

**CLAM/QUAHOG DREDGE HAUL LOG**  
**NMFS FISHERIES OBSERVER PROGRAM**  
**OBCDH OBHAU OBSPP 01/01/21**

OBS/ TRIP ID	
DATE LAND (mm/yy)	/ /
PAGE #	<input type="checkbox"/> OF <input type="checkbox"/>

GEAR CODE <input type="text"/>	GEAR # <input type="text"/>	HAUL # <input type="text"/>	HAUL OBS? NO 0 <input type="text"/> YES 1 <input type="text"/>	ON-EFFORT? NO 0 <input type="text"/> YES 1 <input type="text"/>	CATCH? NO 0 <input type="text"/> YES 1 <input type="text"/>	INC TAKE? NO 0 <input type="text"/> YES 1 <input type="text"/>	WEATHER CODE	WIND SPEED <input type="text"/> kn      DIRECTION <input type="text"/> °		WAVE HEIGHT <input type="text"/> ft	DEPTH, HAUL BEGIN <input type="text"/> fm	GEAR COND CODE
HAUL/FISHING INFO	DATE mm/dd/yy	AND TIME 24 hours	LATITUDE / LONGITUDE (DD MM.M) - LORAN (XXXXX)				WATER TEMP <input type="text"/> ° F	TOW SPEED <input type="text"/> kn	WIRE OUT <input type="text"/> fm			
BEGIN HAUL	/ /	:	Station 1 9960 -	Latitude / Bearing	Station 2 9960 -	Longitude / Bearing	TARGET SPECIES CODE					
BEGIN FISHING	/ /	:	CLAM/QUAHOG CLAPPERS OBS?									
END HAUL	/ /	:	9960 -		9960 -		NO 0 <input type="text"/> YES 1 <input type="text"/>					
GEAR ONBOARD	/ /	:										

COMMENTS

SAMPLE WEIGHT MULTIPLIER

SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT		SPECIES		SUB-SAMPLE WEIGHT	POUNDS	DISP CODE	WEIGHT	
NAME	CODE				D/R	ESTIMATION METHOD CODE	NAME	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**  
**01/01/21**

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

<b>SORTING METHOD</b> Check all that apply	<b>ESTIMATION METHODS</b>
1 <input type="checkbox"/> Picked	01 = Actual (Spring Scale)    11 = Actual (Electronic Scale)
2 <input type="checkbox"/> Shoveled	05 = Tally
3 <input type="checkbox"/> Deckloaded	02 = Volume-to-Volume    03 = Basket or Tote Count
4 <input type="checkbox"/> Conveyor System	14 = Weight-to-Weight    13 = Count-to-Count
5 <input type="checkbox"/> Pumping System	12 = Trap Subsample    07 = Cumulative Sum
9 <input type="checkbox"/> Other (Comment)	10 = Catch Composition Log
	04 = Captain    06 = Visually Estimated
	98 = Combination (Comment)
	99 = Other (Comment)

**MAREL SCALE**  
**CALIBRATION WT**  
 \_\_\_\_\_

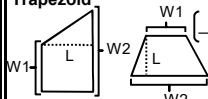
**BASKET OR TOTE COUNT OR TALLY**

\*\*Unit Types: B = Basket, T = Tote, I = Individual (tally), O = Other

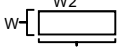
Species	Disp. Code	**Unit Type	List Individual Sample Weights	Total Sample Weight	# of Sample Units	Avg. Weight per Unit	Total # of Units	Total Est. Weight
1						_____ . ____		
2						_____ . ____		
3						_____ . ____		
4						_____ . ____		
5						_____ . ____		
6						_____ . ____		
7						_____ . ____		
8						_____ . ____		
9						_____ . ____		
10						_____ . ____		

**VOLUME-TO-VOLUME**

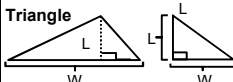
CATCH PILE SHAPE AS SEEN FROM ABOVE:

**Trapezoid**  


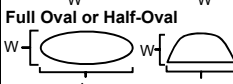
$$\left( \frac{\text{Width 1} + \text{Width 2}}{2} \right) \times \text{Length} \times \text{Avg. Depth} \times 0.5 = \text{Volume (ft}^3\text{)}$$

**Rectangle**  


$$\text{Width} \times \text{Length} \times \text{Avg. Depth} = \text{Volume (ft}^3\text{)}$$

**Triangle**  


$$\left( \frac{\text{Width}}{2} \right) \times \text{Length} \times \text{Avg. Depth} \times 0.5 = \text{Volume (ft}^3\text{)}$$

**Full Oval or Half-Oval**  


$$\left( \frac{\text{Width}}{2} \right) \times \text{Length} \times \text{Avg. Depth} \times 0.785 = \text{Volume (ft}^3\text{)}$$

**Other Shapes or Combination:** Draw and label all dimensions in comments.

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.

**COMMENTS :**

<b>A) Total Haul Vol.</b>	<b>B) Total Subsample Vol.</b>	<b>C) Sample Weight Multiplier</b> (A ÷ B)
_____ ft <sup>3</sup>	Basket(s) X 1.47 ft <sup>3</sup> = _____ ft <sup>3</sup> Tote(s) X 2.65 ft <sup>3</sup> = _____ ft <sup>3</sup> Other(s) X _____ ft <sup>3</sup> = _____ ft <sup>3</sup>	_____

<b>OTHER SUBSAMPLE TYPES</b>	Unit Type	A) Total	B) Sample
	<input type="checkbox"/> Basket <input type="checkbox"/> Tote		
	<input type="checkbox"/> Weight <input type="checkbox"/> Trap		
	<input type="checkbox"/> Count <input type="checkbox"/> Other		

>> Copy to Front >>

**DECKLOADING and CUMULATIVE SUM**

Entire Deckloading Haul Range	Deckloading Measurements	
_____ - _____	Total Pile Vol.	Remainder Pile Vol.    A) Total Haul Vol.
	_____ ft <sup>3</sup>	_____ ft <sup>3</sup> = _____ ft <sup>3</sup>

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 Sampled Weight	*Est. Method	Weight per Haul
1				
2				
3				
4				
5				