



SPAWNING NEWS

SOUTHERN SOUTHEAST REGIONAL
AQUACULTURE ASSOCIATION

14 Borch Street
Ketchikan, AK 99901
www.ssraa.org

Vol. 39 No. 3
December 2017

YEAR | IN | REVIEW

SSRAA's 2017 contributions and cost recovery tallied

By DAVID LANDIS
SSRAA General Manager

SSRAA is now 41 years old and has a long track record of positive overall results—year by year, summer by summer. Since communication to southern Southeast fishers is one of the essential responsibilities of this association, we always look forward to telling gear groups and other interested parties about the summer fishing season.

SUMMER CHUM

The actual returns for these fish at all of our sites were the closest ever to our forecast numbers. Forecasting is partly intuitive, but getting this close involves a little luck in choosing among statistical models. Nakat Inlet, Neets Bay and Anita Bay were all at 90-100 percent of forecast and Kendrick Bay came in at about 77 percent. The lower Kendrick numbers may relate to returning 3-year-olds, since only slightly more than 20 percent of the forecast 3s returned. We know that this brood year experienced low-oxygen periods as fry and outmigrated through a large mass of squid in McLean



Tosh Ratzat on the F/V Carol W and other trollers landed good-sized summer chums and in good numbers in 2017. These returns were close to pre-season forecasts. PHOTO BY BROOKE RATZAT

Whatever natural circumstances caused the poor return of pink salmon to southern Southeast Alaska in 2017 equally affected both naturally produced and SSRAA coho. ...The most likely explanation is that during salmon smolt outmigration warmer-water predators extended through southern Southeast.

Arm. There may have been other health issues with this release.

The return of Nakat fish exceeded 100 percent of forecast in actuality, since there is a Canadian fishery directed specifically at SSRAA's Nakat summer chum. This fishery takes place on the U.S.-Canada border near Tree Point. The presence of the Canadian drift and seine fleets was observed and reported to SSRAA by ADF&G during the summer. The fishery was reported as 4,208 chum harvested by the gillnet fleet and 57,896 chum harvested by the seine fleet. It's worth noting that U.S. fishing fleets also catch Canada-bound fish in this fishery.

The overall average weight of our summer chum in cost recovery at Neets Bay was 10.1 pounds, taken from fish tickets. You may recall that in 2016 our summer chum were notably

smaller: 80 percent of this weight, or less. The run timing was also closer to normal this year, though Nakat and Kendrick may have started and ended a little earlier than usual.

This year's chum troll effort was the most effective in catches per unit since expanded troll fishing began in 2010. The fish were simply more catchable; trollers were not using new techniques. There are a lot of theories as to why this would occur. An extended period of high pressure during the peak of the return seems to make the most sense, as the fish did not move quickly up to the barrier. In addition, distribution of fish throughout the water column instead of in a narrow band is also a factor in catchability.

About 29 percent of the Neets Bay return of summer chum was caught before reaching the terminal area. It's important to note that this occurred despite comparatively little seine effort in District

101. The trend of the past several years continues with this high interception rate. The numbers of these fish intercepted before they reach Neets Bay has increased with early-season intensity in the seine fishery in District 102, which is a corridor for Neets Bay chum. It's of interest this year that a significant portion of the Neets Bay return came down Clarence Strait and showed up in the drift fleet harvest in District 106. If you add in the troll harvest, 47.5 percent of Neets Bay summer chum were caught before they got inside the Bug Island special harvest area line.

COHO

Whatever natural circumstances caused the poor return of pink salmon to southern Southeast Alaska in 2017 equally affected both naturally produced and SSRAA coho. The farther south

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Board election ballots expected to assign incumbents and one newcomer to seats

The 2017 election cycle is in full swing and ballots have been mailed to all those with current and updated information in the CFEC database. Ballots are due at SSRAA on Dec. 5.

David Klepser, the incumbent for the gillnet seat, is running unopposed. Klepser runs the F/V Hannah Point and lives in Ketchikan.

The troll slate features one seat up for election this year. Brant Widness, previously the owner of the F/V Wild Fire, is a Ketchikan resident running unopposed for the seat.

Of the two seine open seats, one is expected to be retained by incumbent runner Leif Dobszinsky of Port Townsend, Wash., who has served one term on the SSRAA board. Nyle Thomas of Petersburg is running for second seine seat available this election cycle. Thomas runs the F/V Barbara.

Craig Ring is running unopposed to retain his board seat representing hand trollers. Craig runs the F/V KM2 and lives in Ketchikan.

All five elected individuals will be seated at the January 2018 board meeting in Ketchikan. Board members serve three-year terms.

SSRAA Board of Directors

SEINERS

Dan Castle	Ketchikan	F/V Little Lady
Jim Castle (secretary)	Ketchikan	F/V Miss Ada
Leif Dobszinsky	Port Townsend	F/V Chasina
Brad Haynes	Ketchikan	F/V Sovereign Grace

GILLNETTERS

Brennon Eagle	Wrangell	F/V Danegeld
Chris Guggenbickler (president)	Wrangell	F/V Noelani
David Klepser	Ketchikan	F/V Hannah Point
Bob Martin	Petersburg	F/V Sumner

POWER TROLLERS

Tom Fisher (vice president)	Ketchikan	F/V Aquarius
Pat Tyner	Craig	F/V Rauma
Charlie Piercy (pres.)	Ketchikan	F/V Tuckahoe
Brian Warmuth	Ketchikan	F/V Shannon Hope

HAND TROLLER

Craig Ring	Ketchikan
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APPOINTEES

John Clifton (treasurer)	Ketchikan	Sportfish
Paul Cyr	Ketchikan	Processor
Mary Edenshaw	Klawock	Native Corporation
Cindy Lasiter	Ketchikan	Public at Large
Lynnette Logan	Craig	Chamber of Commerce
Mike Painter	Ketchikan	Municipality
Sandy Souter	Ketchikan	Public at Large
John Yeager	Wrangell	Subsistence

The 21-member SSRAA Board of Directors includes 13 commercial fishers along with representatives of interest groups and the public.

ssraa.org

SSRAA Spawning News is published by the Southern Southeast Regional Aquaculture Association, a private, non-profit aquaculture corporation based in Ketchikan, Alaska.

Our web site is www.ssraa.org.

This publication is mailed free to all limited-entry salmon permit holders for purse seine, drift gillnet, power troll and hand troll in Alaska Districts 1-8. It is also mailed free to any person interested in SSRAA.

To receive Spawning News, send a request with your name, your organization's name and your address to: Spawning News / 14 Borch St. / Ketchikan, AK 99901.

For changes of address for permit holders, notify: Commercial Fisheries Entry Commission / 8800-109 Glacier Highway / Juneau, AK 99801.

The CFEC fax number is 907-789-6170.

SSRAA uses mailing labels from the CFEC. If your address is wrong, please contact CFEC; SSRAA cannot correct your address for CFEC.

SSRAA calendar

SUN	MON	TUE	WED	THU	FRI	SAT
		1	2	3		
Nov. 28	Purse Seine Task Force / Ketchikan					
Nov. 29	Gillnet Task Force / Ketchikan					
Nov. 30	Regional Planning Team (RPT) Meeting / Ketchikan					
Dec. 5	Board of Directors ballots due to SSRAA					
Dec. 6	Election Committee / SSRAA offices					
Dec. 11	Finance Committee – Production Committee / Ted Ferry Civic Center, Ketchikan					
Dec. 12	Production Committee – Board Development – Cost Recovery Ad Hoc / Ted Ferry Civic Center, Ketchikan					
Dec. 13	Board of Directors / Ted Ferry Civic Center, Ketchikan					
Jan. 25	Finance Committee – Strategic Planning Session / Cape Fox Lodge, Ketchikan					
Jan. 26	Board of Directors Annual Meeting / Cape Fox Lodge, Ketchikan					
March 6	Production Committee / Location TBA, Ketchikan					
March 7	Board of Directors / Location TBA, Ketchikan					

Ballots are due Dec. 5 at SSRAA for the 2017 Board of Directors election. Two seine seats, a gillnet seat and a troll seat are up for election.

SSRAA Staff

ADMINISTRATION AND OPERATIONS

Dave Landis	General Manager
Bret Hiatt	Operations Manager
Bill Gass	Production Manager
Steve Reid	Assistant Production Manager
Cindy Walters	Executive Administrative Assistant
Liz Jones	Administrative Assistant
Jay Johnson LLC	Accounting Services

RESEARCH & EVALUATION

John Holt	Research & Evaluation Manager
Stephanie Sanguinetti	Lab Supervisor
Alan Murray	Lead Research Technician
Whitney Crittenden	Lead Research Technician
Taylor Pearson	Research Technician

WHITMAN LAKE HATCHERY

Jay Creasy	Hatchery Manager
Mark Tollfeldt	Assistant Hatchery Manager
Cody Pederson	Lead Fish Culturist
Caitlin Brady	Fish Culturist
Mike Moreno	Fish Culturist

NEETS BAY HATCHERY

Craig Parry	Hatchery Manager
Mike McWaters	Assistant Hatchery Manager
Dale Wainscott	Lead Fish Culturist
Stan Rice	Fish Culturist
Ryan Patten	Fish Culturist
Andy Gilsdorf	Fish Culturist (10 month)
Andrew Pung	Fish Culturist (10 month)
Richard Flaggs	Maintenance Supervisor
Daniel Perry	Lead Maintenance Technician
James Adams	Maintenance Technician (10 mo.)

BURNETT INLET HATCHERY

Jon Thorington	Hatchery Manager
Cain DePriest	Assistant Manager
Tony Belback	Fish Culturist
Anna Tollfeldt	Fish Culturist (10 month)

CRYSTAL LAKE HATCHERY

Loren Thompson	Hatchery Manager
Kevin Chase	Assistant Hatchery Manager
Wesley Malcom	Lead Fish Culturist
Stephan Smith	Fish Culturist

NECK LAKE REARING AND HARVEST FACILITY

JR Parsley	Facility Manager
Dolores Loucks	Fish Culturist
William Pattison	Seasonal Fish Culturist

DEER MOUNTAIN HATCHERY

Matt Allen	Assistant Hatchery Manager
Michelle Leitz	Lead Fish Culturist

KLAWOCK RIVER HATCHERY

Jeff Lundberg	Hatchery Manager
Troy Liske	Assistant Hatchery Manager
Sheldon Sammon	Fish Culturist
Paul Young	Fish Culturist
Jesse Knock	Fish Culturist (10 mo.)
Stuart Cole	Maintenance Supervisor

MAINTENANCE DEPARTMENT

Ted Addington	Maintenance Manager
Jake Arnold	Lead Maintenance Technician
Tim Emmons Doerschuck	Maintenance Technician

Burnett staff installs new system for spawning fish

CUSTOM FABRICATION BOOSTS EFFICIENCY AND EASES RIGORS OF PROCESSING



New equipment used in spawning salmon at Burnett Inlet Hatchery was custom-fabricated by the staff. The new process is gentler for egg sacs and more ergonomic for personnel. PHOTO BY ANNA TOLLFELDT



The new Archimedes screw gently lifts salmon to the processing equipment inside the hatchery facility. PHOTO BY ANNA TOLLFELDT

By **ANNA TOLLFELDT**
Fish Culturist
Burnett Inlet Hatchery

Last summer was a busy one for everyone at Burnett Inlet Hatchery. After a jam-packed spring of custom HDPE (high-density polyethylene) fabrication to get the new head box plumbing finished, Jon, Tony, Cain and this writer jumped right on to the next task: getting the new flow-through shocker system designed and welded to fit in the small egg-take area at the head of Burnett's raceways.

Starting from the raceway, the fish are crowded up to the head where the new Archimedes screw sits. As the screw turns, fish are continuously picked up and then dropped into the plastic hopper/dewatering box. The live adults then slide down a tube and into the first section of the flow-through shocker tube. The shocker has three different conductive points before the fish exit the custom-made, U-shaped shocker tube. Then they drop on to a dewatered sorting table, where males and females are sorted and pushed up to the two horizontal spawning stations.

Personnel on spawner duty slice the bellies of ripe females while they lie on their sides; not a single fish is lifted. Eggs fall gently into a trough, which leads to a bucket on a stand that sits at an angle so that the eggs do not free-fall. Spawners

also fertilize the eggs by simply squeezing the males on their sides, getting the milt mixed in the eggs as they move down the trough and into the bucket. Because the females aren't being squished in a shock box, they aren't losing as many eggs before spawning—which has led to much higher fecundities.

I have to admit, at first I was a bit skeptical of spawning like this. But I blame that on my muscle memory being so used to actually lifting every ... single ... fish! Now that I've practiced these new spawning movements, I don't ever want to go back to vertical spawning. I actually look forward to spawning horizontally, because I know I can do these repetitive movements without worrying about carpal tunnel or any other physical pain that I've experienced from repetitive vertical spawning in a major egg take. I can horizontally spawn pretty dang fast now, too. It took some practice, but I've got it down.

Once the egg bucket reaches its weight goal, it is dumped into the egg rinser, which rinses eggs and feeds them into the Kitoi box.

With this setup, staff at Burnett are able to do our egg take with fewer hands. Next year, when the crowding system is updated and complete, the whole operation will flow more smoothly and efficiently.

At first I was a bit skeptical of spawning like this. Now ... I don't ever want to go back.

After several trial-and-error summer chum egg takes, using the three different settings provided with the shocking system, the summer chum eggs were eventually shocked and picked. At first, everyone was alarmed by the egg survivals being about 70 percent of average. Despite this, Burnett still met the egg goal. But something else was discovered: salinity levels were affecting survivals. We found that eggs taken from

adults and shocked in a higher salinity level had poorer survivals than those with a lower salinity level.

With that taken into account, the salinity levels were lowered and carefully monitored during the fall chum egg takes and that made a huge difference. The fall chum egg survivals all ended up being in the mid 90-percent range. With some of the bugs worked out, everyone is looking forward to a smoother ride next year.

Outreach projects educate tourists and engage Alaskan students

By MATT ALLEN

Assistant Hatchery Manager

Deer Mountain Hatchery opened its doors to the community of Ketchikan and to tourists on July 24. People walked through the hatchery to engage with knowledgeable hatchery staff and hungry king salmon from 10 a.m. to 2 p.m. on weekdays the rest of the summer.

The facility is far from finished for tourism and outreach. It's more of a work in progress and probably will be for some time. Despite the hatchery's unpolished appearance, people were provided with knowledge and in some instances an education on the who, what, where and why of salmon enhancement.

For many, the highlight was the opportunity to feed our fish. Unlike many other industries that people depend on for sustenance, ours is one that consumers can interact with. Visitors were enlightened to learn that our fish live wild and free before returning as adults to potentially be harvested and become human food.

Traffic through the facility fluctuated with the weather and the numbers of tourists loosed upon the streets of Ketchikan. Some days, only a few dozen people ventured our way; other days, it could be several hundred. Adding Deer Mountain to visitor attractions in the area generated more foot traffic for City Park, the Totem Heritage Center and upper Ketchikan Creek and helped to better tell about symbiotic relationships in this unique ecosystem.

Comments from visitors who walked through the hatchery were exceedingly positive. Even those of us whose primary profession is fish culture found enjoyment engaging with and educating inquisitive people. Many of the questions we fielded were quite basic. What kind of salmon do you raise? How old are they? What do they eat? What do you do with the fish in the winter? How many salmon do you raise? There were many others. Our answers often expanded into the greater tale of Alaskan enhancement hatcheries and our role in the commercial fishing industry and communities across our state.

Tourism wasn't our only responsibility for the summer. First and foremost, we're committed to raising 500,000 Chickamin chinook for



Ketchikan kids painted a mural on the viewing wall at Deer Mountain Hatchery in the first year of a multi-faceted outreach program. Chickamin chinook at the facility help SSRAA to educate visitors about Alaskan aquaculture and to reach out to students.

release in Carroll Inlet and Ketchikan Creek.

Ketchikan residents once again were able to cast for returning king salmon from the bridge just above Thomas Basin. We are re-engaging with local schools by providing hatchery tours, salmon-in-the-classroom opportunities and other activities. On Nov. 15, we conducted spawning demonstrations for Ketchikan Charter School and Tongass School of Arts & Sciences. We brought adult coho from Whitman Lake Hatchery to the students and provided hands-on opportunities to learn about salmon anatomy and reproduction as they pertain to hatchery salmon enhancement.

We would like to give special thanks and recognition to artist Loren McCue, along with her family, students, colleagues and the parents of Tongass School of Arts & Sciences students. They generously donated time and artistic vision for a mural of "Artsy Salmon" at Deer Mountain Hatchery. Funding was through a grant from American Seafood Company. Many hours were dedicated in April and May to complete a unique mural depicting what salmon mean to the students of TSAS.

ssraa | PEOPLE

COLORADAN SWAPS LANDLOCKED AQUACULTURE FOR ARCHIPELAGO CAREER

The first salmon Cain DePriest handled professionally were sockeyes at about 7,100 feet.

Those were hatchery kokanees in the lake-stocking program of Colorado Parks and Wildlife. DePriest also worked with cutthroat trout and Arctic char at Mt. Shavano Hatchery on Colorado's Western Slope. He was three miles from the town of Salida by good road.

DePriest has spent the last seven years at sea level on Southeast Alaskan islands, up to his elbows in sea-run salmon—first for NSRAA and then as assistant hatchery manager at SSRAA's Burnett Inlet Hatchery since August 2016.

"I've never lived in a town in Alaska," he said by phone from Burnett Inlet. "I've always lived in remote places up here."

DePriest grew up in the mountains of Western Colorado. He was accustomed to small towns hedged in by big terrain.

Out of high school, he picked a college program close to his heart. "I grew up hunting and fishing," he said. "It just evolved from there, I guess." DePriest earned a two-year degree in fisheries biology and a bachelor's degree in wildlife biology at Colorado State University in Fort Collins. He went home and worked for four years at Fish and Wildlife's hatchery near Salida, culturing trout, char and salmon—landlocked kokanees. When it was time for a career move, he saw two options: a sea run or a pivot on home ground.

"I was looking for full-time employment in fisheries and I had a

See SSRAA People on 5



Hatchery match—Cain DePriest and Jessica DePriest

SSRAA returns | PRELIMINARY FORECAST FOR 2018

Species	Site	5 YR	4 YR	3 YR	CP	Terminal	Total
S Chum	Neets	123,300	868,300	356,300	363,933	983,967	1,347,900
S Chum	Nakat	41,000	187,200	32,100	130,150	130,150	260,300
S Chum	Anita	77,000	290,000	92,000	229,500	229,500	459,000
S Chum	Kendrick	57,300	434,200	141,000	442,750	189,750	632,500
S Chum	Burnett	Not enough data for forecast computation					

F Chum	Neets	4,000	50,000	5,400	14,850	44,550	59,400
F Chum	Nakat	no release	34,655	22,235	19,912	36,979	56,890
F Chum	Burnett	Not enough data for forecast computation					

Species	Site	6 YR	5 YR	4 YR	CP	Terminal	Total
Chinook	Whitman	700	6,600	5,000	3,690	8,610	12,300
Chinook	Neets	1,000	10,000	7,100	5,430	12,670	18,100
Chinook	Anita	2,000	9,000	4,400	4,620	10,780	15,400
Chinook	Crystal	600	2,000	700	1,650	1,650	3,300

		5 YR	4 YR	3 YR	CP	Terminal	Total
Chinook	Port St Nich	24	422	533	294	685	979

Species	Site	CP	Terminal	Total
Coho	Whitman	15,488	5,163	20,650
Coho	Neets	57,901	24,815	82,716
Coho	Nakat	19,665	2,185	21,850
Coho	Anita	7,600	2,300	9,900
Coho	Neck	27,550	27,550	55,100
Coho	Burnett	10,300	3,500	13,800
Coho	Crystal	5,300	960	6,260
Coho	Klawock	156,835	67,215	224,050

SSRAA People CONTINUED FROM 4

choice of Colorado or Alaska,” he said. “I’d thought about Alaska since I was young. I always knew I wanted to go there.” (It’s probably irrelevant in DePriest’s case, but it is a fact that “salida” is Spanish for “exit.”)

NSRAA offered a job at Hidden Falls Hatchery and DePriest took it. He worked six years at the remote facility on Baranof Island, producing chum, coho and chinook. He settled into Southeast Alaska’s lifestyle. Opportunities for fishing, hunting, crabbing and hiking compensated for privations such as infrequent floatplane service, sketchy internet and a small hatchery staff to interact with.

Colorado is just Alaska without the ocean. And the rain.

“I’ve made Alaska my home,” he said. It’s not so different from his first home. “Colorado is just Alaska without the ocean. And the rain.”

NSRAA’s air link to civilization was fateful. DePriest spoke occasionally by phone with a young woman at the Sitka base of Harris Air, the Hidden Falls Hatchery’s supply and transport contractor. A friend of that woman’s worked with DePriest at Hidden Falls. “The first five years I was there, I never once saw Jessica. But her friend kept saying that we should meet,” he said. And when DePriest at last flew to town for a date, he hit it off with the Sitka townie.

When SSRAA hired Cain DePriest as assistant manager at Burnett Inlet for SSRAA, Jessica DePriest was making the move with him. DePriest said his wife isn’t a stranger to life off the grid. She grew up in Southeast, daughter of a bush pilot and the veteran of work on fishing tenders before her air-carrier gig. “At least she was exposed” to the concept of life in the boonies, he noted.

DePriest said SSRAA’s amenities at Burnett Inlet—frequent air service, good phones and a new HughesNet broadband link—are a step up for the couple’s private life.

“There are plenty of projects” at Burnett Inlet to engage his workdays, DePriest said. Burnett Inlet Hatchery’s summer chum and fall chum programs are ramping up and support other hatcheries in the SSRAA system.

If seas are calm on a day off, the couple might put their Great Dane in their 20-footer, fire up the 225-horse and cut wake to Wrangell, making nearly a mile a minute. But it’s always a round trip. Home is where the hatchery is.

“I like living out here. I’m obviously a remote cat,” he said.

SSRAA contributions | PRELIMINARY CATCH NUMBERS FOR 2017

COHO		Common Property				Special Harvest Area			SSRAA	Cost		
Release Site		Gillnet	Seine	Troll	Sport	Gillnet	Seine	Troll	Brood	Recovery	Other	Total
BURNETT INLET		2,465	350	2,840	449					4,274		10,378
NECK LAKE		3,354	134	3,776	3,562					9,214	6,917	26,957
ANITA BAY		392		1,330	115	2,039	30					3,906
CRYSTAL LAKE		660	375	5,720	800							7,555
HERRING COVE		505	137	5,335	776					4,202		10,955
NAKAT		4,971	254	8,400	869	9,506						24,000
NEETS BAY		2,119	134	11,714	1,140		7	18		588	2,300	18,020
KLAWOCK			4,776	109,610	13,896				2,540	50,455	6,036	187,313
% By Group		5%	2%	51%	7%	4%	0%	0%	1%	24%	5%	100%
Total		14,466	6,160	148,725	21,607	11,545	37	18	2,540	68,733	15,253	289,084

CHINOOK		Common Property				Special Harvest Area			SSRAA	Cost		
Release Site		Gillnet	Seine	Troll	Sport	Gillnet	Seine	Troll	Brood	Recovery	Other	Total
ANITA BAY		2,350		953	30	4,303	4,436	36				12,108
CRYSTAL LAKE		160		481	1,500				1,432			3,573
CITY CREEK		915		225	30							1,170
COFFMAN COVE		270		125								395
HERRING COVE		530	20	1,050	1,776				1,271	1,412	2,539	8,598
PORT ST NICH		41		325						1,350		1,716
NEETS BAY		585	90	1,274	1,355	1,752	2,351	405		4,250		12,062
% By Group		12%	0%	11%	12%	15%	17%	1%	7%	18%	6%	100%
Total		4,851	110	4,433	4,691	6,055	6,787	441	2,703	7,012	2,539	39,622

SUMMER CHUM		Common Property				Special Harvest Area			SSRAA	Cost		
Release Site		Gillnet	Seine	Troll	Sport	Gillnet	Seine	Troll	Brood	Recovery	Other	Total
ANITA BAY		215,155	111,680	2,910		47,780	104,200	70				481,795
BURNETT		13,700	1,746						7,000	5,280		27,726
NAKAT		91,920	12,820	0		110,000						214,740
NEETS BAY		102,810	142,285	126,375		2,810	7,850	118,600	147,000	626,571	15,000	1,289,301
KENDRICK		58,050	450,440	415			137,600					646,505
% By Group		18%	27%	5%		6%	9%	4%	6%	24%	1%	100%
Total		481,635	718,971	129,700	0	160,590	249,650	118,670	154,000	631,851	15,000	2,660,067

FALL CHUM		Common Property				Special Harvest Area			SSRAA	Cost		
Release Site		Gillnet	Seine	Troll	Sport	Gillnet	Seine	Troll	Brood	Recovery	Other	Total
BURNETT		20,725	350						3,600	10,625		35,300
NEETS BAY		6,210	4,385	2,060				3,580	6,050		300	22,585
NAKAT		12,067	1,020			1,555						14,642
% By Group		54%	8%	3%	0%	2%	0%	5%	13%	15%	0%	100%
Total		39,002	5,755	2,060	0	1,555	0	3,580	9,650	10,625		72,527

Year in Review CONTINUED FROM 1

and the farther inside that the smolts left fresh water, the worse was survival. The most likely explanation is that during salmon smolt outmigration warmer-water predators extended through southern Southeast northward to about Petersburg. While survival rates were very poor for southern Southeast pink and coho, survivals were excellent for northern Southeast pink and coho. The more-traditional factor—inside vs. outside waters—also came into play. Returns suggest that fish survived better when smolts departed fresh water more to the outside, closer to the open ocean. This is often more of a factor when there is a large number of predators, as smolts released outside get offshore more quickly and intensity of predation decreases.

Among SSRAA coho releases, Klawock will probably be within the normal range, although we are still establishing that number. Among the traditional Chickamin fall coho, Nakat releases will have the best survival and Neets or Anita the worst. In another interesting anomaly, the Crystal Creek fish did well. They apparently were north of excessive predation or whatever happened to most of the SSRAA fish.

CHINOOK

With very poor natural returns and a low-end U.S.-Canada treaty allocation, this was a seriously constrained chinook season. The spring hatchery-access fishery was tightly managed in time and area. This is the fishery that produces a large percentage of the Alaska hatchery troll harvest. Likewise, some of the corridor fisheries that provide gillnet harvest were also closed or harvest was constrained to protect natural stocks. The primary 2017 opportunities to harvest SSRAA enhanced stocks were net rotational fisheries in the SHAs. This management scenario had a lot to do with which group was able to harvest most of the returning fish. Sport catch of SSRAA chinook was also higher than normal due to these factors.

The value of terminal chinook, prior to the first few days in July, has been good for a number of years. After net fishermen started being paid relatively well for terminal chinook, the comparative harvest between the gear groups shifted toward the net fleets from trollers’ dominant position. Troll value actually increased through this period, but net fleets gained a greater per-pound increase in value from chinook. With serious management constraints in 2017, most of the opportunity shifted to the SHAs, where the net fleets fished, while at the same time harvest opportunity in spring hatchery access fisheries was lost. As has occurred in the past several years, seine numbers exceed the troll harvest of SSRAA chinook. The difference in harvest numbers does not directly relate to a difference in the value of harvest, however. Because of the high value of troll-caught chinook, trollers received the greatest value from this fishery despite the greater number of fish harvested by the net fleets.

FALL CHUM

SSRAA had a very weak return of fall chum at all sites. Some of the negative issues are like those we’ve seen before and have come to expect, but there are new issues as well.

The 2017 fall chum forecast was for a return about the same as in 2016: 212,600 total return from the Neets Bay release and 96,800 total return from the Nakat release. There were also some fall chum coming back to Burnett Inlet from releases in 2014 and 2015. The Burnett Inlet fish were primarily intended for broodstock to be spawned and incubated at Burnett.

For the first several weeks of the return, there were more fall chum harvested in the common property fishery than in the same period in 2016. This changed by Sept. 18, but not markedly. We saw SSRAA fish being caught in the district 101 and 106 gillnet fisheries and in the Neets Bay chum troll fishery.

At Neets Bay, we saw fish school up and commit to the inner bay, but then begin a frustrating in-and-out pattern of showing up briefly and then backing out—where we would see them in the troll fishery in the outer bay. At the same time, there was a large number of seals and sea lions in the inner bay. Fish we put over the barrier that didn’t go right up into the raceways were absolutely slaughtered by marine mammals. We may very well have underestimated the tremendous impact that these aggressively feeding animals have on these fish, particularly coupled with the fall chum’s peculiar behavior of not committing to the barrier and to fresh water.

The end result of what looked at the start to be a pretty good fall chum season was effectively about a 48-hour “season” on Sept. 18-19, with little of note before or after. The fish were catchable at the barrier then, and were

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Whitman Lake	EGGS	GOAL
Fall Coho	4,000,000*	4,000,000
Chinook (Chickamin R)	1,600,000	1,600,000
Nakat Inlet Summer Chum	8,400,000	8,300,000
Kendrick Bay Summer Chum	31,000,000	31,000,000
Neets Bay	EGGS	GOAL
Coho	3,500,000*	2,500,000
Summer Chum	65,000,000	65,000,000
Neets Fall Chum	4,900,000*	20,000,000
Nakat Fall Chum	0	8,000,000
Crystal Lake	EGGS	GOAL
Chinook (Crystal Creek)	1,350,000	1,350,000
Chinook (Chickamin R)	520,000	520,000
Coho	130,000	200,000
Burnett Inlet	EGGS	GOAL
Burnett Summer Chum	24,000,000	23,000,000
Port Asumcion	7,000,000	8,000,000
Burnett Fall Chum	3,300,000*	5,000,000
Anita Bay Summer Chum	23,000,000	23,000,000
Burnett Inlet Summer Coho	2,000,000*	2,200,000
Klawock River		
Coho	5,000,000*	5,000,000
Port Saint Nicholas	EGGS	GOAL
Chinook	135,000	135,000
Total	184,835,000	208,805,000

* PRELIMINARY NUMBERS

seen in quantity at Burnett at the same time, but because of these peculiar and unforeseen events we ended up with minimal cost recovery and only approximately 8.2 million eggs—about a quarter of our goal of 35 million.

COST RECOVERY

Trident Seafoods, who won the bids at Neets Bay, brought in two seiners early to target Neets chinook, fishing until July 5. Fishing was a little scratchy for the most part, but out near the Bug Island line they had modest success with summer chum and chinook.

Cost recovery for summer chum ramped up on July 10 and continued for a solid two weeks, with daily harvest of 250,000-350,000 pounds. The broodstock and harvest management team of Wayne Parsley and John Burke assured the efficiency of this operation, adding substantially to the full utilization of these fish. (John is SSRAA’s former general manager and he contributed to this article.)

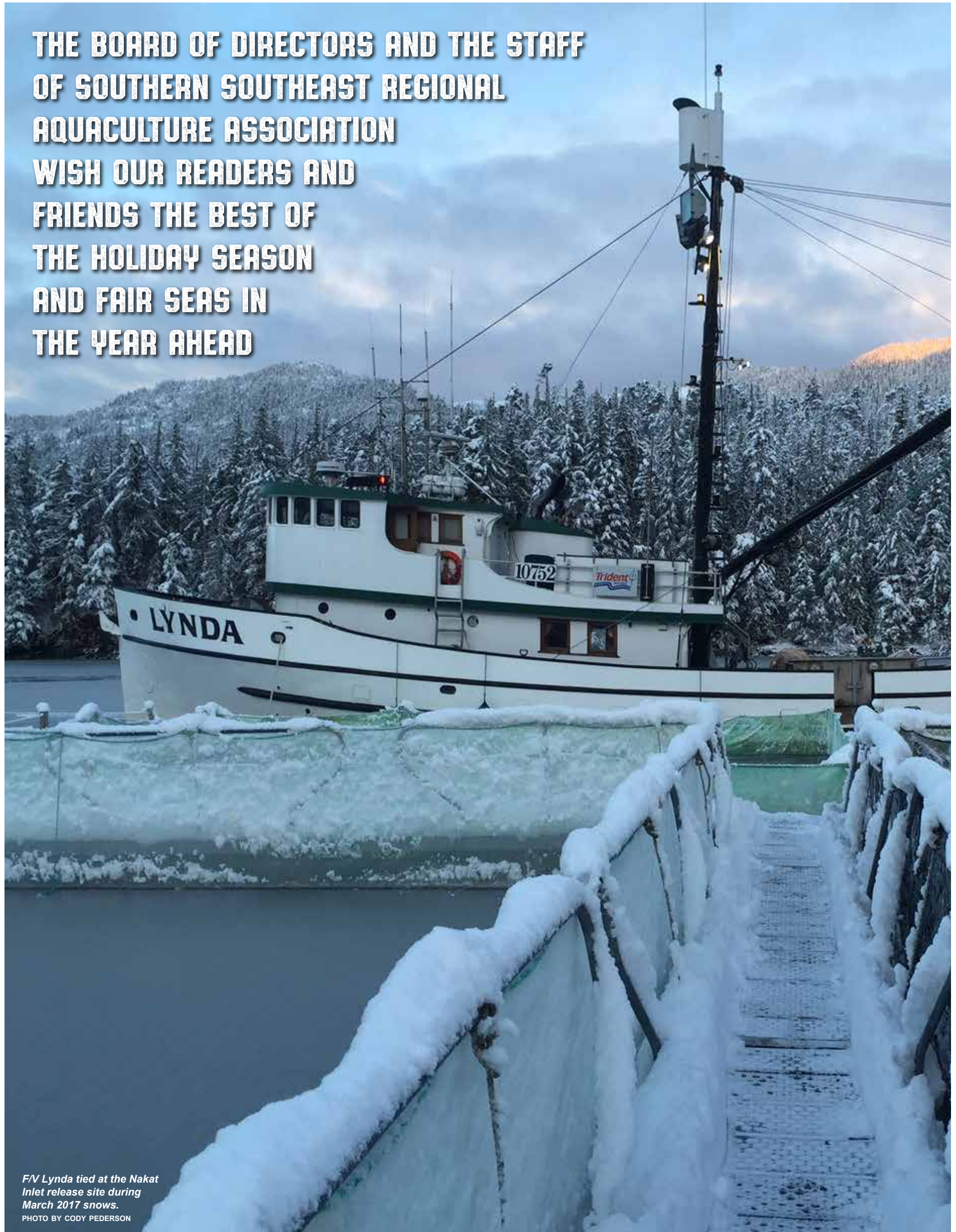
Fall cost recovery at Neets was a bust, for the most part. Although every indication was there for a decent fall chum return, we were simply not able to capitalize on either cost recovery or broodstock. The other species at Neets in the fall, coho, were few and far between.

The other quite significant cost recovery this year was at Klawock, with 50,455 coho harvested for 313,261 pounds. These coho were smaller than last year, at 6.2 pounds, but are actually normal size for this stock.

In smaller, targeted cost-recovery categories, Burnett sold about 28,000 pounds of excess summer coho; Whitman Lake sold about 16,000 pounds of chinook in raceways; and Neck Lake did about 51,000 pounds of summer coho.

In a cyclical business such as fisheries, it’s easy to get worried when cost recovery falls short, and we did miss our goal by a bit. But we’ve been frugal and we’ve used reserves to make certain that SSRAA weathers current challenges. After all, every year has certain unique trials and tribulations—all 41 years’ worth. Your hard-working SSRAA staff and directors will make sure this association stays financially healthy as we prepare ... for next year.

**THE BOARD OF DIRECTORS AND THE STAFF
OF SOUTHERN SOUTHEAST REGIONAL
AQUACULTURE ASSOCIATION
WISH OUR READERS AND
FRIENDS THE BEST OF
THE HOLIDAY SEASON
AND FAIR SEAS IN
THE YEAR AHEAD**



*F/V Lynda tied at the Nakat
Inlet release site during
March 2017 snows.*

PHOTO BY CODY PEDERSON