

**Hystorical catch of bluefin tuna (*Thunnus Thynnus*)
and little Tuna (*E. alletteratus*)
from a Libyan trap net**

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ABSTRACT

Historical catches of Bluefin tuna (*Thunnus thynnus*) and *E. alletteratus* were reported during the period from 1930 – 2001. The total catch declined steadily from 1980 to 2001 probably due to gear competition in the region.

Introduction

Bluefin tuna (*Thunnus Thynnus*) and little tuna (*E. alletteratus*) constitutes an important component of the total pelagic fishing activities in Libya, and form an old Libyan tradition to catch this highly migratory species along the western Libyan waters during late spring and early summer (Tawil and Gashti 1998). It is believed that those fish and other related species migrate every year as a pelagic fish from the Atlantic to the Mediterranean through the strait of Gibraltar (Anon, 1976, Zupanovic and Mujahid 1983, Secor et al 1997).

During migration tuna fish moves near the Libyan coast line towards the east up to Misurata only there for it was possible to catch tuna fish by fixed trap nets in different localities the number of which reached twenty one locality during the year 1930 (Anon 1976; Picclnetti and Omiccioli 1998). Due to importance of the tuna fishery in Libya, where more than six canning tuna factories have been established a data on catch of tuna trap have been recorded in some of the tuna traps. There for the aim of this paper is to present the historical catch of BFT and *E. alletteratus* from one of those traps namely Zreg tuna trap from 1930 up to 2001.

Description of the tuna trap and material

Zreg tuna trap is situated in the western part of the Libyan coast 220 k.m. east of Tripoli between 32° 26' 10" N and 14° 54' 20" E . Fishing takes place at depth of 36 meters, the bottom quality is a mixture of sand and rock, it starts with a leader net of 3200 meters from the coast, the total body length of the net is 475 meters records of

the catch was obtained from the authority of the trap net through the general administration of Marine Wealth and Aquaculture. Table (1) shows the production BFT from the tuna trap while table (2) shows the production of E. alletteratus from the same trap during the period from 1930 up to 2002.

Results and discussion

Table (1) shows that the number of BFT caught from Zreg tuna trap during the last seven decades from 1930 up to year 2000 was 121106 fish the maximum fish caught was during the decade from 1950 to 1959 where a total of 22477 fish was landed in the trap while the lowest number was recoded during the last decade from 1990 up to 1999 where a total of 8243 fish were caught in the same tuna trap fig (1) while Fig. (2) shows the fluctuation from one decade to another. According to previous reports Tawil and Gashti, 1998; Zupanovic et al, 1985; Rodriguez-Roda 1969. the fluctuation may be arranged every three years or in some cases at six or seven years as in Libyan BFT Zupanovic et al 1985. Lozano Cabo 1959 showed a maximum and minimum catches each eight years along the Atlantic coast of Morocco as reviewed by Zopanovic, et al, 1985 similarly Rodriguez-Roda 1969 found that trap yields in the gulf of Gadiz fluctuated over periods of six to seven years.

However the historical catch of BFT from Zreg tuna trap for the last seven decades from 1930 up to year 2000 shows an increase in the production from 1930 to 1970 and a continuous decline from 1970 to year 2000 especially during the last two decades the decline in the catch by trap nets does not show up in the total catch of BFT from Mediterranean contrary the catches increases from one year to another according to SCRS statistical data especially during the last decade which means a great competition between different gears such as P.S. and L.L. on the expense of trap nets occurred.

Similarly in the case of E. alletteratus the catches increased from 1930 up to 1970 table 2 and (fig. 3 and 4) shows that the best catch was from 1960 –1970 especially from 1963 to 1969 the catches declines from 1970 up to year 2000 although the competition with other gears is very limited.

Table No (1) Historical catch of BFT from Zreg tuna trap net

Years	No of fish	Years	No of fish
1930	438	1966	2289
1931	879	1967	1905
1932	1460	1968	1892
1933	2149	1969	2517
1934	1715	1970	2412
1935	2432	1971	2208
1936	2276	1972	1828
1937	1836	1973	2230
1938	2620	1974	1467
1939	2340	1975	2120
1940	2506	1976	2313
1941	2850	1977	1915
1942	2461	1978	2413
1943	1210	1979	1563
1944	3120	1980	1936
1945	-	1981	1248
1946	-	1982	965
1947	2920	1983	2112
1948	1942	1984	1420
1949	2139	1985	1117
1950	2415	1986	485
1951	1682	1987	820
1952	2510	1988	260
1953	2231	1989	768
1954	2479	1990	886
1955	2622	1991	669
1956	1251	1992	715
1957	2179	1993	269
1958	1992	1994	810
1959	3116	1995	919
1960	2707	1996	1903
1961	2239	1997	664
1962	2518	1998	629
1963	2113	1999	716
1964	823	2000	510
1965	2510	2001	600
		2002	0
Total	122173		

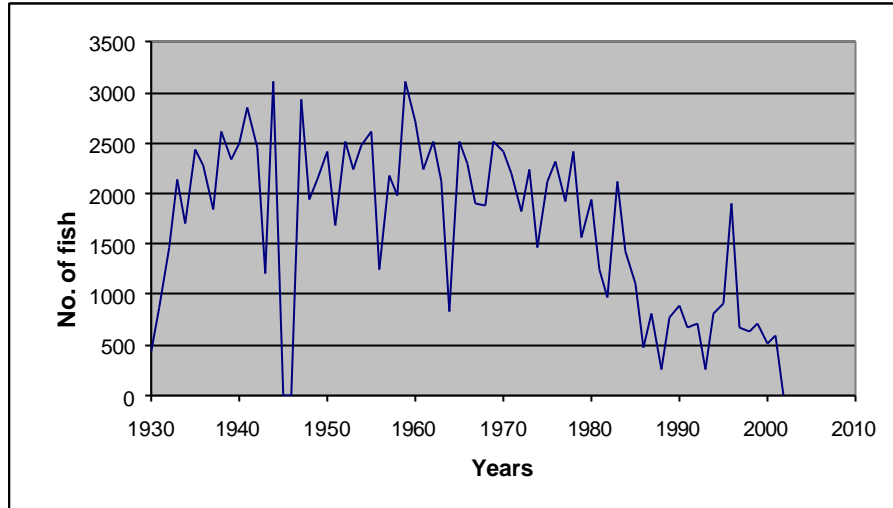


Fig. 1. Number of BFT caught from Zreg tuna trap net during the period from 1930-2001

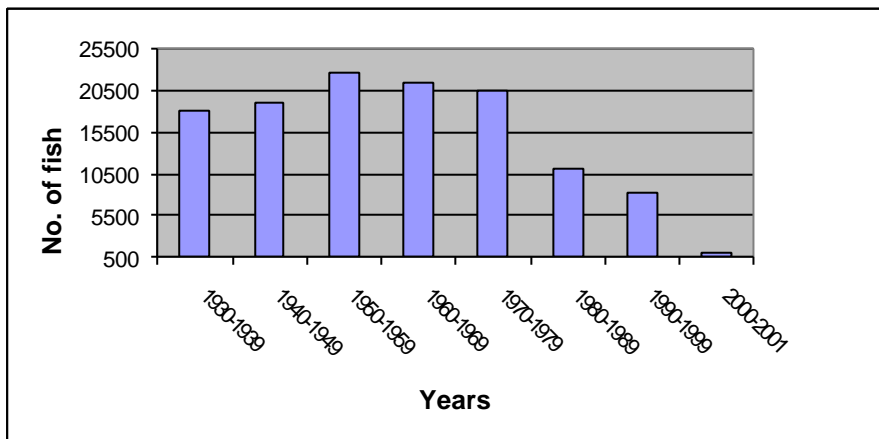


Fig. 2. Number of BFT caught during the last seven decades from Zreg tuna trap

Table No (2) Historical catch of E. allatteratus from Zreg tuna trap net

Years	No of fish	Years	No of fish
1930	250	1965	8628
1931	4200	1966	9729
1932	358	1967	3669
1933	6000	1968	12508
1934	8239	1969	7068
1935	2700	1970	12210
1936	4000	1971	16220
1937	11200	1972	8579
1938	5670	1973	7568
1939	7521	1974	3460
1940	12620	1975	5715
1941	3600	1976	6675
1942	5780	1977	8682
1943	9337	1978	2429
1944	13605	1979	4559
1945	-	1980	3600
1946	-	1981	4239
1947	9216	1982	2314
1948	7654	1983	4520
1949	10286	1984	2877
1950	3728	1985	1510
1951	16720	1986	1492
1952	5680	1987	3215
1953	8359	1988	2970
1954	4382	1989	4729
1955	8756	1990	2575
1956	12210	1991	1815
1957	11560	1992	2300
1958	4567	1993	1250
1959	9423	1994	2500
1960	2920	1995	3120
1961	9340	1996	900
1962	6973	1997	1600
1963	15207	1998	1920
1964	11216	1999	2179
Total	422601		

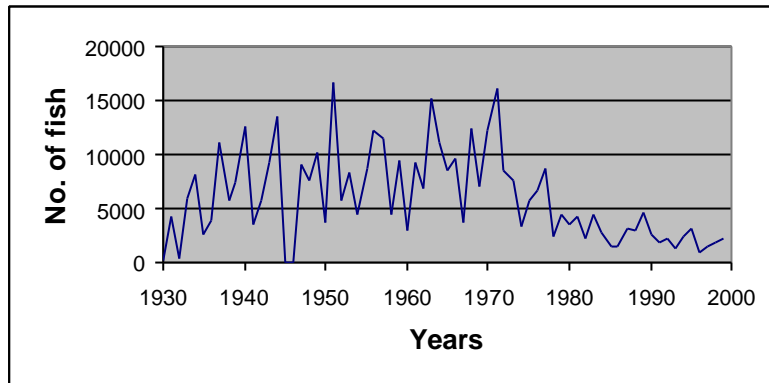


Fig. 3. Number of *E. alletteratus* caught from Zreg tuna trap during the period 1930-1999.

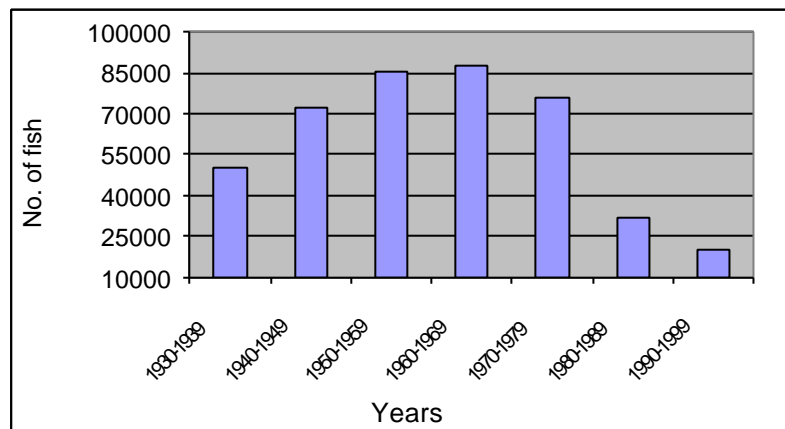


Fig.4. Number of *E. alletteratus* caught during the last seven decades from Zreg tuna trap.

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