

## Appendix A. Apportioning Groundfish Landings to Stock Area Using Dealer and Vessel Reports

*\*This example uses a multi-statistical area VTR as an example of a vessel report, however, vessel reports can be either VTRs or VMS catch reports. The example shown illustrates how to apportion dealer landings to statistical area when more than one statistical area is fished on a trip; however, this same method can be used to apportion dealer landings to gear type/mesh size when multiple gear types/mesh sizes are used on a trip.*

### Step 1: Determine the percentage of species caught in each statistical area based on the VTR.

- a) Convert VTR reported retained catch amount to their live weight equivalent in pounds.
  - Multiply column D by columns E and F to get live weight equivalents (column G).
- b) Determine the percentage of the total species catch caught in each statistical area.
  - Divide column K (total species catch from all statistical areas) by column G to get species % by statistical area (column L)

#### VTR report (statistical area 514)

H	I	A	B	C	D	E	F	G	K	L
Dealer permit number	Dealer name	Species	FVTR code	Units	Retained quantity	Unit conversion factor	Live weight conversion factor	Live weight (lb)	VTR total live weight (lb)	Species % by statistical area
1234	The Fish Co.	Atlantic cod	COD	lb	200	1.00	1.00	200	500	40.0
1234	The Fish Co.	Haddock	HADD	lb	610	1.00	1.00	610	650	93.8
1234	The Fish Co.	Monkfish, tails	MONKT	lb	10	1.00	3.32	33	33	100.0
1234	The Fish Co.	Spiny dogfish	DGSP	lb	350	1.00	1.00	350	350	100.0
1234	The Fish Co.	Winter flounder	FLBB	lb	200	1.00	1.00	200	200	100.0
99998	Home consumption	Witch flounder	FLGS	lb	15	1.00	1.00	15	15	100.0
1234	The Fish Co.	Yellowtail flounder	FLYT	lb	75	1.00	1.00	75	175	42.9
Total								1483	2444	60.7

#### VTR report (statistical area 521)

H	I	A	B	C	D	E	F	G	K	L
Dealer permit number	Dealer name	Species	FVTR code	Units	Retained quantity	Unit conversion factor	Live weight conversion factor	Live weight (lb)	VTR total live weight (lb)	Species % by statistical area
1234	The Fish Co.	Atlantic cod	COD	lb	300	1.00	1.00	300	500	60.0
1234	The Fish Co.	Haddock	HADD	lb	40	1.00	1.00	40	650	6.2
1234	The Fish Co.	Scallops	SCALB	bu	1	8.00	8.33	67	67	100.0
1234	The Fish Co.	Winter skate, wings	SKWINW	lb	200	1.00	2.27	454	454	100.0
1234	The Fish Co.	Yellowtail flounder	FLYT	lb	100	1.00	1.00	100	175	57.1
Total								961	2444	39.3

**Step 2: Calculate the live weight equivalent of the dealer reported landings.**

- a) Convert dealer reported landings amount to their live weight equivalent in pounds.
- Multiply column E by columns F and G to get live weight equivalents (column H).

**Dealer report submitted by The Fish Co.**

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
Species	Market category	Grade category	Units	Landed quantity	Unit conversion factor	Live weight conversion factor	Live weight (lb)
Atlantic cod	Scrod	Gutted	lb	480	1.00	1.17	562
Haddock	Large	Gutted	lb	660	1.00	1.14	752
Monkfish	Unknown	Tails	lb	40	1.00	3.32	133
Scallops	11-20 count	Meats	lb	9	1.00	8.33	75
Spiny dogfish	Unknown	Gutted	lb	317	1.00	1.20	380
Winter flounder	Large	Round	lb	205	1.00	1.00	205
Winter skate	Unknown	Wings	lb	500	1.00	2.27	1135
Yellowtail flounder	Small	Round	lb	180	1.00	1.00	180
Total							3422

**Step 3: Calculate the total dealer landings by statistical area and the total  $K_{all}$  by statistical area.**

a) Calculate the dealer landings by statistical area

- Multiply column C (from step 2, column H) by column D (step 1, column L) to get dealer landings by statistical area in their live weight equivalents (column E)

b) Determine dealer  $K_{all}$  by statistical area

- Sum total dealer species landings by statistical area (column E) to get dealer  $K_{all}$  by statistical area (column F).

c) Determine total  $K_{all}$

- Add any non-dealer landings from the VTR reports (e.g., home consumption; step 1, column G) to the dealer  $K_{all}$  (column F) to get total  $K_{all}$  by statistical area (column H)

**Dealer landings by statistical area**

<i>A</i>	<i>B</i>	<i>C</i>	<i>D</i>	<i>E</i>	<i>F</i>	<i>G</i>	<i>H</i>
Species	Statistical area	Dealer amount (live wt. lb)	VTR statistical area percentage (%)	Total landings by statistical area (live wt. lb)	Dealer Kall dealer (lb)	Non-dealer Kall (lb)	Total Kall (lb)
Atlantic cod	514	562	40	224.8			
Haddock	514	752	93.8	705.4			
Monkfish	514	133	100	133.0			
Scallops	514	75	0	0.0			
Spiny dogfish	514	380	100	380.0	1725.4	15.0	1740.4
Winter flounder	514	205	100	205.0			
Winter skate	514	1135	0	0.0			
Yellowtail flounder	514	180	42.9	77.2			
Atlantic cod	521	562	60	337.2			
Haddock	521	752	6.2	46.6			
Monkfish	521	133	0	0.0			
Scallops	521	75	100	75.0			
Spiny dogfish	521	380	0	0.0	1696.6	0.0	1696.6
Winter flounder	521	205	0	0.0			
Winter skate	521	1135	100	1135.0			
Yellowtail flounder	521	180	57.1	102.8			
Total					3422.0	15.0	3437.0

**Step 4: Calculate the total landed catch ( $K_{\text{species}}$ ) and the  $K_{\text{all}}$  (needed to estimate discards when trip is not observed) for each groundfish stock being monitored.**

- a) Calculate total stock landings from dealer reported landings by statistical area and add any non-dealer landings if there were any reported on the VTR.
- Use the NEFSC standard lookup table to determine which statistical areas correspond to each species stock area and then sum dealer landings by statistical area (step 3, column E) to calculate the total landings by stock area (column C) in live weight (lb).
  - Sum up any non-dealer landings by species/stock area reported on the VTR (step 1, column G) and add to the dealer landings by stock area.
- b) Determine the stock  $K_{\text{all}}$  for each groundfish stock being monitored (needed to calculate discards for unobserved trips).
- Use the NEFSC standard lookup table to determine which statistical areas correspond to each species stock area and then sum the total  $K_{\text{all}}$  by stock area (step 3, column H) across stock areas to calculate the total species/stock  $K_{\text{all}}$  (column D). *\*This must be done on a species/stock basis because stock area boundaries differ from species to species.*

**Groundfish stock area totals (\*only the 14 stocks for which ACE will be allocated in 2010 are included here)**

A	B	C	D	E	
Species	Stock	Landed catch (live wt. lb)	Total species/stock Kall (live wt. lb)		Notes
Haddock	Gulf of Maine	705.4	1740.4		
	Georges Bank	46.6	1696.6		
Atlantic cod	Gulf of Maine	224.8	1740.4		
	Georges Bank	337.2	1696.6		
Pollock	Unit	0.0	3437.0		
White hake	Unit	0.0	3437.0		
Acadian redfish	Unit	0.0	3437.0		
Yellowtail flounder	Cape Cod/Gulf of Maine	180.0	3437.0		
	Georges Bank	0.0	0.0		
	Souther New England/Mid-Atlantic	0.0	0.0		
Winter flounder	Gulf of Maine	205.0	1740.4		
	Georges Bank	0.0	0.0		
American plaice	Unit	0.0	3437.0		
Witch flounder	Unit	15	3437.0		Home consumption; from VTR report