

FOOTNOTES TO THE STATISTICAL BULLETIN

I. Present system

The present system for footnoting the Statistical Bulletin is as follows:

1. All the data derived from regular reporting are footnoted by using consecutive numbers (or letters) on Part IV (national statistics) as far as possible.
2. Those which cannot be applicable to Part IV data are footnoted in Part II (summary by species) while those footnotes already noted in Part IV are not repeated in Part II.
3. Those important footnotes applicable to Parts I and V are repeated in Part IV as well as in Parts I and II.
4. Footnotes for Part III are independent from any other parts.

II. Proposed changes

1. Background

At the 1981 intersessional SCRS Officers Meeting, the quality of statistics included in the Statistical Bulletin was the subject of discussion. In the early stages of the Commission, the Statistical Bulletin was mostly based on FAO statistics and then gradually on statistics reported by national offices, which are often different from FAO statistics. Recently, however, even in the national statistics some inadequacies and inaccuracies have been pointed out. More and more trials have been made to estimate better statistics by national scientists, by the Secretariat and by the Sub-Committee on Statistics and SCRS. Since the Statistical Bulletin contains the best estimates available rather than the national statistics, we replaced the national statistics with all those estimated figures. Consequently, the figures in the Statistical Bulletin or on the data base have different types of origins. Discussions at the time of the SCRS Officers Meeting focused on the problem of the variety of origins of data. Since not all statistics can be upgraded to the same level, it was suggested that the origin (or quality) of each figure be shown. This procedure will hopefully assist the scientists in evaluating the credibility of each datum.

2. Present data base

The Secretariat examined the TASKI data base which is the base used in compiling the Statistical Bulletin as to the possibility of carrying out the above suggestion. (See sample page of TASKI data base listings (Table 1).

The present data base for each record of catch we have shows an element called "quality of info" corresponding to a one-digit number. Codings in the past have been as follows:

1. Catch preliminary
2. Catch final
3. Catch uncertain
4. Landing preliminary
5. Landing final
6. Landing uncertain

Also, for each record, there is a choice of 29 letters to record comments on "sources of information." As you can see, from the listings we can know the history of updating and the major reasons and sources for each record. However, "comments" are not an element of the base and therefore cannot be used for output.

Although the "quality of info" element exists, little attention has been paid to it. Most of the records have been coded with "2" and on a few occasions with "1", "4" or "5". When the data have been reported first as preliminary and thereafter no changes were made, codes 1 or 4 (preliminary) remained in the base. Since these codes have not been utilized in generating Statistical Bulletin output, up to the present, this did not matter. Codes 3 and 6 have never been used.

3. Footnotes on the data base

The "quality of info" seems to be the best element to use. After careful study, we propose the codings as shown in the attached Table 2. Codes 1, 2, 4, and 5 have already been used (they are left as they stand at present). Therefore, only five codes (or six if 0 can be used) are available for use.

4. Footnotes on the printout

Statistical Bulletin tables are already very crowded. However, there is still room to add a letter after each figure. Therefore, if any or all of the figures have to be footnoted as regards sources or quality, "quality of info" can be added to each figure using a letter as proposed in Table 2. Only those letters which can be easily distinguished from numbers should be chosen. Since the final catch reported by the national offices comprises the largest part of all the figures, these data will not be footnoted.

A sample page of statistics with such footnotes is attached as Table 3. Footnotes on this table are, however, not complete or completely correct, as updating for "quality of info" is limited only to the latest entries.

This footnote scheme, if adopted, should be limited only to the basic figures, i.e. catch broken down by species, area and gear in Part IV of the Statistical Bulletin. Subtotals, totals, etc. should not be footnoted. Also many footnotes currently used still have to be added manually.

5. Alternatives to footnoting

Instead of footnoting all the tables in the Statistical Bulletin, we can footnote for "quality of info" only on specific tables prepared for scientists (e.g. species catch tables).

III. Problems and future prospects

1. Problems in coding

Since the proposed coding system involves expanding one of the present elements, it is difficult to have adequate footnotes for all situations. For example, if the source is the scientists' estimate and figure is landing, this cannot be properly coded. Since the difference between catch and landing information is not very important for most of the fisheries, the "estimates by scientist" code will supersede landing information, i.e. code 6 should be entered instead of code 4.

There could also be many borderline cases, such as when national correspondents made personal estimates (2 or 6) or when the Secretariat made estimates which were later approved by the SCRS (G or E), etc. Since the data base has comments on "sources of info", this is not really a critical problem.

2. Checking sources

If this new system is adopted by the Sub-Committee, the major problem faced by the Secretariat will be the checking of the sources of all the records (4,000 records) on the data base and entering the "quality of info" code. This will represent a considerable amount of effort by the Secretariat staff and require funds for updating the TASKI base. We have already started to input the proper codes whenever we have updates or corrections to records. Therefore, these codings have already been made to more than half of the billfish records and many of the small tuna records.

If these procedures are adopted, the Secretariat will continue its efforts as time allows and will complete the project in one to two years. During this period, the output may be only partially footnoted correctly.

IV. Recommendations

1. The Sub-Committee on Statistics should review the codings and classifications of footnotes presented in Table 2.
2. The Sub-Committee on Statistics should decide if such coding is worthwhile, considering the time, effort and money involved.
3. If the Sub-Committee decides to adopt the system, it should decide as to whether or not the figures in the Statistical Bulletin should be footnoted (See Table 3).
4. If the answer to recommendation 3 is negative, it should decide in which table the "quality of info" should be used and how.

Table 1. A sample sheet for data base (TASKI) listings.

Year	Country	Species	Class	Area	5x5 area	Country ALPH	Species	Gear	Area	Date of last entry	Qual. info	Kind of catch	Conv. fact.	Catch	Sources of info	PAGE184
197713	5	3	0	1	0	0	0	0	0	0	0	1	0	2512.00	SECRETARIAT AREA DIV SS 4	0 0
197715	5	3	0	3	0	0	0	0	0	0	5	1	0	0	SCRS/79/62	0 0
197716	110	042	0	0	0	0	0	0	0	0	0	1	0	380.00	SECRETARIAT AREA DIV SS 4	0 0
197717	5	3	042	0	0	0	0	0	0	0	5	1	0	3196.00	SECRETARIAT AREA DIV SS 4	0 0
197718	5	3	044	0	0	0	0	0	0	0	5	1	0	1522.00	SECRETARIAT AREA DIV SS 4	0 0
197719	516	044	0	0	0	0	0	0	0	0	5	1	0	480.00	PMW	0 0
197720	8	3	0	6	0	0	0	0	0	0	5	1	0	9.00	YF BE SEP 1797 SCRS	0 0
197721	816	043	0	0	0	0	0	0	0	0	5	1	0	3600.00	O. OF FISHERIES	0 0
197722	315	3	0	6	0	0	0	0	0	0	7	1	0	111.00	O. OF FISHERIES	0 0
197723	315	3	0	6	0	0	0	0	0	0	7	1	0	307.00	1980 SCRS MEETING	0 0
197724	317	3	040	0	0	0	0	0	0	0	7	1	0	356.00	MIAMI WORKSHOP VI-81	0 0
197725	317	3	041	0	0	0	0	0	0	0	7	1	0	71.00	MIAMI WORKSHOP VI-81	0 0
197726	318	3	040	0	0	0	0	0	0	0	7	1	0	111.00	MIAMI WORKSHOP VI-81	0 0
197727	318	3	041	0	0	0	0	0	0	0	7	1	0	541.00	MIAMI WORKSHOP VI-81	0 0
197728	318	3	041	0	0	0	0	0	0	0	9	1	0	699.00	MIAMI WORKSHOP VI-81	0 0
197729	319	3	041	0	0	0	0	0	0	0	9	1	0	3339.00	C. OF FISHERIES	0 0
197730	319	3	041	0	0	0	0	0	0	0	9	1	0	824.00	O. OF FISHERIES	0 0
197731	319	3	041	0	0	0	0	0	0	0	9	1	0	286.00	MIAMI WORKSHOP VI-81	0 0
197732	319	3	041	0	0	0	0	0	0	0	9	1	0	33.00	NATT'L SCT	0 0
197733	319	3	041	0	0	0	0	0	0	0	9	1	0	47.00	NATT'L SCT	0 0
197734	319	3	041	0	0	0	0	0	0	0	9	1	0	2.00	FAO	0 0
197735	319	3	041	0	0	0	0	0	0	0	9	1	0	5.00	FAO	0 0
197736	319	3	041	0	0	0	0	0	0	0	9	1	0	199.00	FAO	0 0
197737	319	3	041	0	0	0	0	0	0	0	9	1	0	30.00	FAO	0 0
197738	319	3	041	0	0	0	0	0	0	0	9	1	0	662.00	ISPM	0 0
197739	319	3	041	0	0	0	0	0	0	0	10/01/79	1	0	7.00	WORKSHOP SANTANDER IX-79	0 0
197740	319	3	041	0	0	0	0	0	0	0	10/01/79	1	0	222.00	WORKSHOP SANTANDER IX-79	0 0
197741	319	3	041	0	0	0	0	0	0	0	10/01/79	1	0	1039.00	ISPM	0 0
197742	319	3	041	0	0	0	0	0	0	0	10/01/79	1	0	941.00	ISPM	0 0
197743	319	3	041	0	0	0	0	0	0	0	10/01/79	1	0	12.00	ISPM	0 0
197744	319	3	041	0	0	0	0	0	0	0	10/01/79	1	0	12.00	ISPM	0 0

Table 2. Proposed codes for element "Quality of info" in Task II base

Numerical Code	Sources and Quality	Statistical Bulletin Footnote
1	National Office or National statistical correspondent: Preliminary catch	P
2	National Office or National statistical correspondent: Final catch	No footnote
3	FAO formal statistics	F
4	National Office or National statistical correspondent: Preliminary landing	K
5	National Office or National statistical correspondent: Final landing	L
6	National scientist(s) personal estimates	N
7	SCRS and/or SCRS Working Group estimates	E
8	Secretariat estimate	G
9	Gear and/or area only*. An officially reported statistic (1, 2, 4, or 5) divided or reclassified as to gears and areas or sub-areas by the Secretariat, the SCRS and/or a Working Group	A

*If there is a species sub-division, use code 6, 7, or 8.

Table 3. Sample page of Part IV of Statistical Bulletin with all footnote codes.

FLAG, PAVILLON, BANDEKA KOREA

YEAR	GEAR	AREA	TOTAL	BFT	SFB	YFT	ALB	BET	BLF	LTA	SKJ	RON	FRI	KGM	SSM	BIL	SMO	OTH
1975	BFB	ETRO	7322	0	0	2678L	0	0	0	0	4469L	0	0	0	0	0	0	175L
1975	BFB	SE	331	0	0	0	0	331L	0	0	0	0	0	0	0	0	0	0
1975	LLFB	ATL	5928	0	0	0	0	0	0	0	198L	0	0	0	0	109E	0	5423L
1975	LLFB	ETRO	7626	0	0	7626L	0	0	0	0	0	0	0	0	0	0	0	0
1975	LLFB	NORT	10526	23L	0	0	2843A	7113L	0	0	0	0	0	0	0	375E	172A	0
1975	LLFB	SOUT	7041	0	0	0	3230A	3049L	0	0	0	0	0	0	0	463E	279A	0
1975	LLFB	WTKO	7718	0	0	7718L	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL			46472	23	0	18022	6073	10493	0	0	4465	0	0	0	0	947	451	5798
1976	BFB	ETRO	3149	0	0	999L	0	0	0	0	1948L	0	0	0	0	0	0	202L
1976	BFB	SE	190	0	0	0	0	176L	0	0	0	0	0	0	0	14L	0	0
1976	LLFB	ATL	4895	0	0	0	0	0	0	0	28L	0	0	0	0	151E	0	2478L
1976	LLFB	ETRO	6637	0	0	6637L	0	0	0	0	0	0	0	0	0	0	0	0
1976	LLFB	ME	2151	0	0	0	0	2151L	0	0	0	0	0	0	0	0	0	0
1976	LLFB	NORT	5962	10L	0	0	5379A	0	0	0	0	0	0	0	0	238E	335A	0
1976	LLFB	NW	1760	0	0	0	0	1760L	0	0	0	0	0	0	0	0	0	0
1976	LLFB	SE	4212	0	0	0	0	2212L	0	0	0	0	0	0	0	0	0	0
1976	LLFB	SOUT	4800	0	0	0	3376A	0	0	0	0	0	0	0	0	612E	812A	0
1976	LLFB	SW	624	0	0	0	0	624L	0	0	0	0	0	0	0	0	0	0
1976	LLFB	WTKO	4574	0	0	4574L	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL			34914	10	0	12210	8755	8923	0	0	1974	0	0	0	0	1015	1147	2480
1977	BFB	ETRO	9722	0	0	1235L	63L	0	0	0	3600L	0	0	0	0	0	0	824L
1977	BFB	SE	440	0	0	0	0	460L	0	0	0	0	0	0	0	0	0	0
1977	LLFB	ATL	3859	0	0	0	0	0	0	0	0	0	0	0	0	111E	0	3399L
1977	LLFB	ETRO	9825	0	0	9825L	0	0	0	0	0	0	0	0	0	0	0	0
1977	LLFB	ME	3196	0	0	0	0	3196L	0	0	0	0	0	0	0	0	0	0
1977	LLFB	NORT	6501	3L	0	0	5579A	0	0	0	0	0	0	0	0	0	0	0
1977	LLFB	NW	4812	0	0	0	0	2512L	0	0	0	0	0	0	0	378E	541A	0
1977	LLFB	SE	1542	0	0	0	0	1542L	0	0	0	0	0	0	0	0	0	0
1977	LLFB	SOUT	4842	0	0	0	0	1542L	0	0	0	0	0	0	0	0	0	0
1977	LLFB	SW	380	0	0	0	3766A	0	0	0	0	0	0	0	0	462E	699A	0
1977	LLFB	WTKO	6521	0	0	6521L	0	0	0	0	0	0	0	0	0	0	0	0
TOTAL			45051	3	0	17582	9408	8090	0	0	3607	0	0	0	0	956	1240	4163
1978	BFB	WTKO	63	0	0	32K	0	0	0	0	31K	0	0	0	0	0	0	0
1978	BFB	ETRO	9830	0	0	1372K	43P	0	0	0	8132K	0	0	0	0	0	0	283K
1978	BFB	SE	534	0	0	0	0	534K	0	0	0	0	0	0	0	0	0	0
1978	LLFB	ATL	4286	0	0	0	0	0	0	0	42P	0	0	0	0	0	0	0
1978	LLFB	ETRO	7253	0	0	7253K	0	0	0	0	0	0	0	0	0	32E	0	2212K
1978	LLFB	ME	3700	0	0	0	0	3700K	0	0	0	0	0	0	0	0	0	0