



## PROVISION OF SCIENTIFIC SERVICES

### Alfonsino (*Beryx splendens*) OTOLITH READING

Date: October 18, 2019

#### Terms of Reference

The Consultant will determine ages of alfonsino (*Beryx splendens*) caught in the SIOFA area using annual rings of otoliths by sex and management unit area (EAST and WEST) by alfonsino experienced readers. Otoliths will be provided by three CCPs (Australia, Republic of Korea and Cook Island).

#### Annex – Plan of Otoliths reading

Tables 1-4 shows number of otoliths to be prepared by MoP, management unit (EAST and WEST), sex, and bin (size interval). Consultant will read target numbers shown in each Table.

Table 1 Number of otoliths (**EAST and MALE**) assigned to Australia and Cook Islands  
Please note well for Australia using TL needs to change to FL by the conversion factor  $FL=0.84*TL$

EAST						
MALE						
bin #	size range (cm)	# To send			Target to read	Spare
		AUS (FL converted from TL)	CI(FL)	Total		
1	< 25	33	5	38	38	0
2	25 ≤ <30	47	0	47	43	4
3	30 ≤ <35	47	0	47	43	4
4	35 ≤ <40	47	0	47	43	4
5	40 ≤ <45	47	0	47	43	4
6	45 ≤	37	10	47	43	4
	Total	258	15	273	253	20

Table 2 Number of otoliths (**EAST and FEMALE**) assigned to Australia and Cook Islands  
Please note well for Australia using TL needs to change to FL by the conversion factor  $FL=0.84*TL$

EAST						
FEMALE						
bin #	size range (FL) (cm)	# To send			Target to read	Spare
		AUS (FL converted from TL)	CI(FL)	Total		
1	< 25	41	5	46	41	5
2	25 ≤ <30	45	0	45	41	4
3	30 ≤ <35	45	0	45	41	4
4	35 ≤ <40	0	45	45	41	4
5	40 ≤ <45	0	45	45	41	4
6	45 ≤ <50	0	45	45	41	4
7	50 ≤	1	5	6	6	0
	Total	132	145	277	252	25

Table 3 Number of otoliths (**WEST and MALE**) assigned to Australia, Cook Islands and Korea  
Please note well for Australia and Korea using TL need  
to change TL to FL by the conversion factor  $FL=0.84*TL$

WEST							
MALE							
bin #	size range (cm)	# To send				Traget to read	Spare
		AUS (FL converted from TL)	CI (FL)	KOR (FL converted from TL)	Total		
1	< 20	0	0	41	41	37	4
2	20 ≤ <25	0	0	41	41	37	4
3	25 ≤ <30	12	0	29	41	37	4
4	30 ≤ <35	0	41	0	41	37	4
5	35 ≤ <40	0	41	0	41	37	4
6	40 ≤ <45	0	41	0	41	37	4
7	45 ≤	0	41	0	41	37	4
Total		12	164	111	287	259	28

Table 4 Number of otoliths (**WEST and FEMALE**) assigned to Australia, Cook Islands and Korea  
Please note well for Australia and Korea using TL need  
to change TL to FL by the conversion factor  $FL=0.84*TL$

WEST							
FEMALE							
bin #	size range (cm)	# To send				Traget to read	Spare
		AUS (FL converted from TL)	CI (FL)	KOR (FL converted from TL)	Total		
1	< 20	0	0	42	42	38	4
2	20 ≤ <25	0	0	42	42	38	4
3	25 ≤ <30	0	0	42	42	38	4
4	30 ≤ <35	0	42	0	42	38	4
5	35 ≤ <40	0	42	0	42	38	4
6	40 ≤ <45	0	42	0	42	38	4
7	45 ≤	3	19	0	22	22	0
Total		3	145	126	274	250	24