Regional Operational Plan CF.4K.2014.22

Foul Bay Special Harvest Area Adult Sockeye Salmon Sampling

by

Natura Richardson

May 2014

Alaska Department of Fish and Game **Divisions of Sport Fish and Commercial Fisheries**

Symbols and Abbreviations

The following symbols and abbreviations, and others approved for the Système International d'Unités (SI), are used without definition in the following reports by the Divisions of Sport Fish and of Commercial Fisheries: Fishery Manuscripts, Fishery Data Series Reports, Fishery Management Reports, and Special Publications. All others, including deviations from definitions listed below, are noted in the text at first mention, as well as in the titles or footnotes of tables, and in figure or figure captions.

Weights and measures (metric)

centimeter	cm
deciliter	dL
gram	g
hectare	ha
kilogram	kg
kilometer	km
liter	L
meter	m
milliliter	mL
millimeter	mm

Weights and measures (English)

cubic feet per second	ft^3/s
foot	ft
gallon	gal
inch	in
mile	mi
nautical mile	nmi
ounce	oz
pound	lb
quart	qt
yard	yd

Time and temperature

day	d
degrees Celsius	°C
degrees Fahrenheit	°F
degrees kelvin	K
hour	h
minute	min
second	s

Physics and chemistry

all atomic symbols	
alternating current	AC
ampere	A
calorie	cal
direct current	DC
hertz	Hz
horsepower	hp
hydrogen ion activity (negative log of)	pH
parts per million	ppm
parts per thousand	ppt, ‰
volts	V
watts	W

General

Alaska Administrative Code	AAC
all commonly accepted abbreviations	e.g., Mr., Mrs., AM, PM, etc.
all commonly accepted professional titles	e.g., Dr., Ph.D., R.N., etc.
at	@
compass directions:	
east	E
north	N
south	S
west	W
copyright	©
corporate suffixes:	
Company	Co.
Corporation	Corp.
Incorporated	Inc.
Limited	Ltd.
District of Columbia	D.C.
et alii (and others)	et al.
et cetera (and so forth)	etc.
exempli gratia (for example)	e.g.
Federal Information Code	FIC
id est (that is)	i.e.
latitude or longitude	lat. or long.
monetary symbols (U.S.)	$, ¢
months (tables and figures): first three letters	Jan,...,Dec
registered trademark	®
trademark	™
United States (adjective)	U.S.
United States of America (noun)	USA
U.S.C.	United States Code
U.S. state	use two-letter abbreviations (e.g., AK, WA)

Mathematics, statistics

all standard mathematical signs, symbols and abbreviations	
alternate hypothesis	H_A
base of natural logarithm	*e*
catch per unit effort	CPUE
coefficient of variation	CV
common test statistics	(F, t, χ^2, etc.)
confidence interval	CI
correlation coefficient (multiple)	R
correlation coefficient (simple)	r
covariance	cov
degree (angular)	°
degrees of freedom	df
expected value	*E*
greater than	>
greater than or equal to	≥
harvest per unit effort	HPUE
less than	<
less than or equal to	≤
logarithm (natural)	ln
logarithm (base 10)	log
logarithm (specify base)	$\log_2$, etc.
minute (angular)	'
not significant	NS
null hypothesis	H_O
percent	%
probability	P
probability of a type I error (rejection of the null hypothesis when true)	α
probability of a type II error (acceptance of the null hypothesis when false)	β
second (angular)	"
standard deviation	SD
standard error	SE
variance	
population	Var
sample	var

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Alaska Department of Fish and Game, Division of Commercial Fisheries, Kodiak

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Division of Commercial Fisheries

May 2014

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This document should be cited as:
Richardson, N. 2014. Foul Bay special harvest area adult sockeye salmon sampling. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Operational Plan ROP.CF.4K.2014.22, Kodiak.

SIGNATURE/TITLE PAGE

Project Title:	Foul Bay Special Harvest Area Adult Sockeye Salmon Sampling
Project Leader(s):	*Natura Richardson, ADF&G Fishery Biologist I* *Trent Dodson, KRAA Research and Monitoring Manager*
Division, Region and Area:	Division of Commercial Fisheries, Region IV, Kodiak
Project Nomenclature:	
Period Covered:	June 2014–June 2016
Field Dates:	June 1–June 18
Plan Type:	Category I

Approval

Title	Name	Signature	Date
Project Leader	Natura Richardson	Natura Richardson	5/5/2014
Research Coordinator	Nick Sagalkin	Nick Sagalkin	5/1/2014

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ABSTRACT

The Alaska Department of Fish and Game (ADF&G) and Kodiak Regional Aquaculture Association (KRAA) operate a short-term fisheries monitoring and sampling project for adult sockeye salmon returning to Hidden Creek via Foul Bay on Afognak Island. ADF&G staff will collect biological information from at least 600 adult sockeye salmon for age, length, and sex composition. This operational plan provides information and instructions on how to perform the procedures associated with the fishery monitoring efforts of the Foul Bay Special Harvest Area.

Key words: Foul Bay, Special Harvest Area, sockeye salmon, *Onchorhynchus nerka*, Afognak Island, Hidden Lake

PURPOSE

The goal of the Hidden Lake Enhancement Project is to provide increased harvest opportunities of sockeye salmon to the common property fishery in the Kodiak Management Area.

The Foul Bay Special Harvest Area (FBSHA) is located within the Kodiak National Wildlife Refuge and the sampling project is a requirement of the United States Fish and Wildlife Service (USFWS) Hidden Lake Management Plan (Thomsen 2011). The KRAA project biologist will use collected data to author an annual summary/report to the USFWS (T. Dodson, Research and Monitoring Manager, KRAA, Kodiak, personal communication).

BACKGROUND

The FBSHA is located on the northwest side of Afognak Island, approximately 72 km northwest of the city of Kodiak, and includes the waters east of 152°47.2 W (Figure 1). The Hidden Lake system is unable to support a run of anadramous fish due to an impassable falls 1.6 km upstream from the mouth of Hidden Creek (Honnold and Schrof 2001). Juvenile sockeye salmon (*Onchorhynchus nerka*) have been stocked annually in Hidden Lake since 1992 and return as adults to Foul Bay. The Foul Bay sockeye salmon run has been managed and monitored as a commercial salmon fishery since 1995. The broodstock for the Hidden Lake/Foul Bay fishery has primarily been Afognak Lake sockeye salmon reared at Pillar Creek Hatchery on Kodiak Island.

Returning adult sockeye salmon are harvested in the commercial salmon fishery within the Northwest Afognak District in the Foul Bay Special Harvest Area (Figure 1). The fishery is typically monitored early in the second week of June for an average length of seven days. Monitoring duties include estimating the build-up of returning sockeye salmon, estimating and sampling the sockeye salmon harvest, and estimating the incidental harvest of Chinook *O. tshawytscha*, chum *O. keta*, pink *O. gorbuscha*, and coho *O. kisutch* salmon.

OBJECTIVES

The objectives include the following:

1. Monitor the commercial fishery and estimate the daily commercial salmon harvest and build up in the FBSHA by species.
2. Collect age, length, and sex information from adult sockeye salmon.

METHODS

FISHERY MONITORING

The commercial salmon fishery in the FBSHA will be monitored from the time the fishery opens (usually between June 1–9) until approximately June 14. One ADF&G sampler will travel to FBSHA onboard the R/V K-Hi-C and will remain on the boat for the duration of the project. Groceries and skiff fuel to last the duration of the project should be purchased prior to leaving Kodiak, and sampling gear (fish measuring board, rugged digital assistant, etc) will need to be gathered and put on the boat prior to leaving port.

Once on site, the ADF&G sampler will record vessel names and record an estimate of the catch by species by observing sets and interviewing vessel skippers and tender operators each day. A portion of the commercial sockeye salmon catch from the FBSHA will be sampled for age, sex, and length data. The minimum sampling goal of 600 adult sockeye salmon will be necessary to assess the age composition of the FBSHA run.

There are three methods from which samples may be collected from commercial boats; onboard a tender, onboard a seiner, or by taking harvested fish back to sample at the K-Hi-C. If the sampler chooses to board a tender, samples must be confirmed to be from Foul Bay only. The sampler must be sure that fish could not have been already sampled via a different method or date (i.e. avoid collecting tender samples if a previously sampled boat that you have already sampled has delivered to the tender). When sampling from a seiner, timing is crucial. Keep the skiff out of the way of the net, seiner, and power skiff until the catch is almost in the boat and then approach. Ask to sample their catch, and if the boat agrees, choose whether to board the seiner and sample on deck, or to toss fish into the skiff and sample them at the K-Hi-C (be sure to return them to the correct seiner). If the seiner has a water hold, the fish will not be able to be sampled if they are already in the hold. If the seiner has an ice hold, fish may be sampled if the boat hasn't already provided samples. Take great care to avoid collecting duplicate samples; if a boat's catch has recently been sampled, don't take samples from their hold and if a boat you have recently sampled takes fish to the tender don't sample from the tender.

Adult salmon sampling methods are described in Appendix A. If further training in adult salmon sampling techniques is necessary, an experienced sampler will demonstrate the proper techniques before the sampler goes into the field.

DAILY FORMS/DATA TRANSFER

The sampler is responsible for the accuracy, completeness, and neatness of the collected data. The sex and length data shall be recorded using a No.2 pencil in a Rite-in-the-Rain book during daily sampling activities (Figure 2). Every day after sampling, these data shall be entered into a rugged digital assistant (RDA); which will then be backed up on the RDA and onto the provided laptop and memory stick. Vessel and estimate data will be recorded on the Vessel Monitoring Reporting Form (Figure 3).

SAFETY

Review specific sections of the ADF&G Safety standard operating procedures (SOP) manual that apply to the situations possibly encountered at your job site, prior to field deployment. Focus on the following sections of the manual: Policy/Standards, Aircraft/Passenger Safety, Emergency

/Survival Equipment Required in Aircraft, Boating Safety, Vehicle Safety, and Firearm/Bear Safety. After reviewing the above sections in the manual, the project supervisor will direct you to sign the Employee Safety SOP verification form that acknowledges that you have read the material.

All employees are required to attend and pass a certified CPR/First Aid/AED training course prior to field deployment. Employees should be familiar with the region's Emergency Response Plan.

COMMUNICATION SCHEDULE

Daily welfare call will occur at 0810 and 1630 with Commercial Fisheries Management staff and is conducted by dispatch when possible, or by Iridium satellite phone.

Be prepared to provide management staff with the following information during each daily contact:

1. General weather conditions (e.g., "1,000 foot broken ceiling, visibility 5 miles, winds are calm, and it's raining").
2. Fishery monitoring data:
    - Daily and cumulative catch per species
    - Daily and cumulative number of samples collected
    - Other information as requested
3. Logistics
    - Where the R/V K-Hi-C is at the time of the radio call and the area it is headed to.

SCHEDULE AND DELIVERABLES

TASKS

1. Monitor the commercial fishery and estimate the daily commercial salmon harvest and build up in the FBSHA by species. Target Dates: June 5–16, 2014.
2. Collect age, length, and sex information from adult sockeye salmon. Target Dates: June 9–13, 2014.

DELIVERABLES

1. Fisheries data will be reported on the Vessel Monitoring Reporting Form.
2. Age, length and sex data will be entered into the RDA, stored on the field laptop, and transferred to the Kodiak ADF&G office.
3. An annual summary and report will be submitted to the USFWS (e.g. Dodson 2013)

RESPONSIBILITIES

Project Biologist:	Natura Richardson – ADF&G Fishery Biologist
	Trent Dodson – KRAA Research and Monitoring Manager
Field Staff:	Kurt Pedersen – ADF&G Boat Officer

Ms. Richardson and Mr. Dodson will oversee the project operations and coordinate tasks so that the project goals are achieved. Ms. Richardson will work as the on-site sampler to collect and record data, as well as maintain responsibility for the timeliness and accuracy of all data collected. Mr. Pedersen will operate all marine vessels, coordinate daily tasks with Ms. Richardson, and assist as needed with monitoring and sampling. Mr. Dodson will be responsible for summarizing data and authoring reports required by the USFWS.

REFERENCES CITED

Honnold, S. G., and S. T. Schrof. 2001. The results of sockeye salmon Oncorhynchus nerka stocking into Hidden Lake on the Kodiak National Wildlife Refuge: Juvenile and adult production, commercial harvest, and ecosystem effects, 1987-1999. Alaska Department of Fish and Game, Division of Commercial Fisheries, Regional Information Report 4K01-32, Kodiak.

Dodson, T. T. 2013. A seasonal summary of the Hidden Lake sockeye salmon stocking project and related criteria for 2013. Kodiak Regional Aquaculture Association Report No. 14-01, Kodiak.

Thomsen, S. 2011. A seasonal summary of the Hidden Lake sockeye salmon stocking project and related criteria for 2010. Alaska Department of Fish and Game, Fishery Management Report No. 11-25, Anchorage.

FIGURES

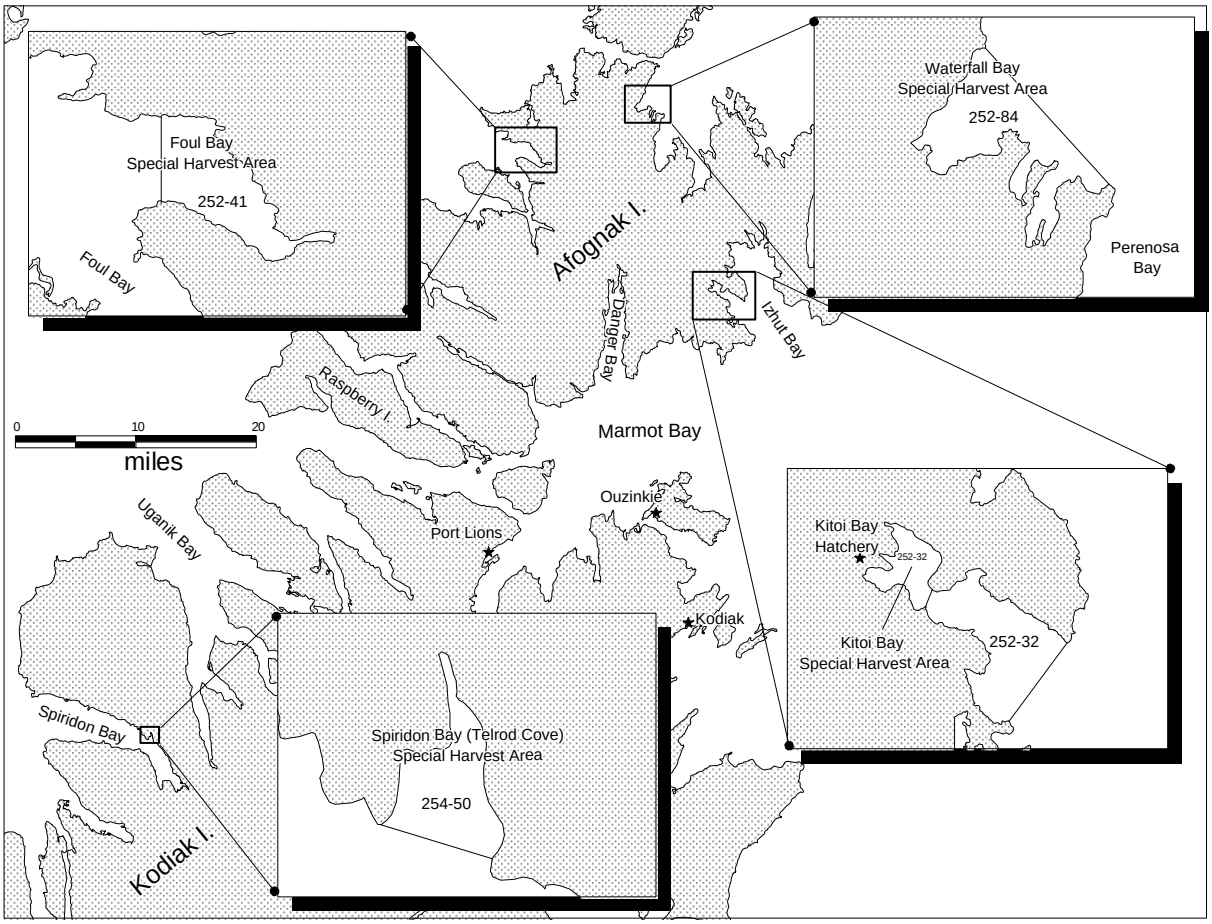
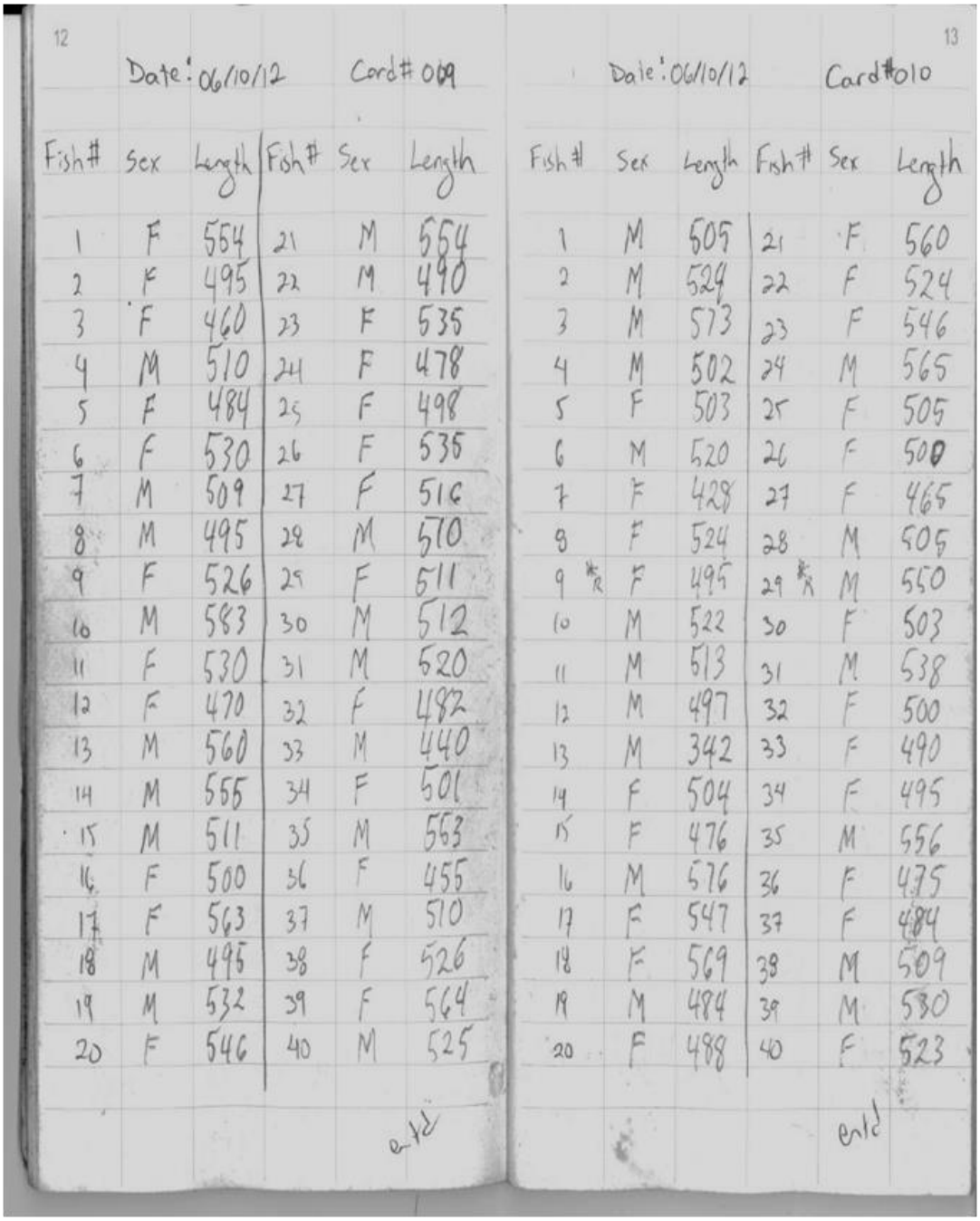


Figure 1.–Map of Special Harvest Areas, with FBSHA depicted in the upper left hand corner.



12

Date: 06/10/12 Card# 009

Fish#	Sex	Length	Fish#	Sex	Length
1	F	554	21	M	554
2	F	495	22	M	490
3	F	460	23	F	535
4	M	510	24	F	478
5	F	484	25	F	498
6	F	530	26	F	535
7	M	509	27	F	516
8	M	495	28	M	570
9	F	526	29	F	511
10	M	583	30	M	512
11	F	530	31	M	520
12	F	470	32	F	482
13	M	560	33	M	440
14	M	555	34	F	501
15	M	511	35	M	563
16	F	500	36	F	455
17	F	563	37	M	510
18	M	495	38	F	526
19	M	532	39	F	564
20	F	546	40	M	525

end

13

Date: 06/10/12 Card# 010

Fish#	Sex	Length	Fish#	Sex	Length
1	M	505	21	F	560
2	M	529	22	F	524
3	M	573	23	F	546
4	M	502	24	M	565
5	F	503	25	F	505
6	M	520	26	F	500
7	F	428	27	F	465
8	F	524	28	M	505
9 *R	F	495	29 *R	M	550
10	M	522	30	F	503
11	M	513	31	M	538
12	M	497	32	F	500
13	M	342	33	F	490
14	F	504	34	F	495
15	F	476	35	M	556
16	M	576	36	F	475
17	F	547	37	F	484
18	F	569	38	M	509
19	M	484	39	M	580
20	F	488	40	F	523

end

Figure 2.–Example of raw data entry in a Rite in the Rain field notebook.

Foul Bay Special Harvest Area Vessel Monitoring Reporting Form			
Date	Number of Fishing Boats	Name of Vessel(s) Fishing	Number of Scales Collected
TOTALS:			

Figure 3.–FBSHA Vessel Monitoring Reporting Form.

APPENDIX A. ADULT SAMPLING

Appendix A1.–Statistical (sampling) weeks and associated calendar dates.

Week	Calendar Dates	Week	Calendar Dates
10	1-Mar – 7-Mar	28	5-Jul – 11-Jul
11	8-Mar – 14-Mar	29	12-Jul – 18-Jul
12	15-Mar – 21-Mar	30	19-Jul – 25-Jul
13	22-Mar – 28-Mar	31	26-Jul – 1-Aug
14	29-Mar – 4-Apr	32	2-Aug – 8-Aug
15	5-Apr – 11-Apr	33	9-Aug – 15-Aug
16	12-Apr – 18-Apr	34	16-Aug – 22-Aug
17	19-Apr – 25-Apr	35	23-Aug – 29-Aug
18	26-Apr – 2-May	36	30-Aug – 5-Sep
19	3-May – 9-May	37	6-Sep – 12-Sep
20	10-May – 16-May	38	13-Sep – 19-Sep
21	17-May – 23-May	39	20-Sep – 26-Sep
22	24-May – 30-May	40	27-Sep – 3-Oct
23	31-May – 6-Jun	41	4-Oct – 10-Oct
24	7-Jun – 13-Jun	42	11-Oct – 17-Oct
25	14-Jun – 20-Jun	43	18-Oct – 24-Oct
26	21-Jun – 27-Jun	44	25-Oct – 31-Oct
27	28-Jun – 4-Jul	45	1-Nov – 7-Nov

SAMPLING PROCEDURES

Place the salmon flat on its right side (the head should be toward the left).

Measure the length (in mm)

Adult salmon length is measured from mid-eye to tail fork because the shape of the salmon's snout changes as it approaches sexual maturity. Slide the fish in place so that the middle of the eye is in line with the edge of the meter stick and hold the head in place with your left hand. Flatten and spread the tail against the board with your right hand. Read and record the mid-eye to tail fork length to the nearest millimeter. Please look at Figure 1.

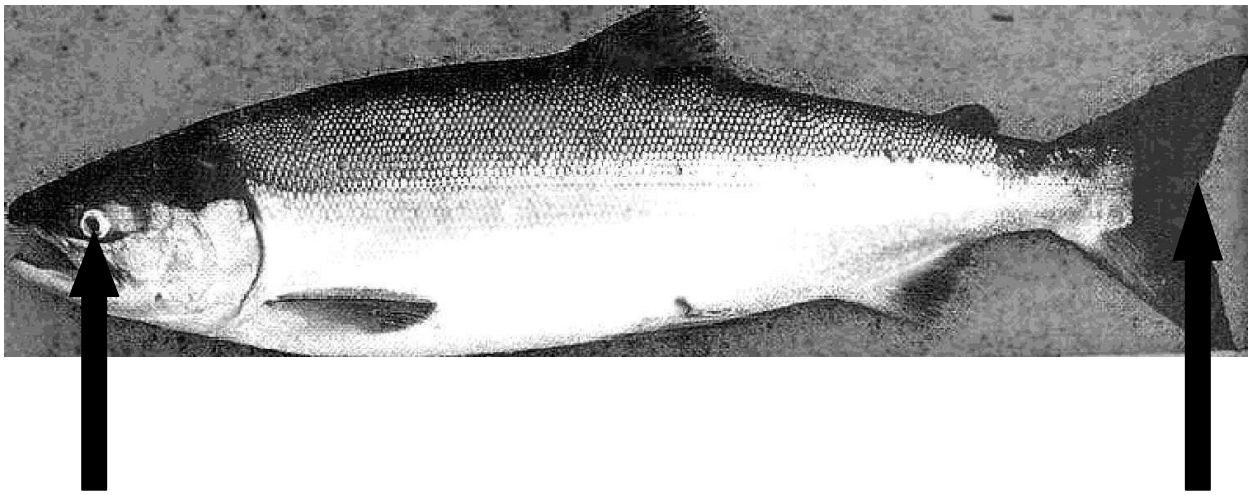


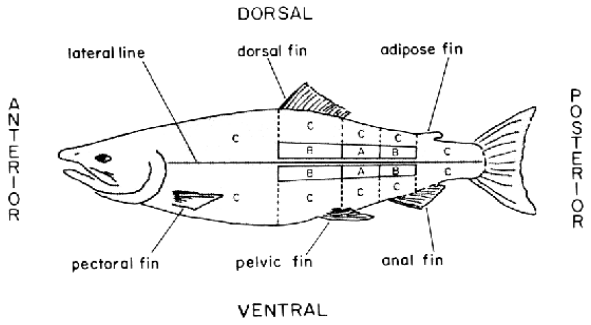
Figure 1.–Measuring fish length from mid-eye to tail fork.

Determine the sex of the fish (escapement sampling only).

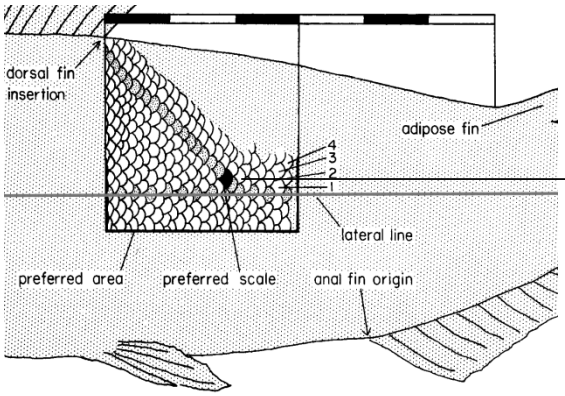
Remove the preferred scale and place on scale card

The preferred scale should be properly placed on a labeled scale (gum) card (Figures 2 and 3). Scale cards should be labeled as soon as possible. If sampling commercial catch, write the date the fish were caught on the card instead of the sampling date. The preferred scale is located 2 rows up from the lateral line, on a diagonal from the insertion (posterior) of the dorsal fin toward the origin of the anal fin (Figure 2). Samplers should be careful to make sure that the scale is not flipped over before it is placed on the scale card**.**

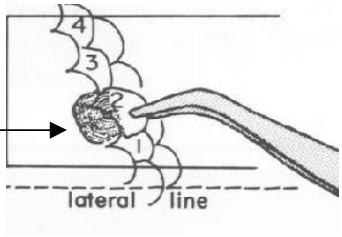
-continued-

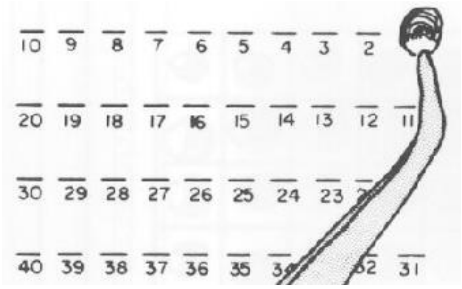


Area A is the preferred area. If scales on the left side are missing, try the right side. Area B is the second choice if there are no scales in Area A on either side of the fish. Area C designates non-preferred areas.



Do not turn scale over.

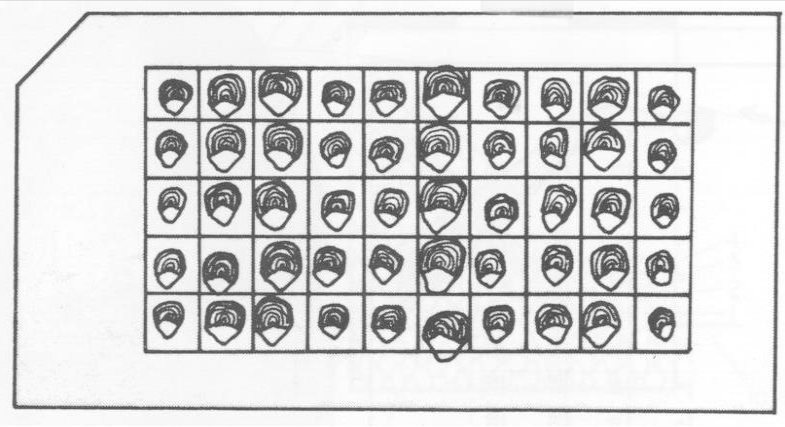




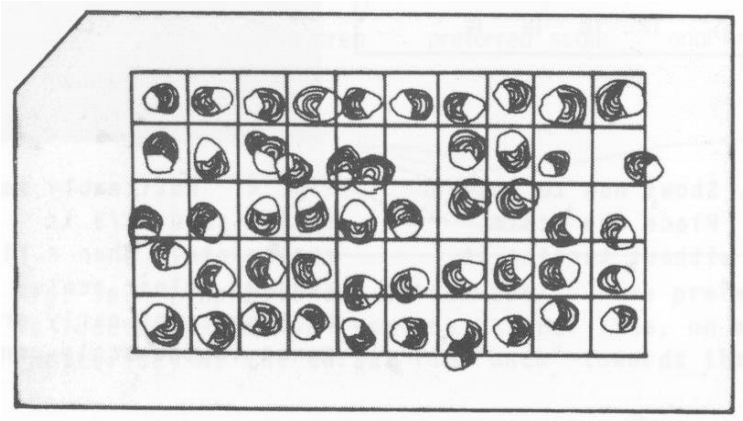
The preferred scale in this diagram is solid black. It is located 2 rows up from the lateral line, on a diagonal from the insertion (posterior) of the dorsal fin"back" toward the origin of the anal fin.

Figure 2.–Removal and placement of the preferred salmon scale onto the scale card.

-continued-



The scales are correctly oriented on the card in the same direction, with the anterior portion of the scale pointed toward the top of the card and the posterior portion (the portion of the scale held in the forceps) pointed toward the bottom of the card.



The scales are incorrectly oriented in different directions. This increases the time spend to age samples.

Figure 3.–Scale orientation on scale card.

-continued-

DATA ENTRY/MANAGEMENT

Data obtained while sampling is recorded using a Meazura Rugged Digital Assistant (RDA). The RDA is a waterproof device used to digitally record sampling data. Sample information is transferred from the device to a netbook after each sample. A USB flash drive is used to save and transfer data from the netbooks located in field camps, to the office, throughout the season. An RDA is shown in Figure 4.

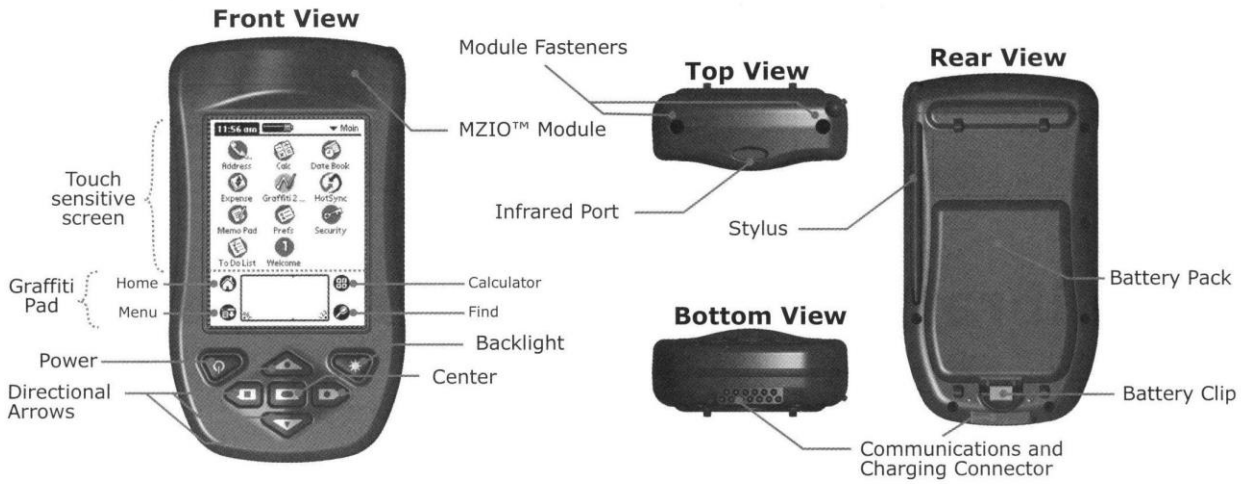


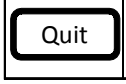
Figure 4.–Rugged Digital Assiatant (RDA).

ENTERING DATA INTO THE RDA

To begin using the RDA, turn it on by pressing the power button (Table 1). Using the stylus, tap the home icon in the bottom portion of the screen to bring up the main menu. It may be necessary to press the home icon several times to bring up the entire main menu. Next, tap the Forms 5.1 icon. Pendragon Forms (Forms 5.1) is the program that you will use to enter all of the sample data. After the icon is selected, the Pendragon Forms screen will appear. If a form was left open by a previous user, it may be necessary to hit the Quit or Done button to get to the main list of forms. Highlight the appropriate sampling form (**ASL_2013.XX**) and select New, which is found in the lower left corner of the screen. The four main buttons of the form will now be visable: ***Enter Background Info, Sample Next Fish, Review***, and ***Quit***.

-continued-

Table 1.–Buttons and Icons addressed in the text.

Image	Description
	Power Button - Button you will press on the RDA itself
	Home Icon - Use the stylus to navigate to the home screens
	Forms 5.1 Icon - Use the stylus to open pendragon forms 5.1
	This is an example of a button within pendragon forms. Use the stylus to select these buttons.

ENTER BACKGROUND INFO

Background information must be entered at the start of each sampling event. A new day always constitutes a new sampling event, so it will be necessary to enter new background information typically once per sampling day. For most projects, changing the background information each day will consist of updating the date only. It is important to edit background information when any change in sampling information occurs. The following topics constitute sampling information. If information in one of the following categories changes, it is necessary to change the background information.

Species

Select the appropriate species from the drop down list on the RDA, such as Sockeye.

Project

Indicate the pertinent project from the dropdown list. For example, if sampling adult sockeye escapement at a weir, choose Escapement.

Management Area

Choose the relevant management area from the dropdown list. Samples collected from Kodiak Island statistical areas must have Kodiak selected as the proper management area.

Area Sampled

Select the area that best represents where the fish were sampled, such as Ayakulik River, from the dropdown list.

Location Type

Indicate the type of area in which the fish were sampled. For example, if the fish were sampled at the Upper Station weir, choose Weir from the drop down menu.

-continued-

Gear

Select the type of gear in which the fish were caught, such as Trap.

Type of Length Measurement

Designate the type of length measurement taken. Adult salmon lengths are typically measured from mid-eye to tail fork.

Date of Sample

Escapement sampling: Use the date the fish are sampled.

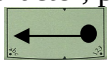
Catch sampling: Use the date the fish were caught, even if this differs from the sample date.

Sampler Initials

Enter the initials of the sampling crew (up to 3 persons). This can be done by writing in the box on the bottom of the screen, or by using the pop up keyboard.

Notes

1. When entering text, tap on the dot by the abc icon to bring up a keyboard. 

2. To delete a character, place the stylus in the text box and draw a small straight line from right to left. 

SAMPLE NEXT FISH:

After entering background information, the RDA is ready to collect individual fish data. The Sample Next Fish button is used to enter the details of each fish sampled. It is not necessary to click on the Sample Next Fish button when entering the first fish of a new sample. After entering the background information, the form automatically knows to go to the sample next fish section of the form. As you continue to sample, simply tap Sample Next Fish or Next to enter individual fish data. This option is used when continuing to the next fish of a sample where no background information has changed. Fish data that is entered here is associated with the current background information logged. The following constitute fish data and should be entered for each fish.

Scale Card Number

Scale (gum) cards are numbered sequentially by date throughout the season starting with 1. A separate numbering sequence will be used for each species or major location change. Consult your crew leader for the current card number. It is crucial to make sure the number written on the scale card matches the scale card number entered into the RDA. The Scale card number will automatically advance to the next number after fish number 40 is recorded.

Fish Number

The fish number is the number of the fish on a particular scale card. This must be a number between 1 and 40. By default, the fish number in the RDA will automatically advance after each fish is sampled. It will also automatically go from 40 to 1.

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Sex

Select the sex of the fish.

Length in mm

Enter the length of the fish from mid-eye to tail fork in millimeters (i.e., 534). If for some reason you do not collect a length measurement, enter 999.

Fin Clip and Tag Color

Select the Skip Fin Clip and Tag Color button if appropriate. If sampling involves fin clips or tags you can enter the optional fin clip and tag information. Indicate the type of fin clip (e.g., axillary process) or tag color using the drop down menus.

Sample Next Fish

Select Sample Next Fish to continue sampling.

Review

The review button can be a very useful tool during sampling. It can be used to ensure data being entered is accurate, or it can be used for editing fish data during a sample. The review portion of the form displays card number, fish number, sex, and length. The most recently sampled fish appear first. To enter the review screen, tap on the Review button on the main screen of the form. After the data has been reviewed and edited, tap the Done button on the bottom right of the screen to return to the main screen of the form. If Sample Next Fish is selected after leaving the review screen, the auto-increment will continue as if the review screen was never entered.

Reviewing Data

To review the last data entered, tap the Review button on the main screen of the form. Use the scroll bar on the right side of the screen to look at the fish that have been entered.

Editing Data

If fish data needs to be edited, tap on it using the stylus. Tap on the Sample Next Fish button to go through the fish data that was previously entered for that fish. Changes can be made as needed. Buttons chosen prior to the review are highlighted with asterisks. After a fish has been edited, the main review screen appears. If a fish is accidently selected from the main review screen, click the button that has the Card#-Fish# to return to the main review screen without going through the fish data. As mentioned above, tap Done to exit the review portion of the form and return to the main screen.

Quit

When sampling is complete, tap Quit to exit the form.

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DATA MANAGEMENT

After sampling is done for the day, it is required that the data be backed up on the RDA itself, and then transferred (by HotSync) to the netbook.

BACKING UP DATA

After each sample the RDA should be backed up so that data is stored on both of the compact flash drives. Turn the RDA on and tap the home icon in the bottom portion of the screen to bring up the main menu. Tap the CardBkup icon if it is present and then the Backup Now button at the top left of the screen. The data will now be on both flash drives. If the RDA does not have a CardBkup icon, it will back up automatically.

DOWNLOADING DATA TO NETBOOK

Connect the communications cable into the RDA and a USB port on the netbook. Press the power button to turn on the RDA and begin a HotSync by tapping the home icon, and then the HotSync icon found on the main menu. Tapping the large icon in the center of the screen will start the HotSync operation (Figure 5). Please make sure the RDA is dry before downloading any data to the netbook.

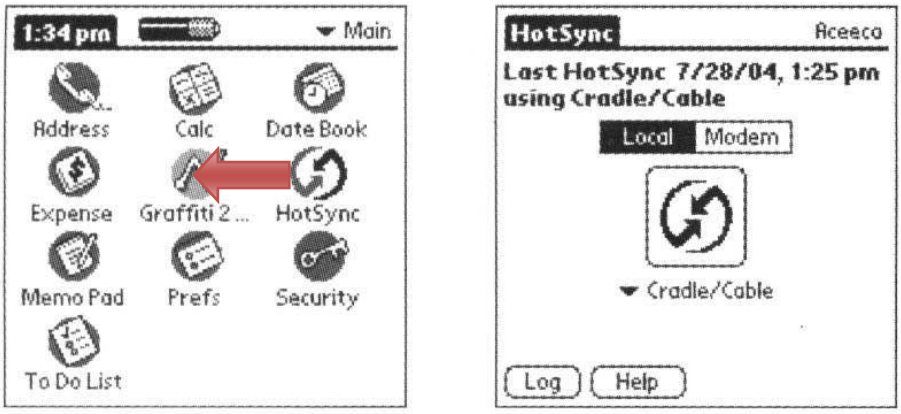

Figure 5.–HotSync Screens Found on RDA

EDITING, NAMING, AND SAVING DATA

If a mistake is realized during a sample it is often easiest to document the mistake and send the correction in with the USB flash drive for the Kodiak office to fix. If a mistake is made during the sample it can be changed using the review portion of the form in the RDA. Data can also be changed after it is downloaded onto the netbook, but is not recommended unless the Kodiak office is consulted first. A HotSync operation after changes have been made on the netbook will update the RDA.

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To view data, HotSync the RDA and open Pendragon Forms Manager (a shortcut should be located to the right of the start menu) on the netbook. Select the form (ASL_2013.XX), and click Edit/View under Data Functions on the right side of the window. All data will now be visible. Make the necessary changes here and exit out of the window to save. It is important to correct the numbers under the proper column and consult the Kodiak office. Hotsync the RDA to the netbook after any changes are made on the netbook to update the RDA with all changes.

After data has been edited and verified, a copy of the database will need to be exported from the Pendragon software and saved on the netbook. In Pendragon Forms Manager, under Data Functions on the right side of the window, click To ASCII. Navigate to the folder in which the data is being saved. Type in the file name and then save. The file name should follow this format: Area_Sampled_YYYYMMDD.csv (e.g., Afognak_River_20130614.csv). After saving, a window will pop up stating the file has been created. Each .csv file will contain all of the data that has been collected up to that point in the season. Do not edit or save the .csv file as an Excel file or it will be difficult or impossible to upload the data into the database.

TRANSFERRING DATA FROM NETBOOK ONTO USB FLASH DRIVE

Up to date data should be sent into the main office as often as possible (e.g., with the grocery plane). Insert a USB flash drive into an appropriate port on the netbook. Double click on MyComputer, which is found on the desktop of the netbook. Navigate to the folder where your data is saved and highlight the most recent file (determined by the date) by single clicking. With the file highlighted, click on edit at the top of the window and then copy. Open up MyComputer and double click on the USB flash drive (often called Removable Disk) found under the heading Devices with Removable Storage. Click on edit at the top of the window, and then paste. The .csv file that was copied earlier will appear in the window indicating it was copied to the flash drive. Exit out of all windows and single click on the safely remove hardware button on the bottom right corner of the desktop in the quick start menu. Click on Safely remove USB Mass Storage Device. A pop-up will verify that it is now safe to remove the flash drive from the system.

POWERING THE NETBOOK AND RDA

1. The RDA can be charged with either the AC or DC powering options. It is the crew leaders responsibility to keep it charged
2. The netbook can only be charged with the AC power adaptor, therefore plan accordingly for generator use. The charging light on the netbook is red when charging, and green when fully charged.
3. If there are powering problems, please contact the office immediately.

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SOME NOTES AND REMINDERS

1. Connect the AC adaptor to the bottom of the communications cable to charge the RDA batteries. If using the DC charger, connect the charger into the communications port.
2. If a mistake is noticed before moving onto the next fish, the previous button can be used to make changes in the RDA without having to go to the review screen or alter the data on the netbook.
3. Each length, sex, and scale must correspond to a single fish! It is the responsibility of the crew leader to be sure the data has been entered correctly.
4. For greater efficiency in scale reading, mount scales with anterior end toward top of gum card (Figure 3).
5. Never put data from different dates onto one gum card, and always enter new background information. Even if only one scale is collected that day, enter new background information and begin a new gum card the next day.
6. Be careful when collecting and mounting scales in wet conditions (rain, high humidity, etc.). If glue dries on top of the scale, it often obscures scale features, resulting in an unreadable scale. In addition, scales frequently adhere poorly to a wet gum card. Protect the cards and keep them dry to avoid having to remount the scales on a new card. If the cards get wet, try to dry them in a protected area or remount if necessary. Use a pencil when filling out gum cards, because ink will come off during pressing.
7. Responsibility for accuracy lies first with the primary data collector(s) and finally with the crew leader. Sloppy or incomplete data or gum cards will be returned to individual collectors for correction.
8. Ensure that all equipment is well kept. Electronics should be stored in a clean safe place. Dry off the RDA with a paper towel after sampling events. The RDA must be dry before transferring data to the netbook. RDA batteries must be charged to make certain sampling is not hampered. It is the responsibility of the crew leader to make sure that all data is carefully examined and edited before returning it to their supervisor.

TROUBLESHOOTING

RESETTING THE RDA

If problems are encountered with the RDA, A soft reset can be done without losing data. To perform a soft reset hold the power and backlight button down together and release at the same time. If a soft reset does not work, the office should be contacted about other options for resetting.

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HOTSYNC ERROR MESSAGE

HotSync message includes "Exceeded user storage space limit of 500KB in form 'ASL_ #.##'

1. Open Pendragon Forms Manager
2. Under Form Function click on "Properties"
3. Click on "Advanced Properties"
4. Click on the "Synchronization Tab"
5. Change the Storage Limit (KB) to 5000 instead of 500.
6. Click "OK"
7. Under Form Functions Click on "Distribute"

Hotsync the RDA and the Netbook.