

Subsistence Harvest of Herring Eggs in Sitka Sound



2021 Herring preseason meeting
March 12, 2021

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Alaska Department of Fish and Game

Purpose of Presentation

- Regulatory history
- Harvest assessment program
- Recent survey results
- 2021 survey planning



Board of Fisheries actions

- 1989
 - Customary and traditional use determination.
- 2002
 - Sitka Tribe of Alaska (STA) proposal.
 - Amount reasonably necessary for subsistence (ANS) finding of between 105,000 and 158,000 lb of herring spawn.
 - Implement harvest monitoring program.
- 2009
 - ANS revised to 136,000-227,000 pounds of herring roe.



Regulatory actions, continued

- 2012
 - Closure within “core” area to commercial sac roe herring fishery.
- 2015
 - Federal action on Makhnati Island waters
- 2018
 - Expanded closure within “core” area
- 2021
 - Several proposals are before the BOF this cycle

Harvest Monitoring Program

HERRING EGG SUBSISTENCE HARVEST SURVEY SITKA, ALASKA 2019

This survey is used to estimate subsistence harvests of herring eggs from Sitka Sound and to describe community subsistence economies. We will publish a summary report which will be available to all households in your community. We share this information with the Sitka Tribe of Alaska, the Alaska Department of Fish and Game, the U.S. Fish and Wildlife Service and the National Park Service. We work with the Federal Regional Advisory Councils and with local Fish and Game Advisory Committees to better manage subsistence, and to implement federal and state subsistence priorities.

This project is guided by the research principles adopted by the Alaska Federation of Natives in 1993. We will NOT identify your household. We will NOT use this information for enforcement. Participation in this survey is voluntary. Even if you agree to be surveyed, you may stop at any time.

HOUSEHOLD ID:		
COMMUNITY ID:	Sitka	313
INTERVIEWER:		
INTERVIEW DATE:		
DATA CODED BY:		
DATA ENTERED BY:		
SUPERVISOR:		



- To conduct in-person interviews with households who harvest herring spawn.
- To produce estimates of the total pounds of herring spawn harvested on hemlock branches, Macrocystis kelp, hair seaweed and “other” substrates; and,
- To identify locations where herring spawn are harvested.



COOPERATING ORGANIZATIONS

RESOURCE PROTECTION DEPARTMENT
SITKA TRIBE OF ALASKA
429 KATLIAN STREET
SITKA, AK 99835

907-747-7188

DIVISION OF SUBSISTENCE
ALASKA DEPT OF FISH & GAME
802 3RD STREET
JUNEAU, AK 99801

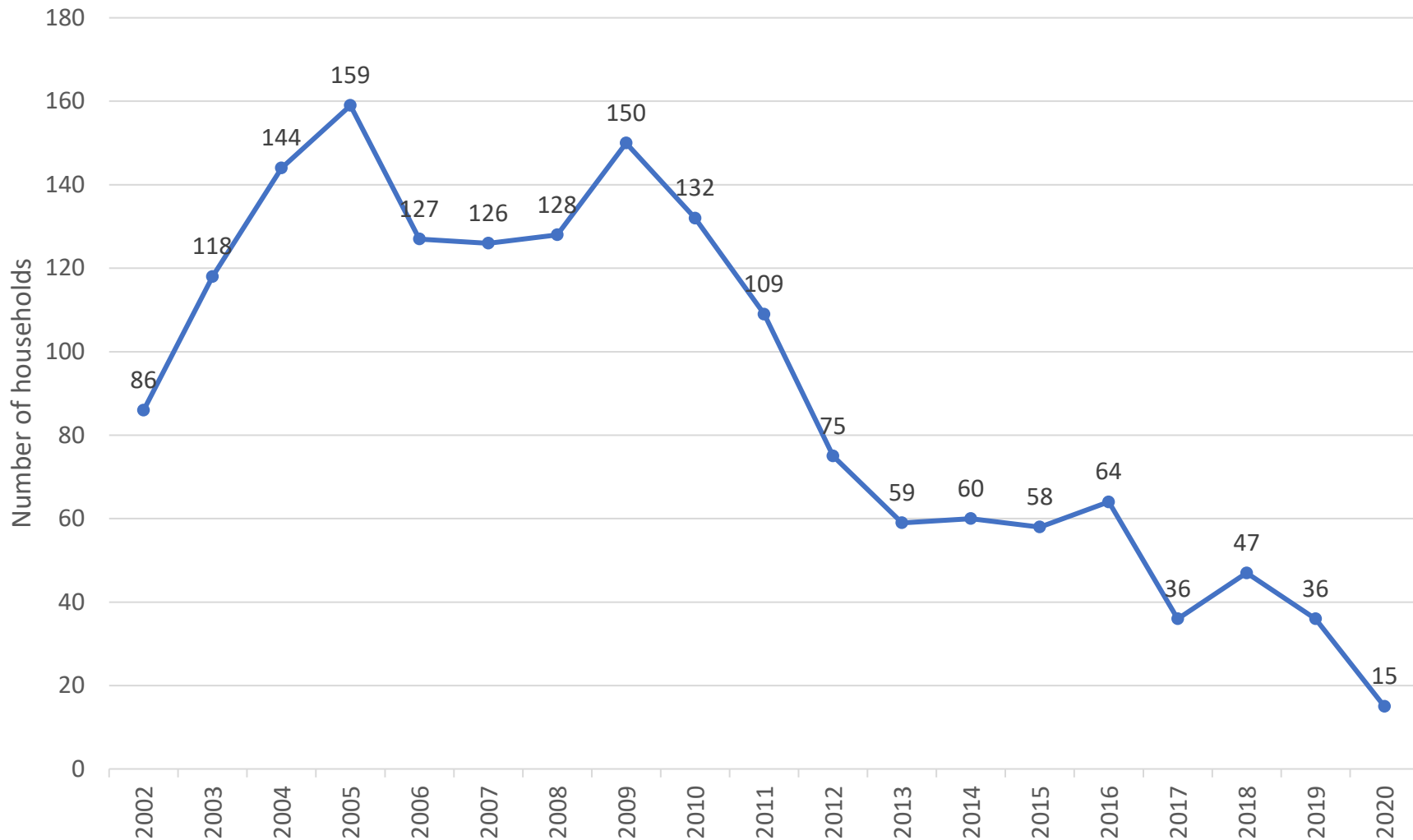
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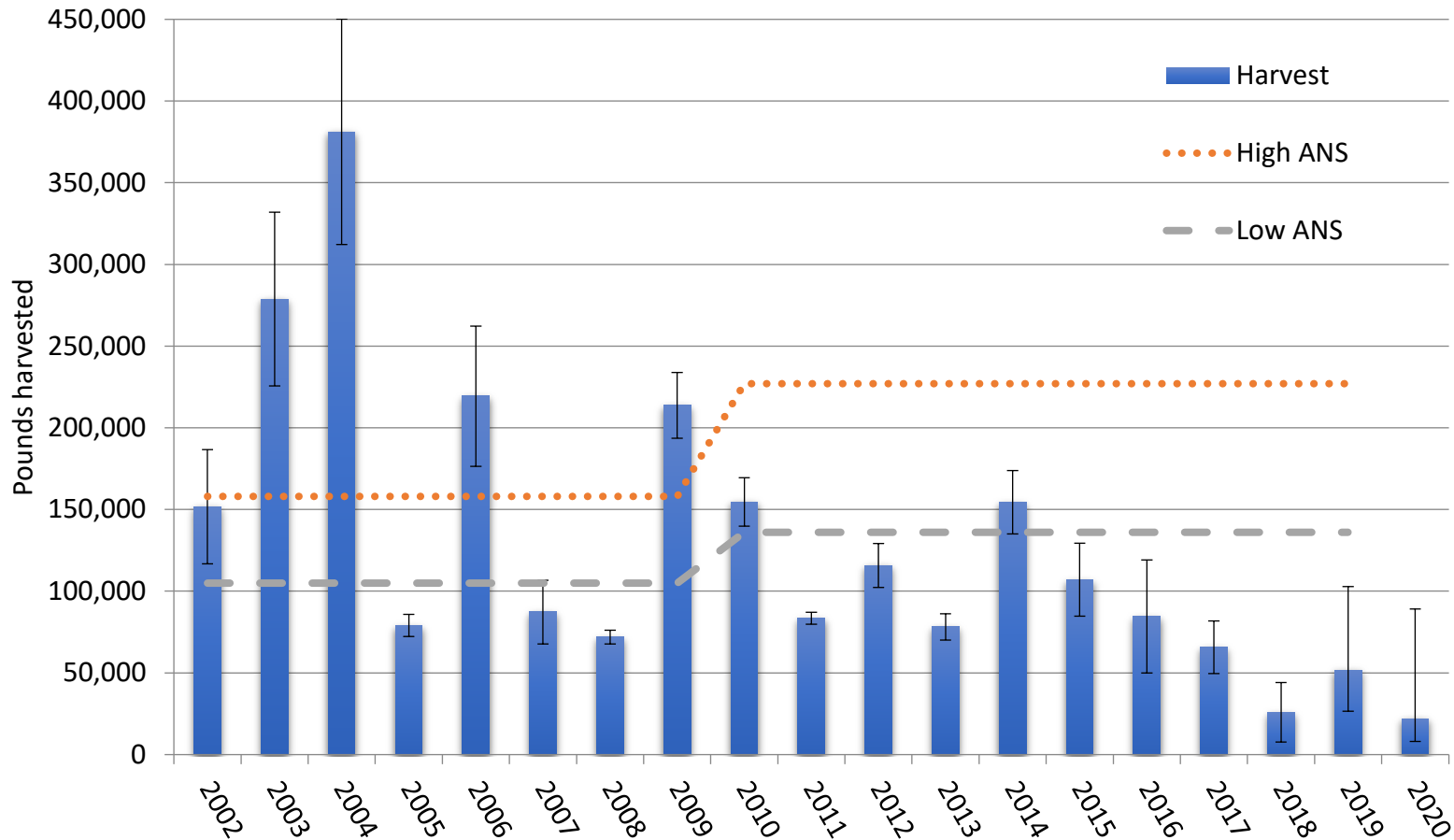
- Determining harvest weights
 - STA and the department work together to develop a set of conversion factors.
 - Apply to most common types of containers.
 - Average weights developed through multiple measurements.



Survey Sample Achievement



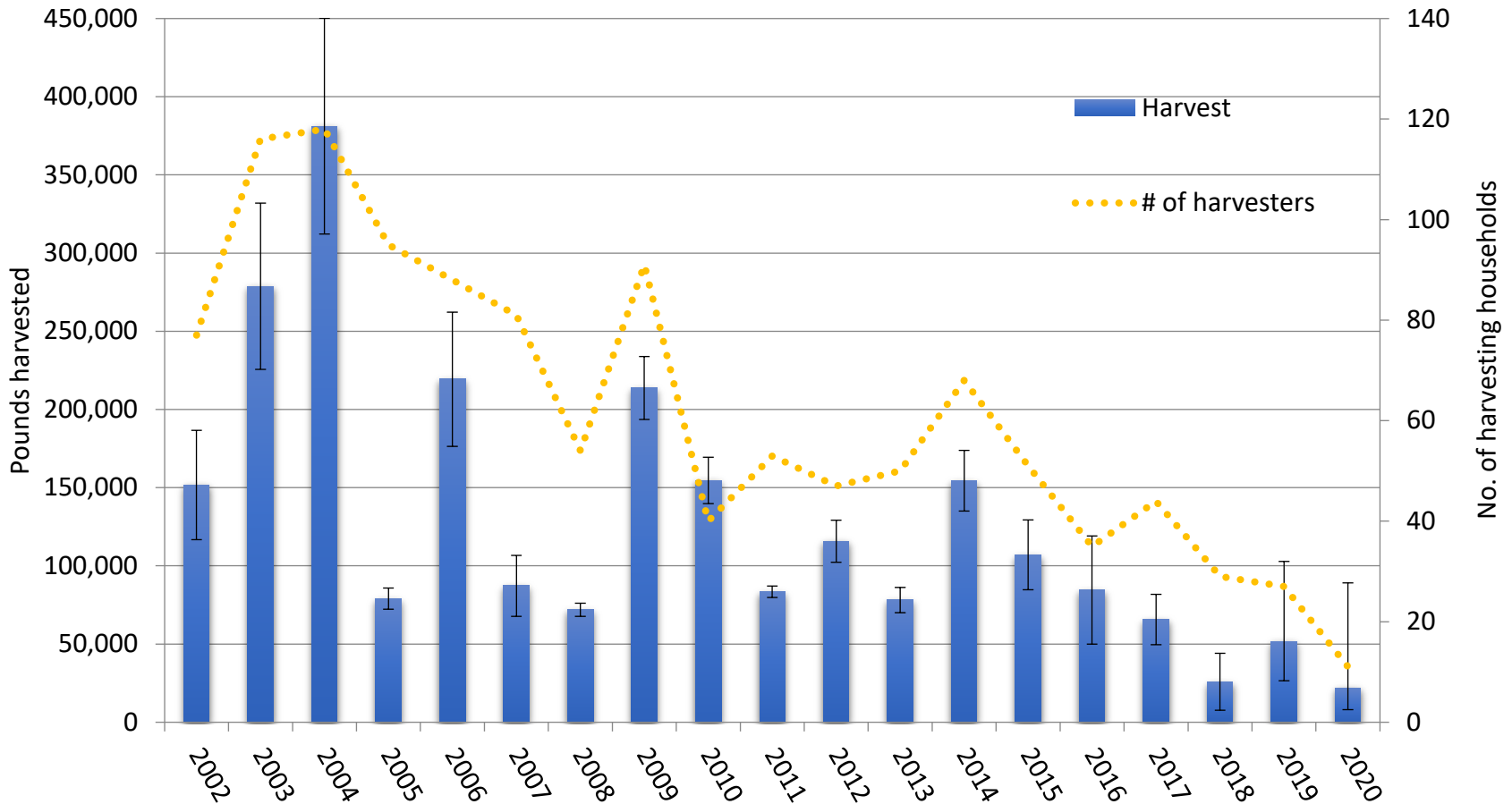
Estimated Harvest



Total pounds useable weight and amount necessary for subsistence (ANS) of herring spawn on all substrates in Sitka Sound, 2002–2020.



Harvest effort



Total pounds useable weight and number of subsistence harvesters in Sitka Sound, 2002–2020.

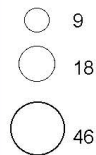


Harvest Locations 2020

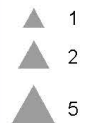
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Percent of harvest weight



Number of respondents



Source: Sitka Tribe of Alaska and ADF&G Division of Subsistence household surveys. Technical Paper No. XXX: The subsistence harvest of Pacific herring spawn in Sitka Sound, Alaska, 2020.

Note: Harvest locations depicted in this map are general and do not represent exact harvest locations. Not all respondents shared harvest amounts per location. Percentages reflect portion of total reported harvest by respondents who answered the question.



Harvest locations, 2011-2020

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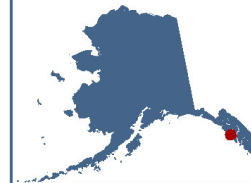


Number of respondents

- 1 - 4
- 5 - 11
- 12 - 18
- 19 - 28
- 64 - 85

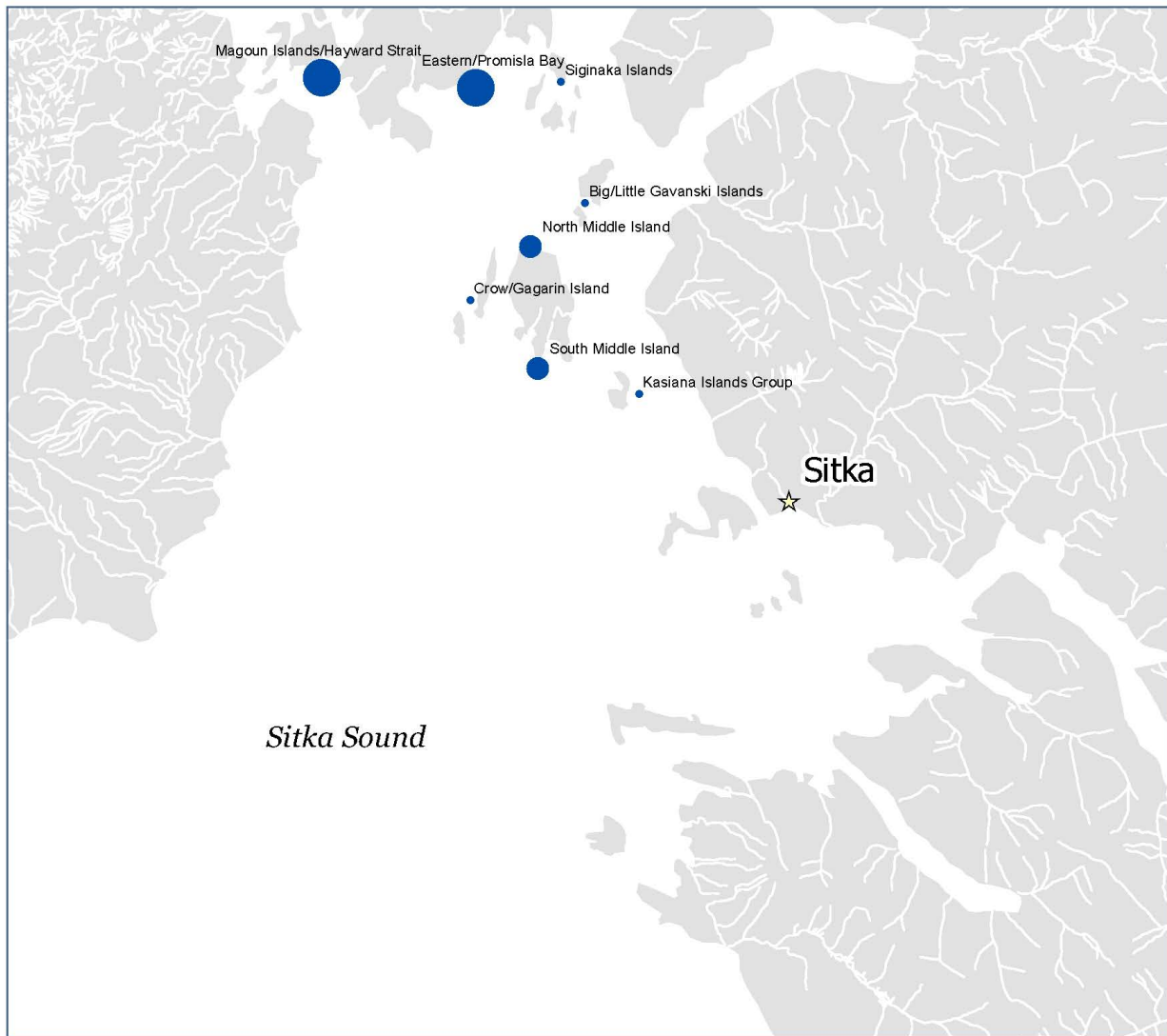
Source: Sitka Tribe of Alaska and ADF&G Division of Subsistence household surveys.

Note: Harvest locations depicted in this map are general and do not represent exact harvest locations. Not all respondents shared harvest location.



Harvest locations, 2017-2020

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Number of respondents

- 4 - 9
- 10 - 14
- 15 - 21

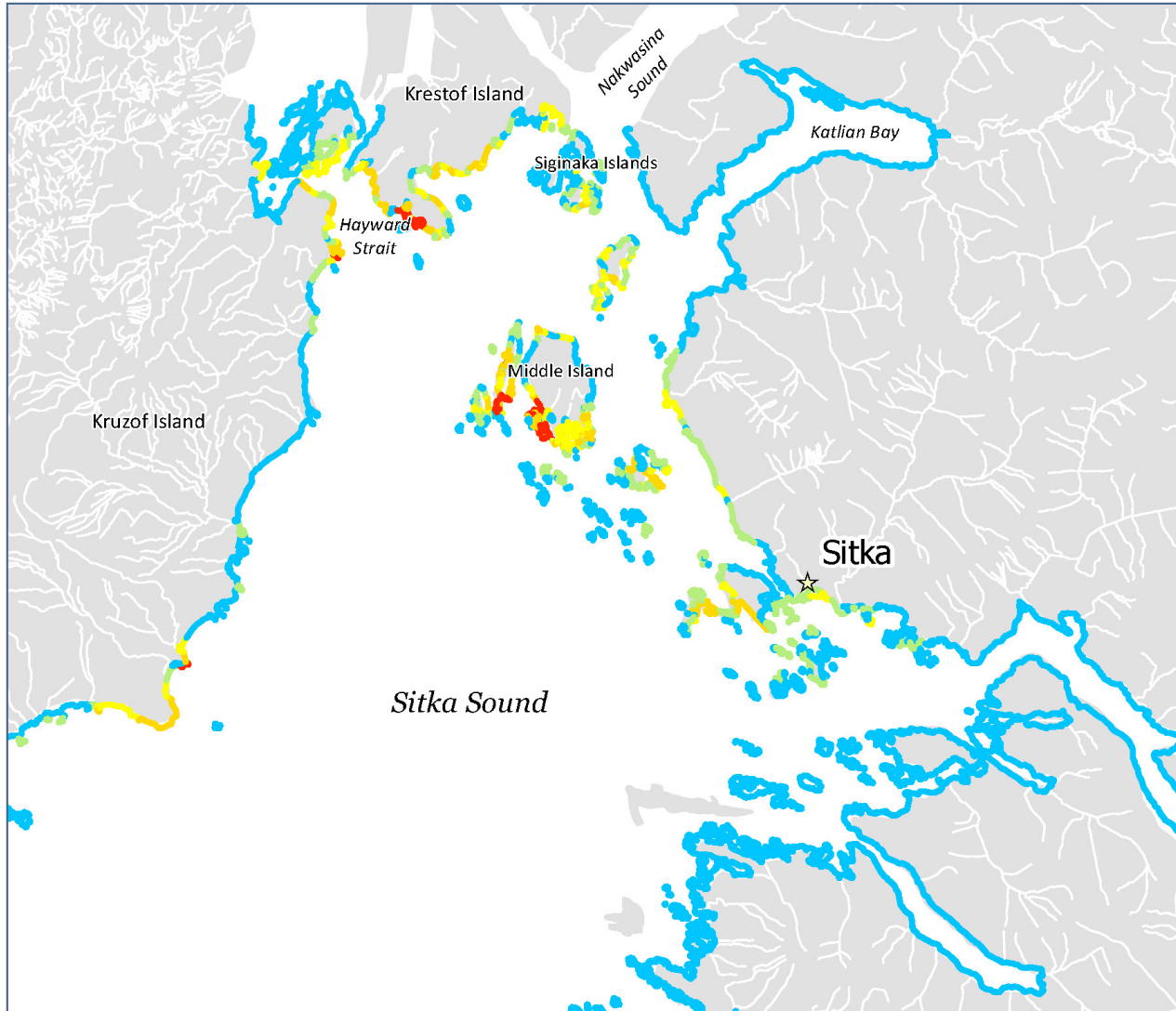
Source: Sitka Tribe of Alaska and ADF&G Division of Subsistence household surveys.

Note: Harvest locations depicted in this map are general and do not represent exact harvest locations. Not all respondents shared harvest location.



Spawning days, 2017

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Number of days of ADF&G-documented spawn 2017

- 0
- 1
- 2
- 3-4
- 5-6

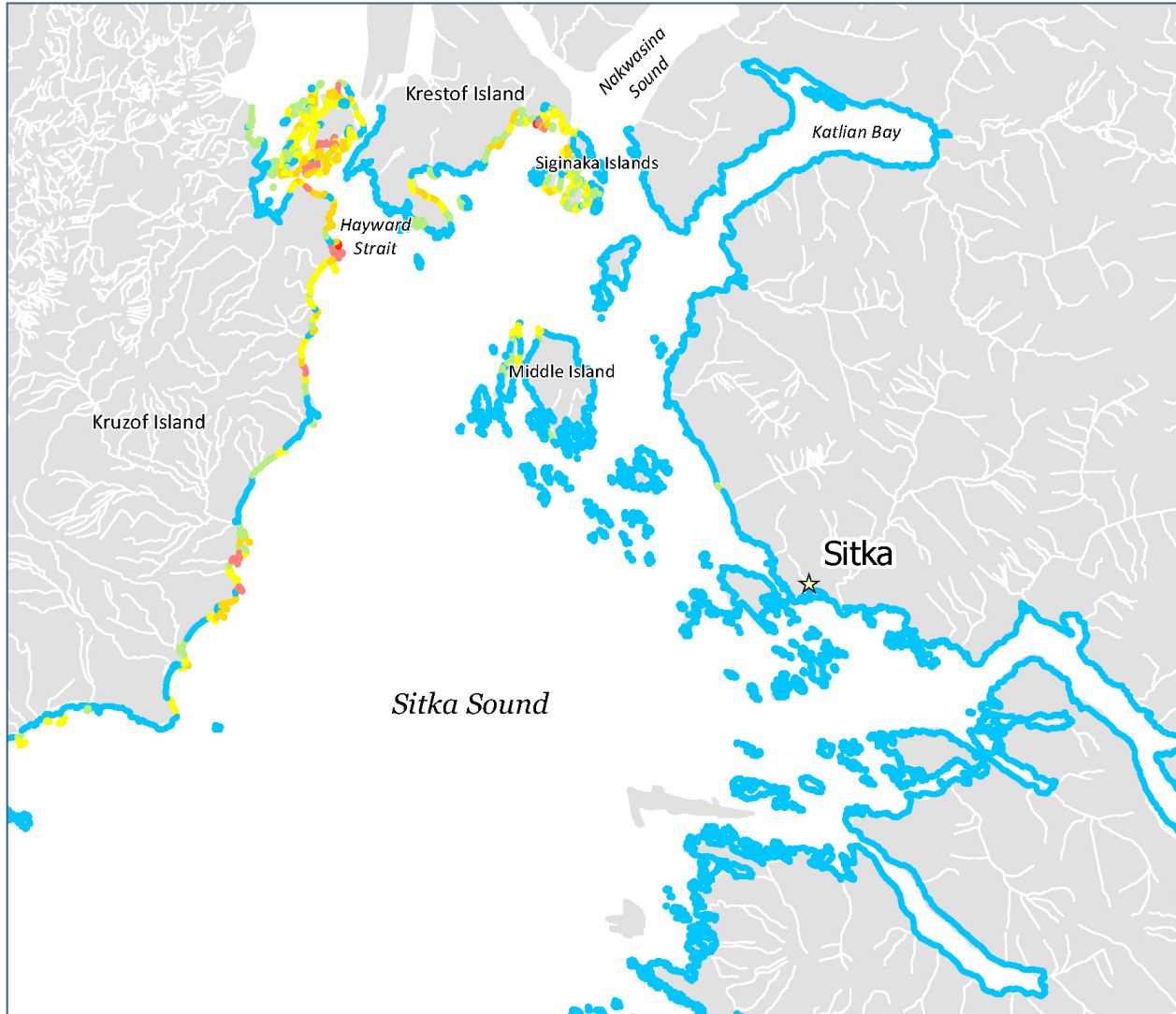
0 1 2 Miles

Map created by ADF&G Division of Subsistence with data provided by the Division of Commercial Fisheries.



Spawning days, 2018

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Number of days of ADF&G-documented spawn 2018

- 0 (Blue)
- 1 (Light Green)
- 2 (Yellow)
- 3 (Orange)
- 4 (Red-Orange)
- 5 (Red)

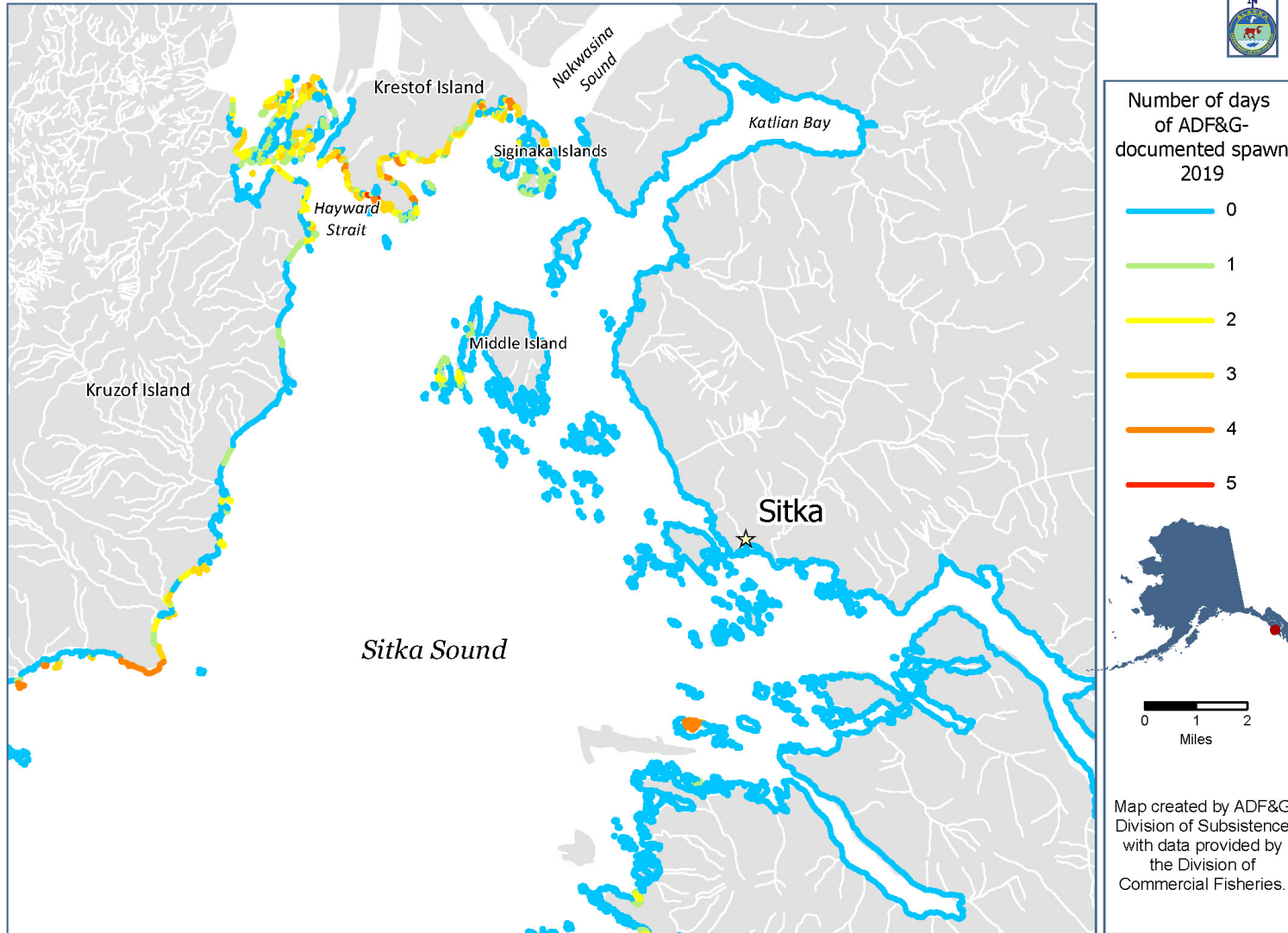
0 1 2 Miles

Map created by ADF&G Division of Subsistence with data provided by the Division of Commercial Fisheries.



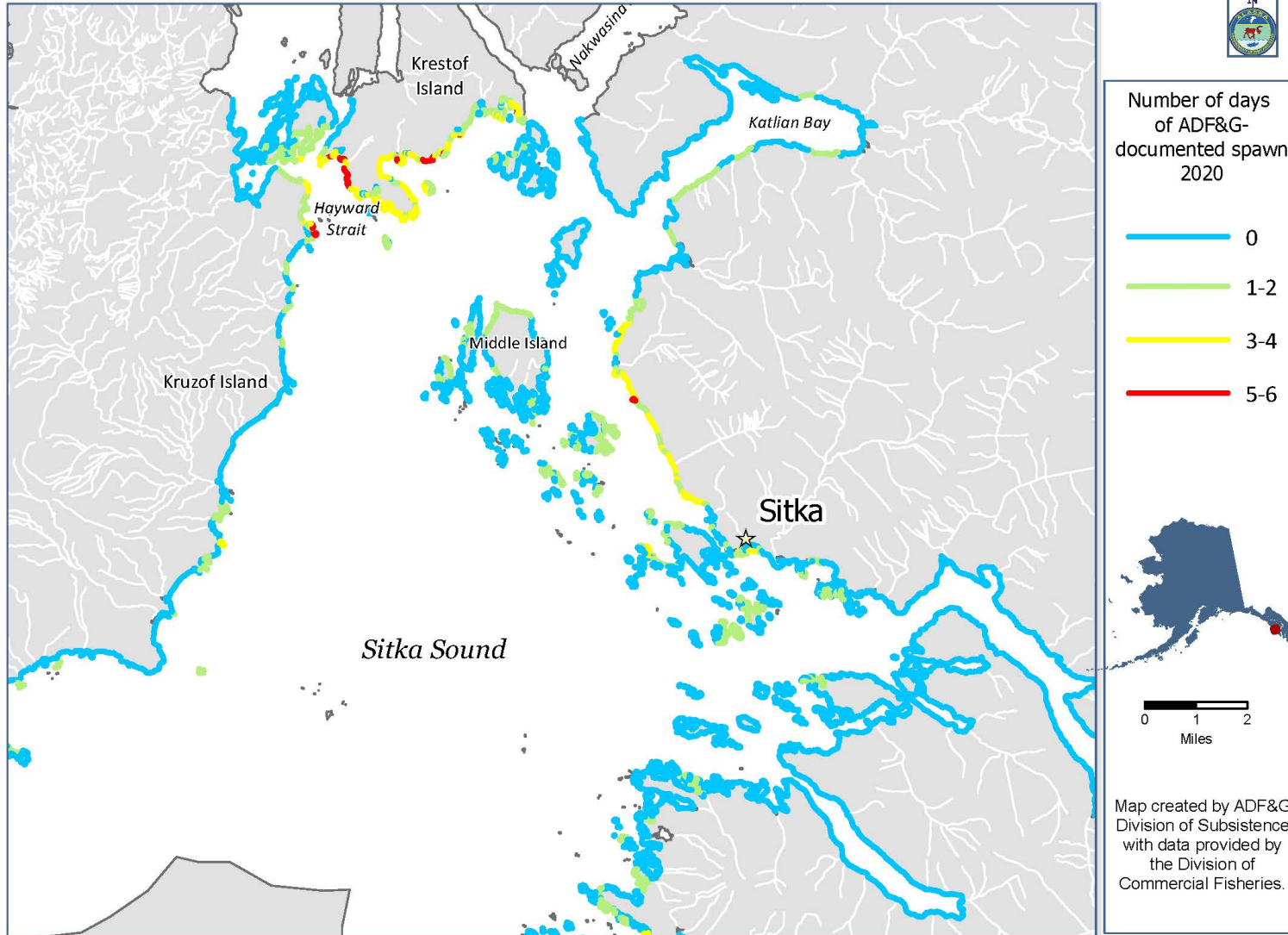
Spawning days, 2019

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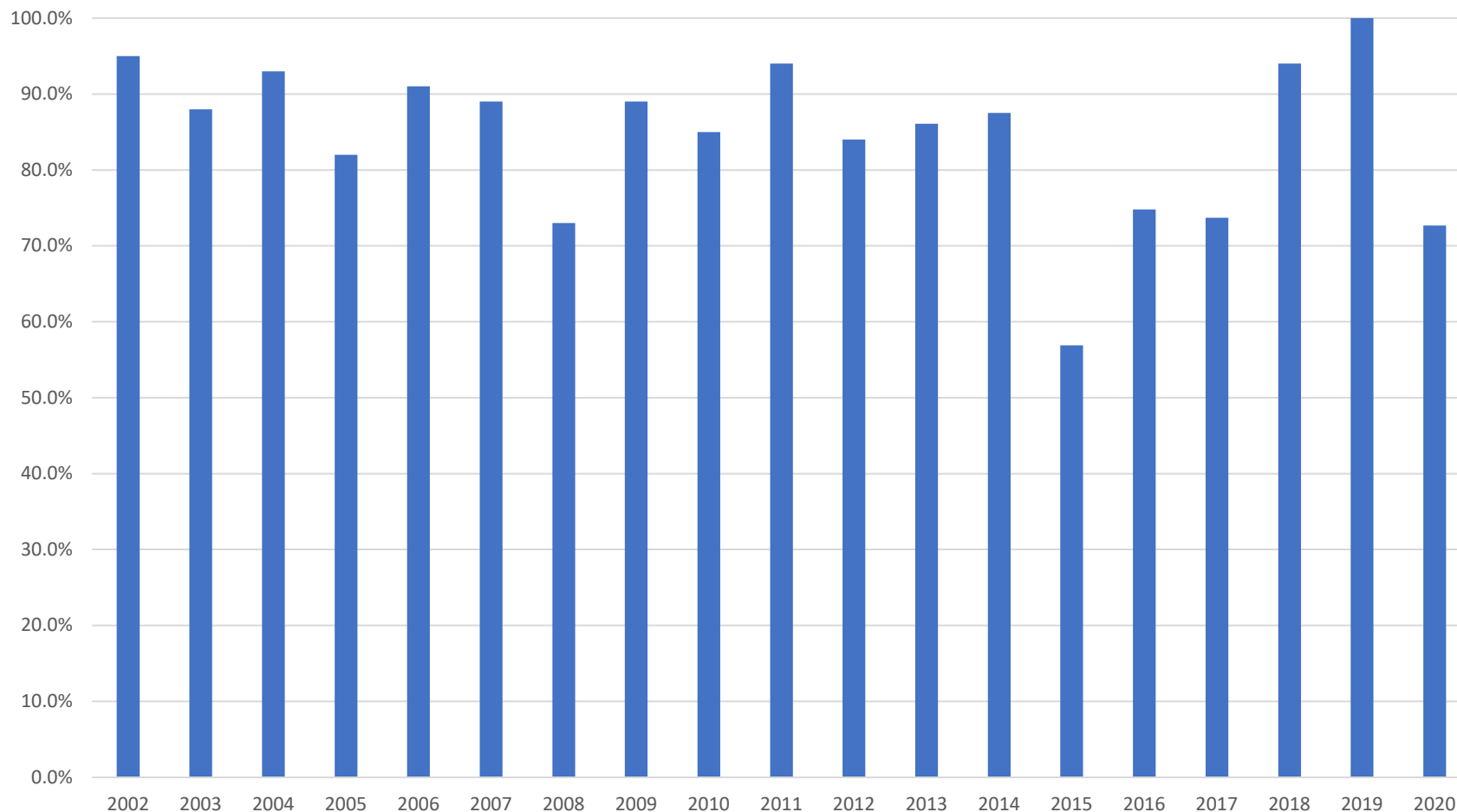


Spawning days, 2020

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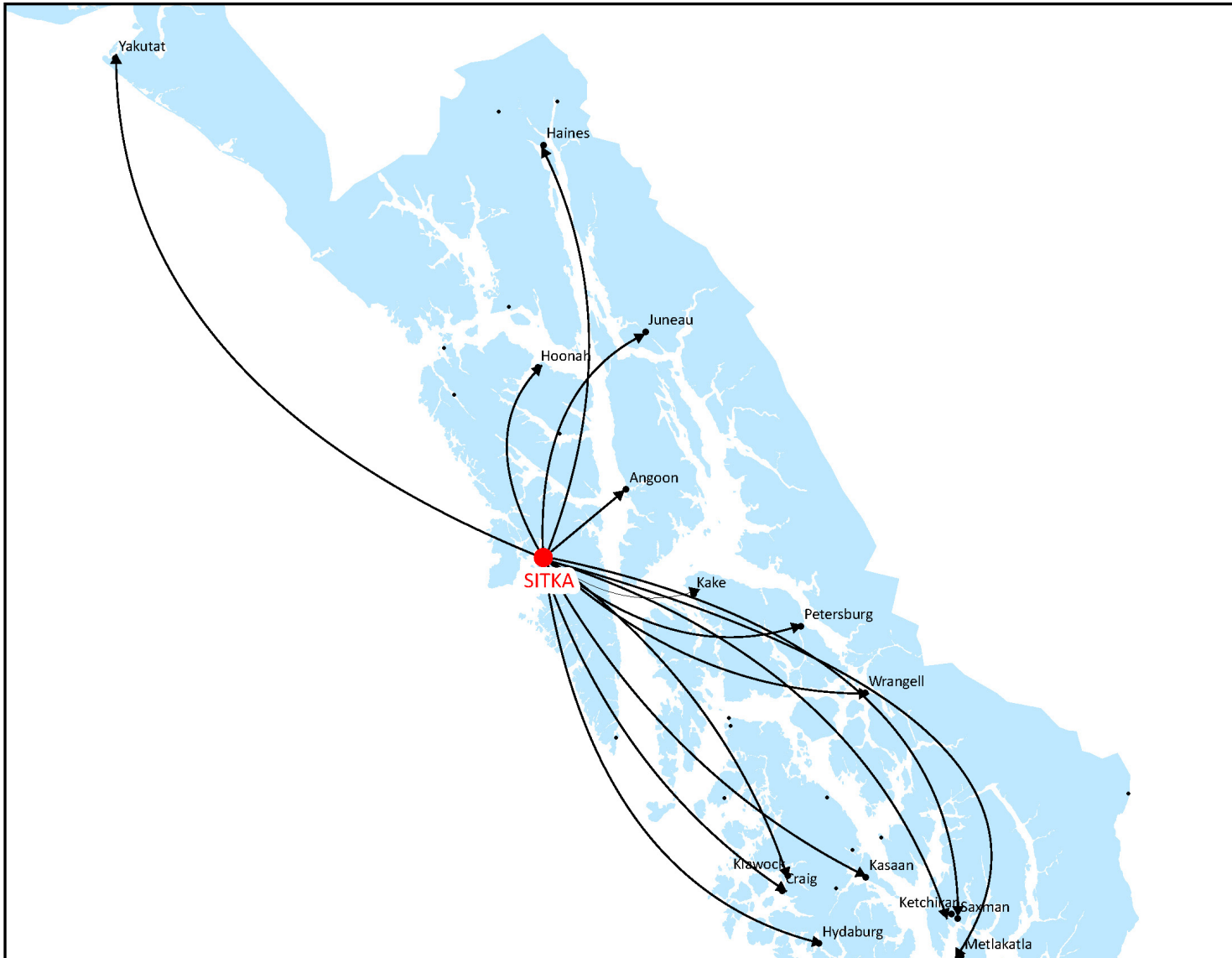
Sharing Herring Eggs



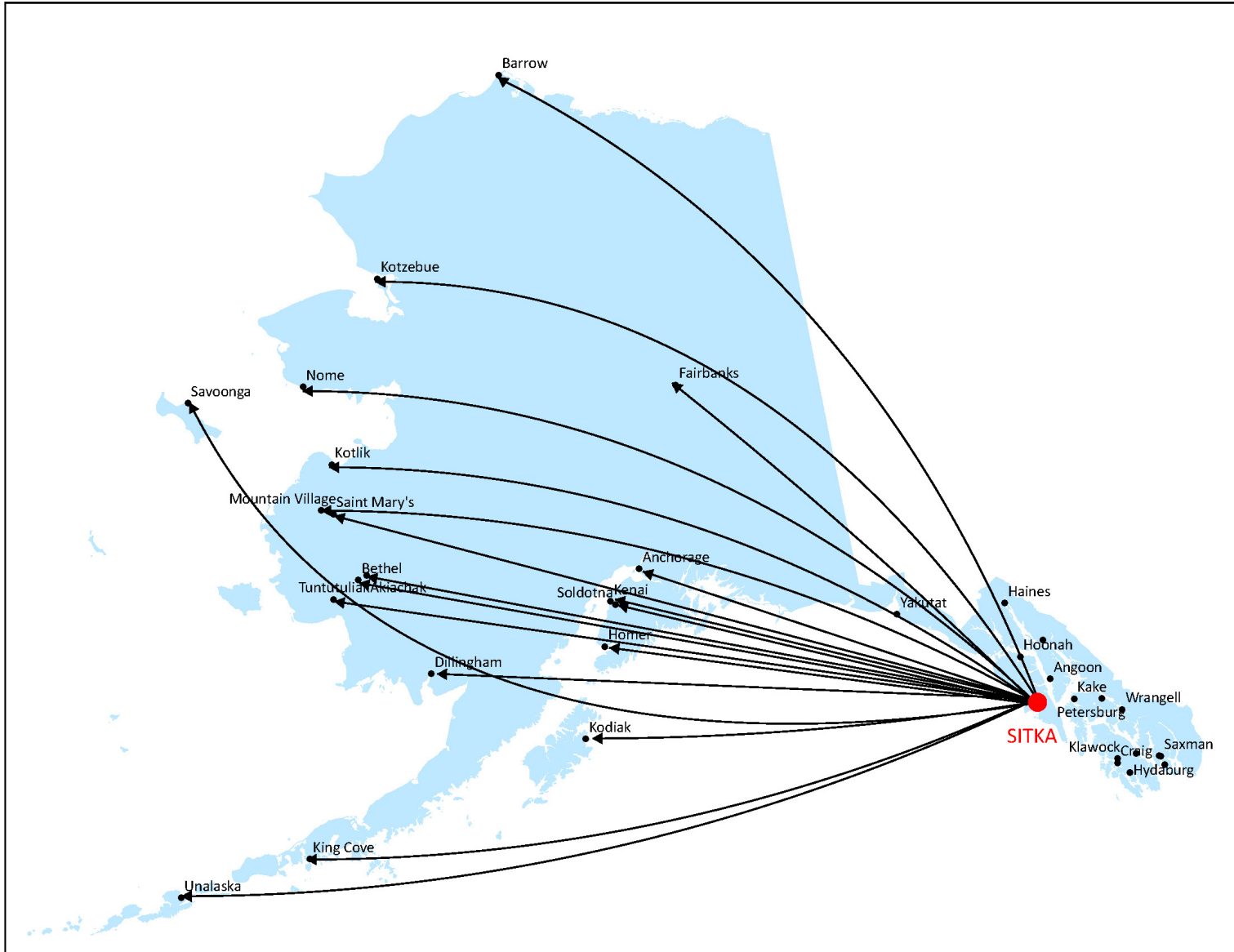
Percent of harvesting households giving away herring eggs, 2002-2020



Sharing Herring Eggs

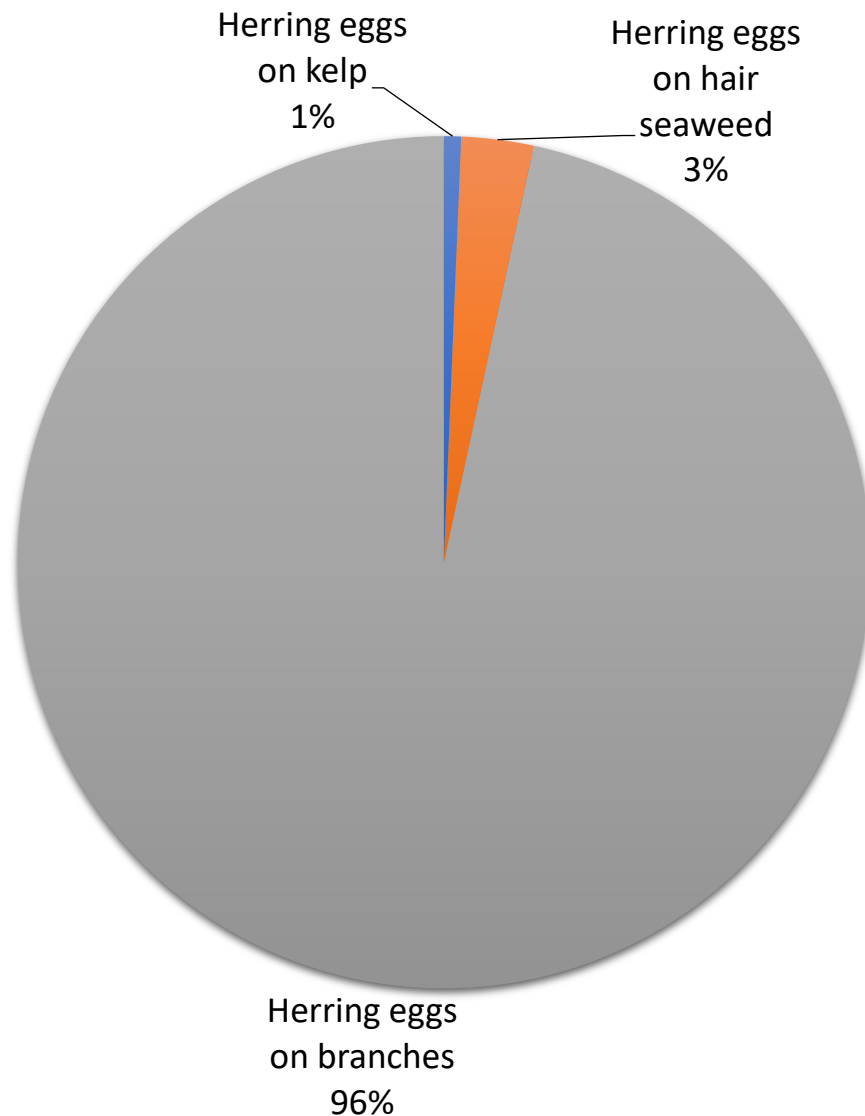


Sharing Herring Eggs

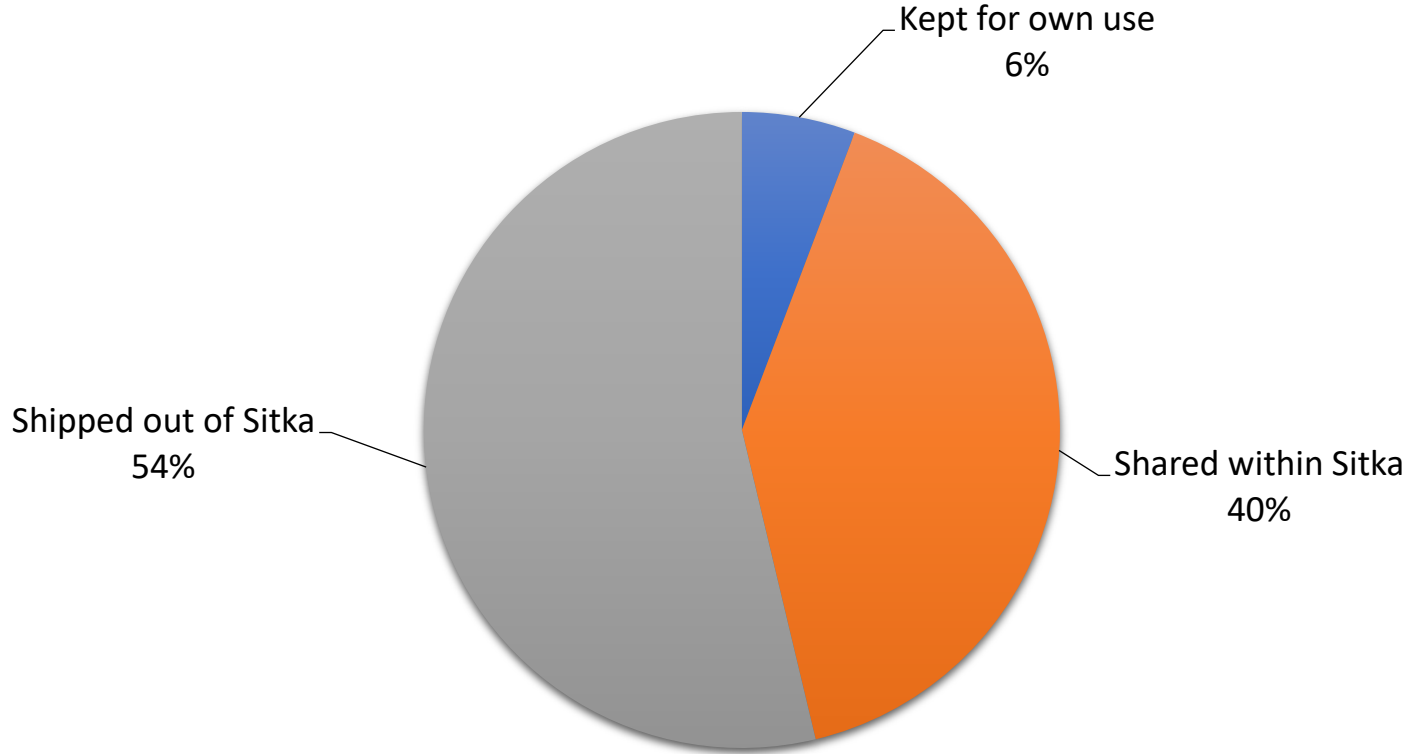


Herring Spawn Harvest by Substrate

	<u>Total pounds</u>
Herring spawn - all types	21,925.7
Herring spawn on hemlock branches	21,183.0
Herring spawn on kelp	142.1
Herring spawn, hair seaweed	600.6



Distribution of Harvest



	Kept for own use	Shared within Sitka	Shipped out of Sitka
Herring spawn - all types	6%	41%	54%
Herring spawn on hemlock branches	4%	41%	54%
Herring spawn on kelp	100%	0%	0%
Herring spawn, hair seaweed	35%	22%	43%



What size vessel did households use to harvest herring spawn in 2020?

Number of households responding	less than 20 feet	20 - 24 feet	Over 24 feet	Commercial vessel	Other	No boat used - harvested from shore
	%	%	%	%	%	%
8	75.0	12.5	0.0	0.0	0.0	12.5

Harvesting households harvested herring spawn for how many households in 2020?

Number of households responding	One	Two to five	Six to ten	Eleven to fifty	Fifty-one to one hundred	Over one hundred
	%	%	%	%	%	%
7	0.0	71.4	0.0	28.6	0.0	0.0

Assessments

Did harvesting households get enough herring spawn in 2020?

Number of households responding	Yes	No
	<hr/>	<hr/>
8	75%	25%

Did harvesting households get enough herring spawn to share in 2020?

Number of households responding	Yes	No
	<hr/>	<hr/>
6	100%	0%

Project timeline

- 2021 project
- April through June: Harvester surveys
- June through October: Data analysis
- November/December: Report writing
- January 2022: Report publication



How you can help



- Sign up to be surveyed.
- Keep your shipping bills.
- Help identify other harvesters, local and non-local.