

Torres Strait Rock Lobster Data Issues

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Data issues pertaining to the Torres Strait rock lobster fishery

Topics

1. TIB Docket-book data (TDB01) general issues
2. Specific Data Issues
3. Proposal to introduce a fish receiver system

1. Docket book (TDB01) data general issues:

- Voluntary to complete
- Duplication of the records – catches reported can be reported elsewhere, including the TVH logbook
- Duplication of the forms – processors can also record catches

2. TIB docket book data specific issues:

- Decline in Docket-book records

The number of catch records and the associated estimate of the total catch of rock lobsters in the TIB sector by year.

YEAR	2004	2005	2006	2007	2008	2009	2010	2011	2012	2013	2014	2015
Records	4645	6671	4087	5957	4822	3540	3099	2954	1394	688	1855	1445
Catch (t)	235	358	152	274	217	136	191	201	169	141	149	151

- A substantive proportion of the TIB catch since 2013 has been received as aggregate records from processors instead of in the docket-book data. These aggregate catch data had not been entered into the AFMA database in Canberra.
- The aggregated catch data from processors is now being sent to AFMA in Canberra, but can't be used for CPUE analyses (no effort, no locations, etc)

- Docket-book data fields – filters to differentiate TIB from TVH and processor records
 - Seller-Name: misspelt, nicknames – considerably reduced since workshop held in Nov 2015
 - Seller-Type: high proportion of “unknown”; used to match seller – name with a lookup table, but the table not been kept up to date and issues of misspelt, nicknames; reduces its utility
 - Related-Log: “TRL04” - helpful, other entries(e.g., HC01,HC02,NSS BSEI, etc) and associate with Unknown seller-type – uncertain!
 - Client-Name

The combination of the Seller-Type, the Related-Log together with the vessel symbol (with the symbol for most TVH vessels starting with an ‘F’) will enable a better means of identifying and removing non-TIB and duplicate records

- Multiple TIB Record-Numbers for same vessel, seller, day

An example of the TIB data showing all records associated with a single vessel and a single date.

RECORD_NO	OP_DATE	CREW	METHOD	PROCES	GRADE	KGS_KEPT	SELLERNAME	DAYS-FISHED	AREA
25-May-08	2	MDH	Whole	M	7.58	Seller 1	2	9	
25-May-08	2	MDH	Whole	M	26.77	Seller 1	2	9	
25-May-08	2	MDH	Tailed	M	11.95	Seller 1	2	9	
25-May-08	2	MDH	Whole	M	42.02	Seller 1	2	9	
25-May-08	2	MDH	Whole	M	4.54	Seller 2	2	9	
25-May-08	2	MDH	Whole	M	7.17	Seller 2	2	9	
25-May-08	2	MDH	Whole	M	16.06	Seller 2	2	9	
25-May-08	2	MDH	Whole	M	25.21	Seller 2	2	9	
25-May-08	2	MDH	Whole	M	16.81	Seller 3	2	9	
25-May-08	2	MDH	Whole	M	10.7	Seller 3	2	9	
25-May-08	2	MDH	Whole	M	3.03	Seller 3	2	9	
25-May-08	2	MDH	Whole	M	4.78	Seller 3	2	9	
25-May-08	2	MDH	Whole	M	1.28	Seller 1	1	9	
25-May-08	2	MDH	Tailed	M	2.79	Seller 1	1	9	
25-May-08	2	MDH	Whole	M	9.55	Seller 1	1	9	
25-May-08	2	MDH	Whole	M	17.16	Seller 1	1	9	
25-May-08	2	MDH	Whole	M	5.73	Seller 2	1	9	
25-May-08	2	MDH	Whole	M	0.77	Seller 2	1	9	
25-May-08	2	MDH	Tailed	M	1.67	Seller 2	1	9	
25-May-08	2	MDH	Whole	M	10.29	Seller 2	1	9	
25-May-08	2	MDH	Tailed	M	1.11	Seller 3	1	9	
25-May-08	2	MDH	Whole	M	3.82	Seller 3	1	9	
25-May-08	2	MDH	Whole	M	0.51	Seller 3	1	9	
25-May-08	2	MDH	Whole	M	6.86	Seller 3	1	9	
25-May-08	2	MDH	Whole	M	19.69	Seller 1	1	9	
25-May-08	2	MDH	Whole	M	10.62	Seller 1	1	9	
25-May-08	2	MDH	Tailed	M	3.83	Seller 1	1	9	
25-May-08	2	MDH	Whole	M	6.37	Seller 2	1	9	
25-May-08	2	MDH	Whole	M	11.81	Seller 2	1	9	
25-May-08	2	MDH	Tailed	M	2.29	Seller 2	1	9	
25-May-08	2	MDH	Whole	M	7.87	Seller 3	1	9	
25-May-08	2	MDH	Whole	M	4.24	Seller 3	1	9	
25-May-08	2	MDH	Tailed	M	1.53	Seller 3	1	9	

Record-Number should be unique number for each of combination of vessel, date and seller-name.

But it is not and reason is unclear, three questions:

- Why there are multiple catch records pertaining to the same process-type and grade of lobsters for a single Record-No?
- Why are there multiple Record-Nos for the same seller for the same vessel-date?
- Why are the days-fished different for several of the Record-Nos for the same seller?

Possible explanation:

- The dates associated with these docket-book forms were most likely **not correct** (based on the observation that the style of writing across all the sheets examined was also identical which indicated that the same person had completed all forms using the same pen on the same day)
- There was missing Docket-Book pages associated with the original sheets examined associated with the series of Record-Nos listed in above table. (suggests not all Docket-book sheets are returned to AFMA)

- F-Vessels listing catches in both the Logbook and Docket-book
 - Catches for such vessels found in the TIB docket-book have been assumed to be duplicates of those recorded in the TVH logbook.
 - For some F-Vessels there are sometimes catches for a given date recorded in both books .
 - Some docket-book F-Vessels records for a given date but no corresponding catch recorded in the TVH logbook.
 - After being contacted, one operator stated that the docket-book only entries relate to lobsters that had died in the cage. These had been tailed and sold to a TI processor
 - If this reasoning is similar for the other operators then these catches should be included in the TVH catch.

- Additional data relating to the TSRL

Several historical data sets are available for the fishery and are stored in the AFMA data warehouse

Table Name	N-recs	Min-Date	Max-Date
DMR_MURRAY_ISLAND_OPERATION	1,576	3-Jan-04	30-Jun-05
DMR_MURRAY_ISLAND_CATCH	12,014		
DMR_FREEZER_OPERATION_TSF	21,686	29-May-96	10-May-04
DMR_FREEZER_CATCH_TSF	35,372		
DMR_OPERATION_TSF	14,244	20-Apr-00	21-Feb-05
DMR_OPERATION_METHOD_TSF	12,236		
DMR_CATCH_TSF	19,937		
DMR_RELATED_LOGBOOKS_TSF	1,343		

- Additional data relating to the TSRL

These data sets relate to:

- Murray-Island data: TIB data, not in docket book, 2004-2005 (updated recently 2003-2010)
- Freezer data: Historical TIB data 1996-2004, precedes TDB01
- Operation_TSF and Catch_TSF data: 99% TDB01 catch/effort from 2004-2006 in CSIRO DB – possible duplication (these data are early duplicates of docket book data and can be ignored)
- JCU data: a compilation of historical TIB data from 1990s

AFMA is in the process of updating all these data sets. 1&2 may be additional data and 3&4 need to be check

3. Proposal to introduce a Fish Receiver System

AFMA is proposing to develop a fish receiver system (sometimes called a catch-disposal-record (CDR) system) for Torres Strait fisheries.

Questions/Comments to the proposal:

- How the CDR system would be different from the Docket book (DB) system ?
- Is it better to patch up the problems with the DB so that it does the job it was designed to do.
- However, whatever system is chosen it must be designed so that it captures the total landed catch.
- DB system was going to be made mandatory (as agreed at the workshop in Cairns in Jan-15 with the TIB sector and processors and organised by Shane), what is follow up ?

Comments to the new system:

- Need for the CDR coverage to be comprehensive
- The information recorded on the CDR data sheets should collect, at a minimum, the following information (Date, Name of Seller, Name of Boat or Boat Symbol, Unloading Port, Start-Date-of Trip, End-Date-of Trip, Fishing method, Species Name, Catch in numbers, Catch in weight, Process type, Weight recording method, Name of Buyer/processor)
- The CDR records need to be able to be linked back to the relevant logbook and docket-book data pertaining to these catches

Alternatively, the docket book system was implemented to capture all island based catch and it was developed to replace all receipt books. Hence it covers all fisheries, the docket book system can provide comprehensive data with some simple rules applied (also data to 2011 seems fine):

- mandatory for all receivers and AFMA maintains a listing of receivers that they mail regularly to source docket book sheets
- only point of sale records (no aggregated records)
- no TVH related records (although the docket book has a tick box for this very reason)
- AFMA maintains a lookup table listing seller names with their associated info eg TIB, seller loan etc (this would allow a more efficient screening) it also exists but the newbies weren't aware of it.

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Thank you

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