Yellowfin daily increment deposition rates: mark recapture experiments

Presenter name: Jessica Farley

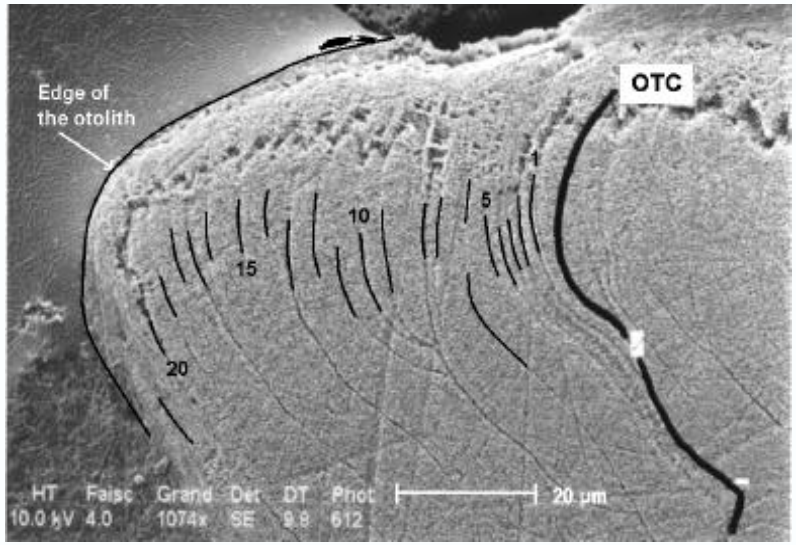
IATTC Workshop on age and growth of BET and YFT in the Pacific Ocean
23 January 2019

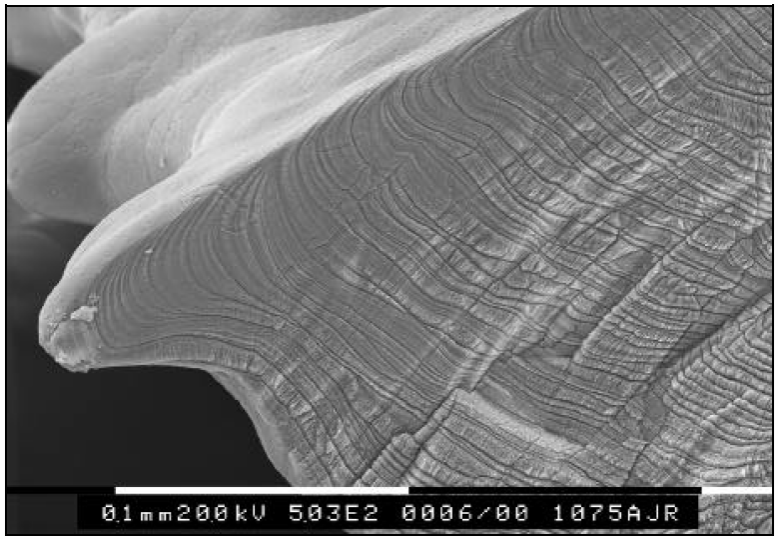
Daily ageing

Reference	Type	Size range	N	Reading method	Validation method	Days at liberty or captivity	Age validation successful	
Uchiyama and Struhsaker 1981	Age validation	52	2	Whole otolith	Captive experiments	24-30	Yes	Hawaii
	Ageing	7-93	14	Whole otolith				
Yamanaka 1990	Age validation	25-40	12	Whole otolith light microscope	Captive experiments	2-39	Yes	Hawaii
	Ageing	15-28	68	Whole otolith light microscope				
	Ageing	16-79	139	Frontal section light microscope				
Lehodey and Leroy 1999	Age validation[1]	39-90	3	Transverse section SEM	OTC mark-recapture	21-175	Yes	Solomon Islands
	Age validation[1]	39	1	Transverse section light microscope	OTC mark-recapture	21	Yes	
	Age validation[1]	43, 90	2	Transverse section light microscope	OTC mark-recapture	49, 175	No	
	Ageing	20-145	180	Transverse section light microscope				

Age validation

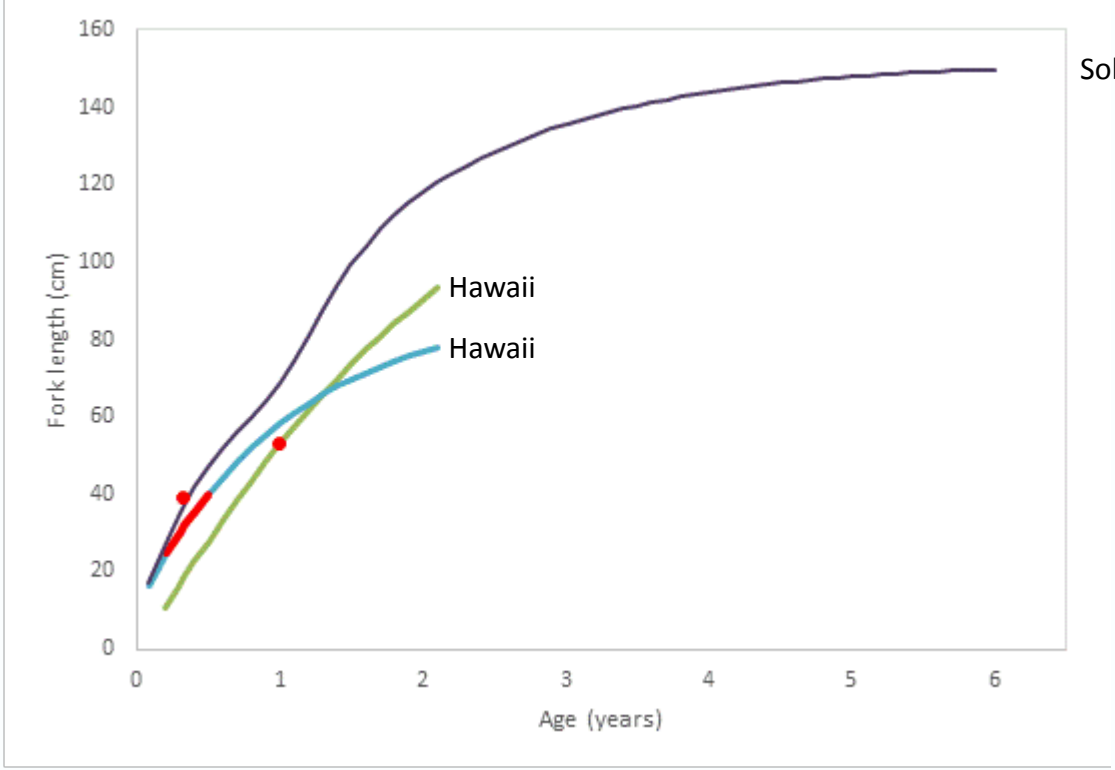
Sample	FL (cm) release	FL (cm) recapture	Days at liberty	Count (1) (mean number) Light microscopy	% difference	Count (2) SEM	% difference
T00105	42	43	49	44.4	-9.4	50	2.0
T00138	35	39	21	21.3	1.4	21	0.0
T00159	62	90.5	175	157	-10.3	175	0.0





From Lehodey & Leroy (1999)

Growth curves – daily ageing



Solomon Is