



IOTC WORKING PARTY ON TAGGING DATA ANALYSIS (RTTP-IO DATA)

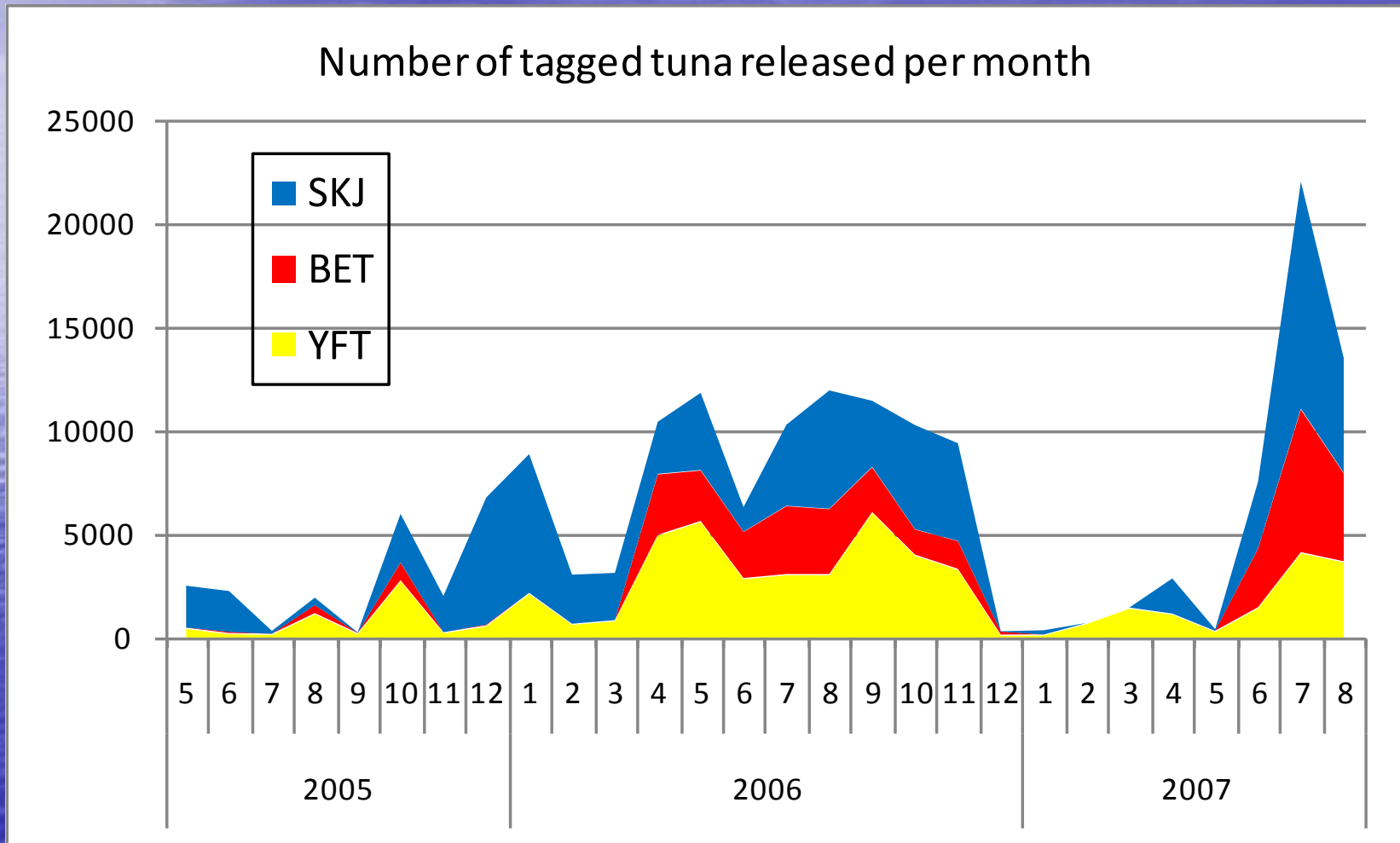
ICCS, Victoria - Seychelles
June 30th – July 4th 2008

by

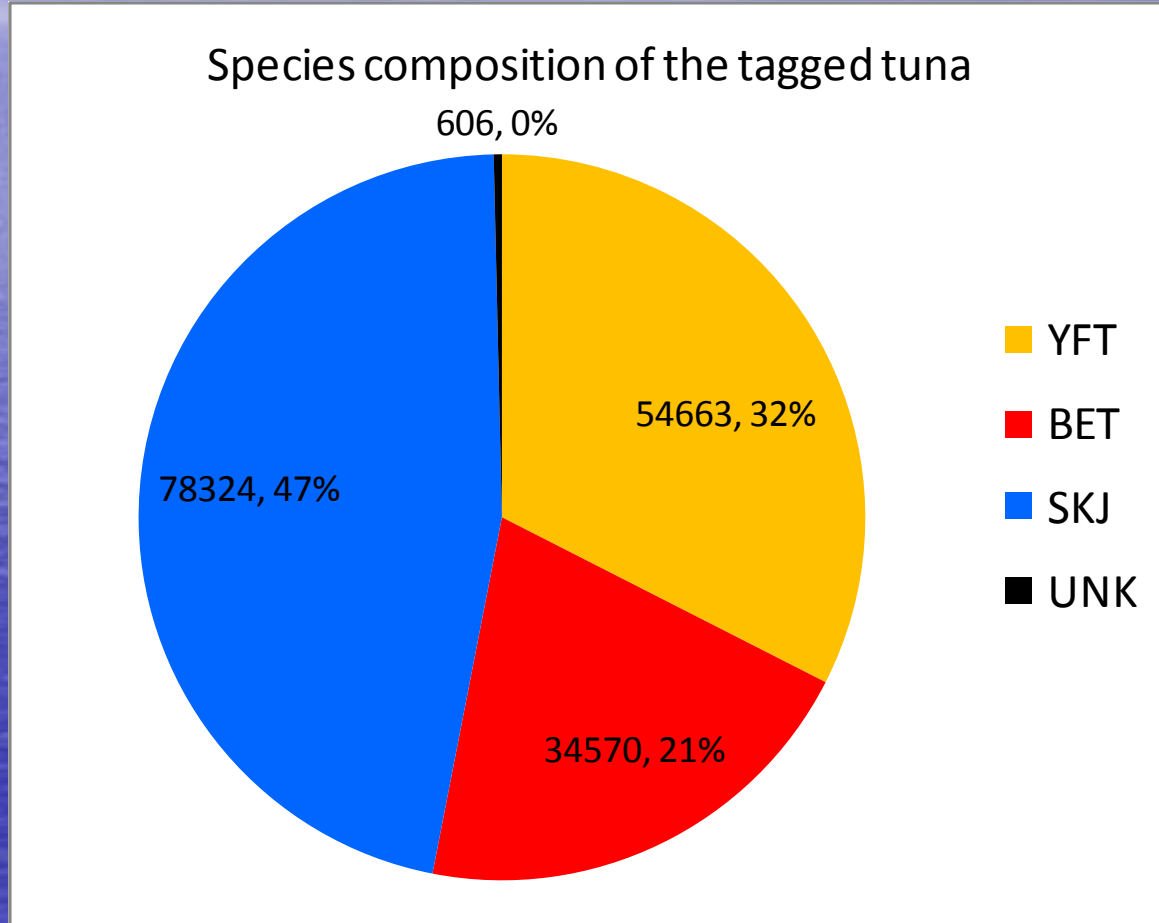
Jean-Pierre HALLIER
Chief Coordinator of the RTTP-IO



1. TAGGING – Monthly number of fish tagged (overall number: 168,163)

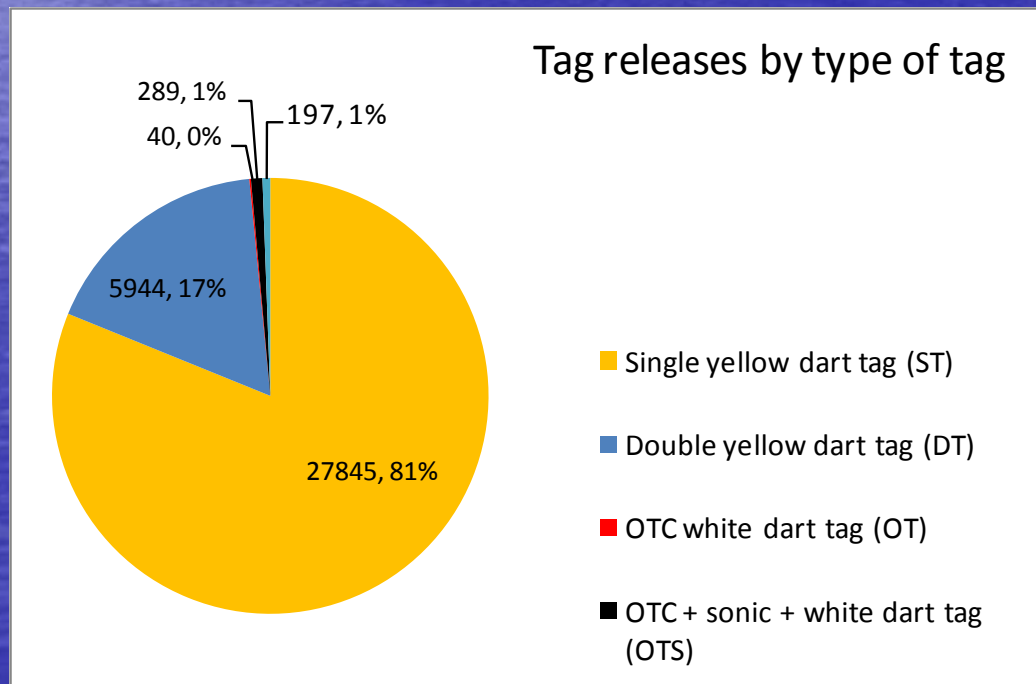


1. TAGGING – Species composition (more than 50% are YFT & BET)

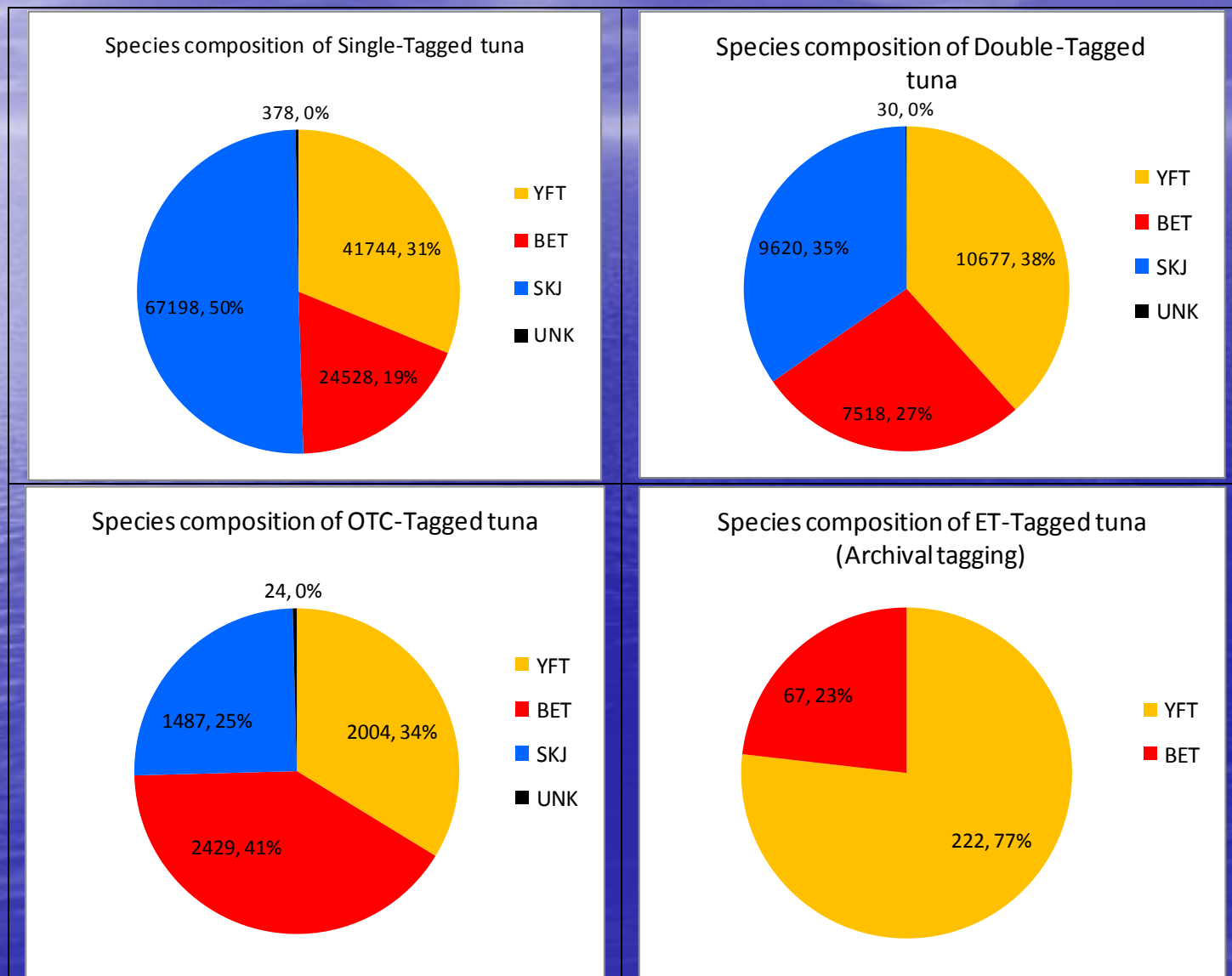


1. TAGGING – Distribution by species & type of tag

	YFT	BET	SKJ	UNK	Total	% type
Single yellow dart tag (ST)	41744	24528	67198	378	133848	79.6
Double yellow dart tag (DT)	10677	7518	9620	30	27845	16.6
OTC white dart tag (OT)	2004	2429	1487	24	5944	3.5
OTC + sonic + white dart tag (OTS)	14	12	14		40	0.0
OTC + archival + red dart tag (ET)	222	67			289	0.2
Unknown type of tag (UN)	2	16	5	174	197	0.1
<i>Total</i>	<i>54663</i>	<i>34570</i>	<i>78324</i>	<i>606</i>	<i>168163</i>	
Percentage (%)	32.5	20.6	46.6	0.4		

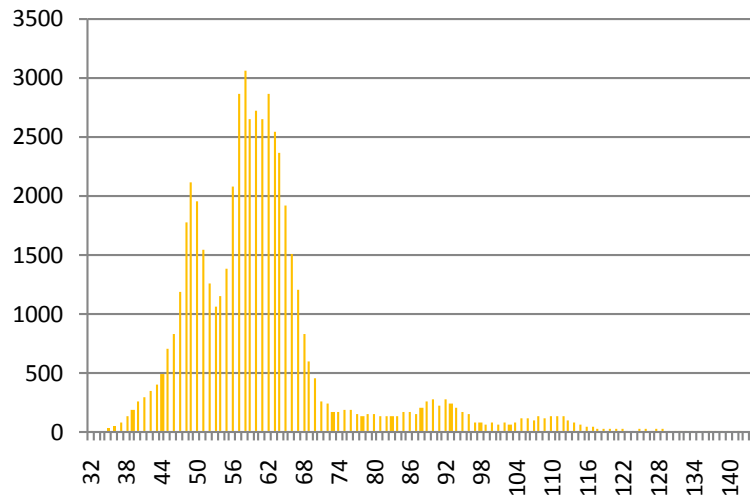


1. TAGGING – Species composition by type of tag

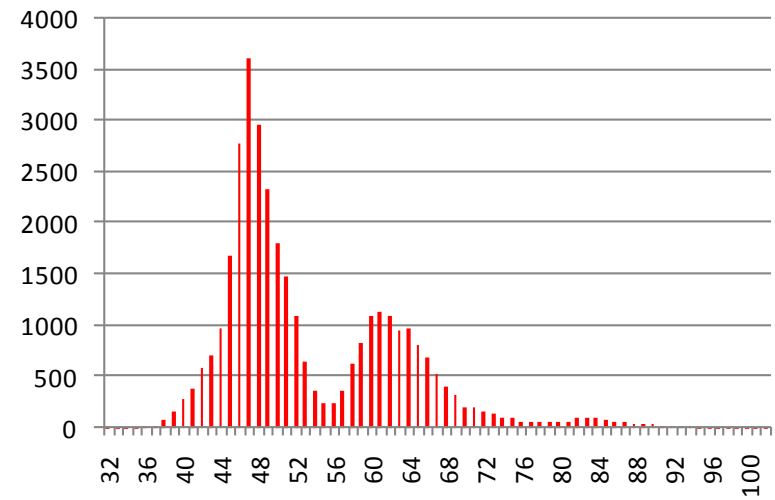


1. TAGGING – Size distribution

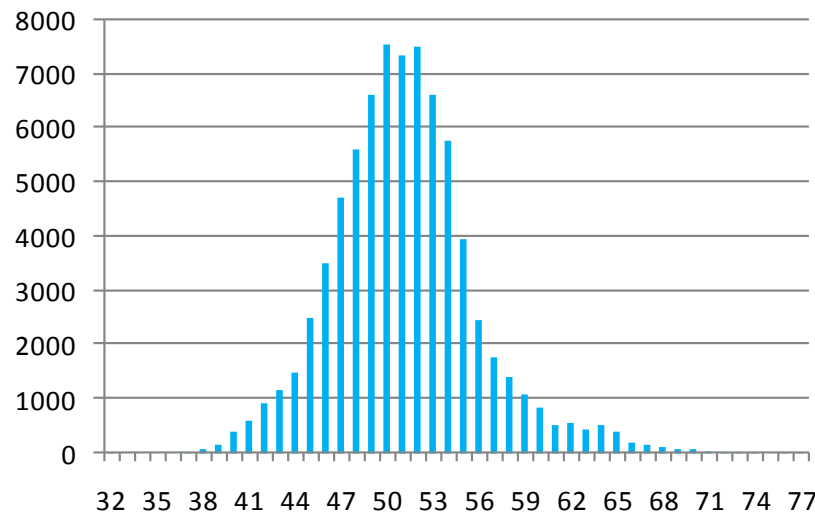
Size distribution of tagged YFT (N=54,245)



Size distribution of tagged BET (N=34,402)

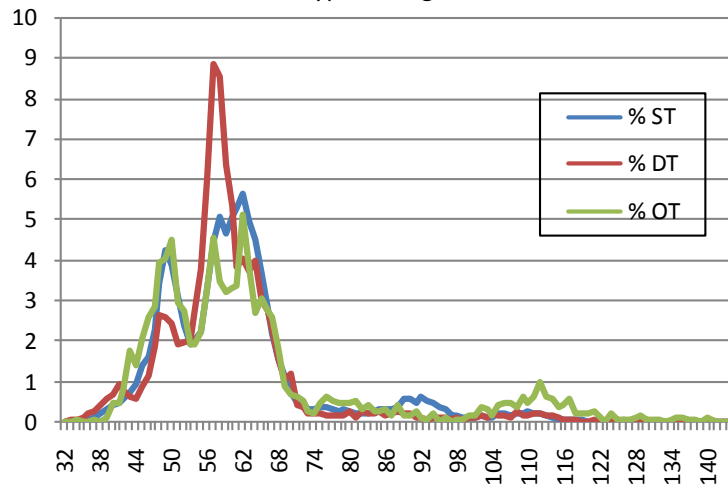


Size distribution of tagged SKJ (N=77,574)

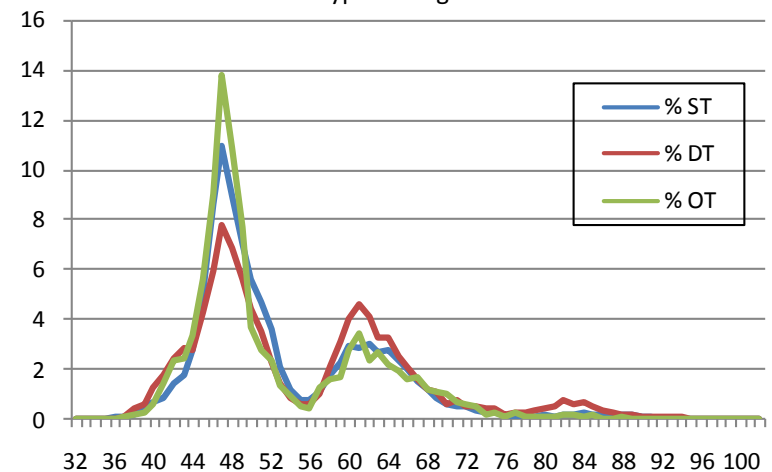


1. TAGGING – Size distribution by type of tag

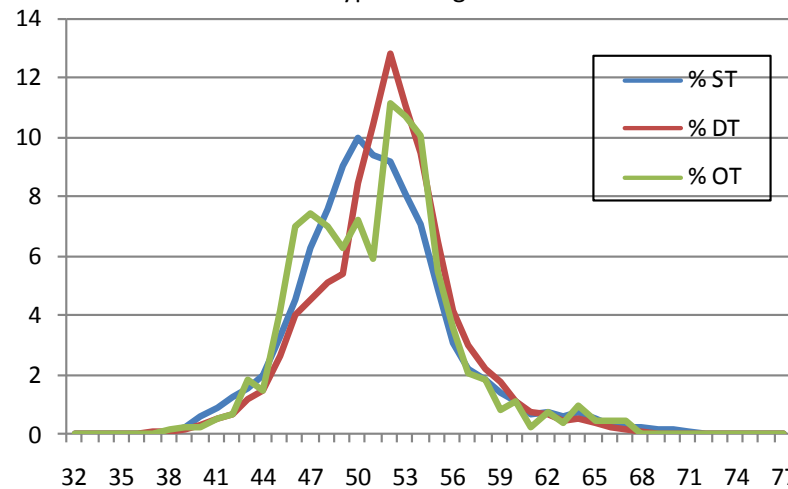
Percentage of each size class for YFT bearing different types of tag



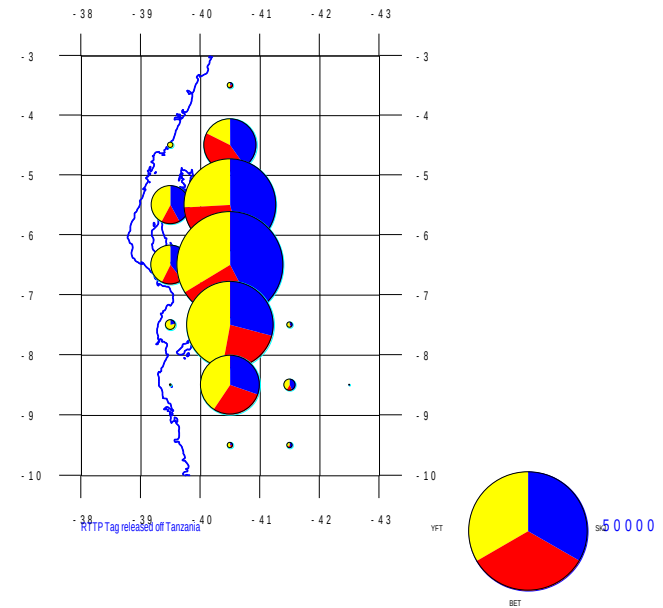
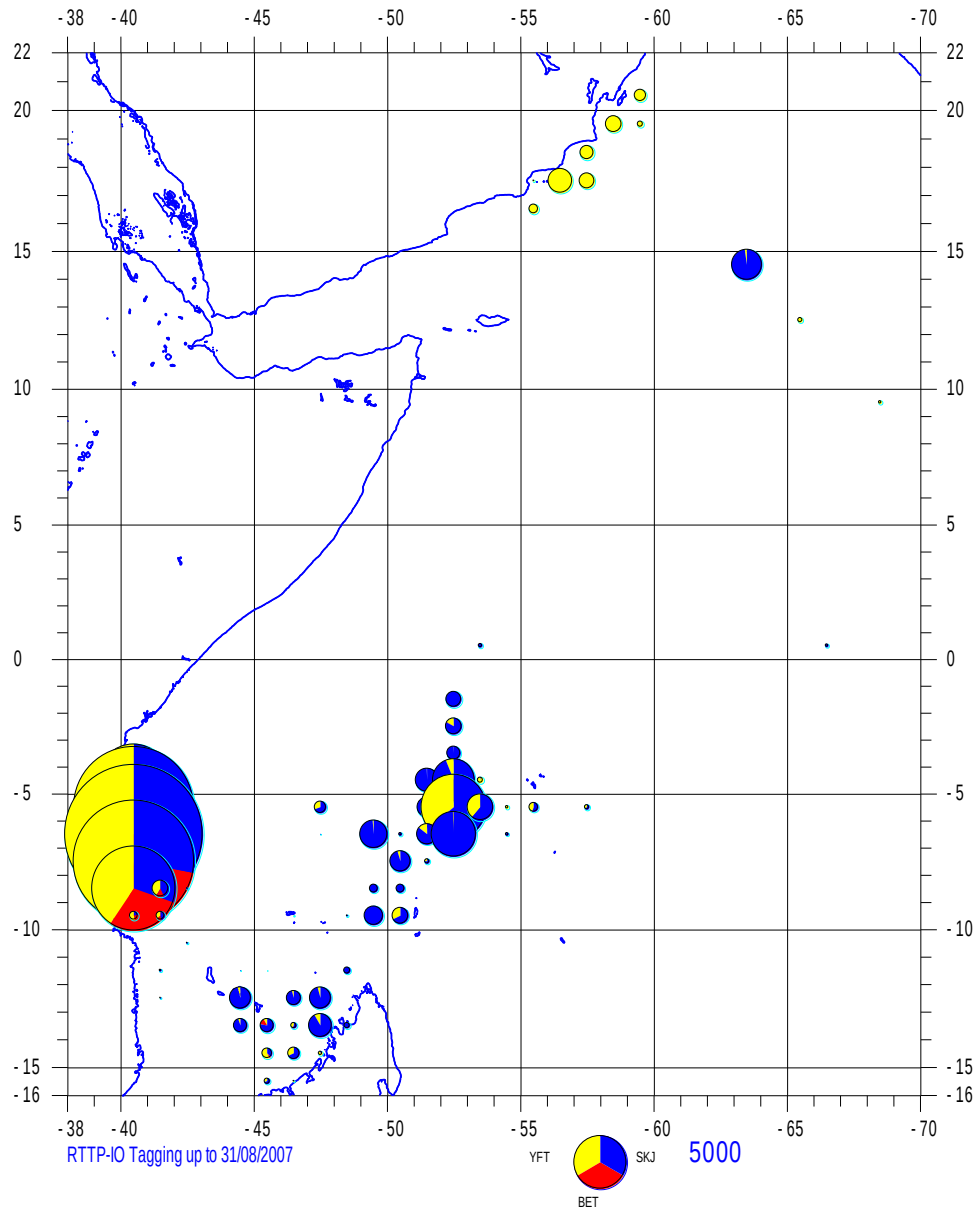
Percentage of each size class for BET bearing different types of tag



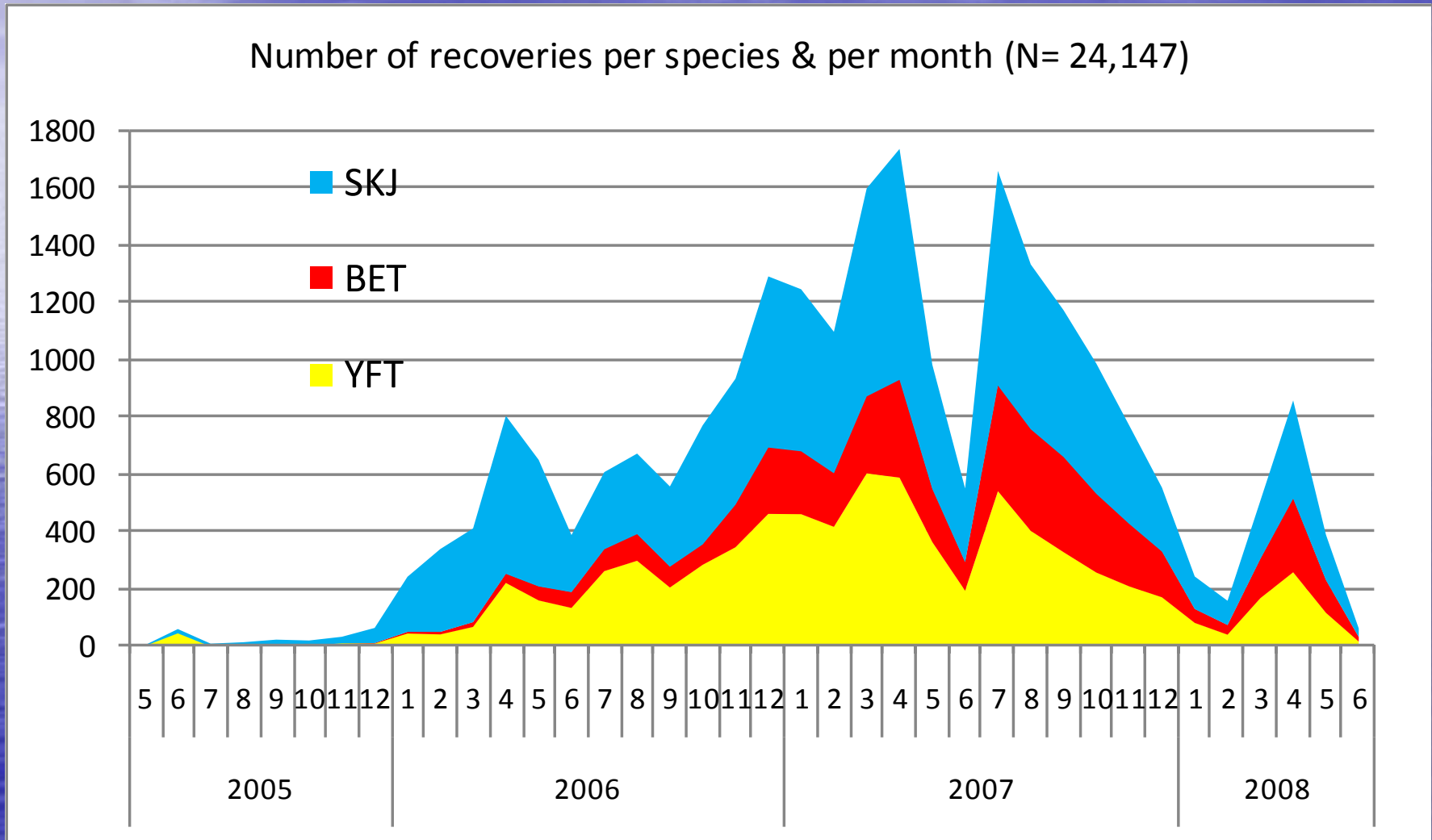
Percentage of each size class for SKJ bearing different types of tag



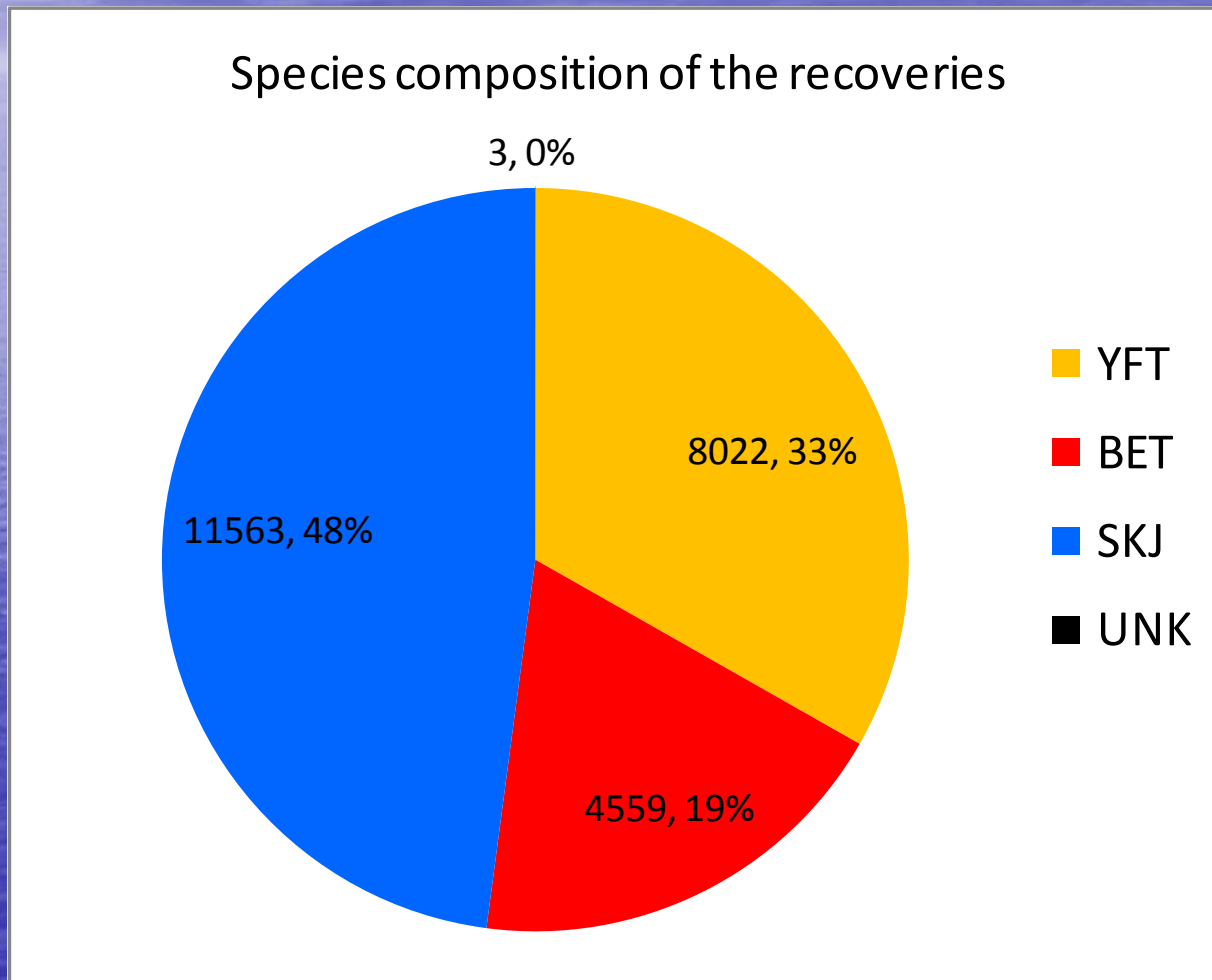
1. TAGGING – Geographical distribution



2. RECOVERIES – Monthly Number of recoveries per month (overall number: 24,147)

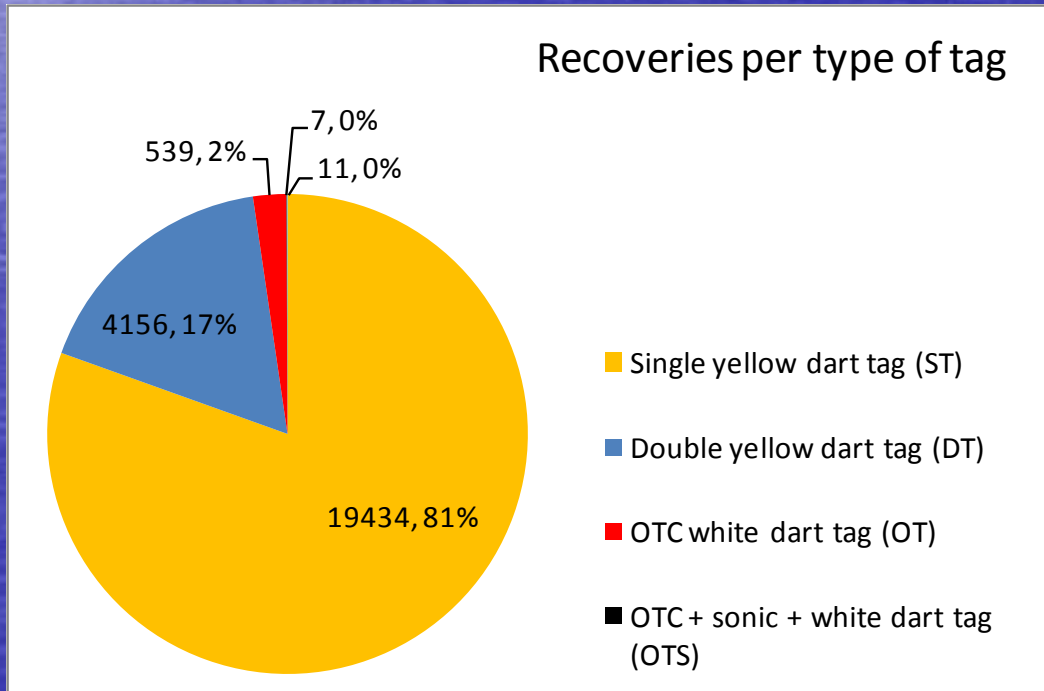


2. RECOVERIES – Species composition

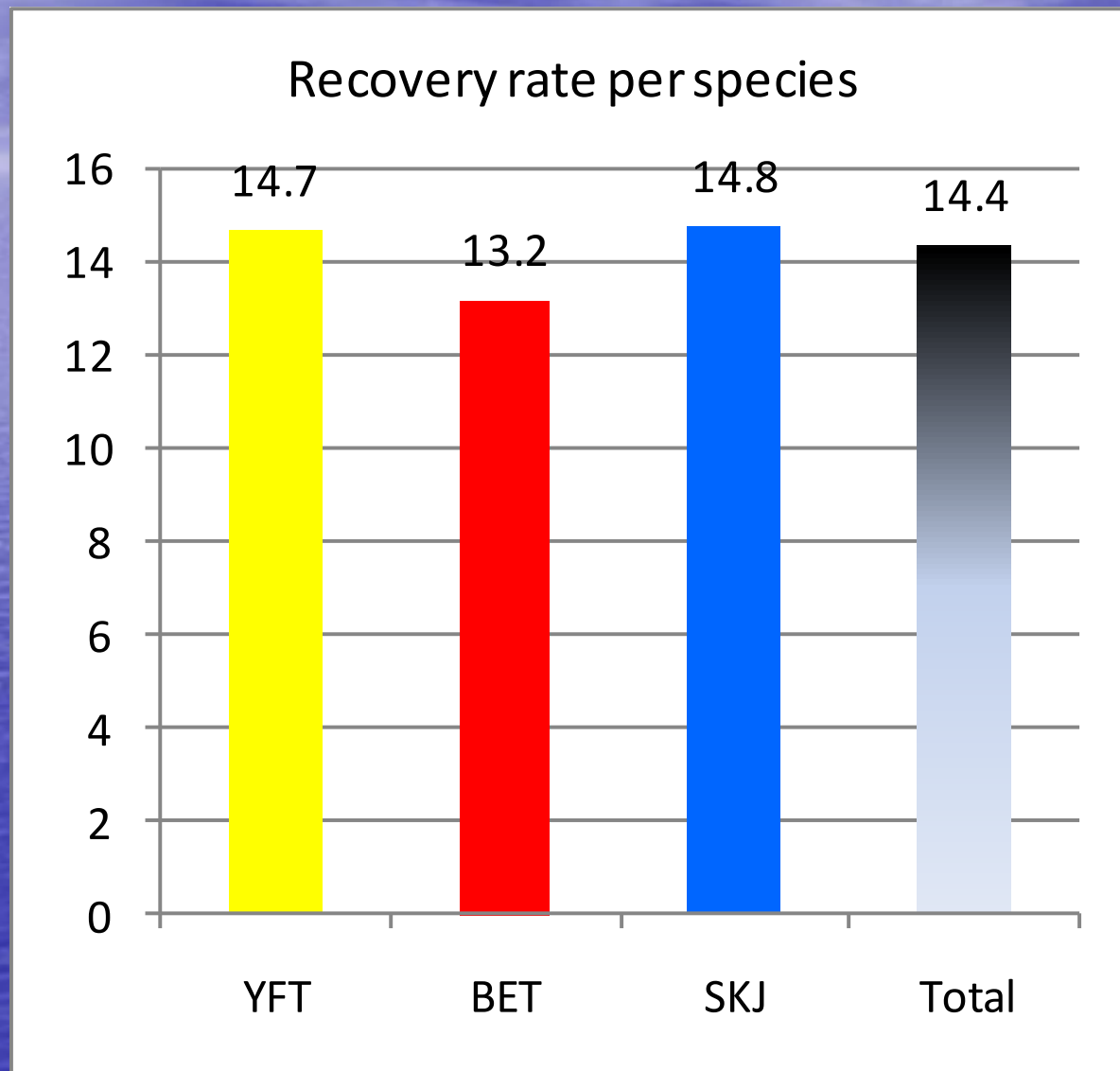


2. RECOVERIES – Distribution by species & type of tag

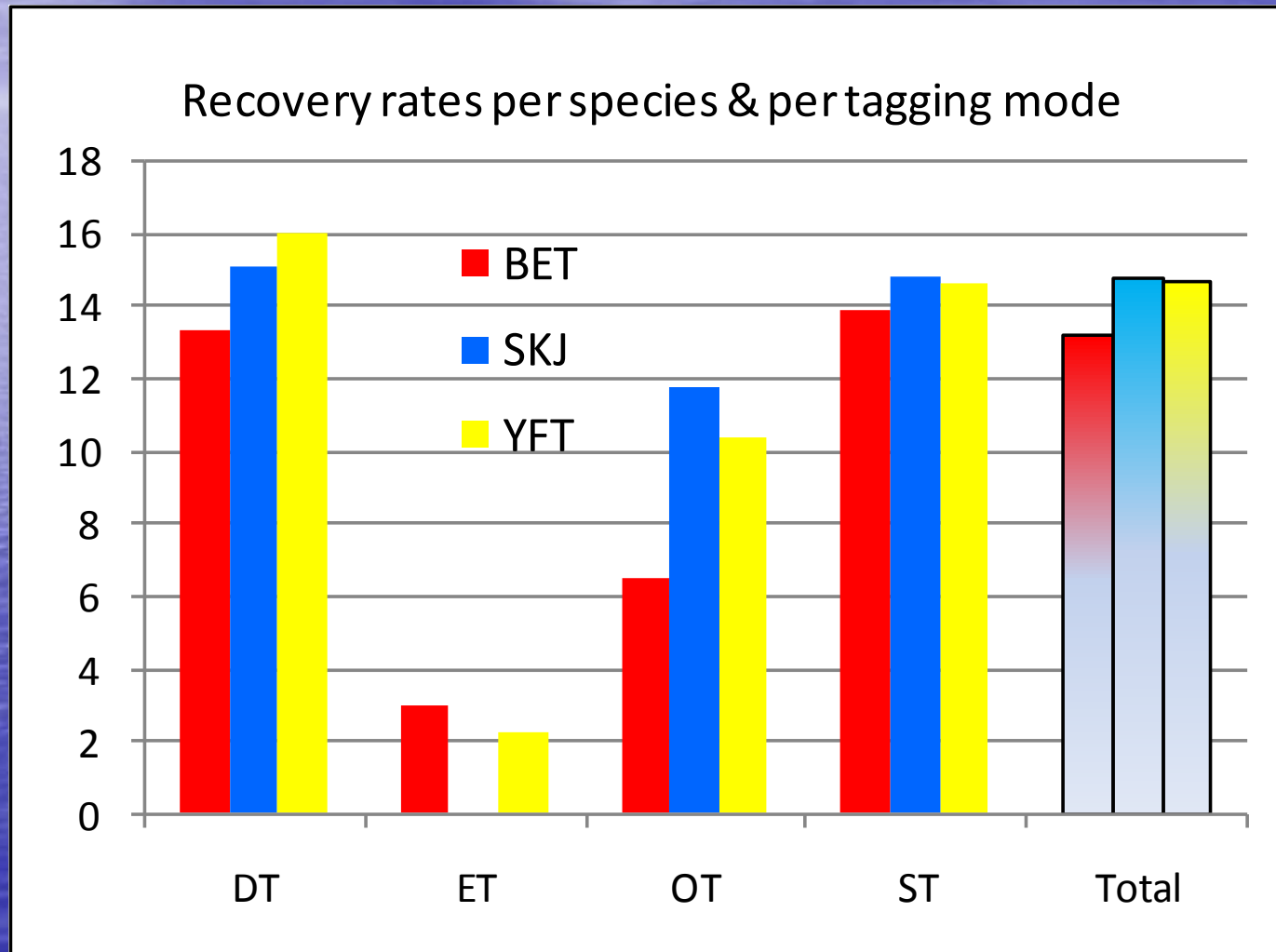
	YFT	BET	SKJ	UNK	Total	% type
Single yellow dart tag (ST)	6104	3396	9933	1	19434	80.5
Double yellow dart tag (DT)	1705	999	1451	1	4156	17.2
OTC white dart tag (OT)	207	158	174		539	2.2
OTC + archival + red dart tag (ET)	5	2			7	0.0
Unknown type of tag (UN)	1	4	5	1	11	0.0
<i>Total</i>	8022	4559	11563	3	24147	
Percentage (%)	33.2	18.9	47.9	0.0		



2. RECOVERIES – Recovery rates per species

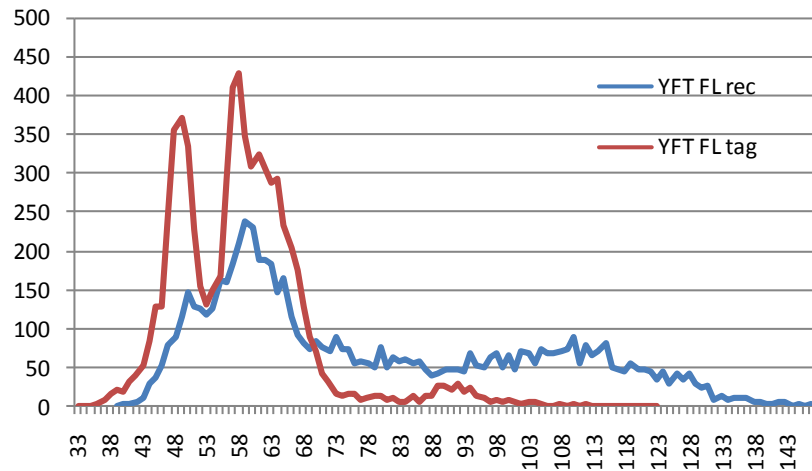


2. RECOVERIES – Recovery rates per species & type of tag

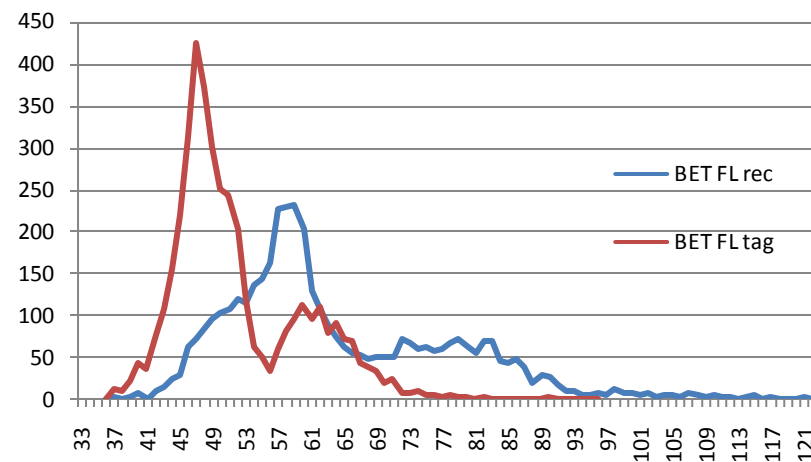


2. RECOVERIES – Size distributions at tagging & at recovery

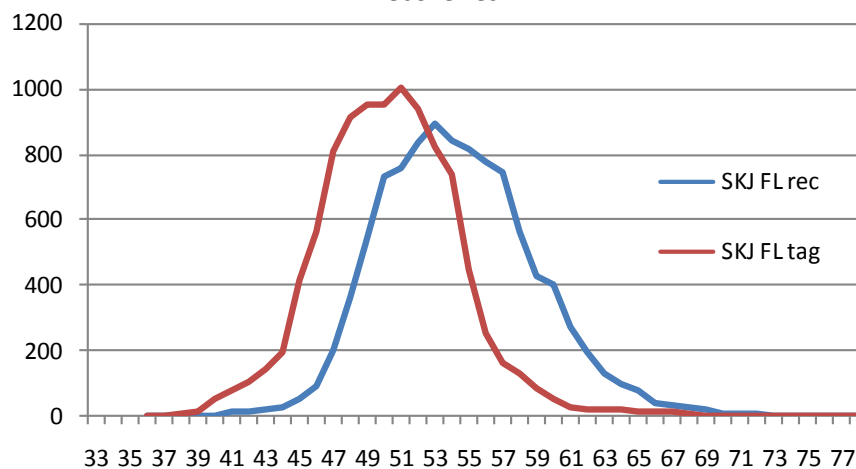
Size distributions at tagging and at recovery for YFT recoveries



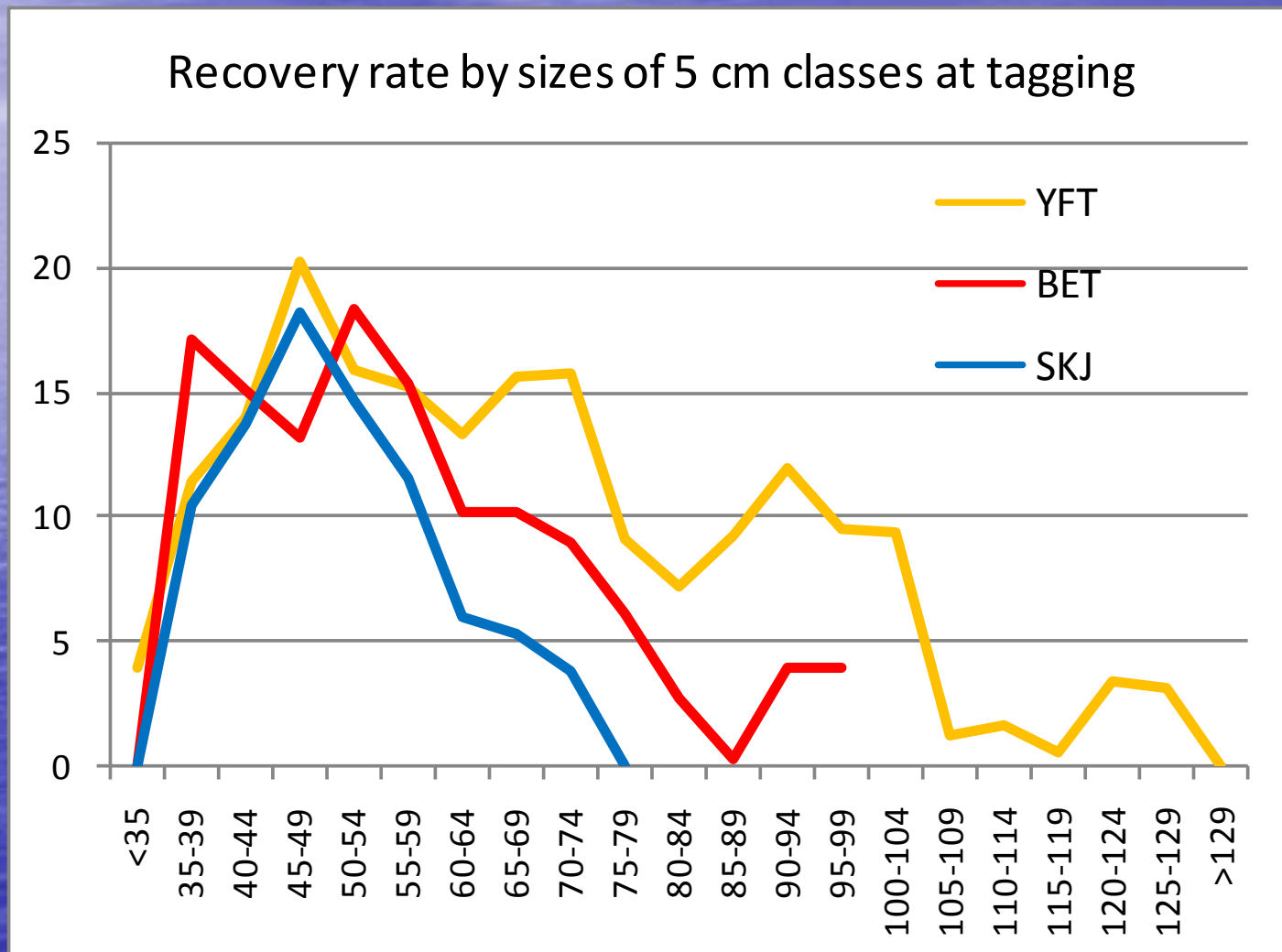
Size distributions at tagging and at recovery for BET recoveries



Size distributions at tagging and at recovery for SKJ recoveries

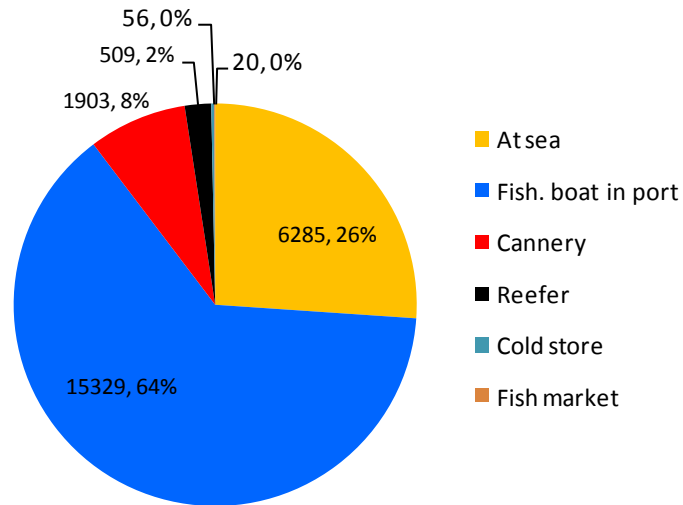


2. RECOVERY – Recovery rate by 5 cm size classes at tagging

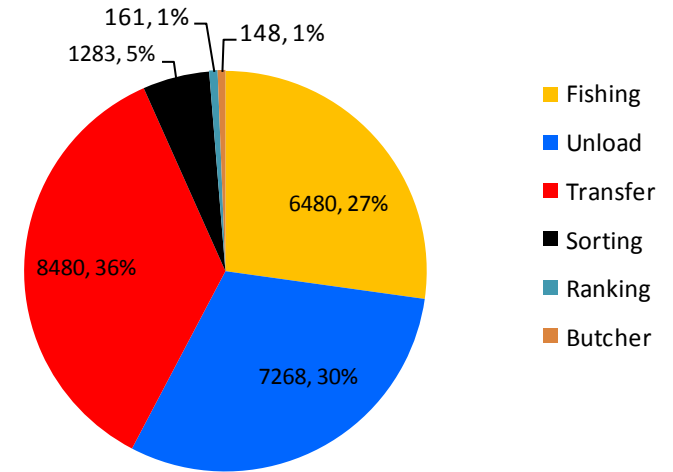


2. RECOVERY – The origins of the recoveries

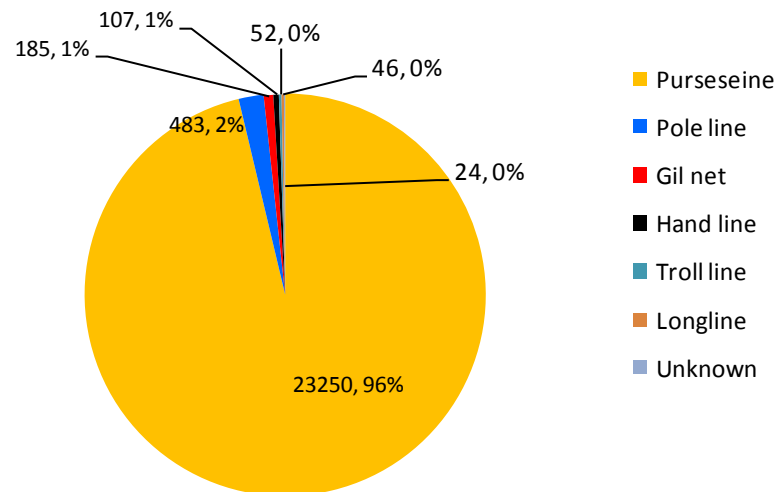
Where recoveries took place?



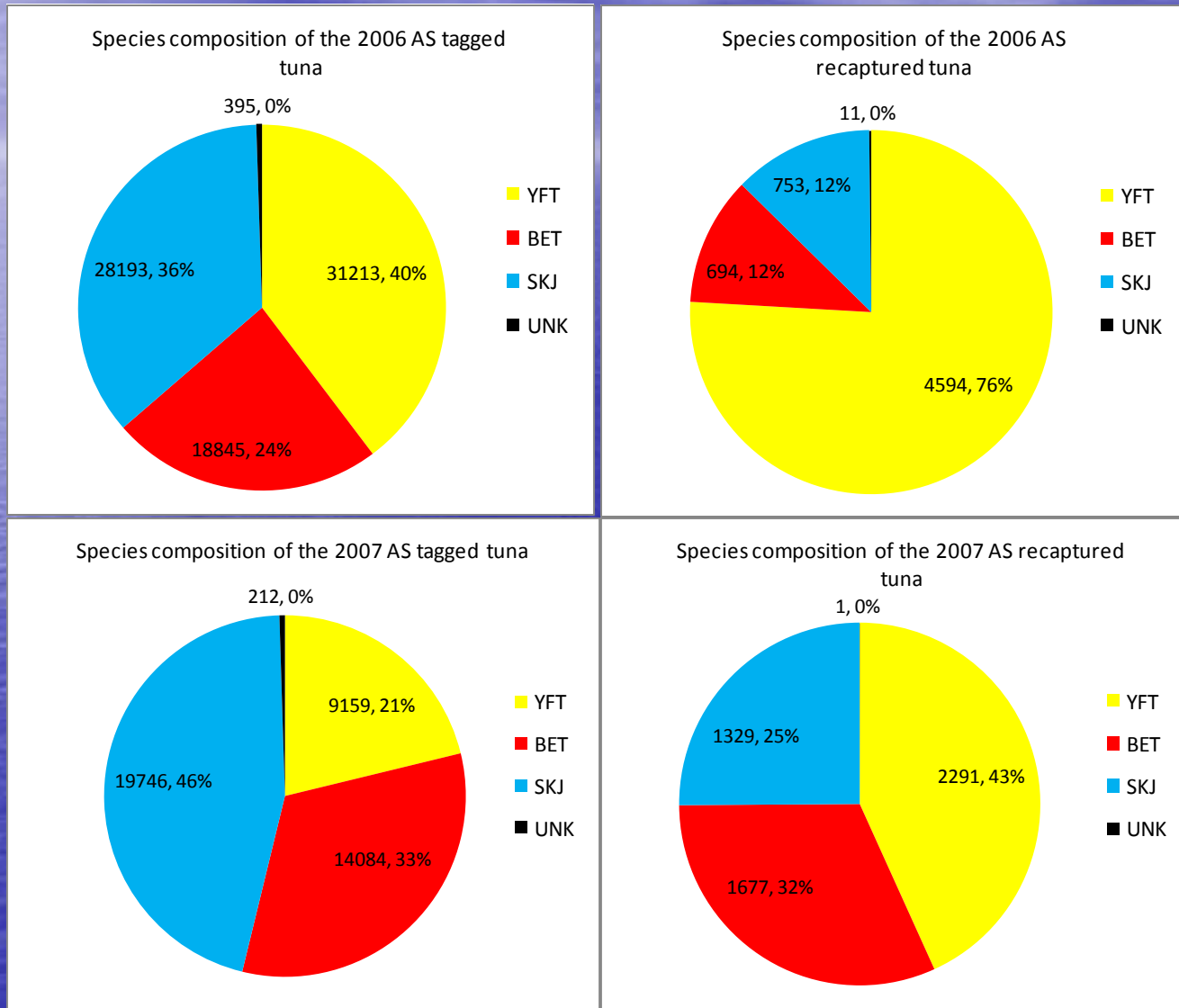
During which process recoveries are found



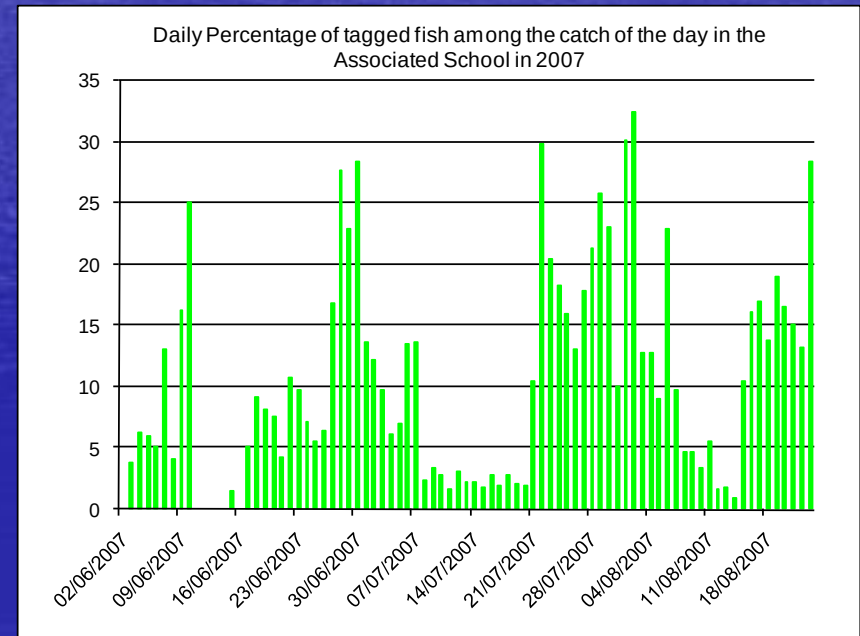
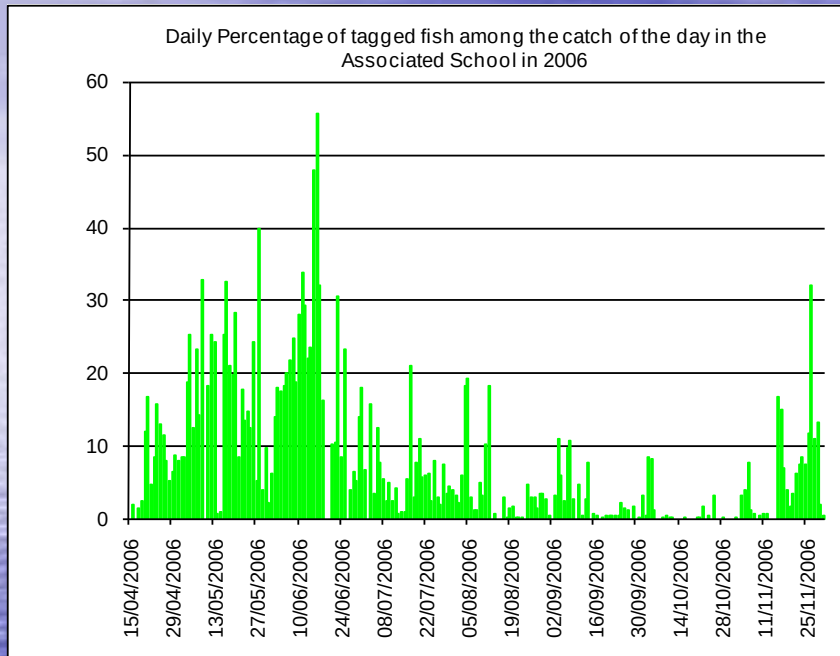
Recoveries by gear



2. RECOVERY – Species composition at tagging and at recapture in the Associated School

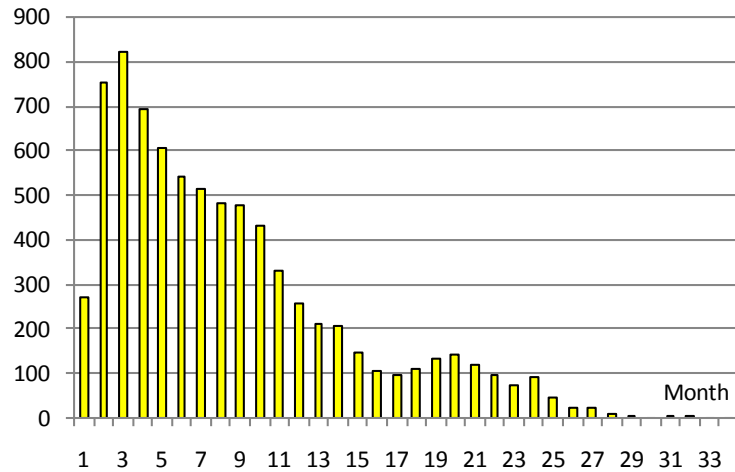


2. RECOVERY – **Associated School**, Daily Percentage of fish with tag among the tagged fish

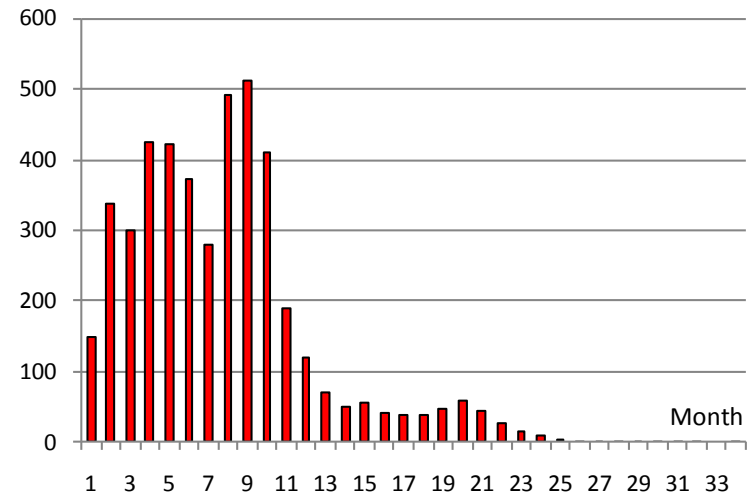


2. RECOVERY – Time-at-liberty per species

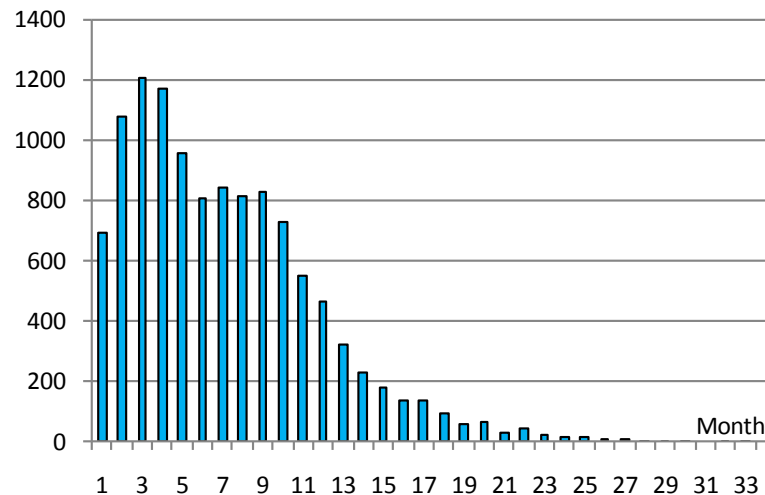
Distribution of the YFT time-at-liberty (N= 7848)



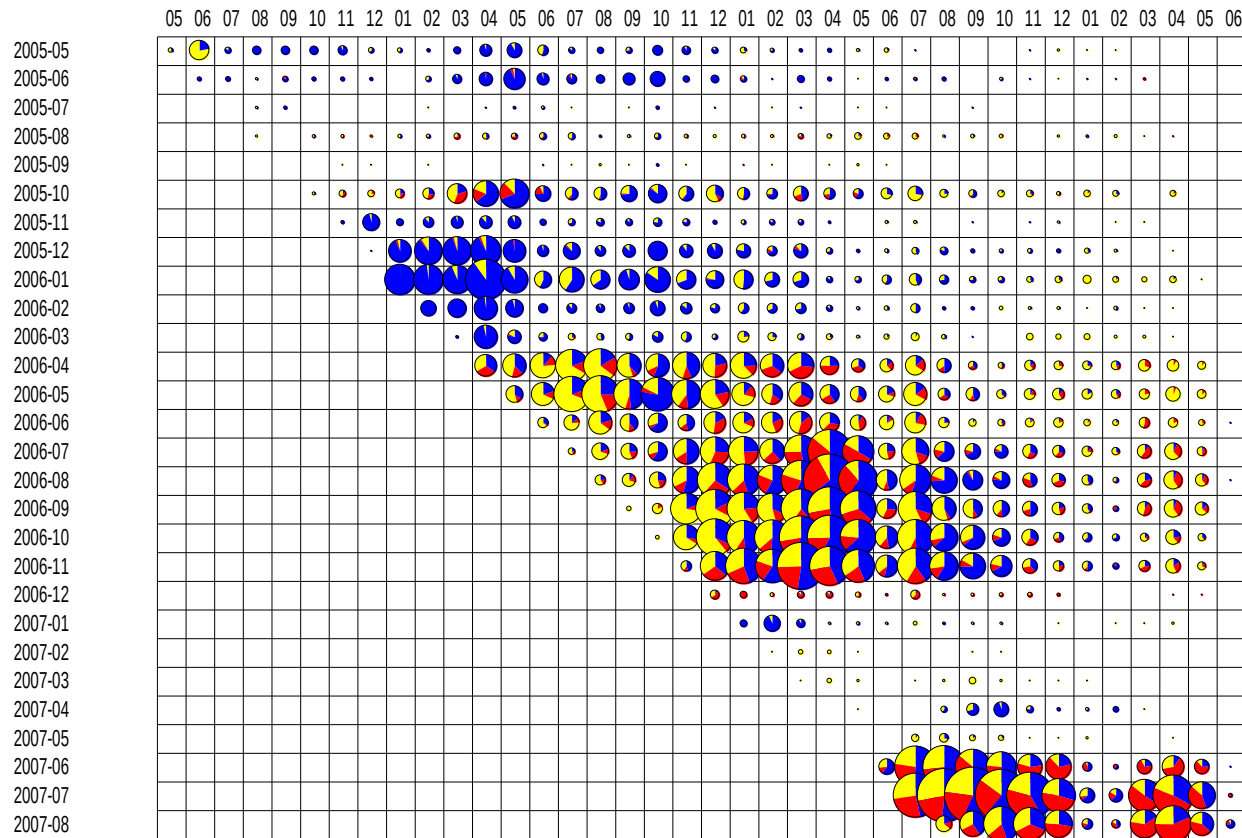
Distribution of the BET time-at-liberty (N=4533)



Distribution of the SKJ time-at-liberty (N=11517)



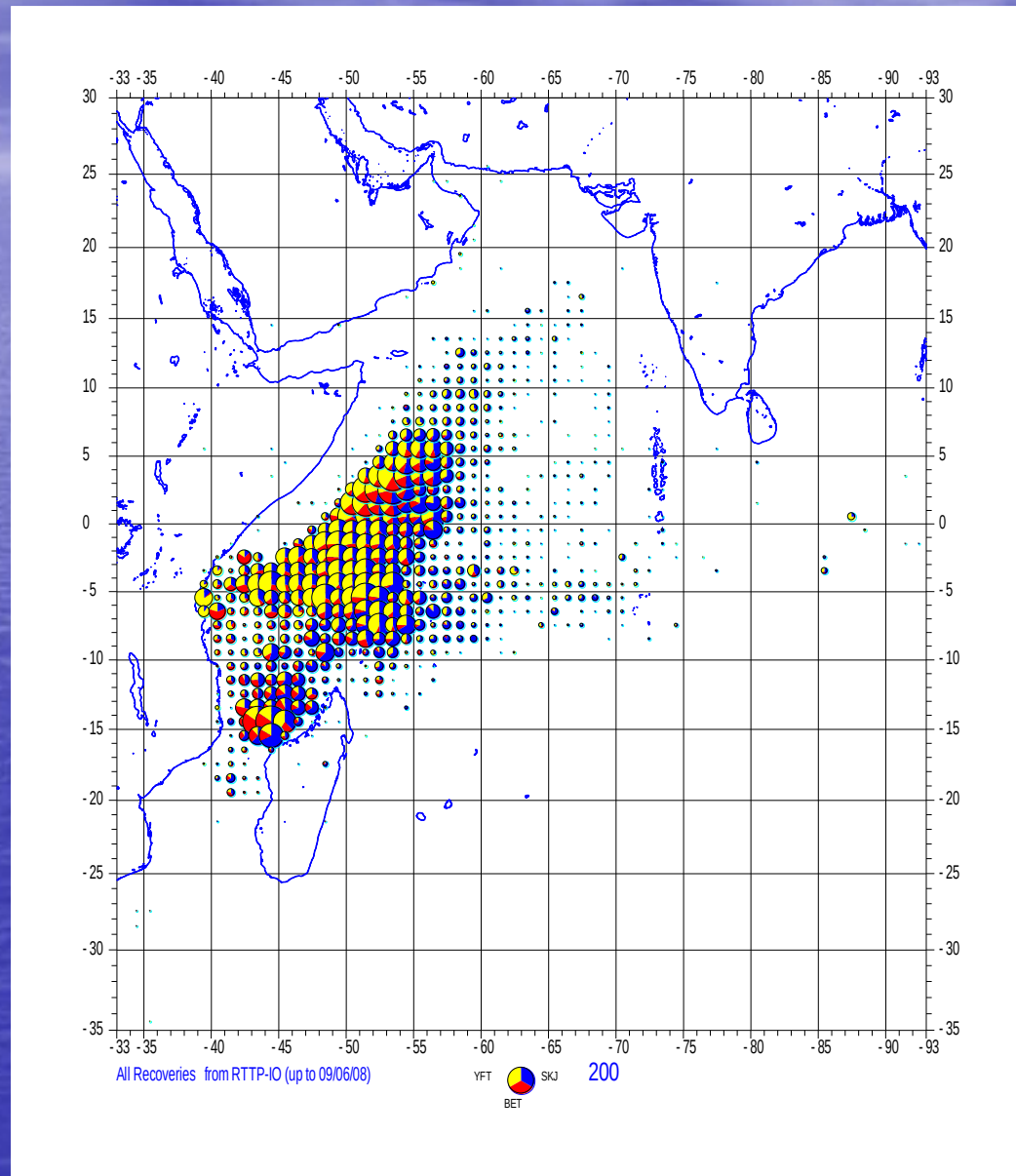
2. RECOVERY – Monthly distribution of the recoveries from each tagging month (May 2005- August 2007)



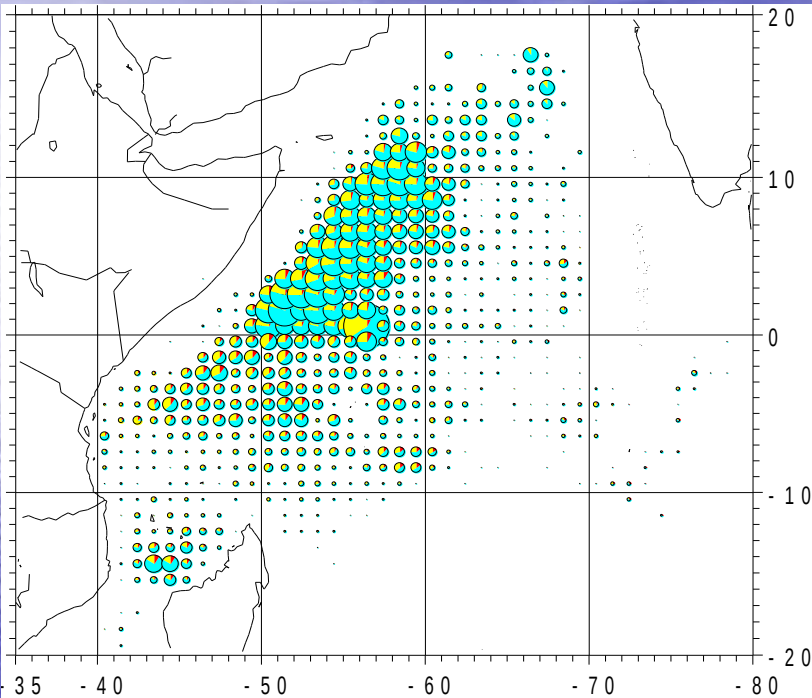
YF SK BE 70

RTTP Recoveries per tagging month

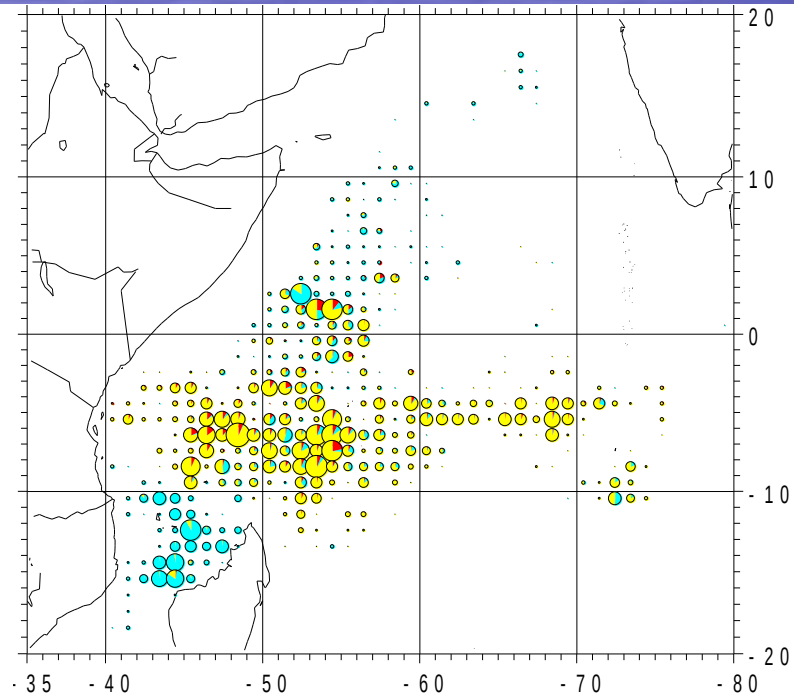
2. RECOVERY – Geographical distribution of the recoveries



2. RECOVERY – Geographical distribution of the PS catches



FAD PS 2006-2007

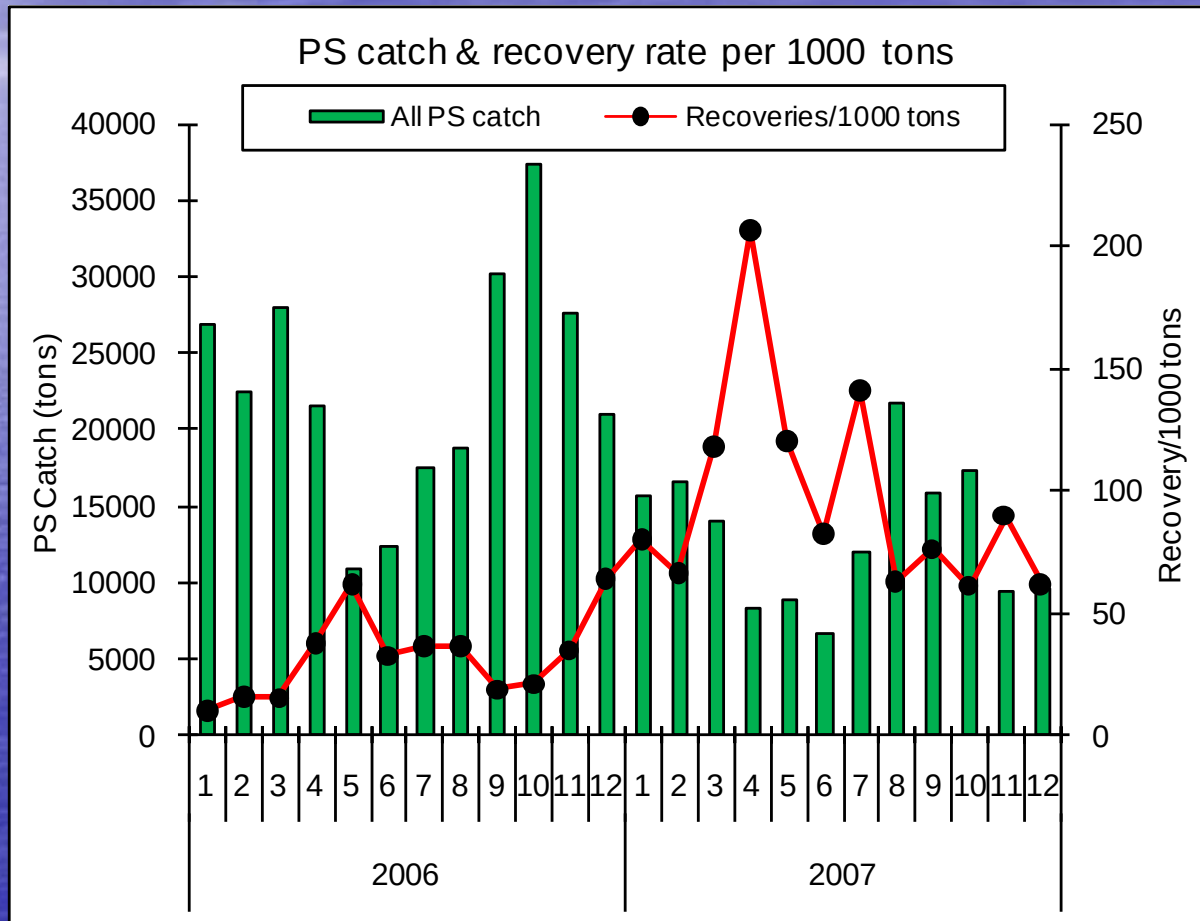


BL PS 2006-2007

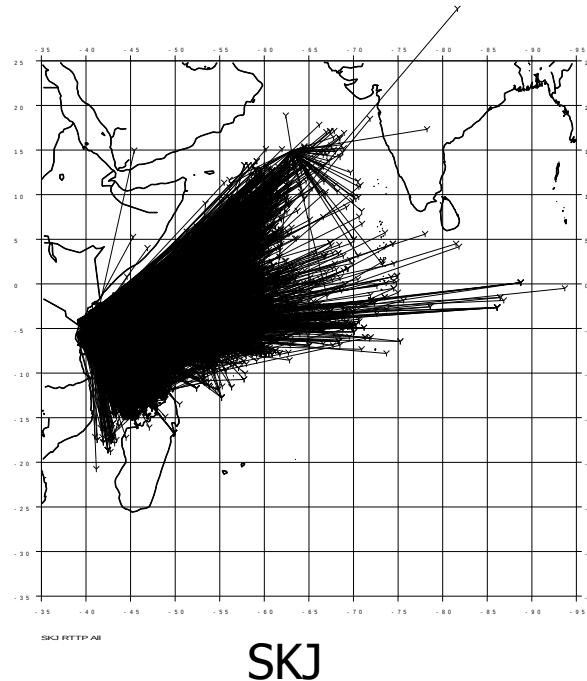
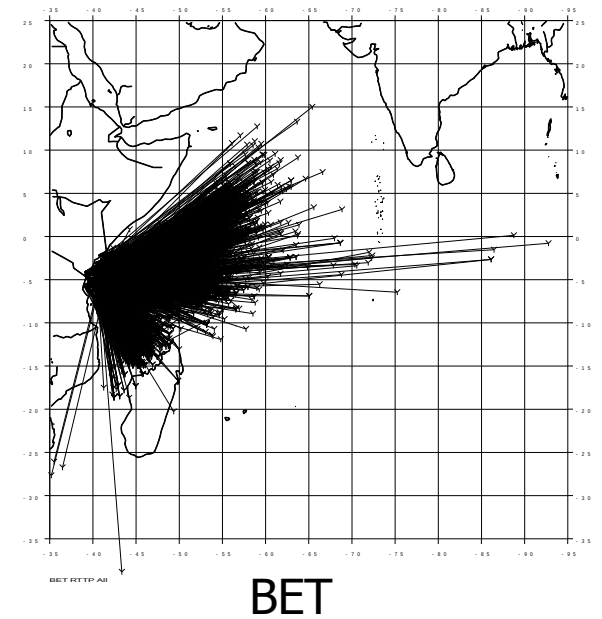
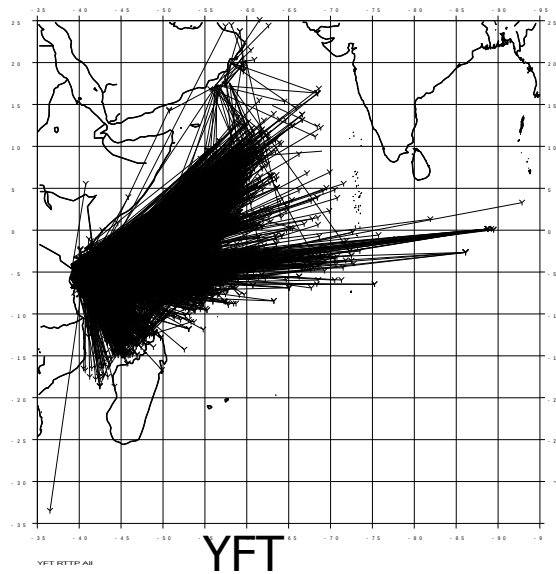
YFT  BET
SKJ

Provided by Dr. A. Fonteneau

2. RECOVERY – Purse seine catch and number of recoveries

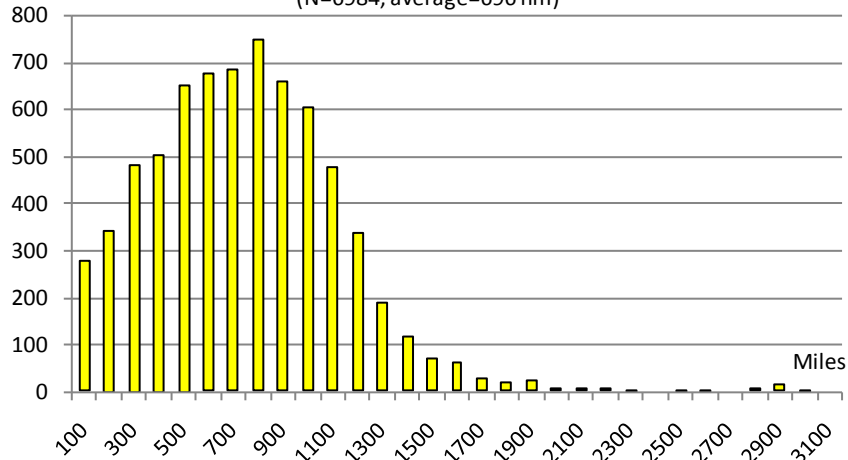


2. RECOVERY – Straight lines between tagging and recovery

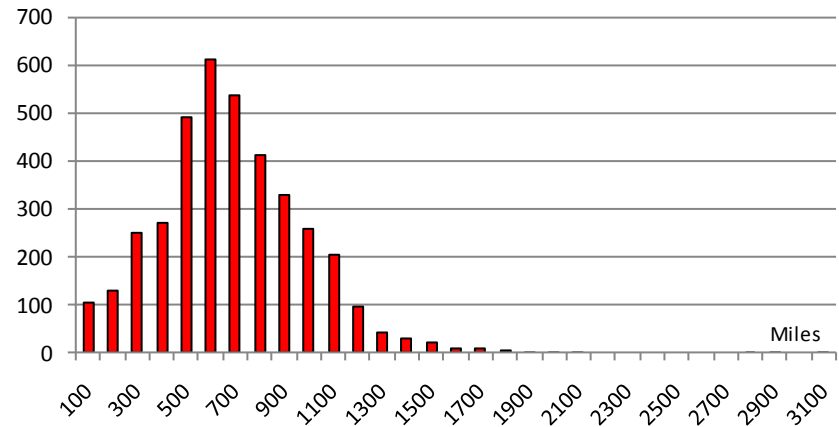


2. RECOVERY – Distances travelled in straight line between tagging and recovery

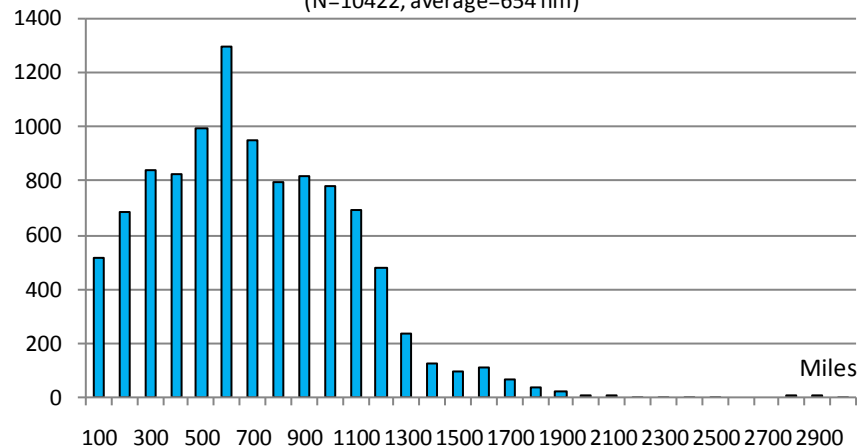
Distribution of the YFT distance travelled
(N=6984, average=696 nm)



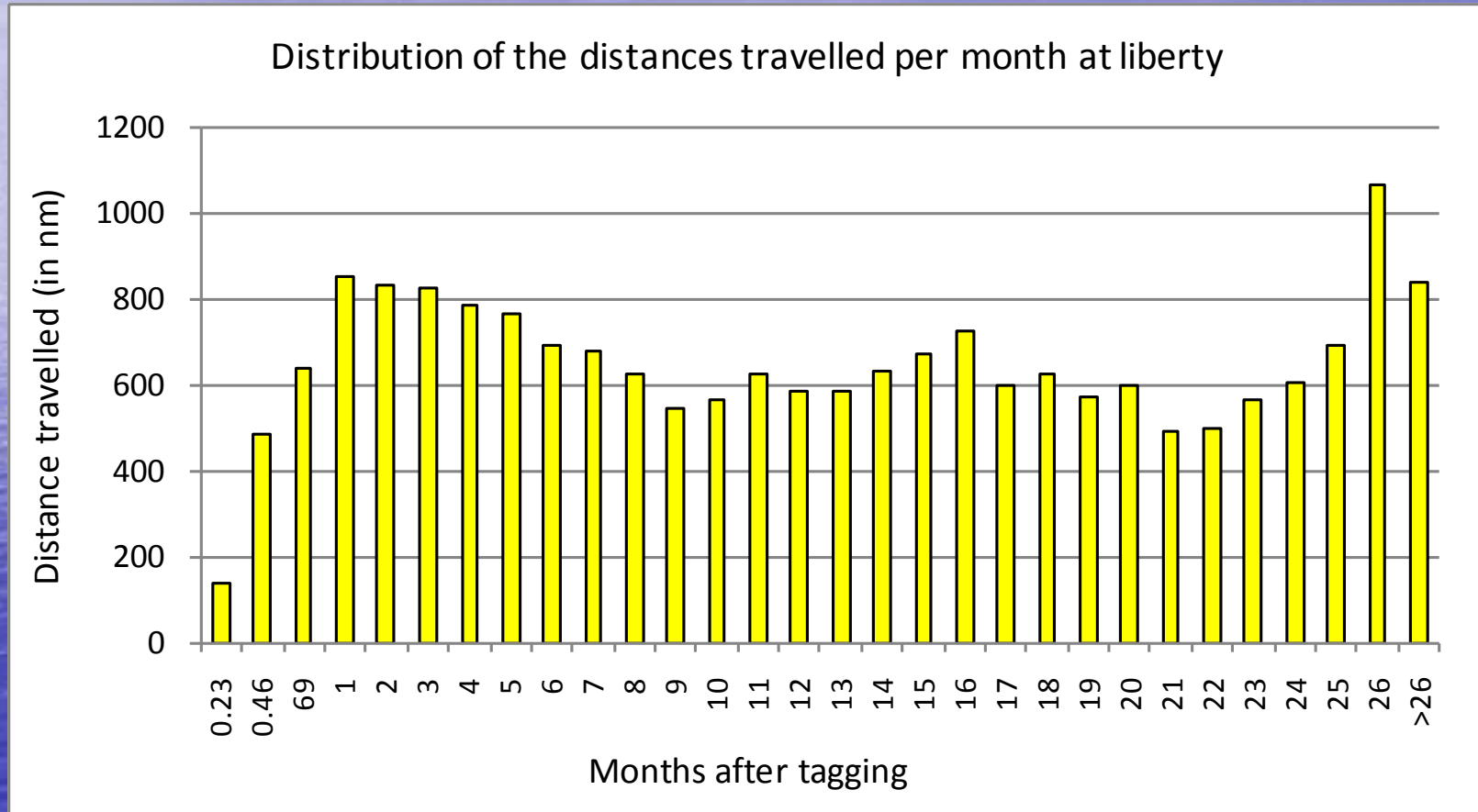
Distribution of the BET distance travelled
(N=3825, average=637 nm)



Distribution of the SKJ distance travelled
(N=10422, average=654 nm)



2. RECOVERY – Distances per time-at-liberty



3. RTTP-IO - CONCLUSIONS

- For Tagging the initial target of 80,000 have been more than doubled.
- With more than 50 % of Yellowfin and Bigeye the RTTP has succeeded in giving the priority to these two species according to the wishes of the IOTC Scientific Committee.
- The Recoveries already reach 14.5% 9 months after the completion of the tagging and more recoveries are expected in the months to come.
- The distribution of the time-at-liberty as well as other parameters are showing a very good mixing of the tagged tuna among the rest of the populations which is quite suitable when tagging data are used for stock assessment.

The achievements briefly presented in this document have been made possible through the dedication, hard work and collaboration of many different partners including the skippers, crews, Cruise Leaders, Tagging Technicians, Regional Tagging Technicians, National and Recovery Officers.

THEREFORE WE EXPRESS THEM ALL OUR THANKS AND CONGRATULATIONS

