PAIR and SINGLE MID-WATER TRAWL HAUL LOG
NMFS FISHERIES OBSERVER PROGRAM
OBPRH OBHAU OBSPP 01/01/10

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

GEAR CODE	GEAR #	HAUL #	HAUL OBS?	ON-EFFORT?	CATCH?	INC TAKE?	WEATHER CODE	WIND SPEED	WIND DIRECTION	WAVE HEIGHT	DEPTH, HAUL BEGIN	GEAR COND CODE
			NO 0 ____ YES 1 ____	NO 0 ____ YES 1 ____	NO 0 ____ YES 1 ____	NO 0 ____ YES 1 ____		kn	o	ft	fm	

HAUL INFO	DATE mm/dd/yy	TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX) Station 1	**Latitude /** Bearing	Station 2	**Longitude /** Bearing
BEGIN HAUL	/ /	:	9960 -		9960 -	
BEGIN FISHING	/ /	:				
END HAUL	/ /	:				
GEAR ONBOARD	/ /	:	9960 -		9960 -	
FISH PUMPING			VERTICAL OPENING ** ft	HORIZONTAL OPENING ** ft	DOOR SPREAD ** ft	
BEGIN	/ /	:				
END	/ /	:				

NUMBER OF TURNS	TOW SPEED	WIRE OUT	WATER TEMP
	____.____ kn	fm	____.____ o F

TARGET SPECIES CODE

DEPTH RANGE, HEADROPE _____ fm

DISTANCE BETWEEN BOATS * _____ ft

COMMENTS

*Only fill in for pair trawl trips
**Only fill in if gear mounted electronics are used

SPECIES NAME	SPECIES CODE	CATCH DISP (K/D)	POUNDS	DISP CODE	WEIGHT D/R	WEIGHT ESTIMATION METHOD CODE	SPECIES NAME	SPECIES CODE	CATCH DISP (K/D)	POUNDS	DISP CODE	WEIGHT D/R	WEIGHT ESTIMATION METHOD CODE

OMB Control No.: 0648-0593
Expires on: 09/30/2012

CATCH ESTIMATION WORKSHEET
NMFS FISHERIES OBSERVER PROGRAM
01/01/10

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

SORTING METHOD		ESTIMATION METHOD(S)	
Picked	1 ___	Weighed (Actual)	01 ___
Shoveled	2 ___	Volume-to-Volume	02 ___
Deckloaded	3 ___	Basket or Tote Count	03 ___
Conveyor System	4 ___	Captain	04 ___
Combination (comment)	8 ___	Tally	05 ___
Other (comment)	9 ___	Visually Estimated	06 ___
_____		Cumulative Sum	07 ___
HAUL NUMBERS WHERE		Combination (comment)	98 ___
DECKLOADING OCCURRED		Other (comment)	99 ___
_____ - _____		_____	

TALLY/BASKET/TOTE COUNTS

Unit Types: B = basket, T = tote, I = individual (tally)

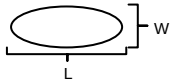
Species:	Unit Type	Avg Weight/Unit	# of Units
		lbs	
		lbs	
		lbs	
		lbs	
		lbs	
		lbs	
		lbs	
		lbs	

VOLUME TO VOLUME METHOD

VOLUME MEASUREMENTS

PILE ON DECK - as seen from above

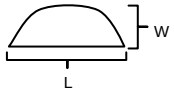
Oval



___.__ ft X ___.__ ft X ___.__ ft X 3.14 / 4 = ____.__ __ ft^3

Length Width Depth** π

Half-Oval

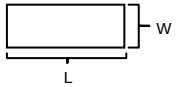


___.__ ft X ___.__ ft X ___.__ ft X 3.14 / 4 = ____.__ __ ft^3

Length Width Depth** π

CHECKER PEN

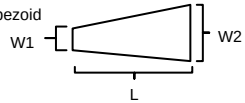
Rectangle



___.__ ft X ___.__ ft X ___.__ ft = ____.__ __ ft^3

Length Width Depth**

Trapezoid



___.__ ft X (___.__ ft + ___.__ ft) / 2 X ___.__ ft = ____.__ __ ft^3

Length Width1 Width2 Depth**

OTHER SHAPE or COMBINATION - draw and show all dimensions below Volume = ____.__ __ ft^3

**10 random depths from throughout pile: (Pile on deck: include one depth of 0.0ft)

__.__ ft	__.__ ft	__.__ ft	__.__ ft	__.__ ft	__.__ ft	__.__ ft	__.__ ft	__.__ ft	__.__ ft

A) # of Subsampling Containers Used	B) Volume of One Container	C) Total Subsample Volume (A x B)	D) Sample Weight Multiplier (Tot. Vol / C)	E) Percent Subsampled (C / Tot. Vol) x 100
_____	Basket __ 1.47 ft^3 Tote __ 2.65 ft^3 Other: __.__ __ ft^3	_____.__ __ ft^3	_____.__ __	_____.__ __ %

COMMENTS

SPECIES	SUBSAMP WGT (lbs)

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