



Tab B, No. 8(b)
April 2021

Red Snapper Data Recreational Data Calibrations and Recreational Catch Limits

Currency Exchange 101

$$\frac{\text{Currency 2}}{\text{Currency 1}} = \text{Exchange Rate}$$

For Example:

$$\frac{\text{€ (Euro)}}{\text{\$ (USD)}} = 0.836 \qquad \frac{\text{€ 8.36}}{\text{\$10}} = 0.836$$

Invert the num/den to get the exchange rate going the other way.

$$\frac{\text{\$ (USD)}}{\text{€ (Euro)}} = 1.196 \qquad \frac{\text{\$ 10}}{\text{€ 8.36}} = 1.196$$



Data “Currencies”

CHTS and each state measures harvest differently so, we need an exchange rate to compare the systems.

- Calibration Ratios are like Exchange Rates

$$\frac{\text{Currency 2}}{\text{Currency 1}} = \text{Exchange Rate}$$

$$\frac{\text{State Data Collection Program}}{\text{CHTS}} = \text{Calibration Ratio}$$

Predicted Landings

For **Alternative 1**, putting the value of CHTS units into AL's currency:

$$\frac{\text{AL Snapper Check (??)}}{\text{CHTS for AL (1,122,662)}} = 0.4875$$

$$\frac{\text{AL Snapper Check (1,122,662)}}{\text{CHTS for AL (??)}} = 0.4875$$

Results in a new value in CHTS units.

(Divide by the exchange rate instead of multiplying)

$$\frac{\text{AL Snapper Check (1,122,662)}}{\text{CHTS for AL (2,302,896)}} = 0.4875$$

Calibrating Multiple Currencies

Because each pair of currencies has its own exchange rate between them, summing the units from different currencies does not correspond to the sum of units in a single currency.

$$\begin{array}{rcl} \frac{\text{€ } 8.36}{\$10} & = & 0.836 \\[1em] \frac{\text{¥ } 1,086 \text{ (Yen)}}{\$10} & = & 108.6 \end{array}$$

$$\begin{array}{r} 8.36 \\ + \\ 1,086 \end{array}$$

$$\begin{array}{r} \cancel{1094.36 \text{ units}} \\ \neq \\ \text{¥ } 547.18 + \text{€ } 547.18 \\ \neq \\ \$20 \end{array}$$

Throughout the document you'll see the sum of 5 different currencies however, this is displayed for comparison purposes only and does not serve as a valid ACL value

Calibration Ratios (Exchange Rates)



AL Snapper Check (547,298)

CHTS for AL (1,122,662)

= **0.4875**



FL GRS (2,028,641)

CHTS for FL (1,913,451)

= **1.0602**



LA Creel (865,207)

CHTS for LA (816,233)

= **1.06**



MS Tales 'n Scales (58,195)

CHTS for MS (151,550)

= **0.3840**



TX Creel Survey (265,105)

CHTS for TX (265,105)

= **1.00**

Alt.	Ratio	ACL	1		2		3 & 4		5	
Currency		CHTS		CHTS		<u>CHTS</u>		CHTS		CHTS
AL	0.4875	1,122,662	 1,122,662	2,302,896	 547,298	1,122,662	 864,450	1,773,231	 989,975	2,030,717
FL	1.0602	1,913,451	 1,913,451	1,804,802	 2,028,641	1,913,451	 1,473,358	1,389,698	 1,687,301	1,591,493
LA	1.06	816,233	 816,233	770,031	 865,207	816,233	 628,499	592,924	 719,762	679,021
MS	0.384	151,550	 151,550	394,661	 58,195	151,550	 116,693	303,888	 133,638	348,015
TX	1	265,105	 265,105	265,105	 265,105	265,105	 204,131	204,131	 233,772	233,772
Total		4,269,000	4,269,000	5,537,495	Not Additive	4,269,000	3,287,131	4,263,872	3,764,448	4,883,019
Do predicted landings remain = /> ACL?			No		Yes		Yes		No	

Questions?

