Alaska sport fisheries during the 2017 season ranged from 9.5 pounds in Craig-Klawock to 39.1 pounds in the Yakutat area for chartered anglers, and 14.4 pounds in Juneau to 32.0 pounds in the Gustavus area for private anglers (Table 5). Note that weights of commercial fishery-leased Guided Angler Fish (GAF) halibut harvested by charter anglers were not included in the calculation of average weights of charter harvested halibut.

Table 5.—Summary of average net weights of Pacific halibut sampled from marine boat fisheries (sport) at various ports in Southeast Alaska in 2017.

Location	Private angler		Charter angler	
	Avg wt (lbs)	n	Avg wt (lbs)	n
Craig-Klawock	15.9	271	9.5	728
Elfin Cove	29.5	458	28.6	595
Gustavus	32.0	209	20.2	606
Juneau	14.4	1,453	9.8	397
Ketchikan	17.0	1,254	11.5	951
Petersburg	22.6	513	22.0	167
Sitka	21.4	121	13.3	1,175
Wrangell	26.8	93	13.7	24
Yakutat	26.2	43	39.1	227

Objective 7: A total of 510 sampled black rockfish from the Sitka sport fishery in 2017 were sexed and successfully aged via reading their otoliths. We did not attain our goal of 550 for 2 primary reasons: 1) an unexpected lull in the fishery occurred during July 2017 which created a situation where we deviated from proportional sampling throughout the season that would have allowed us to attain our goal, or come closer; and 2) a small number of sampled fish were identified as black rockfish during dockside sampling and were later found out to be dusky rockfish during otolith analyses; therefore these had to be excluded from our sampling goal and age-sex evaluation for black rockfish. The sex composition of sampled fish was 40% female, and 60% male. The age structure of all sexes combined was skewed to younger fish in the age range of 10 to 14 years old (Figure 1).

Figure 1. Age distribution of black rockfish (n=510) sampled in 2017 Sitka sport fishery



Objective 8: The average round weight of lingcod harvested in Southeast Alaska sport fisheries during the 2017 season ranged from 13.8 pounds in Elfin Cove to 25.6 pounds in the Yakutat area for chartered anglers, and 11.0 pounds in Juneau to 21.7 pounds in the Sitka area for private anglers (Table 6). Since fish are received whole, we estimated the round weight in pounds.

Table 6—Summary of average round weights of lingcod sampled from marine boat fisheries (sport) at various ports in Southeast Alaska in 2017.

Location	Private angler		Charter angler	
	Avg wt (lbs)	n	Avg wt (lbs)	n
Craig-Klawock	15.0	186	18.1	663
Elfin Cove	18.8	24	13.8	67
Gustavus	---	--	14.5	23
Juneau	11.0	9	--	--
Ketchikan	14.7	96	17.4	131
Petersburg	--	--	--	--
Sitka	21.7	49	15.2	179
Wrangell	15.7	2	--	--
Yakutat	14.6	35	25.6	144

FINAL REPORT STATUS:

This performance report constitutes the final report of activities for study S-1-1 during the F-10-33 grant period.

Results from the 2017 investigations will also be published in a Fishery Data Series report titled “Harvest Estimates for Selected Marine Sport Fisheries in Southeast Alaska During 2017” in April 2019.

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DATE: September 4, 2018