Alaska Track 1: Preliminary Review of the 2016 Season

Table 1a. Review status

Trip Review Status*	Longline Halibut	Longline Pacific Cod	Longline Sablefish	,
Review Completed (# trips)	5	12	14	31
Total Trips	5	12	16	33
Review Completed (percent)	100%	100%	88%	94%

^{*} All subsequent summaries are based on reviewed trips only

Table 1b. Summary of data including: number of vessels, number of trips, and number of hauls.

Data Summary	Longline Halibut	Longline Pacific Cod	Longline Sablefish	All Fisheries
Vessels	3	3	5	9
Trips	5	12	14	31
Hauls	34	160	83	277

Table 2. Trip and Haul Level Data Quality Assessment

Trip Level Data Quality (all review levels)

Longline Halibut	Longline Pacific Cod	Longline Sablefish	Total
4	4	8	16
80%	33%	57%	52%
	7	10	22
	Halibut 4	Halibut Pacific Cod	Longline Halibut Pacific Cod Sablefish 4 4 8 80% 33% 57%

Haul Level Data Quality (review level 1-4 only)

Video Completeness (Number of Hauls)	Longline Halibut	Longline Pacific Cod	Longline Sablefish	Total
Video complete	29	97	72	198
Intermittent gaps in video coverage		55	1	56
Video ends before catch handling ends	2	4	6	12
Video starts after haul start	3	3	3	9
No video		1	1	2
Total	34	160	83	277
Catch Completeness (Number of Hauls)				
Complete - All catch brought onboard was recorded	33	101	81	215
Incomplete - Part of catch not recorded	1	59	2	62
Data Confidence from Video (Number of Hauls)				
High	33	90	71	194
Medium		63	8	71
Low	1	6	3	10
Unusable				
No Video		1	1	2
Image Quality (Number of Hauls)				
High	33	97	69	199
Medium		45	10	55
Low	1	17	3	21
Unusable				
No Video	***************************************	1	1	2
Primary Reason for Medium Image Quality (Number	of Hauls)			
Condensation				0
Glare			1	
Dirty Cameras		2		2
Night Lighting		5		5
Poor Camera Angles		27	1	28
Water Spots		11	8	19
Primary Reason for Low Image Quality (Number of F	lauls)	3		
Condensation	***************************************			***************************************
Glare				
Dirty Cameras				
Night Lighting				
Poor Camera Angles	1	6		
Water Spots				
No data from one or more cameras		11	3	

Table 3. Summary of logbook data submissions for a given trip.

Effort Log Completed	Longline Halibut	Longline Pacific Cod	Longline Sablefish	Total	Percent Total
Yes	5	10	14	29	94%
No		2		2	6%
Total	5	12	14	31	100%

Table 4. Review rate by target fishery. Review of both retained and discarded catch included.

	Longline Halibut	Longline Pacific Cod*	Longline Sablefish
Haul Count	34	160	84
Average Sort Min/Haul	116	117	209
Average Review Min/Haul	73	107	105
Average Review Min/Sort Min	0.69	0.93	0.50

Table 5. Counts of video recorded retained and discarded catch.

		Longline Hali	but	Longline Pacific Cod			Longline Sab	lefish	
Species	Retained	Discarded	Unknown	Retained	Discarded	Unknown	Retained	Discarded	Unknown
Rockfish and Thornyheads									
Rockfish - unidentified					3				
Rockfish, Black				34	1		1		
Rockfish, Canary	13	1		1				1	
Rockfish, Dark unidentified		1							
Rockfish, Dusky (was Light Dusky)	8	1		4	8		13	1	
Rockfish, Northern									
Rockfish, Quillback	1				21				
Rockfish, Red Banded	31	1		4	1		3		
Rockfish, Redstripe									
Rockfish, Rosethorn									
Rockfish, Silvergray				13	1				
Rockfish, Small Red unidentified	1	1		10	1		15	3	
Rockfish, Tiger				1	1				
Rockfish, Yelloweye	166	3			7		69		
Rockfish, Rougheye	63	4		15			188	9	
Rockfish, Shortraker	36	2		9	2		364	26	
Rockfish, Shortraker/Rougheye unidentified	135	15		33	1		554	50	
Rockfish, Shortraker/Rougheye Total	234	21		57	3		1,106	85	
Rockfish, Longspine Thornyhead									
Rockfish, Shortspine Thornyhead	70	2		2			510	249	
Rockfish, Thornyhead unidentified	248	25		1			3,146	1,092	
Rockfish, Thornyheads Total	318	27		3			3,656	1,341	

		Longline Hali	but	Longline Pacific Cod		fic Cod		Longline Sab	lefish
Species	Retained	Discarded	Unknown	Retained	Discarded	Unknown	Retained	Discarded	Unknown
Sablefish	1,651	92		10	177	1	26,179	863	
Pacific halibut	1,113	1,129		210	4,210	1	360	555	
Pacific cod	378	16		37,779	651	1	1		
Lingcod	33	8		3	26		10	2	
Flatfish									
Flatfish - unidentified					162	2		1	
Flounder, Arrowtooth		40		5	205			34	
Flounder, Kamchatka					8		1	2	
Flounder, Kamchatka/Arrowtooth - unidentified		124		7	507		1	89	
Flounder, Kamchatka/Arrowtooth Total		164		12	720		2	125	
Sole, Dover		1			•••••			4	
Sole, Flathead		***************************************	***************************************		121	1		***************************************	
Sole, Petrale									
Sole, Rock Sole unidentified					1				0
Other Fish									
Pollock (Walleye Pollock)				1,181					
Grenadier (Rattail), Giant		9					2	1,358	
Grenadier, (Rattail) - unidentified		10			1		81	5,671	
Flatnose, Pacific (Codling)									
Greenling - unidentified					***************************************			***************************************	
Ratfish, Spotted		21			2			6	
Ronquil/Searcher - unidentified					17				
Roundfish - unidentified		1		10	82	1		41	
Sculpin - Myoxocephalus unidentified					43				
Sculpin - unidentified		72		3	2,642	2			
Sculpin, Bigmouth		1			2				
Sculpin, Great				1	100				
Sculpin, Irish Lord - unidentified		5			78				
Sculpin, Red Irish Lord					14				
Sculpin, Yellow Irish Lord		50		3	905				
Fish head /lips or parts		2			7		4	97	
Fish - unidentified				6	59			2	

		Longline Hali	ibut		Longline Pac	ific Cod		Longline Sab	lefish
Species	Retained	Discarded	Unknown	Retained	Discarded	Unknown	Retained	Discarded	Unknown
Shark									
Shark, Pacific Sleeper (Mud)					5				
Shark, Spiny Dogfish		82			241		3	56	
Skate									
Ray, (Skate) - unidentified				1	22				
Skate - Soft Snout unidentified		8		7	289			40	
Skate - Stiff Snout unidentified					6				
Skate, Alaska					45			3	
Skate, Aleutian		3		6	35			3	
Skate, Bering		2			32				
Skate, Big		104		312	716	1		6	
Skate, Longnose		122		263	456			48	
Skate, Roughtail							1	106	
Crab									
Crab - unidentified (Family Unknown)								1	
Crab, King - unidentified									
Crab, King, Couesi								1	
Crab, Tanner - Unidentified								14	
Coral									
Bryozoans/Coral Unid					3		13	32	
Coral, Red Tree					1			2	
Invert									
Invertebrate - unidentified		7			98		1	34	
Sand Dollars, Sea Urchins		47			9				
Sea Anemone - unidentified		3			84			3	
Sea Whip, Sea Pen - unidentified				2	700		2	218	
Snail - unidentified		17			7				
Snail, Empty Shell					4				
Sponge - unidentified					1				0
Worm - unidentified (flatworms, ribbon worms)									
Octopus - unidentified				13	27		1	5	
Starfish - unidentified		11	0	2	64			3	0
Starfish, Basket		13	0	1	8			2	0
Starfish, Brittle		6	0					511	0
Starfish, Sunstar	3	25	0	4	3,221	4	5	9	0
Bird									
Albatross, Black-footed									
Fulmar, Northern					2				
Gull - unidentified									
Gull, Glaucus-winged									
Gull, Herring									
Unknown			0		38			2	0
Miscellaneous - unidentified (rocks, mud, garbage, etc		21			175		5	39	

Table 6. Counts of intentional or unintentional discards.

	Longline Halibut			1	Longline Pacific Cod					Longline Sablefish		
	Interacted w/	Drop-off	Utilized	Total	Interacted w/	Drop-off	Utilized	Total	Interacted w/	Drop-off	Utilized	Tota
Species	vessel or crew		Onboard		vessel or crew		Onboard		vessel or crew		Onboard	
Rockfish and Thornyheads												
Rockfish - unidentified					3			3				
Rockfish, Dark unidentified	1			1								
Rockfish, Dusky (was Light Dusky)	1			1	8			8	1			1
Rockfish, Northern												
Rockfish, Quillback					20	1		21				
Rockfish, Red Banded	1			1	1			1				
Rockfish, Small Red unidentified		1		1	1			1		3		3
Rockfish, Yelloweye	3			3	7			7				
Rockfish, Rougheye	3	1		4					8	1		9
Rockfish, Shortraker	2			2	2			2	24	2		26
Rockfish, Shortraker/Rougheye unidentified	13	2		15	1			1	41	9		50
Rockfish, Shortspine Thornyhead	2			2					240	9		249
Rockfish, Thornyhead unidentified	23	2		25					1,022	70		1,092
Sablefish	82	10		92	176	1		177	677	186		863
Pacific halibut	1,119	10		1,129	4,184	26		4,210	552	3		555
Pacific cod	16		***************************************	16	465	186		651		•••••		
Lingcod	8			8	25	1		26	1	1		2
Flatfish			***************************************									
Flatfish - unidentified					159	3		162	1			1
Flounder, Arrowtooth	40			40	202	1	2	205	34			34
Flounder, Kamchatka					8			8	2			
Flounder, Kamchatka/Arrowtooth - unidentified	124			124	500	7		507	89			89
Sole, Dover	1			1					4			
Sole, Flathead	_			_	120	1		121				
Sole, Petrale					120	-						
Sole, Rock Sole unidentified					1			1				
Other Fish								-	•			
Pollock (Walleye Pollock)					#N/A	14		#N/A				
Grenadier (Rattail), Giant	8	1		9	#IN/A	14		#IN/A	1,283	58		1,34
	10	1			1					167		1
Grenadier, (Rattail) - unidentified	10			10	1			1	5,049	107		5,210
Flatnose, Pacific (Codling)												
Greenling - unidentified					2							
Ratfish, Spotted	21			21	2			2	6			(
Ronquil/Searcher - unidentified					17	42		17		42		
Roundfish - unidentified		1		1	70	12		82	28	13		4:
Sculpin - Myoxocephalus unidentified					41	2		43				
Sculpin - unidentified	71	1		72	2,634	8		2,642				
Sculpin, Bigmouth	1			1	1	1		2				
Sculpin, Great	1				100			100				
Sculpin, Irish Lord - unidentified	5			5	78			78				
Sculpin, Red Irish Lord					14			14				
Sculpin, Yellow Irish Lord	50			50	905			905				
Fish head /lips or parts	2			2	7			7	97			9
Fish - unidentified					57	2		59	1	1		

		Longline H	alibut		Lo	ngline Sak	olefish		Lo	ongline Sal	olefish	1
	Interacted w/	5	Utilized	-	Interacted w/	D	Utilized	-	Interacted w/	5 · · · · · · · · · · · · · · · · · · ·	Utilized	
Species	vessel or crew	Drop-off	Onboard	Total	vessel or crew	Drop-off	Onboard	Total	vessel or crew	Drop-off	Onboard	Total
Shark												
Shark, Pacific Sleeper (Mud)					5			5				
Shark, Spiny Dogfish	81	1		82	237	4		241	56			56
Skate												
Ray, (Skate) - unidentified					17	5		22				
Skate - Soft Snout unidentified	8			8	287	2		289	40			40
Skate - Stiff Snout unidentified					6			6				
Skate, Alaska					45			45	3			3
Skate, Aleutian	3			3	35			35	3			3
Skate, Bering	2			2	32			32				ĺ
Skate, Big	102	2		104	706	10		716	6			6
Skate, Longnose	121	1		122	447	9		456	47	1		48
Skate, Roughtail									106			106
Crab												
Crab - unidentified (Family Unknown)									1			1
Crab, King - unidentified												ĺ
Crab, King, Couesi									1			1
Crab, Tanner - Unidentified									13	1		14
Coral												
Bryozoans/Coral Unid					3			3	31	1		32
Coral, Red Tree					1			1	2			2
Invert	••••••				•••••••••							
Invertebrate - unidentified	7			7	96	2		98	34			34
Sand Dollars, Sea Urchins	47			47	9			9				
Sea Anemone - unidentified	3			3	84			84	3			3
Sea Whip, Sea Pen - unidentified					697	3		700	218			218
Snail - unidentified	17			17	5	2		7				
Snail, Empty Shell					4	_		4				ľ
Sponge - unidentified					1			1				ľ
Worm - unidentified (flatworms, ribbon worms)					1			-				
Octopus - unidentified					8	19		27	4			4
Starfish - unidentified	11			11	62	2		64	3			3
Starfish, Basket	13			13	8	-		8	2			2
Starfish, Brittle	6			6				J	509	2		511
Starfish, Sunstar	25			25	3,028	193		3,221	9	-		9
Bird					3,020							
Albatross, Black-footed												
Fulmar, Northern					2			2				
Gull - unidentified								_				ŀ
Gull, Glaucus-winged					1				1			ł
Gull, Herring					1				1			ł
Unknown					33	5		38	2			2
Miscellaneous - unidentified (rocks, mud, garbage, e	21			21	174	1		175	38	1		39
iviiscenaneous - unidentineu (rocks, muu, garbage, e				21	1/4			1/3				33

Table 7. Pacific halibut counts for each type of discard, release method, and release condition for the three target fisheries.

Discard Type	Release Method	Release Condition	Longline Halibut	Longline Pacific Cod	Longline Sablefish
Damaged	Hand release	Dead/Sand Fleas/Bleeding	0	0	6
Damaged	Hook straightening	Minor	2	0	0
Damaged	Hook twisting and shaking	Dead/Sand Fleas/Bleeding	19	5	12
Damaged	Hook twisting and shaking	Minor	1	0	0
Damaged	Hook twisting and shaking	Moderate	1	0	0
Damaged	Hook twisting and shaking	Severe	2	0	0
Damaged	Hook twisting and shaking	Unknown	0	1	0
Damaged	Unknown	Dead/Sand Fleas/Bleeding	0	1	2
General	Cut the gangion	Minor	0	4	0
General	Cut the gangion	Moderate	0	1	0
General	Cut the gangion	Unknown	0	13	0
General	Gaff	Dead/Sand Fleas/Bleeding	1	0	0
General	Gaff	Severe	0	1	0
General	Hand release	Minor	10	4	79
General	Hand release	Moderate	0	0	1
General	Hand release	Unknown	9	8	10
General	Hit the roller	Dead/Sand Fleas/Bleeding	2	0	0
General	Hit the roller	Minor	1	1	0
General	Hit the roller	Moderate	1	0	0
General	Hit the roller	Unknown	3	17	2
General	Hook straightening	Minor	20	0	0
General	Hook straightening	Unknown	15	0	0
General	Hook twisting and shaking	Dead/Sand Fleas/Bleeding	7	33	2
General	Hook twisting and shaking	Minor	738	2053	304
General	Hook twisting and shaking	Moderate	3	18	1
General	Hook twisting and shaking	Severe	1	2	0
General	Hook twisting and shaking	Unknown	276	1895	112
General	Other careful release	Minor	0	0	1
General	Other careful release	Unknown	0	2	0
General	Unknown	Minor	2	26	15
General	Unknown	Moderate	0	2	0
General	Unknown	Unknown	5	96	5
General	Unknown	Severe	0	1	0
DropOffAboveWater	No Selection		9	24	3
DropOffBelowWater	No Selection		1	2	0
TOTAL			1129	4210	555

Table 8. Pacific halibut counts for each type release method for the three target fisheries.

Release Method	Longline Halibut		Longline Pacific Cod		Longline Sablefish		Total	% of total
Cut the gangion	0	> 1%	18	> 1%	0	> 1%	18	> 1%
Gaff	1	> 1%	1	> 1%	0	> 1%	2	> 1%
Hand release	19	2%	12	> 1%	96	17%	127	2%
Hit the roller	7	1%	18	> 1%	2	> 1%	27	> 1%
Hook straightening	37	3%	0	> 1%	0	> 1%	37	1%
Hook twisting and shaking	1048	93%	4007	95%	431	78%	5486	93%
No Selection	10	1%	26	1%	3	1%	39	1%
Other careful release	0	> 1%	2	> 1%	1	> 1%	3	> 1%
Unknown	7	1%	126	3%	22	4%	155	3%
Grand Total	1129		4210		555		5894	

Table 9. Pacific halibut counts for each type release condition for the three target fisheries.

Release Condition	Longline	e Halibut	Longline F	Pacific Cod	Longline	Sablefish	Total	% of total
Dead/Sand Fleas/Bleeding	29	3%	39	1%	22	4%	90	2%
Minor	774	69%	2080	49%	398	72%	3252	55%
Moderate	5	> 1%	29	1%	3	1%	37	1%
Severe	3	> 1%	4	> 1%	0	> 1%	7	> 1%
Unknown	308	27%	2031	48%	129	23%	2468	42%
No Selection	10	1%	27	1%	3	1%		> 1%
Grand Total	1129		4210		555		5894	<u>.</u>

Figure 1. Video and sensor completeness in relation to the number of trips the electronic monitoring system had been on a specific vessel. As a vessel made more trips, the likelihood of video and sensor data being complete was higher.

