## **INTER-AMERICAN TROPICAL TUNA COMMISSION**

## 92<sup>ND</sup> MEETING

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## **DOCUMENT IATTC-92 INF-B**

## PRELIMINARY ESTIMATES OF CATCHES OF TUNAS, IN WEIGHT AND NUMBERS, BY PURSE-SEINE SET TYPE, 2017

In response to a request from a Member, the staff prepared preliminary estimates of catches of yellowfin, bigeye, and skipjack tunas, in weight and in numbers of individuals, in the three purse-seine set types, in 2017.

The catch in numbers by set type was calculated by dividing the catch in weight by the average weight for each set type (Table 1). The average weight was calculated using the length-composition data from the IATTC port sampling program. For bigeye and skipjack, the average weight of the fish in the catch was similar in unassociated (NOA) and floating objects (OBJ) sets. For yellowfin, however, the average weight of the fish caught in floating-object sets was about 5 kg, whereas in unassociated sets is was about 12 kg, and in dolphin sets (DEL) about 31 kg.

**TABLE 1.** Average weight of fish in the catch, in kg, by species and set type, 2017, to 30 June.<sup>1</sup>

	DEL	NOA	OBJ	
BET		7.90	8.73	
YFT	30.89	12.17	4.88	
SKJ	3.85	3.43	3.42	

The cumulative catch of yellowfin in dolphin sets to 14 July is about 69,000 tons, representing about 2.23 million fish (Table 2, Figure 1), or about 32 fish per ton of catch. The corresponding values for unassociated and floating-object sets are about 18,000 t and 1.5 million fish and 38,000 t and 7.7 million fish, respectively, representing about 82 and 205 fish per ton of catch.

**TABLE 2.** Preliminary estimate of cumulative catch in 2017 up to week 26 (30 June) and week 28 (14 July), in weight and numbers, by species and set type.

		DEL	NOA	OBJ
Week 26 -	–30 June	e 2017		
Catch (t)	BET	0	1,210	38,085
	YFT	63,717	17,754	35,509
	SKJ	1,141	74,750	129,667
Catch in number (millions of fish)	BET	0	0.15	4.36
	YFT	2.06	1.46	7.28
	SKJ	0.30	21.76	37.86

<sup>&</sup>lt;sup>1</sup> All 2017 data are preliminary

		DEL	NOA	OBJ				
Week 28 –14 July 2017								
Catch (t)	BET	0	1,210	40,733				
	YFT	68,789	18,144	37,585				
	SKJ	1,184	76,174	136,660				
Catch in number (millions of fish)	BET	0.00	0.15	4.67				
	YFT	2.23	1.49	7.71				
	SKJ	0.31	22.18	39.91				

These impacts do not take into consideration the natural mortality of small fish before they can enter the spawning component of the population. The staff estimates that the effect of the floating-object fishery on the spawning biomass is about 2-3 times greater than that of the dolphin-associated fishery per ton of catch.



**FIGURE 1.** Comparison of weekly cumulative catch, by species and set type, in weight (left panels) and numbers (right panels), in 2017 up to week 28.