

TWIN TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBTH OBHAU OBSPP 05/01/13

OBS/ TRIP ID	
DATE LAND (mm/yy)	/ /
PAGE #	OF

GEAR CODE [][][]	GEAR # [][]	HAUL # [][][]	HAUL OBS? NO 0 _____ YES 1 _____	ON-EFFORT? NO 0 _____ YES 1 _____	CATCH? NO 0 _____ YES 1 _____	INC TAKE? NO 0 _____ YES 1 _____	WEATHER CODE	WIND SPEED _____ kn DIRECTION _____ °		WAVE HEIGHT _____ ft	DEPTH, HAUL BEGIN _____ fm	GEAR COND CODE
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HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				NUMBER OF TURNS	TOW SPEED _____ kn	WIRE OUT _____ fm	WATER TEMP _____ ° F
BEGIN HAUL	/ /	:	Station 1 9960 -	Latitude / Bearing	Station 2 9960 -	Longitude / Bearing				

BEGIN FISHING	/ /	:					TARGET SPECIES	CODE	NET OBSERVED Port 1 _____ Starboard 2 _____ Both 3 _____
END HAUL	/ /	:	9960 -		9960 -				

GEAR ONBOARD	/ /	:							**Only fill in if gear mounted electronics are used	VERTICAL OPENING _____ ft
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COMMENTS

HORIZONTAL OPENING
_____ ft

DOOR SPREAD
_____ ft

SAMPLE WEIGHT MULTIPLIER

SPECIES					WEIGHT			SPECIES					WEIGHT		
NAME	CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	D/R	ESTIMATION METHOD CODE	NAME	CODE	SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	D/R	ESTIMATION METHOD CODE		
1							11								
2							12								
3							13								
4							14								
5							15								
6							16								
7							17								
8							18								
9							19								
10							20								

**CATCH ESTIMATION WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM**

05/01/13

OBS/TRIP ID	
DATE LANDED mm/yy	/ /
HAUL #	

SORTING METHOD	ESTIMATION METHODS	MAREL SCALE FIT VALUE
1 <input type="checkbox"/> Picked	01 = Actual (Spring Scale) 11 = Actual (Electronic Scale)	_____
2 <input type="checkbox"/> Shoveled	05 = Tally 03 = Basket or Tote Count	
3 <input type="checkbox"/> Deckloaded	02 = Volume-to-Volume 07 = Cumulative Sum	
4 <input type="checkbox"/> Conveyor System	04 = Captain	
5 <input type="checkbox"/> Pumping System	06 = Visually Estimated	
8 <input type="checkbox"/> Combination (Comment)	10 = Catch Composition Log	
9 <input type="checkbox"/> Other (Comment)	98 = Combination (Comment)	
	99 = Other (Comment)	

BASKET OR TOTE COUNT OR TALLY								
**Unit Types: B = Basket, T = Tote, I = Individual (tally), O = Other								
SPECIES	DISP. CODE	**UNIT TYPE	LIST INDIVIDUAL SAMPLE WGTS.	TOTAL SAMPLE WGT.	# OF SAMPLE UNITS	AVG. WGT. PER UNIT	TOTAL # OF UNITS	TOTAL EST. WGT.
1						_____ . ____		
2						_____ . ____		
3						_____ . ____		
4						_____ . ____		
5						_____ . ____		
6						_____ . ____		
7						_____ . ____		
8						_____ . ____		
9						_____ . ____		
10						_____ . ____		

VOLUME-TO-VOLUME
CATCH PILE SHAPE AS SEEN FROM ABOVE:

Trapezoid

$$\left(\frac{W1 + W2}{2} \right) \times L \times \text{Avg. Depth} = \text{Volume}$$

Rectangle

$$W \times L \times \text{Avg. Depth} = \text{Volume}$$

Triangle

$$\left(\frac{W}{2} \right) \times L \times \text{Avg. Depth} = \text{Volume}$$

Full Oval or Half-Oval

$$W \times L \times \text{Avg. Depth} \times 0.785 = \text{Volume}$$

Other Shapes or Combination: Draw and label all dimensions in comments. = _____ ft³

DEPTHS: Representative depths (ft) systematically taken throughout the catch pile.
Include a single depth of 0.0 ft if the catch pile is not in a checker pen or slopes to zero.

_____	_____	_____	_____	_____	_____	_____	_____	_____
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A) Total Haul Vol. _____ ft ³	B) Total Subsample Vol. _____ Basket(s) X 1.47 ft ³ = _____ ft ³ _____ Tote(s) X 2.65 ft ³ = _____ ft ³ _____ Other(s) X _____ ft ³ = _____ ft ³	C) Sample Weight Multiplier (A ÷ B) _____ >> Copy to Front >>
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DECKLOADING and CUMULATIVE SUM				
Entire Deckloading Haul Range	Deckloading Measurements			
	Total Pile Vol.	Remainder Pile Vol.	A) Total Haul Vol.	
_____ - _____	_____ ft ³	_____ ft ³	= _____ ft ³	
Number of Hauls _____	*Est.Meth.: Estimation Method used to obtain species Total Samp. Wgt. for cumulative sum calculation. If not '01' or '11' show all additional calculations & use '98' on front.			
SPECIES	DISP. CODE	TOTAL SAMP. WGT.	*EST. METH.	WGT. PER HAUL
1				
2				
3				
4				
5				

COMMENTS :