01/01/08

NMFS FISHERIES OBSERVER PROGRAM
CATCH ESTIMATION WORKSHEET

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

FISHING METHOD		CATCH ESTIMATION METHOD		** CATCH SHAPE, MEASUREMENTS & VOLUME
Picked	1 ___	Weighed (Actual)	1 ___	Comment and draw catch shape.
Shoveled	2 ___	Volume to Volume	2 ___	
Deckloaded	3 ___	Basket or Tote Count	3 ___	
Conveyor System	4 ___	Captain	4 ___	Rect./square (L x W x D) 1 ___ L _____ W$_1$ _____ D _____ = V ___ ft^3
Combination (comment)	8 ___	Tally	5 ___	Trapezoidal ([(W$_1$ + W$_2$)]/2xLxD) 2 ___ L ___ W$_1$ ___ W$_2$ ___ D ___ = V ___ ft^3
Other (comment)	9 ___	Visually Estimated	6 ___	Triangular (L x W / 2 x D) 3 ___ L ___ W ___ D ___ = V ___ ft^3
_____		Cumulative Sum Method	7 ___	Circular (π r^2 x D) 4 ___ r ___ D ___ = V ___ ft^3
HAUL NUMBERS WHERE		Combination (comment)	8 ___	Oval (r$_1$ x r$_2$ x π x D) 5 ___ r$_1$ ___ r$_2$ ___ D ___ = V ___ ft^3
DECKLOADING OCCURRED		Other (comment)	9 ___	Other/Combination (comment) 9 ___ _____
_____	_____			Are measurements the same as previous haul? NO 0 ___ YES 1 ___

** # SUBSAMPLING CONTAINERS USED	** VOL SUBSAMPLE CONTAINER	** TOTAL SUBSAMPLE VOLUME =	** SAMPLE WEIGHT MULTIPLIER	** PERCENT SUBSAMPLED	Volume of Subsample	Circular Shapes
	Orange Basket 1___ 1.47 ft^3	# subsample containers used x	total catch vol / total subsamp vol	(total subsamp vol / total catch) vol) x 100	1 Basket = 1.47 ft^3	r = radius
	Fish Tote 2___ 2.65 ft^3	volume of a subsample container			2 Baskets = 2.94 ft^3	r = diameter / 2
	Other 9___ ft^3				3 Baskets = 4.41 ft^3	r$_1$ = short radius
_____	_____	_____ ft^3	_____	_____ %	4 Baskets = 5.88 ft^3	r$_2$ = long radius
					5 Baskets = 7.35 ft^3	π = 3.14

** SPECIES	** SUBSAMP WGT (lbs)	** SPECIES	** SUBSAMP WGT (lbs)	COMMENTS		
					Angular Shapes	**Trapezoidal Shapes**
					A = area	W$_1$ = short width
					V = volume	W$_2$ = long width
					W = width	
					D = catch depth	
			** Required only when using the volume to volume method.		