DW-3-ADDENDUM: USING MEDIAN OF HIGHEST FIVE CPUE IN BACK-CALCULATION OF RECREATIONAL LANDINGS OF KING MACKEREL FROM 1930 TO 1980

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SUMMARY

This document presents the results of using the median of the highest five CPUE values and the median of the first five CPUE values to obtain a time series of CPUE as requested by Assessment Workshop Panel. The use of the median rather than the mean reduces the influence of very high CPUE values in early years when catch and effort statistics were known to have less precision than later years. The methods are otherwise exactly the same as for DW-3: Back-calculation of recreational landings of king mackerel from 1930 to 1980. The main result is a 7-15% reduction in the total number of fish landed between 1930 and 1980 (Figure 1) with the greatest difference in the Gulf and Mixing zones. The slight increase in landings from 1977-1981 in the Atlantic zone is a result of increasing effort during these years (Figure 1). The greatest numeric reductions were in the private vessel landings in the Gulf and mixing zone during the summer, whereas the greatest percent reductions were in the generally in shore mode landings for each zone (Figures 2-4). New vectors of CPUE are given for the Atlantic, Mixing and Gulf zones (Tables 1-3), revised landings for all zones, modes and seasons (Tables 4-6) and for all zones combined (Table 7).

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Table 1. Vector of Atlantic CPUE.

Zone	Atlantic															
Mode	*Private boat*				*Shore*				*Charterboat*				*Headboat*			
Season	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter
1900	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1901	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1902	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1903	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1904	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1905	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1906	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1907	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1908	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1909	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1910	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1911	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1912	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1913	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1914	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1915	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1916	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1917	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1918	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1919	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1920	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1921	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1922	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1923	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1924	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1925	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1926	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1927	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1928	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1929	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1930	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1931	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1932	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1933	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
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1936	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
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1940	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1941	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1942	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1943	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1944	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1945	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1946	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1947	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1948	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
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1950	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1951	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1952	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
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1955	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1956	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
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1963	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1964	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1965	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1966	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1967	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1968	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1969	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1970	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1971	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1972	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1973	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1974	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1975	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1976	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1977	0.041	0.051	0.082	0.025	0.000	0.004	0.003	0.000	1.189	0.532	0.554	0.871	0.201	0.040	0.051	0.014
1978	0.034	0.049	0.081	0.024	0.000	0.003	0.002	0.001	1.124	0.525	0.543	0.832	0.190	0.038	0.048	0.014
1979	0.026	0.048	0.080	0.023	0.000	0.003	0.002	0.001	1.058	0.518	0.533	0.792	0.178	0.036	0.045	0.013
1980	0.018	0.046	0.079	0.021	0.000	0.002	0.002	0.002	0.993	0.511	0.522	0.753	0.167	0.034	0.041	0.013
1981	0.010	0.045	0.077	0.020	0.000	0.001	0.002	0.003	0.927	0.504	0.512	0.713	0.156	0.032	0.038	0.013

Table 2. Vector of mixing zone CPUE.

Zone	Mixing zone															
Mode	*Private boat*				*Shore*				*Charterboat*				*Headboat*			
Season	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter
1900	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1901	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1902	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1903	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1904	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1905	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1906	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1907	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1908	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1909	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1910	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1911	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1912	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1913	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1914	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1915	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1916	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1917	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1918	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1919	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1920	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1921	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1922	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1923	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1924	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1925	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1926	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1927	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1928	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1929	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1930	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1931	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1932	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1933	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1934	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1935	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1936	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1937	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1938	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1939	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1940	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1941	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1942	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1943	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1944	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1945	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
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1947	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
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1953	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1954	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1955	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1956	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1957	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
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1959	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1960	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1961	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1962	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1963	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1964	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1965	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1966	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1967	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1968	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1969	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1970	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1971	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1972	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1973	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1974	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1975	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1976	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1977	0.066	0.062	0.069	0.050	0.004	0.001	0.002	0.001	0.588	0.290	0.427	0.533	0.578	0.191	0.291	0.496
1978	0.055	0.056	0.067	0.040	0.004	0.001	0.002	0.001	0.540	0.271	0.391	0.482	0.542	0.184	0.274	0.454
1979	0.043	0.050	0.065	0.030	0.003	0.001	0.002	0.001	0.492	0.253	0.356	0.431	0.506	0.177	0.257	0.412
1980	0.031	0.044	0.063	0.020	0.002	0.001	0.002	0.001	0.444	0.234	0.320	0.379	0.471	0.171	0.240	0.369

1981	0.019	0.037	0.060	0.010	0.001	0.001	0.002	0.001	0.396	0.215	0.285	0.328	0.435	0.164	0.222	0.327

Table 3. Vector of Gulf CPUE.

Zone	Gulf															
Mode	*Private boat*				*Shore*				*Charterboat*				*Headboat*			
Season	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter
1930	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1931	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1932	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1933	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1934	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1935	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1936	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1937	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1938	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1939	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1940	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1941	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1942	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1943	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1944	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1945	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1946	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1947	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1948	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1949	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1950	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1951	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1952	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1953	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1954	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1955	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1956	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1957	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1958	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1959	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1960	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1961	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1962	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1963	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1964	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1965	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1966	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1967	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1968	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1969	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1970	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1971	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1972	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1973	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1974	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1975	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1976	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1977	0.021	0.026	0.064	0.011	0.003	0.019	0.018	0.003	0.154	0.219	0.325	0.214	0.013	0.010	0.017	0.002
1978	0.019	0.020	0.064	0.009	0.003	0.015	0.015	0.003	0.143	0.211	0.313	0.193	0.012	0.009	0.016	0.001
1979	0.017	0.015	0.064	0.006	0.003	0.011	0.012	0.003	0.133	0.202	0.302	0.172	0.011	0.008	0.014	0.001
1980	0.016	0.010	0.064	0.004	0.004	0.006	0.009	0.002	0.122	0.194	0.290	0.152	0.009	0.007	0.013	0.001
1981	0.014	0.005	0.064	0.001	0.004	0.002	0.006	0.002	0.112	0.185	0.279	0.131	0.008	0.006	0.012	0.001

Table 4. Predicted (italics) and estimated (post-1980) Atlantic recreational landings.

Zone	Atlantic															
Mode	*Private boat*				*Shore*				*Charter boat*				*Headboat*			
Method	2	2	1	1	1	1	1	1	3	3	3	3	3	3	3	3
Season	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter
1900	0	1,973	0	0	0	0	0	0	0	0	0	0	0	0	0	0
1901	0	2,214	2,108	69	0	85	101	0	9	49	53	16	0	3	6	0
1902	0	2,456	4,217	137	0	170	202	0	18	98	105	32	1	6	12	0
1903	0	2,698	6,325	206	0	255	304	0	28	146	158	48	1	9	18	0
1904	0	2,940	8,434	274	0	340	405	0	37	195	211	63	2	12	24	0
1905	0	3,181	10,542	343	0	425	506	0	46	244	264	79	2	15	30	0
1906	0	3,423	12,650	411	0	510	607	0	55	293	316	95	3	18	37	0
1907	0	3,665	14,759	480	0	595	709	0	65	342	369	111	3	21	43	0
1908	0	3,906	16,867	548	0	680	810	0	74	391	422	127	3	24	49	0
1909	0	4,148	18,975	617	0	766	911	0	83	439	475	143	4	27	55	0
1910	0	4,632	21,084	685	0	851	1,012	0	92	488	527	159	4	30	61	0
1911	0	4,961	23,192	754	0	936	1,113	0	102	537	580	175	5	33	67	0
1912	0	5,291	25,301	822	0	1,021	1,215	0	111	586	633	190	5	36	73	0
1913	0	5,621	27,409	891	0	1,106	1,316	0	120	635	686	206	6	39	79	0
1914	0	5,951	29,517	959	0	1,191	1,417	0	129	683	738	222	6	42	85	0
1915	0	6,281	31,626	1,028	0	1,276	1,518	0	139	732	791	238	7	45	91	0
1916	0	6,611	33,734	1,096	0	1,361	1,620	0	148	781	844	254	7	48	98	0
1917	0	6,941	35,843	1,165	0	1,446	1,721	0	157	830	896	270	7	51	104	0
1918	0	7,271	37,951	1,233	0	1,531	1,822	0	166	879	949	286	8	54	110	1

1919	0	7,601	40,059	1,302	0	1,616	1,923	0	176	928	1,002	301	8	57	116	1
1920	0	8,261	42,168	1,370	0	1,701	2,024	0	185	976	1,055	317	9	60	122	1
1921	0	8,261	44,276	1,439	0	1,786	2,126	0	194	1,025	1,107	333	9	63	128	1
1922	0	8,261	46,384	1,507	0	1,871	2,227	0	203	1,074	1,160	349	10	66	134	1
1923	0	8,261	48,493	1,576	0	1,956	2,328	0	213	1,123	1,213	365	10	69	140	1
1924	0	8,261	50,601	1,644	0	2,041	2,429	0	222	1,172	1,266	381	10	72	146	1
1925	0	8,261	52,710	1,713	0	2,126	2,530	0	231	1,221	1,318	397	11	75	152	1
1926	0	8,261	54,818	1,781	0	2,211	2,632	0	240	1,269	1,371	413	11	78	159	1
1927	0	8,261	56,926	1,850	0	2,297	2,733	0	250	1,318	1,424	428	12	81	165	1
1928	0	8,261	59,035	1,919	0	2,382	2,834	0	259	1,367	1,477	444	12	84	171	1
1929	0	8,261	61,143	1,987	0	2,467	2,935	0	268	1,416	1,529	460	13	87	177	1
1930	0	8,261	63,252	2,056	0	2,552	3,037	0	277	1,465	1,582	476	13	90	183	1
1931	0	8,759	65,360	2,124	0	2,637	3,138	0	287	1,513	1,635	492	13	93	189	1
1932	0	9,257	67,468	2,193	0	2,722	3,239	0	296	1,562	1,687	508	14	96	195	1
1933	0	9,754	69,577	2,261	0	2,807	3,340	0	305	1,611	1,740	524	14	99	201	1
1934	0	10,252	71,685	2,330	0	2,892	3,441	0	314	1,660	1,793	539	15	102	207	1
1935	0	10,750	73,793	2,398	0	2,977	3,543	0	324	1,709	1,846	555	15	105	213	1
1936	0	11,248	75,902	2,467	0	3,062	3,644	0	333	1,758	1,898	571	16	108	220	1
1937	0	11,745	78,010	2,535	0	3,147	3,745	0	342	1,806	1,951	587	16	111	226	1
1938	0	12,243	80,119	2,604	0	3,232	3,846	0	351	1,855	2,004	603	17	114	232	1
1939	0	12,741	82,227	2,672	0	3,317	3,948	0	361	1,904	2,057	619	17	117	238	1
1940	0	1,374	8,434	274	0	340	405	0	37	195	211	63	2	12	24	0
1941	0	1,477	8,644	281	0	349	415	0	38	200	216	65	2	12	25	0
1942	0	1,581	8,855	288	0	357	425	0	39	205	221	67	2	13	26	0
1943	0	1,684	9,066	295	0	366	435	0	40	210	227	68	2	13	26	0
1944	0	1,788	9,277	301	0	374	445	0	41	215	232	70	2	13	27	0
1945	0	1,891	9,488	308	0	383	455	0	42	220	237	71	2	13	27	0
1946	0	19,947	96,986	3,152	0	3,913	4,656	0	425	2,246	2,426	730	20	138	281	1
1947	0	20,982	99,094	3,220	0	3,998	4,757	0	435	2,295	2,478	746	20	141	287	1
1948	0	22,017	101,202	3,289	0	4,083	4,859	0	444	2,343	2,531	762	21	144	293	1
1949	0	23,053	103,311	3,357	0	4,168	4,960	0	453	2,392	2,584	777	21	147	299	1
1950	0	25,123	105,419	3,426	0	4,253	5,061	0	462	2,441	2,637	793	22	150	305	1
1951	0	26,348	107,528	3,494	0	4,338	5,162	0	472	2,490	2,689	809	22	153	311	1
1952	0	27,572	109,636	3,563	0	4,423	5,263	0	481	2,539	2,742	825	23	156	317	1
1953	0	28,797	111,744	3,631	0	4,508	5,365	0	490	2,587	2,795	841	23	159	323	1
1954	0	30,022	113,853	3,700	0	4,593	5,466	0	499	2,636	2,848	857	23	162	329	2
1955	472	31,246	115,961	3,769	0	4,678	5,567	0	508	2,685	2,900	873	24	165	335	2
1956	1,122	32,471	118,069	3,837	0	4,763	5,668	0	508	2,685	2,900	873	24	165	335	2
1957	1,772	33,696	120,178	3,906	0	4,848	5,769	0	508	2,685	2,900	873	24	165	335	2
1958	2,421	34,920	122,286	3,974	0	4,933	5,871	0	508	2,685	2,900	873	24	165	335	2
1959	3,071	36,145	124,395	4,043	0	5,018	5,972	0	508	2,685	2,900	873	24	165	335	2
1960	4,371	38,595	126,503	4,111	0	5,103	6,073	0	508	2,685	2,900	873	24	165	335	2
1961	4,650	39,119	128,611	4,180	0	5,188	6,174	0	1,031	7,602	8,497	2,155	23	214	450	1
1962	4,928	39,644	130,720	4,248	0	5,273	6,276	0	1,553	12,518	14,095	3,436	22	263	565	1
1963	5,207	40,169	132,828	4,317	0	5,359	6,377	0	2,075	17,435	19,692	4,718	20	313	679	1
1964	5,486	40,694	134,937	4,385	0	5,444	6,478	0	2,598	22,351	25,289	6,000	19	362	794	1
1965	5,764	41,219	137,045	4,454	0	5,529	6,579	0	3,120	27,268	30,886	7,282	18	411	908	1
1966	6,043	41,744	139,153	4,522	0	5,614	6,680	0	3,642	32,184	36,483	8,564	17	460	1,023	1
1967	6,321	42,269	141,262	4,591	0	5,699	6,782	0	4,165	37,101	42,080	9,846	16	509	1,138	1
1968	6,600	42,794	143,370	4,659	0	5,784	6,883	0	4,687	42,017	47,677	11,128	15	558	1,252	1
1969	6,878	43,319	145,478	4,728	0	5,869	6,984	0	5,209	46,934	53,274	12,410	14	608	1,367	1
1970	7,435	44,369	147,587	4,796	0	5,954	7,085	0	5,732	51,850	58,872	13,692	13	657	1,481	1
1971	8,133	45,683	149,695	4,865	0	6,039	7,187	0	6,254	56,767	64,469	14,974	11	706	1,596	1
1972	8,830	46,997	151,804	4,933	0	6,124	7,288	0	6,776	61,683	70,066	16,256	10	755	1,711	1
1973	9,528	48,311	153,912	5,002	0	6,209	7,389	0	7,299	66,600	75,663	17,538	9	804	1,825	1
1974	10,225	49,625	156,020	5,070	0	6,294	7,490	0	7,821	71,517	81,260	18,819	8	853	1,940	1
1975	10,922	50,939	158,129	5,139	0	6,379	7,591	0	8,343	76,433	86,857	20,101	7	903	2,054	0
1976	11,620	52,253	160,237	5,207	0	6,464	7,693	0	8,866	81,350	92,454	21,383	6	952	2,169	0
1977	12,317	53,567	162,346	5,276	0	6,549	7,794	0	9,388	86,266	98,051	22,665	5	1,001	2,284	0
1978	10,586	53,120	161,847	5,074	0	5,386	7,027	343	9,364	89,998	101,691	22,862	3	997	2,246	0
1979	8,595	52,587	161,281	4,865	0	4,190	6,238	694	9,283	93,602	105,120	22,942	2	988	2,194	0
1980	6,650	53,158	160,649	4,649	0	2,962	5,427	1,054	9,144	97,078	108,337	22,907	1	974	2,128	0
1981	0	29,670	58,500	0	0	0	0	0	0	0	0	0	0	0	0	0
1982	0	53,326	84,568	9,826	0	0	0	0	0	0	0	0	0	0	0	0
1983	0	69,306	176,362	0	0	0	0	0	0	0	0	0	0	0	0	0
1984	0	49,192	249,099	3,080	0	0	2,814	0	0	0	0	0	0	0	0	0
1985	5,075	58,514	146,329	7,682	0	0	0	0	0	0	0	0	0	0	0	0
1986	32,745	53,034	243,775	9,227	0	0	23,233	0	2,041	239,389	56,365	4,908	0	568	1,224	0
1987	8,251	114,424	173,786	2,450	0	0	1,570	0	5,096	110,920	72,016	42,231	0	895	2,243	0
1988	5,722	80,375	130,819	4,789	0	3,302	5,171	0	0	56,470	199,847	3,816	0	1,307	1,792	0
1989	9,916	22,517	64,282	769	0	1,474	3,721	0	6,748	49,773	98,734	19,904	0	1,440	877	0
1990	10,576	44,982	87,883	23,286	0	1,558	15,151	642	19,383	22,774	83,575	6,305	0	716	1,301	0
1991	50,908	92,055	104,868	1,426	0	2,080	6,777	0	15,302	55,942	190,286	1,746	0	1,357	3,797	0
1992	5,658	61,162	207,469	3,092	0	1,261	361	0	6,969	87,596	193,033	47,820	0	1,470	3,373	0
1993	2,840	33,115	67,361	0	0	475	1,854	0	16,406	32,416	43,445	6,445	0	1,267	1,495	0
1994	20,976	32,826	58,698	655	0	7,187	1,562	1,672	7,359	34,952	52,194	23,939	0	881	1,404	0
1995	24,090	20,760	47,422	3,492	0	0	2,871	0	24,764	23,111	88,416	5,164	0	825	1,626	0
1996	1,799	30,567	28,612	4,947	0	391	0	0	11,076	40,410	51,613	5,185	0	691	885	0
1997	5,571	22,855	89,125	3,064	0	8,375	324	0	8,844	77,741	142,229	32,959	245	867	2,951	20
1998	11,891	23,595	34,114	2,297	0	73,667	391	0	10,009	58,160	43,006	25,303	261	2,114	1,664	38
1999	14,253	16,645	43,316	1,187	0	0	604	0	7,467	22,949	17,765	6,243	313	956	1,405	5
2000	13,865	62,774	122,470	2,316	0	506	373	0	9,215	16,500	45,860	5,114	496	1,494	3,297	111
2001	9,782	47,682	67,210	2,260	0	290	4,576	0	1,768	35,492	27,477	6,245	215	958	1,492	99
2002	34,273	15,108	29,270	497	0	0	8,554	0	173	7,819	9,194	2,137	228	533	899	2
2003	20,928	30,159	83,466	2,600	0	522	622	0	444	15,968	14,580	1,307	55	642	607	2
2004	15,798	31,267	50,899	2,928	0	0	3,670	0	3,807	21,817	21,392	3,780	972	639	1,092	10
2005	12,148	40,820	86,249	1,216	0	0	0	0	2,130	9,630	32,212	83	753	782	1,268	34
2006	1,910	39,470	63,268	3,293	0	0	0	0	4,745	24,548	8,075	2,157	553	943	1,515	22

Table 5. Predicted (italics) and estimated (post-1980) mixing zone recreational landings.

Zone	Mixing															
Mode	*Private boat*				*Shore*				*Charter boat*				*Headboat*			
Method	1	1	2	1	1	2	1	1	3	3	3	3	3	3	3	3
Season	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter
1900	0	0	0	0	0	40	0	0	0	0	0	0	0	0	0	0
1901	458	802	0	649	25	41	37	15	350	360	470	572	237	316	481	393
1902	917	1,604	0	1,298	51	42	74	31	701	719	941	1,144	473	633	963	786
1903	1,375	2,406	0	1,946	76	43	112	46	1,051	1,079	1,411	1,716	710	949	1,444	1,179
1904	1,834	3,208	0	2,595	101	44	149	62	1,401	1,439	1,881	2,287	946	1,266	1,926	1,573
1905	2,292	4,010	0	3,244	127	45	186	77	1,752	1,798	2,352	2,859	1,183	1,582	2,407	1,966
1906	2,750	4,812	0	3,893	152	46	223	92	2,102	2,158	2,822	3,431	1,419	1,899	2,889	2,359
1907	3,209	5,613	0	4,542	177	47	261	108	2,452	2,518	3,292	4,003	1,656	2,215	3,370	2,752
1908	3,667	6,415	0	5,191	203	48	298	123	2,802	2,877	3,763	4,575	1,892	2,532	3,852	3,145
1909	4,126	7,217	0	5,839	228	49	335	138	3,153	3,237	4,233	5,147	2,129	2,848	4,333	3,538
1910	4,584	8,019	0	6,488	253	51	372	154	3,503	3,597	4,703	5,718	2,365	3,165	4,815	3,932
1911	5,042	8,821	0	7,137	279	52	410	169	3,853	3,956	5,174	6,290	2,602	3,481	5,296	4,325
1912	5,501	9,623	0	7,786	304	54	447	185	4,204	4,316	5,644	6,862	2,839	3,797	5,778	4,718
1913	5,959	10,425	0	8,435	329	56	484	200	4,554	4,676	6,114	7,434	3,075	4,114	6,259	5,111
1914	6,417	11,227	0	9,083	355	57	521	215	4,904	5,035	6,584	8,006	3,312	4,430	6,741	5,504
1915	6,876	12,029	0	9,732	380	59	559	231	5,255	5,395	7,055	8,578	3,548	4,747	7,222	5,897
1916	7,334	12,831	0	10,381	405	60	596	246	5,605	5,755	7,525	9,149	3,785	5,063	7,704	6,291
1917	7,793	13,633	0	11,030	430	62	633	262	5,955	6,114	7,995	9,721	4,021	5,380	8,185	6,684
1918	8,251	14,435	0	11,679	456	63	670	277	6,305	6,474	8,466	10,293	4,258	5,696	8,667	7,077
1919	8,709	15,237	0	12,327	481	65	708	292	6,656	6,834	8,936	10,865	4,494	6,013	9,148	7,470
1920	9,168	16,039	0	12,976	506	68	745	308	7,006	7,193	9,406	11,437	4,731	6,329	9,630	7,863
1921	9,626	16,840	0	13,625	532	71	782	323	7,356	7,553	9,877	12,009	4,967	6,645	10,111	8,256
1922	10,085	17,642	0	14,274	557	75	819	338	7,707	7,913	10,347	12,580	5,204	6,962	10,593	8,650
1923	10,543	18,444	0	14,923	582	78	857	354	8,057	8,272	10,817	13,152	5,440	7,278	11,074	9,043
1924	11,001	19,246	0	15,572	608	82	894	369	8,407	8,632	11,288	13,724	5,677	7,595	11,556	9,436
1925	11,460	20,048	0	16,220	633	85	931	385	8,758	8,992	11,758	14,296	5,914	7,911	12,037	9,829
1926	11,918	20,850	0	16,869	658	89	968	400	9,108	9,351	12,228	14,868	6,150	8,228	12,519	10,222
1927	12,377	21,652	0	17,518	684	92	1,006	415	9,458	9,711	12,699	15,440	6,387	8,544	13,000	10,615
1928	12,835	22,454	0	18,167	709	96	1,043	431	9,808	10,071	13,169	16,011	6,623	8,861	13,482	11,008
1929	13,293	23,256	0	18,816	734	99	1,080	446	10,159	10,430	13,639	16,583	6,860	9,177	13,963	11,402
1930	13,752	24,058	0	19,464	760	106	1,117	462	10,509	10,790	14,110	17,155	7,096	9,494	14,445	11,795
1931	14,210	24,860	0	20,113	785	110	1,155	477	10,859	11,150	14,580	17,727	7,333	9,810	14,926	12,188
1932	14,669	25,662	0	20,762	810	114	1,192	492	11,210	11,509	15,050	18,299	7,569	10,126	15,408	12,581
1933	15,127	26,464	0	21,411	836	118	1,229	508	11,560	11,869	15,521	18,871	7,806	10,443	15,889	12,974
1934	15,585	27,266	0	22,060	861	121	1,266	523	11,910	12,229	15,991	19,442	8,042	10,759	16,371	13,367
1935	16,044	28,067	0	22,708	886	125	1,304	538	12,261	12,588	16,461	20,014	8,279	11,076	16,852	13,761
1936	16,502	28,869	0	23,357	912	129	1,341	554	12,611	12,948	16,932	20,586	8,516	11,392	17,333	14,154
1937	16,960	29,671	0	24,006	937	133	1,378	569	12,961	13,308	17,402	21,158	8,752	11,709	17,815	14,547
1938	17,419	30,473	0	24,655	962	137	1,415	585	13,311	13,667	17,872	21,730	8,989	12,025	18,296	14,940
1939	17,877	31,275	0	25,304	988	141	1,453	600	13,662	14,027	18,343	22,302	9,225	12,342	18,778	15,333
1940	1,834	3,208	0	2,595	101	15	149	62	1,401	1,439	1,881	2,287	946	1,266	1,926	1,573
1941	1,879	3,288	0	2,660	104	16	153	63	1,436	1,475	1,928	2,345	970	1,297	1,974	1,612
1942	1,925	3,368	0	2,725	106	16	156	65	1,471	1,511	1,975	2,402	993	1,329	2,022	1,651
1943	1,971	3,448	0	2,790	109	17	160	66	1,506	1,547	2,022	2,459	1,017	1,361	2,070	1,691
1944	2,017	3,528	0	2,855	111	18	164	68	1,541	1,583	2,069	2,516	1,041	1,392	2,119	1,730
1945	2,063	3,609	0	2,920	114	18	168	69	1,576	1,619	2,116	2,573	1,064	1,424	2,167	1,769
1946	21,086	36,889	0	29,845	1,165	191	1,713	708	16,114	16,545	21,635	26,304	10,881	14,557	22,148	18,085
1947	21,544	37,691	0	30,494	1,190	198	1,750	723	16,464	16,904	22,105	26,876	11,118	14,873	22,630	18,479
1948	22,003	38,493	0	31,143	1,215	205	1,788	738	16,814	17,264	22,575	27,448	11,354	15,190	23,111	18,872
1949	22,461	39,294	0	31,792	1,241	212	1,825	754	17,165	17,624	23,046	28,020	11,591	15,506	23,593	19,265
1950	22,920	40,096	0	32,441	1,266	226	1,862	769	17,515	17,983	23,516	28,592	11,827	15,823	24,074	19,658
1951	23,378	40,898	0	33,089	1,291	244	1,899	785	17,865	18,343	23,986	29,164	12,064	16,139	24,556	20,051
1952	23,836	41,700	0	33,738	1,317	262	1,937	800	18,216	18,703	24,457	29,735	12,300	16,455	25,037	20,444
1953	24,295	42,502	0	34,387	1,342	280	1,974	815	18,566	19,062	24,927	30,307	12,537	16,772	25,519	20,838
1954	24,753	43,304	457	35,036	1,367	298	2,011	831	18,916	19,422	25,397	30,879	12,773	17,088	26,000	21,231
1955	25,212	44,106	2,708	35,685	1,393	316	2,048	846	19,267	19,782	25,868	31,451	13,010	17,405	26,482	21,624
1956	25,670	44,908	4,958	36,334	1,418	334	2,086	861	19,267	19,782	25,868	31,451	13,010	17,405	26,482	21,624
1957	26,128	45,710	7,209	36,982	1,443	351	2,123	877	19,267	19,782	25,868	31,451	13,010	17,405	26,482	21,624
1958	26,587	46,512	9,459	37,631	1,469	369	2,160	892	19,267	19,782	25,868	31,451	13,010	17,405	26,482	21,624
1959	27,045	47,314	11,709	38,280	1,494	387	2,197	908	19,267	19,782	25,868	31,451	13,010	17,405	26,482	21,624
1960	27,503	48,116	16,210	38,929	1,519	423	2,235	923	19,267	19,782	25,868	31,451	13,010	17,405	26,482	21,624
1961	27,962	48,918	18,205	39,578	1,545	439	2,272	938	21,526	20,315	27,781	31,626	12,900	17,341	26,328	21,445
1962	28,420	49,720	20,200	40,226	1,570	454	2,309	954	23,786	20,848	29,695	31,802	12,791	17,278	26,175	21,266
1963	28,879	50,521	22,196	40,875	1,595	470	2,346	969	26,046	21,382	31,608	31,978	12,681	17,215	26,021	21,086
1964	29,337	51,323	24,191	41,524	1,621	486	2,384	985	28,305	21,915	33,522	32,153	12,572	17,151	25,868	20,907
1965	29,795	52,125	26,186	42,173	1,646	502	2,421	1,000	30,565	22,448	35,436	32,329	12,462	17,088	25,715	20,728
1966	30,254	52,927	28,181	42,822	1,671	518	2,458	1,015	32,825	22,981	37,349	32,505	12,353	17,025	25,561	20,549
1967	30,712	53,729	30,176	43,470	1,697	534	2,495	1,031	35,085	23,515	39,263	32,680	12,243	16,961	25,408	20,370
1968	31,171	54,531	32,171	44,119	1,722	549	2,533	1,046	37,344	24,048	41,176	32,856	12,134	16,898	25,254	20,191
1969	31,629	55,333	34,166	44,768	1,747	565	2,570	1,061	39,604	24,581	43,090	33,031	12,024	16,835	25,101	20,011
1970	32,087	56,135	38,156	45,417	1,773	597	2,607	1,077	41,864	25,114	45,004	33,207	11,915	16,771	24,947	19,832
1971	32,546	56,937	40,751	46,066	1,798	617	2,644	1,092	44,123	25,648	46,917	33,383	11,805	16,708	24,794	19,653
1972	33,004	57,739	43,345	46,715	1,823	638	2,682	1,108	46,383	26,181	48,831	33,558	11,696	16,645	24,641	19,474
1973	33,463	58,541	45,940	47,363	1,848	659	2,719	1,123	48,643	26,714	50,744	33,734	11,586	16,581	24,487	19,295
1974	33,921	59,343	48,535	48,012	1,874	679	2,756	1,138	50,903	27,247	52,658	33,909	11,477	16,518	24,334	19,116
1975	34,379	60,145	51,129	48,661	1,899	700	2,793	1,154	53,162	27,781	54,572	34,085	11,367	16,455	24,180	18,937
1976	34,838	60,947	53,724	49,310	1,924	720	2,831	1,169	55,422	28,314	56,485	34,261	11,258	16,391	24,027	18,757
1977	35,296	61,748	56,319	49,959	1,950	741	2,868	1,185	57,682	28,847	58,399	34,436	11,148	16,328	23,873	18,578
1978	29,424	56,265	57,003	40,549	1,635	761	2,750	1,070	55,041	27,492	55,294	31,282	10,356	15,690	22,317	16,835
1979	23,390	50,619	57,518	30,881	1,311	782	2,629	951	52,031	26,067	51,870	28,093	9,578	15,057	20,778	15,123
1980	17,194	44,813	60,208	20,956	978	823	2,503	830	48,652	24,575	48,128	24,871	8,813	14,428	19,257	13,441
1981	13,098	113,460	28,263	122,156	0	0	0	0	0	0	0	0	0	0	0	0
1982	5,314	52,940	202,943	5,960	0	0	0	0	0	0	0	0	0	0	0	0
1983	7,130	26,817	146,772	3,302	0	0	0	0	0	0	0	0	0	0	0	0

1984	57,052	22,987	84,040	21,717	0	0	0	0	0	0	0	0	0	0	0	0
1985	2,534	10,192	48,818	5,433	0	0	0	0	0	0	0	0	0	0	0	0
1986	23,535	37,544	68,712	24,782	0	0	0	0	6,378	8,815	2,605	1,002	4,659	11,587	14,808	3,770
1987	19,031	31,148	19,318	51,946	0	0	0	0	12,719	15,507	15,920	11,948	3,971	15,885	10,405	30,634
1988	46,859	20,929	70,703	4,784	0	0	0	0	37,047	11,382	6,236	2,078	1,703	10,106	8,867	480
1989	20,837	40,896	43,483	31,446	0	0	0	0	6,252	11,841	27,315	5,543	7,286	6,820	14,885	2,746
1990	66,279	43,947	58,589	15,073	27,731	0	6,459	0	7,428	7,562	36,147	25,925	11,062	13,318	12,530	10,575
1991	16,014	38,973	116,750	49,434	0	3,243	0	0	4,004	10,358	17,916	21,146	10,390	12,369	23,773	7,425
1992	18,090	25,243	94,934	19,094	1,113	0	0	0	45,659	5,841	22,348	21,293	6,246	6,943	11,389	5,994
1993	20,130	32,037	59,187	38,814	830	0	721	1,222	22,548	17,108	35,527	105,722	7,191	5,819	13,076	11,705
1994	13,317	30,140	46,589	21,719	0	0	0	685	43,363	36,155	50,030	94,300	5,482	9,349	13,456	10,956
1995	32,099	81,295	48,339	29,225	888	635	0	635	21,838	63,702	98,583	153,831	3,636	7,786	8,471	9,717
1996	25,321	51,628	61,742	19,164	0	1,423	0	0	39,987	62,298	52,525	109,843	12,282	9,635	20,396	7,274
1997	45,159	62,512	47,856	62,535	0	1,138	0	0	51,091	41,729	51,615	116,020	9,234	8,524	6,101	11,141
1998	35,576	75,325	46,726	32,720	1,304	0	0	0	13,880	50,747	38,761	89,313	5,790	5,046	7,232	10,765
1999	11,464	77,327	64,152	40,147	0	0	2,276	526	33,240	40,442	25,377	37,585	5,705	3,757	13,586	3,485
2000	7,408	63,720	126,504	35,340	0	0	1,529	0	10,170	24,377	38,571	18,525	4,084	5,655	8,984	7,062
2001	9,354	69,820	41,160	27,262	0	0	0	0	8,376	16,853	28,044	36,220	2,017	3,676	6,114	5,025
2002	55,974	64,473	53,652	19,469	5,891	4,838	2,421	0	7,380	23,714	22,867	31,281	2,161	3,693	6,315	2,317
2003	24,523	112,830	100,206	104,598	0	0	1,052	0	17,325	36,808	19,854	53,772	3,036	1,721	6,072	2,841
2004	16,676	52,461	96,231	31,686	0	0	0	1,815	9,558	38,002	21,604	21,311	3,592	3,762	7,157	3,006
2005	21,167	51,402	60,898	28,360	884	0	2,145	1,360	12,486	37,267	30,646	32,915	6,460	7,089	11,762	9,555
2006	36,836	103,152	97,802	46,469	4,086	1,381	9,104	0	10,312	29,993	31,896	24,538	3,127	4,938	9,474	10,812

Table 6. Predicted (italics) and estimated (post-1980) Gulf of Mexico recreational landings (includes Texas).

Zone	Gulf															
Mode	*Private boat*				*Shore*				*Charter boat*				*Headboat*			
Method	2	2	2	2	1	1	1	1	3	3	3	3	3	3	3	3
Season	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter	fall	spring	summer	winter
1930	0	0	34,505	0	0	0	0	0	0	0	0	0	0	0	0	0
1931	0	95	35,771	1	36	857	1,282	90	78	442	894	149	14	70	181	20
1932	1	189	37,036	1	71	1,715	2,563	181	156	884	1,787	298	27	139	363	41
1933	1	284	38,302	2	107	2,572	3,845	271	233	1,325	2,681	447	41	209	544	61
1934	1	378	39,568	3	143	3,429	5,127	362	311	1,767	3,574	596	54	278	726	81
1935	2	473	40,834	3	178	4,286	6,408	452	389	2,209	4,468	745	68	348	907	102
1936	2	567	42,099	4	214	5,144	7,690	542	467	2,651	5,362	894	81	418	1,089	122
1937	2	662	43,365	5	250	6,001	8,972	633	545	3,092	6,255	1,043	95	487	1,270	142
1938	2	756	44,631	5	285	6,858	10,253	723	622	3,534	7,149	1,192	108	557	1,451	162
1939	3	851	45,897	6	321	7,715	11,535	813	700	3,976	8,043	1,341	122	627	1,633	183
1940	0	95	4,796	1	36	857	1,282	90	78	442	894	149	14	70	181	20
1941	0	104	5,049	1	39	943	1,410	99	86	486	983	164	15	77	200	22
1942	0	113	5,302	1	43	1,029	1,538	108	93	530	1,072	179	16	84	218	24
1943	0	123	5,554	1	46	1,114	1,666	117	101	574	1,162	194	18	90	236	26
1944	0	132	5,807	1	50	1,200	1,794	127	109	618	1,251	209	19	97	254	28
1945	0	142	6,060	1	53	1,286	1,923	136	117	663	1,340	224	20	104	272	30
1946	5	1,512	63,131	11	570	13,716	20,507	1,446	1,245	7,068	14,298	2,384	216	1,114	2,903	325
1947	5	1,607	65,659	12	606	14,573	21,789	1,536	1,323	7,510	15,191	2,533	230	1,183	3,084	345
1948	5	1,702	68,188	12	642	15,431	23,070	1,627	1,400	7,952	16,085	2,682	243	1,253	3,266	366
1949	6	1,796	70,717	13	677	16,288	24,352	1,717	1,478	8,393	16,979	2,831	257	1,323	3,447	386
1950	6	1,891	75,305	14	713	17,145	25,634	1,808	1,556	8,835	17,872	2,980	270	1,392	3,628	406
1951	6	1,985	79,088	14	749	18,002	26,915	1,898	1,634	9,277	18,766	3,129	284	1,462	3,810	427
1952	7	2,080	82,872	15	784	18,860	28,197	1,988	1,712	9,719	19,659	3,278	297	1,531	3,991	447
1953	7	2,174	86,656	16	820	19,717	29,479	2,079	1,789	10,160	20,553	3,427	311	1,601	4,173	467
1954	7	2,269	90,440	16	856	20,574	30,760	2,169	1,867	10,602	21,447	3,576	324	1,671	4,354	487
1955	8	2,363	94,224	17	891	21,431	32,042	2,259	1,945	11,044	22,340	3,725	338	1,740	4,535	508
1956	8	2,458	98,008	18	927	22,289	33,324	2,350	1,945	11,067	22,615	3,725	341	1,778	4,657	525
1957	8	2,552	101,792	18	963	23,146	34,605	2,440	1,945	11,090	22,890	3,725	343	1,816	4,778	543
1958	8	2,647	105,576	19	998	24,003	35,887	2,531	1,946	11,113	23,166	3,725	346	1,853	4,899	560
1959	9	2,741	109,359	20	1,034	24,860	37,169	2,621	1,946	11,137	23,441	3,725	348	1,891	5,020	578
1960	9	2,836	116,458	20	1,070	25,718	38,450	2,711	1,946	11,160	23,716	3,725	351	1,929	5,141	595
1961	9	2,930	119,033	21	1,105	26,575	39,732	2,802	2,188	12,119	26,467	3,963	362	1,989	5,306	614
1962	10	3,025	121,608	22	1,141	27,432	41,014	2,892	2,430	13,079	29,218	4,202	373	2,050	5,471	633
1963	257	3,119	124,184	393	1,177	28,289	42,295	2,982	2,672	14,038	31,969	4,440	384	2,111	5,636	652
1964	764	3,214	126,759	779	1,212	29,147	43,577	3,073	2,914	14,998	34,720	4,678	395	2,171	5,801	671
1965	1,272	3,510	129,334	1,165	1,248	30,004	44,859	3,163	3,155	15,958	37,472	4,916	406	2,232	5,966	690
1966	1,780	4,933	131,909	1,551	1,283	30,861	46,140	3,254	3,397	16,917	40,223	5,154	417	2,293	6,131	709
1967	2,287	6,355	134,484	1,937	1,319	31,718	47,422	3,344	3,639	17,877	42,974	5,392	428	2,353	6,296	728
1968	2,795	7,777	137,059	2,323	1,355	32,576	48,704	3,434	3,881	18,836	45,725	5,630	439	2,414	6,461	747
1969	3,303	9,200	139,635	2,710	1,390	33,433	49,985	3,525	4,123	19,796	48,477	5,868	450	2,475	6,626	766
1970	4,318	11,950	144,316	3,481	1,426	34,290	51,267	3,615	4,365	20,755	51,228	6,106	461	2,535	6,791	784
1971	5,258	14,505	148,688	4,196	1,462	35,147	52,549	3,706	4,607	21,715	53,979	6,345	472	2,596	6,956	803
1972	6,199	17,060	153,060	4,911	1,497	36,005	53,831	3,796	4,848	22,675	56,730	6,583	483	2,657	7,121	822
1973	7,139	19,615	157,432	5,626	1,533	36,862	55,112	3,886	5,090	23,634	59,481	6,821	494	2,717	7,286	841
1974	8,080	22,171	161,804	6,341	1,569	37,719	56,394	3,977	5,332	24,594	62,233	7,059	505	2,778	7,451	860
1975	9,020	24,726	166,176	7,056	1,604	38,576	57,676	4,067	5,574	25,553	64,984	7,297	516	2,839	7,616	879
1976	9,961	27,281	170,548	7,771	1,640	39,434	58,957	4,157	5,816	26,513	67,735	7,535	527	2,899	7,781	898
1977	10,901	29,836	174,920	8,486	1,676	40,291	60,239	4,248	6,058	27,472	70,486	7,773	538	2,960	7,946	917
1978	10,780	26,668	179,292	7,187	1,917	32,109	51,036	3,948	5,867	27,377	71,111	7,240	506	2,902	7,921	927
1979	10,490	22,489	183,664	5,575	2,167	23,550	41,397	3,632	5,644	27,209	71,561	6,661	472	2,839	7,889	937
1980	10,718	18,242	191,938	3,893	2,426	14,615	31,321	3,300	5,387	26,969	71,836	6,036	437	2,772	7,849	946
1981	0	4,913	69,526	0	0	428	4,550	0	0	2,151	25,548	0	0	1,920	6,181	0
1982	9,000	25,368	635,314	2,598	0	4,712	18,329	0	0	1,670	19,825	0	0	1,920	6,181	0
1983	0	8,684	191,421	1,743	0	0	32,060	0	0	1,125	15,020	0	0	1,920	6,181	0
1984	2,804	4,712	269,215	0	0	0	0	0	0	375	6,201	0	0	1,920	6,181	0
1985	0	22,635	70,408	12,288	0	0	828	0	0	586	3,549	0	0	1,920	6,181	0
1986	1,067	11,151	90,789	1,343	5,863	0	0	0	1,301	5,869	23,932	311	38	2,780	6,003	13
1987	17,149	102,638	99,897	1,185	0	28,894	13,930	0	0	25,637	52,568	933	46	2,044	7,533	20
1988	0	10,828	189,301	859	0	1,221	22,618	0	0	950	82,056	0	5	1,384	8,094	0
1989	41,327	19,413	115,355	2,596	0	0	9,868	0	4,005	18,457	33,913	502	52	1,316	9,071	17
1990	45	60,358	83,525	20,899	0	43,424	45,004	1,695	0	22,270	47,592	10,363	30	1,538	9,091	596
1991	1,373	21,160	223,570	5,346	0	17,046	109,640	0	0	32,791	78,943	3,672	34	553	12,271	2
1992	5,161	43,161	117,523	4,587	0	37,399	15,454	0	37	8,457	42,300	1,417	12	3,308	14,601	7
1993	8,274	31,270	119,186	1,569	0	24,021	37,722	0	16,266	38,460	36,825	15,401	130	3,154	11,871	98
1994	14,306	47,800	80,964	11,551	0	14,047	50,337	2,399	4,269	40,241	72,339	14,423	152	5,970	12,868	425
1995	2,432	72,372	54,860	26,688	0	9,218	6,054	340	5,668	59,022	33,159	27,808	8	6,339	15,367	13
1996	5,203	52,391	74,511	17,110	0	3,564	2,228	2,245	0	127,193	70,490	357	642	5,173	14,001	4
1997	6,494	48,576	117,215	9,625	0	1,297	8,007	4,920	5,550	58,087	61,365	13,686	649	5,456	13,624	1,729
1998	15,795	32,024	52,061	5,408	0	0	5,200	0	11,003	30,554	53,296	9,077	683	4,122	8,826	1,027
1999	19,507	56,310	42,109	14,409	0	17,151	7,064	512	9,150	26,409	46,528	15,507	601	4,540	13,662	611
2000	47,222	40,451	82,852	11,455	0	3,283	28,232	517	5,043	51,149	52,981	7,276	662	3,820	9,698	2,049
2001	30,537	36,108	65,419	16,737	1,817	12,096	35,547	2,411	6,943	24,033	42,370	2,724	701	2,431	9,434	679
2002	3,285	69,420	79,527	9,800	3,943	33,079	12,235	834	2,471	28,762	44,071	7,215	940	3,397	9,767	549
2003	18,943	52,515	87,958	7,122	7,322	4,568	19,995	0	1,286	28,782	28,812	5,876	806	7,104	9,644	3,987
2004	15,237	71,969	80,573	9,734	0	7,028	13,062	0	6,515	25,536	30,387	6,530	387	2,366	13,478	1,267
2005	7,803	58,743	56,117	5,958	0	27,763	3,961	6,535	409	28,324	15,099	3,291	383	4,883	11,324	2,029
2006	9,778	118,061	126,279	8,502	0	37,662	27,021	12,698	7,652	38,032	55,924	10,107	1,057	6,475	11,026	5,153

Table 7. Total predicted (italics) and estimated recreational landings. Note that the estimated landings for 1981-1985 are incomplete and should be obtained from other documents and that the Gulf estimates include Texas.

year	Total	Atlantic	Mix	Gulf
1900	2,012	1,973	40	0
1901	9,921	4,714	5,208	0
1902	17,830	7,455	10,375	0
1903	25,739	10,196	15,543	0
1904	33,648	12,937	20,711	0
1905	41,557	15,678	25,879	0
1906	49,466	18,419	31,047	0
1907	57,375	21,160	36,215	0
1908	65,284	23,902	41,383	0
1909	73,193	26,643	46,550	0
1910	81,345	29,626	51,719	0
1911	89,343	32,455	56,888	0
1912	97,340	35,284	62,056	0
1913	105,338	38,114	67,225	0
1914	113,336	40,943	72,393	0
1915	121,334	43,772	77,561	0
1916	129,331	46,602	82,730	0
1917	137,329	49,431	87,898	0
1918	145,327	52,260	93,067	0
1919	153,325	55,090	98,235	0
1920	161,654	58,249	103,405	0
1921	169,324	60,749	108,575	0
1922	176,993	63,248	113,746	0
1923	184,663	65,747	118,916	0
1924	192,333	68,247	124,086	0
1925	200,003	70,746	129,256	0
1926	207,672	73,246	134,427	0
1927	215,342	75,745	139,597	0
1928	223,012	78,244	144,767	0
1929	230,681	80,744	149,938	0
1930	272,859	83,243	155,111	34,505
1931	286,500	86,240	160,282	39,978
1932	300,142	89,237	165,453	45,451
1933	313,783	92,235	170,623	50,925
1934	327,424	95,232	175,794	56,398
1935	341,065	98,229	180,965	61,871
1936	354,706	101,226	186,136	67,345
1937	368,347	104,223	191,306	72,818
1938	381,989	107,220	196,477	78,291
1939	395,630	110,218	201,648	83,764
1940	41,057	11,371	20,682	9,003
1941	42,601	11,725	21,200	9,677
1942	44,146	12,078	21,717	10,351
1943	45,690	12,432	22,234	11,024
1944	47,235	12,785	22,752	11,698
1945	48,779	13,139	23,269	12,371
1946	503,237	134,920	237,866	130,451
1947	518,681	138,454	243,040	137,187
1948	534,126	141,989	248,214	143,923
1949	549,571	145,523	253,388	150,659
1950	568,117	150,093	258,569	159,455
1951	585,017	153,817	263,754	167,446
1952	601,917	157,541	268,938	175,438
1953	618,817	161,265	274,123	183,429
1954	636,175	164,989	279,765	191,421
1955	655,797	169,185	287,200	199,412
1956	670,912	173,423	291,455	206,034
1957	686,027	177,661	295,711	212,655
1958	701,142	181,899	299,966	219,277
1959	716,257	186,136	304,221	225,899
1960	738,829	192,249	310,745	235,835
1961	772,233	207,896	319,120	245,217
1962	805,637	223,543	327,495	254,599
1963	839,658	239,190	335,869	264,598
1964	873,955	254,837	344,244	274,873
1965	908,453	270,484	352,619	285,350
1966	944,077	286,132	360,993	296,952
1967	979,702	301,779	369,368	308,555
1968	1,015,326	317,426	377,743	320,157
1969	1,050,950	333,073	386,118	331,760
1970	1,093,716	349,524	396,503	347,689
1971	1,134,844	366,379	405,482	362,983
1972	1,175,972	383,234	414,462	378,277
1973	1,217,100	400,089	423,441	393,571
1974	1,258,229	416,944	432,420	408,865
1975	1,299,357	433,799	441,399	424,159
1976	1,340,485	450,654	450,378	439,453
1977	1,381,613	467,509	459,357	454,747
1978	1,331,097	470,544	423,763	436,790
1979	1,275,440	472,582	386,680	416,177
1980	1,224,276	475,119	350,470	398,687
1981	480,364	88,170	276,977	115,217
1982	1,139,794	147,720	267,157	724,917
1983	687,843	245,668	184,021	258,154
1984	781,389	304,185	185,796	291,408
1985	402,972	217,600	66,977	118,395

year	Total	Atlantic	Mix	Gulf
1986	1,025,166	666,509	208,197	150,460
1987	1,124,788	533,882	238,432	352,474
1988	1,031,900	493,410	221,174	317,316
1989	755,397	280,155	219,350	255,892
1990	1,007,187	318,132	342,625	346,430
1991	1,364,740	526,544	331,795	506,401
1992	1,196,875	619,264	284,187	293,424
1993	923,003	207,119	371,637	344,247
1994	991,937	244,305	375,541	372,091
1995	1,122,569	242,541	560,680	319,348
1996	1,024,806	176,176	473,518	375,112
1997	1,266,105	395,170	514,655	356,280
1998	928,771	286,510	413,185	229,076
1999	766,247	133,108	359,069	274,070
2000	983,010	284,391	351,929	346,690
2001	749,454	205,546	253,921	289,987
2002	724,428	108,687	306,446	309,295
2003	941,260	171,902	484,638	284,720
2004	749,001	158,071	306,861	284,069
2005	734,343	187,325	314,396	232,622
2006	1,049,846	150,499	423,920	475,427

Figure 1. Back-calculated landings using the median of highest 5 CPUEs.

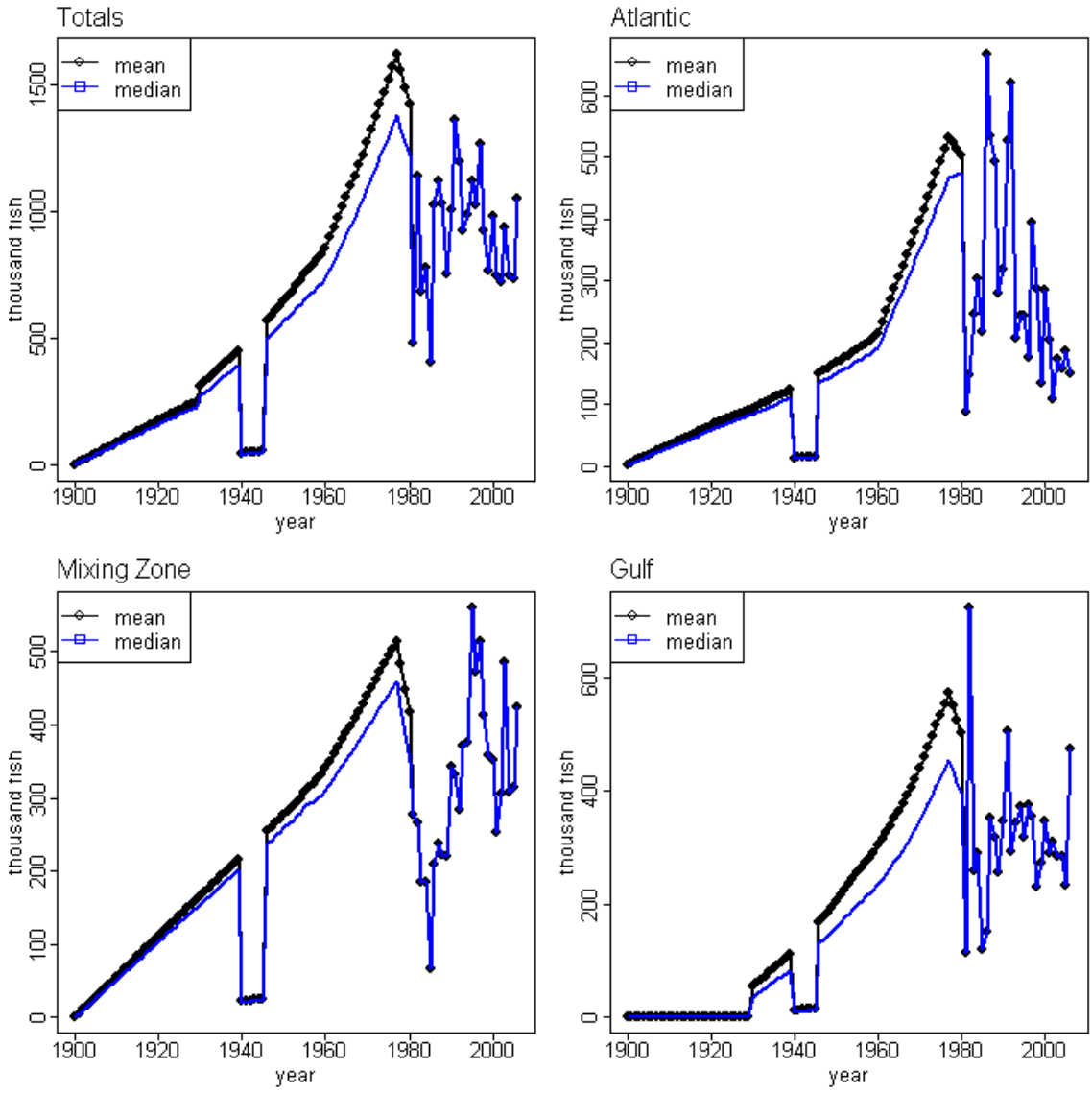

Figure 2. Atlantic back-calculated landings using the median of highest 5 CPUEs

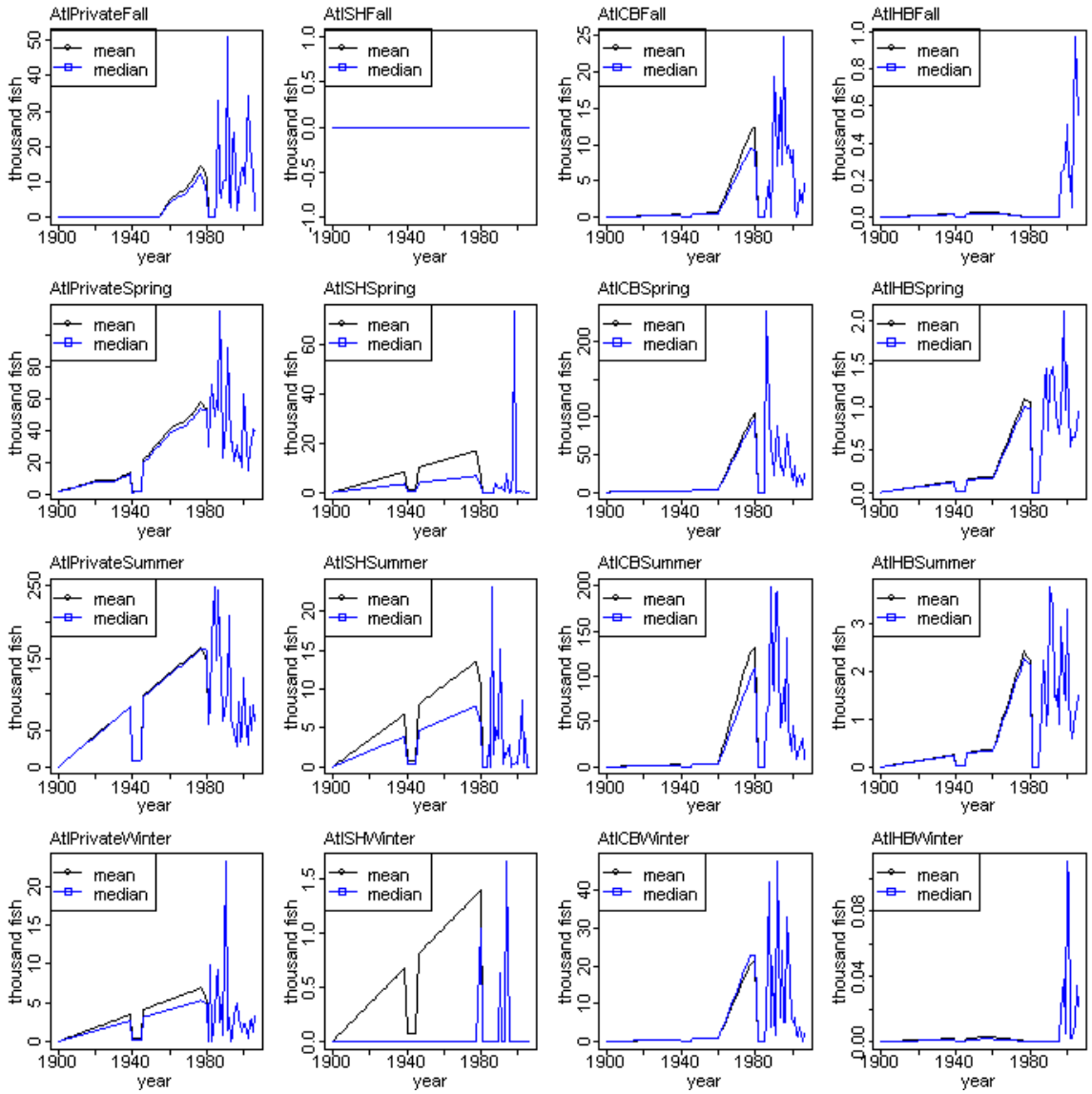

Figure 3. Mixing zone back calculated landings using the median of highest 5 CPUE

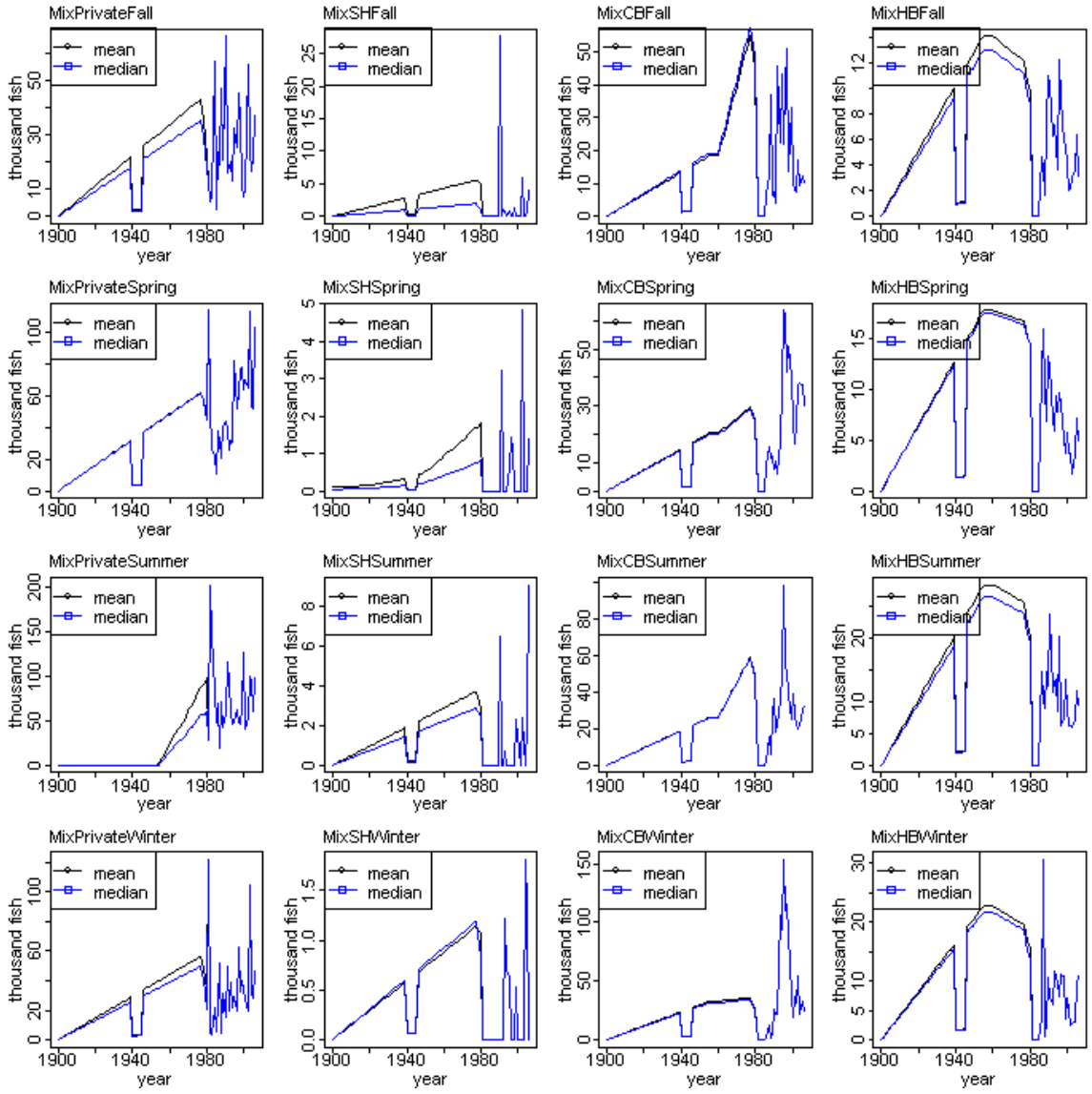

Figure 4. Gulf back calculated landings using the median of highest 5 CPUE