SOUTHWEST FISHERIES CENTER

HONOLULU LABORATORY

NATIONAL MARINE FISHERIES SERVICE

P.O. BOX 3830

HONOLULU, HI 96812

file copy

October 1984

ANNUAL AND AVERAGE MONTHLY TRENDS IN THE CATCH OF BOTTOM FISH SPECIES IN HAWAII 1949-80

Southwest Fisheries Center Honolulu Laboratory
National Marine Fisheries Service, NOAA
Honolulu, Hawaii 96812

Not for Publication

ADMINISTRATIVE REPORT H-84-16

This report is used to insure prompt dissemination of preliminary results, interim reports, and special studies to the scientific community. Contact the Southwest Fisheries Center Honolulu Laboratory, National Marine Fisheries Service, NOAA, if you wish to cite or reproduce this material.

Southwest Fisheries Center Administrative Report H-84-16

ANNUAL AND AVERAGE MONTHLY TRENDS IN THE CATCH OF BOTTOM FISH SPECIES IN HAWAII 1949-80

Southwest Fisheries Center Honolulu Laboratory
National Marine Fisheries Service, NOAA
Honolulu, Hawaii 96812

October 1984

NOT FOR PUBLICATION

INTRODUCTION

This data summary was prepared for use by the bottom fish planning team of the Western Pacific Regional Fishery Management Council. A fishery management plan (FMP) under the Magnuson Fishery Conservation and Management Act of 1976 requires a basic description of the relevant fisheries. These summaries were prepared from the monthly reports of the commercial fish landings compiled by the Hawaii Department of Land and Natural Resources, Division of Aquatic Resources (HDAR).

The data cover the 11 "management unit" species included in the draft bottom fish FMP as well as 4 additional species of interest. Additional information on these species, including scientific names and descriptions, can be obtained from the draft bottom fish FMP.

ANNUAL TRENDS

The data have been summarized to show annual historical trends in landings and ex vessel revenue over the years 1949-78. Data for 1979 and 1980 became available after the individual species tables were created. Therefore these latter 2 years have been compiled in one annual table. Table 1 reports the 1979 and 1980 landings and revenue for each of the management unit species, the percent of the total management unit of each, and landings and revenue for four additional species frequently caught by handline methods. Tables 2A through 17A include reported catch (actual landings) in thousands of pounds and metric tons, reported revenue in thousands of dollars, and two "inflation-adjusted" revenue values. Deflated revenue uses the 1967 Honolulu version of the Consumer Price Index to place all values on an equivalent annual basis; adjusted revenue uses the December 1981 version of the price index. The figures show annual reported catch (C) and adjusted revenue (AR).

Figures 1A through 16A clearly show the substantial decline in commercial landings during the 1960's and the significant increase in the 1970's. This pattern is observed for almost all of the individual management unit species. The upward pattern represents three phenomena: an improving market for fresh bottom fish, increased effort by a large number of part-time handline fishers using small boats, and the increased harvest from the Northwestern Hawaiian Islands.

The tables and figures were prepared by Wesley Higuchi, Mathematics Aid, for the Fishery Management Research Program.

Western Pacific Fishery Management Council, 1984. Combined draft fishery management plan, environmental assessment and regulatory input review for the bottom fish and seamount groundfish fisheries of the western

MONTHLY TRENDS

Seasonal trends in the landings of individual bottom fish are clearly identifiable in Figures 1B-16B and Tables 2B-17B. Peak landings and revenue are in December, reflecting the strong influence of Hawaii consumers on the market. This is particularly true for the "red fish" such as onaga and opakapaka. However, some species, such as the shallower water forms (kahala, ulua, and uku) have stronger spring and summer seasons which is probably related to their availability. The figures show average monthly reported catch (C) and revenue (R) in current dollars.

Table 1.--Bottom fish landings, 1979 and 1980 (Source: Hawaii Division of Aquatic Resources, monthly tabulations (preliminary)).

	1979		1980			
Species	Catch in thousands of pounds	Revenue in thousands of dollars	Catch in thousands of pounds	Revenue in thousands of dollars	Percent of catch 1980	Percent of catch 1949-78
Management unit	655.9	$1,118.0	666.1	$1,071.7	100.00	100.00
Ehu	21.8	47.8	18.3	38.2	2.75	5.01
Gindai	3.6	4.8	2.2	3.5	0.33	0.24
Hapuupuu	64.9	89.0	55.1	64.8	8.27	7.22
Kahala	83.6	58.9	49.6	28.2	7.45	14.19
Kalekale	8.3	11.8	6.9	9.7	1.04	2.94
Lehi	16.4	24.8	17.2	24.9	2.58	0.64
Onaga	48.8	126.1	33.9	88.5	5.09	9.66
Opakapaka	205.4	440.5	230.7	480.8	34.63	22.54
Uku	87.9	162.7	74.9	160.6	11.24	10.59
Ulua	94.4	121.4	158.9	144.8	12.86	17.74
Wekeula	20.8	30.2	18.4	27.7	2.76	9.22
Other						
Taape	60.4	32.4	59.4	31.3		
Akule	367.4	353.6	435.8	402.1		
Kahalalu	84.7	84.2	73.6	71.1		
Opelu	428.0	463.3	491.1	523.0		

Table 2-A. Bottom fish (management unit species). Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	895.2	406.0	384.11	551.09	1398.68
1950	994.6	451.1	359.75	537.75	1364.80
1951	927.7	420.7	358.39	504.77	1281.11
1952	1066.1	483.5	429.34	587.34	1490.66
1953	970.5	440.1	385.39	522.92	1327.16
1954	745.4	338.0	291.84	392.26	995.56
1955	791.3	358.8	322.02	427.08	1083.94
1956	645.5	292.8	293.70	384.43	975.68
1957	606.3	275.0	282.32	357.37	907.01
1958	597.7	271.1	273.82	330.70	839.31
1959	425.8	193.1	224.79	266.97	677.57
1960	489.6	222.0	237.45	275.14	698.31
1961	464.6	210.7	219.46	247.70	628.66
1962	509.7	231.2	250.08	276.03	700.55
1963	603.4	273.7	279.79	302.15	766.86
1964	590.1	267.6	277.07	298.24	756.94
1965	472.2	214.1	239.67	253.35	643.01
1966	508.8	230.8	253.65	260.69	661.62
1967	459.5	208.4	254.36	254.36	645.56
1968	453.8	205.8	268.92	259.07	657.53
1969	452.6	205.3	287.22	264.72	671.86
1970	381.0	172.8	254.69	223.02	566.03
1971	439.2	199.2	322.57	271.30	688.56
1972	435.6	197.5	377.46	307.37	780.12
1973	482.9	219.0	429.63	334.87	849.89
1974	434.6	197.1	431.79	304.29	772.29
1975	568.8	257.9	599.65	386.87	981.87
1976	561.7	254.8	702.72	431.64	1095.51
1977	577.3	261.8	779.63	453.80	1151.75
1978	722.7	327.8	1099.97	595.22	1510.67
AVERAGE	609.1	276.3	372.38	362.08	918.97

Table 2-B.--Bottom fish (management unit species). Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	45.0	20.4	29.37	28.33	71.91
FEBRUARY	53.3	24.2	32.71	31.85	80.83
MARCH	57.1	25.9	36.13	35.68	90.55
APRIL	52.8	23.9	31.58	31.43	79.76
MAY	53.8	24.4	30.37	29.82	75.69
JUNE	46.4	21.1	24.21	24.27	61.60
JULY	43.8	19.9	24.21	24.90	63.19
AUGUST	43.0	19.5	26.87	26.81	68.05
SEPTEMBER	49.5	22.4	29.33	28.79	73.07
OCTOBER	47.8	21.7	30.64	28.65	72.72
NOVEMBER	50.0	22.7	31.82	29.61	75.15
DECEMBER	66.6	30.2	45.13	41.94	106.44
AVERAGE	50.8	23.0	31.03	30.17	76.58

Table 3-A.--Ehu. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	58.7	26.6	41.29	59.23	150.34
1950	68.6	31.1	39.90	59.64	151.36
1951	48.8	22.2	29.73	41.88	106.29
1952	54.9	24.9	37.45	51.24	130.04
1953	46.2	21.0	33.49	45.44	115.32
1954	33.7	15.3	23.28	31.29	79.42
1955	39.2	17.8	27.60	36.60	92.90
1956	46.0	20.9	31.51	41.25	104.69
1957	32.4	14.7	25.13	31.81	80.73
1958	23.3	10.6	18.17	21.95	55.70
1959	19.8	9.0	17.06	20.26	51.43
1960	18.0	8.2	14.71	17.05	43.27
1961	12.8	5.8	11.17	12.61	32.00
1962	23.5	10.7	17.54	19.36	49.12
1963	28.1	12.7	21.54	23.26	59.03
1964	22.9	10.4	18.55	19.97	50.67
1965	19.9	9.0	15.00	15.86	40.24
1966	19.6	8.9	14.86	15.28	38.77
1967	16.0	7.3	13.64	13.64	34.61
1968	22.7	10.3	20.30	19.56	49.65
1969	16.6	7.5	18.58	17.12	43.45
1970	16.7	7.6	20.32	18.23	46.28
1971	21.9	9.9	27.79	23.37	59.32
1972	30.2	13.7	42.09	34.27	86.99
1973	22.0	10.0	31.65	24.67	62.60
1974	26.8	12.2	38.86	27.38	69.50
1975	29.3	13.3	48.22	31.11	78.95
1976	35.7	16.2	59.78	36.70	93.14
1977	31.7	14.4	61.58	35.84	90.97
1978	35.3	16.0	72.14	39.04	99.07
AVERAGE	30.7	13.9	29.78	29.50	74.86

Table 3-B.--Ehu. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	2.3	1.1	2.29	2.18	5.54
FEBRUARY	2.5	1.1	2.45	2.34	5.93
MARCH	2.8	1.3	2.82	[illegible]	7.17
APRIL	2.8	1.3	2.80	2.83	7.19
MAY	3.0	1.4	2.88	2.90	7.35
JUNE	2.4	1.1	2.17	2.20	5.58
JULY	2.5	1.1	2.30	2.39	6.07
AUGUST	2.3	1.0	2.20	2.24	5.67
SEPTEMBER	2.5	1.1	2.18	2.19	5.55
OCTOBER	2.1	1.0	1.94	1.93	4.89
NOVEMBER	2.1	1.0	2.01	1.94	4.92
DECEMBER	3.4	1.5	3.73	3.55	9.00
AVERAGE	2.6	1.2	2.48	2.46	6.24

Table 5-A.--Hapuupuu. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	63.8	28.9	23.67	33.96	86.19
1950	84.3	38.2	22.43	33.53	85.10
1951	73.6	33.4	23.61	33.25	84.40
1952	91.9	41.7	31.41	42.97	109.05
1953	74.2	33.6	20.58	27.93	70.87
1954	40.0	18.2	11.98	16.11	40.88
1955	65.6	29.8	19.82	26.29	66.72
1956	41.6	18.9	15.23	19.93	50.58
1957	32.2	14.6	14.51	18.37	46.63
1958	28.6	13.0	11.82	14.28	36.23
1959	29.0	13.2	13.93	16.54	41.99
1960	22.4	10.1	11.22	13.00	32.99
1961	20.5	9.3	10.71	12.08	30.67
1962	22.3	10.1	9.72	10.73	27.23
1963	32.7	14.8	13.36	14.43	36.62
1964	24.1	10.9	9.81	10.56	26.79
1965	21.2	9.6	9.28	9.81	24.90
1966	33.1	15.0	14.17	14.56	36.96
1967	23.4	10.6	11.24	11.24	28.52
1968	21.0	9.5	12.35	11.90	30.20
1969	21.2	9.6	12.95	11.93	30.29
1970	40.5	18.4	25.22	22.09	56.06
1971	49.6	22.5	35.60	29.94	75.99
1972	36.9	16.7	31.06	25.29	64.19
1973	50.8	23.0	49.47	38.55	97.85
1974	39.4	17.9	38.73	27.30	69.28
1975	59.8	27.1	63.89	41.22	104.62
1976	58.4	26.5	72.62	44.61	113.22
1977	49.1	22.3	60.47	35.20	89.34
1978	74.5	33.8	100.49	54.38	138.01
AVERAGE	44.2	20.0	26.71	24.07	61.08

Table 5-B.--Hapuupuu. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	2.8	1.3	1.62	1.57	3.98
FEBRUARY	3.8	1.7	2.32	2.10	5.32
MARCH	3.9	1.7	2.64	2.35	5.96
APRIL	4.3	2.0	2.80	2.44	6.20
MAY	4.3	2.0	2.39	2.22	5.65
JUNE	3.3	1.5	1.71	1.59	4.02
JULY	3.1	1.4	1.93	1.75	4.44
AUGUST	3.4	1.5	2.16	1.94	4.93
SEPTEMBER	4.1	1.8	2.64	2.27	5.75
OCTOBER	3.0	1.4	1.76	1.59	4.03
NOVEMBER	3.7	1.7	2.13	1.93	4.89
DECEMBER	4.4	2.0	2.59	2.33	5.90
AVERAGE	3.7	1.7	2.23	2.01	5.09

Table 6-A.--Kahala. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	190.3	86.3	60.34	86.57	219.70
1950	168.9	76.6	37.13	55.50	140.85
1951	169.4	76.8	40.40	56.90	144.41
1952	156.1	70.8	34.70	47.47	120.49
1953	94.7	43.0	17.80	24.15	61.28
1954	68.0	30.8	12.70	17.07	43.33
1955	83.0	37.6	16.80	22.28	56.54
1956	54.6	24.8	12.43	16.27	41.30
1957	70.1	31.8	19.10	24.18	61.37
1958	89.5	40.6	22.68	27.39	69.51
1959	73.9	33.5	22.37	26.56	67.42
1960	86.4	39.2	25.30	29.32	74.41
1961	76.8	34.8	22.78	25.71	65.26
1962	85.3	38.7	26.49	29.24	74.20
1963	105.7	47.9	29.15	31.48	79.89
1964	95.6	43.4	27.51	29.62	75.17
1965	75.0	34.0	21.07	22.27	56.52
1966	99.1	44.9	28.61	29.40	74.62
1967	69.4	31.5	21.51	21.51	54.58
1968	85.2	38.6	28.97	27.91	70.83
1969	72.8	33.0	26.29	24.23	61.50
1970	70.1	31.8	25.69	22.50	57.10
1971	83.3	37.8	35.17	29.58	75.08
1972	57.0	25.8	26.25	21.38	54.26
1973	66.1	30.0	42.96	33.48	84.98
1974	34.1	15.5	16.92	11.92	30.26
1975	29.9	13.6	13.92	8.98	22.80
1976	41.0	18.6	21.63	13.29	33.72
1977	57.4	26.0	34.80	20.26	51.41
1978	99.1	44.9	71.39	38.63	98.04
AVERAGE	86.9	39.4	28.10	29.17	74.03

Table 6-B.--Kahala. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	7.4	3.3	2.68	2.87	7.28
FEBRUARY	11.0	5.0	3.62	3.77	9.57
MARCH	14.6	6.6	5.72	5.82	14.78
APRIL	11.7	5.3	3.68	3.90	9.90
MAY	6.9	3.1	1.88	1.96	4.97
JUNE	3.9	1.8	0.96	1.02	2.59
JULY	3.7	1.7	0.94	1.02	2.59
AUGUST	3.5	1.6	1.05	1.15	2.92
SEPTEMBER	4.8	2.2	1.41	1.50	3.82
OCTOBER	4.5	2.0	1.44	1.44	3.64
NOVEMBER	5.9	2.7	1.73	1.77	4.50
DECEMBER	9.1	4.1	2.98	2.94	7.46
AVERAGE	7.2	3.3	2.34	2.43	6.17

Table 7-A.--Kalekale. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	29.7	13.5	17.00	24.40	61.92
1950	31.9	14.5	14.27	21.33	54.13
1951	42.8	19.4	17.89	25.20	63.96
1952	32.0	14.5	17.07	23.36	59.28
1953	38.8	17.6	19.29	26.17	66.43
1954	32.4	14.7	14.02	18.85	47.84
1955	33.8	15.3	15.80	20.95	53.17
1956	32.6	14.8	14.62	19.14	48.58
1957	20.6	9.4	9.93	12.57	31.91
1958	19.2	8.7	9.75	11.78	29.90
1959	20.9	9.5	11.55	13.72	34.83
1960	16.3	7.4	9.21	10.67	27.08
1961	19.0	8.6	9.63	10.87	27.58
1962	18.3	8.3	9.46	10.45	26.51
1963	24.3	11.0	11.76	12.71	32.25
1964	15.7	7.1	8.46	9.11	23.12
1965	14.0	6.4	7.84	8.29	21.03
1966	13.1	5.9	7.31	7.51	19.07
1967	7.0	3.2	4.01	4.01	10.17
1968	5.1	2.3	3.47	3.34	8.48
1969	5.6	2.6	5.54	5.10	12.95
1970	4.5	2.0	4.96	4.34	11.02
1971	7.0	3.2	7.23	6.08	15.43
1972	7.1	3.2	8.46	6.89	17.48
1973	6.5	2.9	6.43	5.01	12.72
1974	5.8	2.6	6.85	4.83	12.25
1975	8.9	4.0	11.33	7.31	18.56
1976	9.2	4.2	12.83	7.88	20.00
1977	7.3	3.3	9.70	5.65	14.34
1978	9.8	4.4	17.46	9.45	23.98
AVERAGE	18.0	8.2	10.77	11.90	30.20

Table 7-B.--Kalekale. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	1.2	0.6	0.77	0.83	2.11
FEBRUARY	1.4	0.6	0.88	0.95	2.42
MARCH	1.5	0.7	0.99	1.10	2.78
APRIL	1.6	0.7	0.97	1.12	2.83
MAY	1.3	0.6	0.78	0.87	2.21
JUNE	0.8	0.4	0.55	0.62	1.58
JULY	1.4	0.6	0.79	0.91	2.30
AUGUST	1.5	0.7	0.92	1.01	2.55
SEPTEMBER	1.5	0.7	0.83	0.91	2.31
OCTOBER	1.7	0.8	0.93	1.02	2.58
NOVEMBER	1.7	0.8	0.98	1.06	2.70
DECEMBER	2.3	1.0	1.38	1.51	3.83
AVERAGE	1.5	0.7	0.90	0.99	2.52

Table 8-A.--Lehi. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	•	•	•	•	•
1950	•	•	•	•	•
1951	•	•	•	•	•
1952	•	•	•	•	•
1953	•	•	•	•	•
1954	•	•	•	•	•
1955	•	•	•	•	•
1956	•	•	•	•	•
1957	0.6	0.3	0.28	0.35	0.89
1958	3.4	1.5	1.15	1.39	3.52
1959	1.1	0.5	0.46	0.55	1.40
1960	1.2	0.5	0.48	0.56	1.42
1961	1.5	0.7	0.50	0.57	1.44
1962	2.0	0.9	0.70	0.77	1.96
1963	2.3	1.0	0.76	0.82	2.09
1964	1.0	0.4	0.38	0.41	1.03
1965	1.4	0.6	0.56	0.59	1.49
1966	2.4	1.1	0.88	0.91	2.30
1967	2.6	1.2	0.93	0.93	2.36
1968	3.9	1.8	1.52	1.46	3.72
1969	4.7	2.1	1.98	1.83	4.64
1970	1.3	0.6	0.63	0.55	1.41
1971	2.1	1.0	1.23	1.03	2.62
1972	5.1	2.3	3.18	2.59	6.58
1973	6.5	2.9	4.32	3.37	8.55
1974	4.3	1.9	3.23	2.27	5.77
1975	10.5	4.8	8.75	5.65	14.33
1976	9.5	4.3	8.36	5.14	13.03
1977	8.8	4.0	8.58	5.00	12.68
1978	10.2	4.6	13.58	7.35	18.66
AVERAGE	3.9	1.8	2.84	2.00	5.09

Table 8-B.--Lehi. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	0.5	0.2	0.30	0.22	0.56
FEBRUARY	0.4	0.2	0.29	0.21	0.53
MARCH	0.5	0.2	0.31	0.23	0.59
APRIL	0.3	0.1	0.21	0.15	0.39
MAY	0.3	0.1	0.19	0.13	0.34
JUNE	0.1	0.1	0.08	0.06	0.14
JULY	0.1	0.0	0.05	0.04	0.10
AUGUST	0.1	0.1	0.09	0.07	0.17
SEPTEMBER	0.2	0.1	0.12	0.09	0.24
OCTOBER	0.3	0.2	0.29	0.19	0.48
NOVEMBER	0.6	0.3	0.49	0.32	0.82
DECEMBER	0.7	0.3	0.56	0.39	0.99
AVERAGE	0.3	0.2	0.25	0.18	0.45

Table 9-A.--Onaga. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	.	.	.	.	.
1950	88.0	39.9	48.96	73.19	185.76
1951	56.7	25.7	37.02	52.14	132.34
1952	43.1	19.5	31.03	42.45	107.75
1953	58.3	26.4	43.51	59.04	149.85
1954	71.2	32.3	48.98	65.83	167.07
1955	64.5	29.2	46.93	62.24	157.97
1956	85.9	38.9	59.39	77.73	197.29
1957	62.0	28.1	42.87	54.27	137.74
1958	65.9	29.9	49.78	60.12	152.59
1959	46.3	21.0	41.75	49.58	125.85
1960	40.9	18.5	35.92	41.62	105.63
1961	43.0	19.5	37.63	42.47	107.79
1962	62.4	28.3	56.14	61.97	157.27
1963	53.9	24.5	49.83	53.81	136.56
1964	57.4	26.0	52.74	56.77	144.08
1965	65.9	29.9	62.68	66.26	168.17
1966	69.7	31.6	68.83	70.74	179.54
1967	58.1	26.4	61.69	61.69	156.58
1968	69.9	31.7	76.87	74.06	187.95
1969	48.5	22.0	68.59	63.22	160.46
1970	38.2	17.3	59.88	52.43	133.08
1971	48.0	21.7	70.94	59.66	151.42
1972	50.3	22.8	84.73	69.00	175.12
1973	42.7	19.4	70.80	55.18	140.06
1974	40.5	18.4	77.65	54.73	138.89
1975	66.2	30.0	119.64	77.19	195.90
1976	90.6	41.1	201.20	123.59	313.66
1977	67.3	30.5	165.30	96.22	244.20
1978	62.4	28.3	165.49	89.55	227.29
AVERAGE	59.2	26.9	70.23	64.37	163.37

Table 9-B.--Onaga. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	4.7	2.1	5.90	5.02	12.74
FEBRUARY	5.3	2.4	6.37	5.62	14.27
MARCH	4.8	2.2	5.79	5.42	13.75
APRIL	4.2	1.9	5.05	4.69	11.90
MAY	4.1	1.9	4.90	4.44	11.28
JUNE	2.6	1.2	3.32	3.00	7.62
JULY	3.2	1.5	3.81	3.67	9.31
AUGUST	4.9	2.2	5.62	5.37	13.62
SEPTEMBER	5.6	2.5	5.95	5.76	14.61
OCTOBER	6.3	2.9	7.11	6.61	16.78
NOVEMBER	5.7	2.6	6.33	5.83	14.79
DECEMBER	7.7	3.5	10.07	8.95	22.71
AVERAGE	4.9	2.2	5.85	5.36	13.61

Table 10-A.--Opakapaka. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	225.6	102.3	96.20	138.02	350.28
1950	238.5	108.2	83.11	124.23	315.30
1951	272.4	123.5	105.54	148.65	377.28
1952	300.3	136.2	120.32	164.60	417.75
1953	214.8	97.4	87.38	118.57	300.92
1954	143.1	64.9	57.26	76.97	195.34
1955	181.3	82.2	78.10	103.58	262.87
1956	148.8	67.5	61.09	79.96	202.93
1957	127.0	57.6	57.49	72.78	184.71
1958	121.6	55.1	56.84	68.65	174.24
1959	78.6	35.6	41.04	48.74	123.70
1960	88.5	40.1	46.14	53.47	135.70
1961	93.4	42.4	44.29	49.99	126.88
1962	103.0	46.7	50.39	55.61	141.15
1963	121.1	54.9	57.25	61.82	156.91
1964	105.6	47.9	51.08	54.98	139.54
1965	83.4	37.8	42.66	45.10	114.46
1966	97.5	44.2	47.93	49.26	125.02
1967	110.1	50.0	58.00	58.00	147.21
1968	89.8	40.7	49.41	47.60	120.81
1969	90.0	40.8	59.90	55.20	140.11
1970	52.8	24.0	39.59	34.66	87.98
1971	82.4	37.4	67.34	56.64	143.75
1972	118.1	53.6	100.31	81.69	207.32
1973	132.1	59.9	115.02	89.65	227.53
1974	111.4	50.5	115.70	81.54	206.94
1975	161.0	73.0	174.02	112.27	284.94
1976	121.8	55.3	155.58	95.57	242.55
1977	150.9	68.4	226.67	131.94	334.85
1978	176.6	80.1	343.62	185.94	471.92
AVERAGE	138.1	62.6	89.64	84.86	215.36

Table 10-B.--Opakapaka. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	13.6	6.2	8.96	8.49	21.55
FEBRUARY	14.6	6.6	9.46	9.00	22.84
MARCH	15.0	6.8	10.07	9.93	25.20
APRIL	11.2	5.1	7.36	7.32	18.57
MAY	9.3	4.2	5.66	5.53	14.04
JUNE	7.0	3.2	4.16	4.06	10.31
JULY	7.0	3.2	3.92	4.08	10.35
AUGUST	7.1	3.2	4.63	4.54	11.52
SEPTEMBER	10.2	4.6	6.15	5.95	15.10
OCTOBER	11.0	5.0	7.68	6.64	16.86
NOVEMBER	12.8	5.8	8.76	7.70	19.54
DECEMBER	19.1	8.7	12.83	11.62	29.49
AVERAGE	11.5	5.2	7.47	7.07	17.95

Table 11-A.--Uku. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	71.6	32.5	30.58	43.87	111.34
1950	71.4	32.4	26.71	39.92	101.32
1951	53.2	24.1	19.22	27.06	68.69
1952	66.9	30.4	26.09	35.69	90.57
1953	73.5	33.3	29.76	40.38	102.49
1954	65.6	29.8	23.80	31.99	81.19
1955	82.1	37.3	28.24	37.46	95.07
1956	81.6	37.0	33.45	43.78	111.11
1957	101.0	45.8	40.13	50.79	128.91
1958	74.3	33.7	31.03	37.47	95.11
1959	36.3	16.5	18.22	21.64	54.92
1960	46.0	20.9	20.93	24.25	61.55
1961	42.3	19.2	17.91	20.21	51.30
1962	64.8	29.4	25.94	28.64	72.68
1963	65.1	29.5	27.92	30.15	76.52
1964	89.8	40.7	36.31	39.09	99.21
1965	50.4	22.9	21.46	22.69	57.59
1966	58.1	26.4	23.90	24.56	62.34
1967	58.6	26.6	26.55	26.55	67.38
1968	49.4	22.4	24.29	23.40	59.39
1969	57.8	26.2	29.50	27.19	69.00
1970	49.3	22.3	28.39	24.86	63.11
1971	49.0	22.2	29.69	24.97	63.38
1972	52.2	23.7	34.90	28.42	72.13
1973	69.2	31.4	48.94	38.14	96.81
1974	82.6	37.5	71.32	50.26	127.57
1975	62.3	28.3	62.16	40.10	101.78
1976	63.4	28.7	66.26	40.70	103.30
1977	72.5	32.9	99.65	58.00	147.21
1978	85.8	38.9	139.01	75.22	190.91
AVERAGE	64.9	29.4	38.08	35.25	89.46

Table 11-B.--Uku. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	2.4	1.1	1.60	1.49	3.78
FEBRUARY	2.5	1.2	1.65	1.51	3.82
MARCH	2.5	1.1	1.82	1.63	4.13
APRIL	3.0	1.4	2.13	1.89	4.79
MAY	8.5	3.8	4.84	4.31	10.93
JUNE	12.0	5.4	5.44	5.38	13.64
JULY	8.7	3.9	4.49	4.49	11.39
AUGUST	6.8	3.1	4.14	3.92	9.95
SEPTEMBER	5.0	2.3	2.99	2.73	6.92
OCTOBER	4.5	2.0	2.84	2.53	6.43
NOVEMBER	4.2	1.9	2.79	2.46	6.24
DECEMBER	4.8	2.2	3.36	2.93	7.43
AVERAGE	5.4	2.5	3.17	2.94	7.46

Table 12-A.--Ulua. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	193.6	87.8	77.45	111.11	282.01
1950	182.5	82.8	56.12	83.89	212.91
1951	156.8	71.1	55.18	77.72	197.25
1952	231.1	104.8	84.04	114.96	291.77
1953	297.1	134.7	94.53	128.26	325.53
1954	215.4	97.7	62.61	84.16	213.60
1955	170.3	77.2	53.74	71.27	180.89
1956	92.1	41.8	34.91	45.70	115.97
1957	96.3	43.7	39.83	50.42	127.96
1958	85.6	38.8	32.61	39.38	99.95
1959	48.9	22.2	21.81	25.90	65.74
1960	93.2	42.3	39.92	46.25	117.39
1961	68.9	31.3	29.87	33.71	85.55
1962	69.0	31.3	30.22	33.36	84.66
1963	87.2	39.6	33.86	36.57	92.81
1964	107.9	48.9	42.69	45.96	116.64
1965	74.6	33.8	33.24	35.14	89.18
1966	64.2	29.1	29.13	29.93	75.97
1967	77.2	35.0	43.12	43.12	109.43
1968	79.1	35.9	41.28	39.77	100.95
1969	95.6	43.3	48.29	44.51	112.97
1970	64.4	29.2	33.07	28.96	73.50
1971	60.7	27.5	32.96	27.72	70.36
1972	43.3	19.6	30.52	24.85	63.07
1973	47.7	21.6	41.57	32.40	82.24
1974	59.4	26.9	46.28	32.62	82.78
1975	101.9	46.2	74.97	48.37	122.76
1976	97.2	44.1	79.93	49.09	124.60
1977	77.4	35.1	73.44	42.75	108.49
1978	121.5	55.1	138.22	74.80	189.83
AVERAGE	108.7	49.3	51.18	52.75	133.89

Table 12-B.--Ulua. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	6.0	2.7	3.22	3.33	8.45
FEBRUARY	7.4	3.4	3.62	4.00	10.16
MARCH	7.0	3.2	3.74	3.91	9.92
APRIL	7.9	3.6	3.92	4.04	10.25
MAY	10.3	4.7	4.40	4.70	11.93
JUNE	9.7	4.4	3.94	4.19	10.62
JULY	10.2	4.6	4.16	4.49	11.39
AUGUST	9.4	4.2	4.20	4.51	11.45
SEPTEMBER	11.3	5.1	5.04	5.21	13.22
OCTOBER	10.1	4.6	4.79	4.64	11.78
NOVEMBER	9.1	4.1	4.74	4.51	11.45
DECEMBER	10.4	4.7	5.43	5.23	13.28
AVERAGE	9.1	4.1	4.27	4.40	11.16

Table 13-A.--Weke. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	61.7	28.0	37.60	53.94	136.90
1950	60.6	27.5	31.12	46.52	118.07
1951	54.0	24.5	29.79	41.96	106.49
1952	89.7	40.7	47.22	64.60	163.96
1953	72.9	33.1	39.05	52.99	134.48
1954	76.0	34.4	37.20	50.00	126.89
1955	71.5	32.4	35.00	46.42	117.81
1956	62.4	28.3	31.08	40.68	103.24
1957	62.9	28.5	32.57	41.23	104.64
1958	84.3	38.2	39.02	47.13	119.62
1959	69.8	31.7	35.89	42.62	108.18
1960	75.7	34.3	33.09	38.34	97.32
1961	85.6	38.8	34.66	39.12	99.28
1962	58.2	26.4	23.05	25.45	64.58
1963	80.7	36.6	33.35	36.02	91.41
1964	68.5	31.1	28.79	30.99	78.65
1965	65.9	29.9	25.65	27.11	68.81
1966	51.1	23.2	17.57	18.06	45.84
1967	36.3	16.5	13.37	13.37	33.93
1968	27.0	12.2	9.99	9.63	24.44
1969	38.4	17.4	14.58	13.44	34.11
1970	41.5	18.8	15.13	13.25	33.62
1971	33.2	15.1	12.92	10.87	27.58
1972	33.4	15.1	14.22	11.58	29.39
1973	36.8	16.7	16.11	12.56	31.87
1974	28.7	13.0	14.72	10.38	26.33
1975	36.9	16.7	20.55	13.25	33.64
1976	33.4	15.1	22.94	14.09	35.76
1977	53.3	24.2	37.42	21.78	55.28
1978	43.9	19.9	32.75	17.72	44.98
AVERAGE	56.5	25.6	27.21	30.17	76.57

Table 13-B.--Weke. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	4.4	2.0	2.25	2.51	6.36
FEBRUARY	4.5	2.0	2.26	2.55	6.47
MARCH	4.8	2.2	2.42	2.65	6.73
APRIL	5.8	2.6	2.83	3.20	8.12
MAY	5.9	2.7	2.59	2.89	7.34
JUNE	4.7	2.1	1.98	2.25	5.70
JULY	4.1	1.9	1.90	2.15	5.45
AUGUST	4.1	1.8	1.98	2.20	5.58
SEPTEMBER	4.5	2.0	2.14	2.33	5.91
OCTOBER	4.4	2.0	2.11	2.29	5.81
NOVEMBER	4.4	2.0	2.17	2.34	5.93
DECEMBER	5.0	2.3	2.59	2.83	7.18
AVERAGE	4.7	2.1	2.27	2.51	6.38

Table 14-A.--Taape. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	.	.	.	.	.
1950	.	.	.	.	.
1951	.	.	.	.	.
1952	.	.	.	.	.
1953	.	.	.	.	.
1954	.	.	.	.	.
1955	.	.	.	.	.
1956	.	.	.	.	.
1957	.	.	.	.	.
1958	.	.	.	.	.
1959	.	.	.	.	.
1960	.	.	.	.	.
1961	.	.	.	.	.
1962	.	.	.	.	.
1963	.	.	.	.	.
1964	.	.	.	.	.
1965	.	.	.	.	.
1966	.	.	.	.	.
1967	.	.	.	.	.
1968	.	.	.	.	.
1969	.	.	.	.	.
1970	.	.	.	.	.
1971	.	.	.	.	.
1972	.	.	.	.	.
1973	.	.	.	.	.
1974	.	.	.	.	.
1975	17.5	7.9	6.79	4.38	11.12
1976	29.5	13.4	12.44	7.64	19.39
1977	36.1	16.4	19.70	11.47	29.11
1978	59.1	26.8	30.72	16.62	42.19
AVERAGE	35.5	16.1	17.41	10.03	25.45

Table 14-B.--Taape. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	3.0	1.4	1.60	0.91	2.30
FEBRUARY	4.7	2.1	2.40	1.36	3.46
MARCH	4.9	2.2	2.02	1.16	2.94
APRIL	2.2	1.0	1.12	0.65	1.65
MAY	2.1	1.0	1.03	0.58	1.48
JUNE	1.9	0.9	0.77	0.45	1.14
JULY	1.8	0.8	0.74	0.43	1.09
AUGUST	2.4	1.1	1.12	0.65	1.64
SEPTEMBER	3.1	1.4	1.62	0.93	2.35
OCTOBER	5.1	2.3	2.40	1.40	3.56
NOVEMBER	4.0	1.8	2.32	1.33	3.38
DECEMBER	3.5	1.6	1.77	1.04	2.64
AVERAGE	3.2	1.4	1.55	0.89	2.26

Table 15-A.--Akule. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	501.1	227.3	309.72	444.36	1127.79
1950	401.5	182.1	232.87	348.09	883.44
1951	440.2	199.6	262.95	370.35	939.96
1952	371.7	168.6	226.72	310.16	787.18
1953	314.5	142.6	201.83	273.86	695.05
1954	323.7	146.8	204.82	275.30	698.71
1955	304.4	138.0	191.75	254.31	645.44
1956	154.8	70.2	121.19	158.63	402.61
1957	177.4	80.4	127.76	161.72	410.44
1958	178.6	81.0	123.34	148.96	378.07
1959	147.8	67.0	118.18	140.36	356.23
1960	298.4	135.4	207.00	239.86	608.77
1961	168.6	76.5	110.61	124.85	316.86
1962	177.5	80.5	127.36	140.58	356.78
1963	128.6	58.3	95.92	103.59	262.90
1964	99.1	44.9	74.97	80.70	204.80
1965	238.8	108.3	153.47	162.23	411.74
1966	397.0	180.1	205.51	211.21	536.05
1967	588.5	266.9	245.90	245.90	624.09
1968	751.1	340.6	265.36	255.65	648.83
1969	408.6	185.3	164.53	151.64	384.86
1970	720.1	326.6	256.07	224.23	569.10
1971	544.9	247.1	227.47	191.31	485.55
1972	524.1	237.7	231.13	188.21	477.69
1973	643.4	291.8	304.80	237.57	602.95
1974	542.6	246.2	265.57	187.15	474.99
1975	434.3	196.9	247.99	159.99	406.07
1976	904.5	410.2	526.68	323.52	821.09
1977	659.4	299.1	483.86	281.64	714.81
1978	367.3	166.6	321.11	173.76	441.00
AVERAGE	397.1	180.1	221.22	213.95	555.79

Table 15-B.--Akule. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	25.4	11.5	15.89	15.68	39.80
FEBRUARY	30.0	13.6	18.60	17.98	45.63
MARCH	42.0	19.1	25.31	24.61	62.45
APRIL	46.7	21.2	26.05	24.34	61.79
MAY	53.4	24.2	26.23	25.19	63.94
JUNE	45.3	20.5	22.57	22.32	56.66
JULY	39.6	17.9	19.74	19.93	50.58
AUGUST	31.7	14.4	17.21	16.69	42.37
SEPTEMBER	25.5	11.6	14.65	15.09	38.30
OCTOBER	20.1	9.1	12.27	13.26	33.65
NOVEMBER	19.3	8.8	11.54	12.68	32.19
DECEMBER	23.3	10.6	14.15	14.27	36.22
AVERAGE	33.7	15.3	18.75	18.56	47.10

Table 16-A.--Hahalalu. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	.	.	.	.	.
1950	.	.	.	.	.
1951	.	.	.	.	.
1952	.	.	.	.	.
1953	.	.	.	.	.
1954	.	.	.	.	.
1955	.	.	.	.	.
1956	.	.	.	.	.
1957	.	.	.	.	.
1958	.	.	.	.	.
1959	.	.	.	.	.
1960	.	.	.	.	.
1961	.	.	.	.	.
1962	41.7	18.9	24.98	27.57	69.97
1963	22.1	10.0	16.26	17.56	44.58
1964	61.6	28.0	42.40	45.65	115.85
1965	210.8	95.6	85.80	90.59	230.18
1966	227.5	103.2	80.02	82.24	208.73
1967	264.8	120.1	82.12	82.12	208.43
1968	194.5	88.2	74.15	71.43	181.30
1969	390.4	177.1	152.25	140.32	356.14
1970	260.0	117.9	102.22	89.51	227.13
1971	274.0	124.3	116.64	98.10	248.98
1972	345.3	156.6	159.26	129.69	329.15
1973	137.2	62.2	63.41	49.42	125.44
1974	83.8	38.0	56.73	39.98	101.46
1975	76.7	34.8	59.02	38.08	96.64
1976	70.7	32.0	51.45	31.60	80.21
1977	61.9	28.1	57.47	33.45	84.89
1978	48.0	21.8	67.61	36.59	92.85
AVERAGE	163.0	73.9	75.99	64.94	164.82

Table 16-B.--Hahalalu. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	12.6	5.7	6.63	5.82	14.76
FEBRUARY	13.8	6.3	7.22	5.84	14.81
MARCH	12.1	5.5	6.52	5.42	13.75
APRIL	8.9	4.0	5.89	4.68	11.87
MAY	8.8	4.0	4.22	3.40	8.62
JUNE	9.3	4.2	4.05	3.23	8.21
JULY	4.6	2.1	2.74	2.20	5.57
AUGUST	15.2	6.9	5.85	5.51	13.98
SEPTEMBER	16.6	7.5	6.08	5.71	14.50
OCTOBER	14.4	6.5	5.98	5.66	14.33
NOVEMBER	31.8	14.4	13.03	10.87	27.59
DECEMBER	15.6	7.1	8.02	6.80	17.26
AVERAGE	13.7	6.2	6.36	5.44	13.80

Table 17-A.--Opelu. Annual catch and revenues, 1949-78.

YEAR	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
1949	244.5	110.9	102.23	146.68	372.27
1950	181.1	82.1	71.57	106.98	271.51
1951	194.1	88.0	76.99	108.44	275.21
1952	245.7	111.4	89.73	122.75	311.55
1953	248.7	112.8	92.98	126.17	320.21
1954	274.4	124.4	87.86	118.09	299.71
1955	287.9	130.6	98.16	130.19	330.42
1956	311.6	141.3	97.41	127.50	323.59
1957	216.2	98.0	82.44	104.36	264.86
1958	187.9	85.2	79.15	95.59	242.61
1959	188.8	85.6	74.73	88.75	225.25
1960	192.5	87.3	81.99	95.01	241.12
1961	209.0	94.8	84.27	95.11	241.39
1962	383.8	174.1	124.52	137.44	348.82
1963	401.1	181.9	129.38	139.72	354.61
1964	292.3	132.5	103.55	111.47	282.91
1965	190.0	86.2	74.98	79.26	201.15
1966	219.8	99.7	87.50	89.92	228.23
1967	211.4	95.9	85.51	85.51	217.02
1968	244.0	110.7	96.11	92.60	235.01
1969	215.4	97.7	104.15	95.99	243.63
1970	174.1	79.0	97.84	85.65	217.45
1971	229.8	104.2	137.98	116.04	294.52
1972	171.7	77.9	117.22	95.46	242.27
1973	207.9	94.3	140.60	109.59	278.13
1974	217.1	98.5	161.07	113.51	288.10
1975	320.6	145.4	244.72	157.88	400.71
1976	307.0	139.2	250.17	153.67	390.00
1977	396.9	180.0	347.31	202.16	513.08
1978	298.6	135.4	331.18	179.21	454.83
AVERAGE	248.8	112.8	125.11	117.02	297.01

Table 17-B.--Opelu. Monthly catch and revenues, 1949-78.

MONTH	CATCH IN THOUSANDS OF POUNDS	CATCH IN METRIC TONS	REVENUE IN THOUSANDS OF DOLLARS	DEFLATED REVENUE IN THOUSANDS OF DOLLARS	ADJUSTED REVENUE IN THOUSANDS OF DOLLARS
JANUARY	15.7	7.1	8.27	7.89	20.04
FEBRUARY	14.1	6.4	7.56	7.32	18.59
MARCH	13.9	6.3	7.84	7.56	19.19
APRIL	14.4	6.5	7.97	7.74	19.65
MAY	12.9	5.9	7.14	6.63	16.84
JUNE	11.2	5.1	6.18	5.64	14.32
JULY	14.2	6.4	8.03	7.44	18.89
AUGUST	20.8	9.5	11.23	10.38	26.34
SEPTEMBER	35.5	16.1	17.04	15.63	39.68
OCTOBER	38.3	17.4	16.30	15.49	39.30
NOVEMBER	31.0	14.0	14.51	13.34	33.85
DECEMBER	26.7	12.1	13.03	11.95	30.33
AVERAGE	20.7	9.4	10.43	9.75	24.75

Figure 1-A.--Bottom fish (management unit species). Annual catch and revenues, 1949-78.

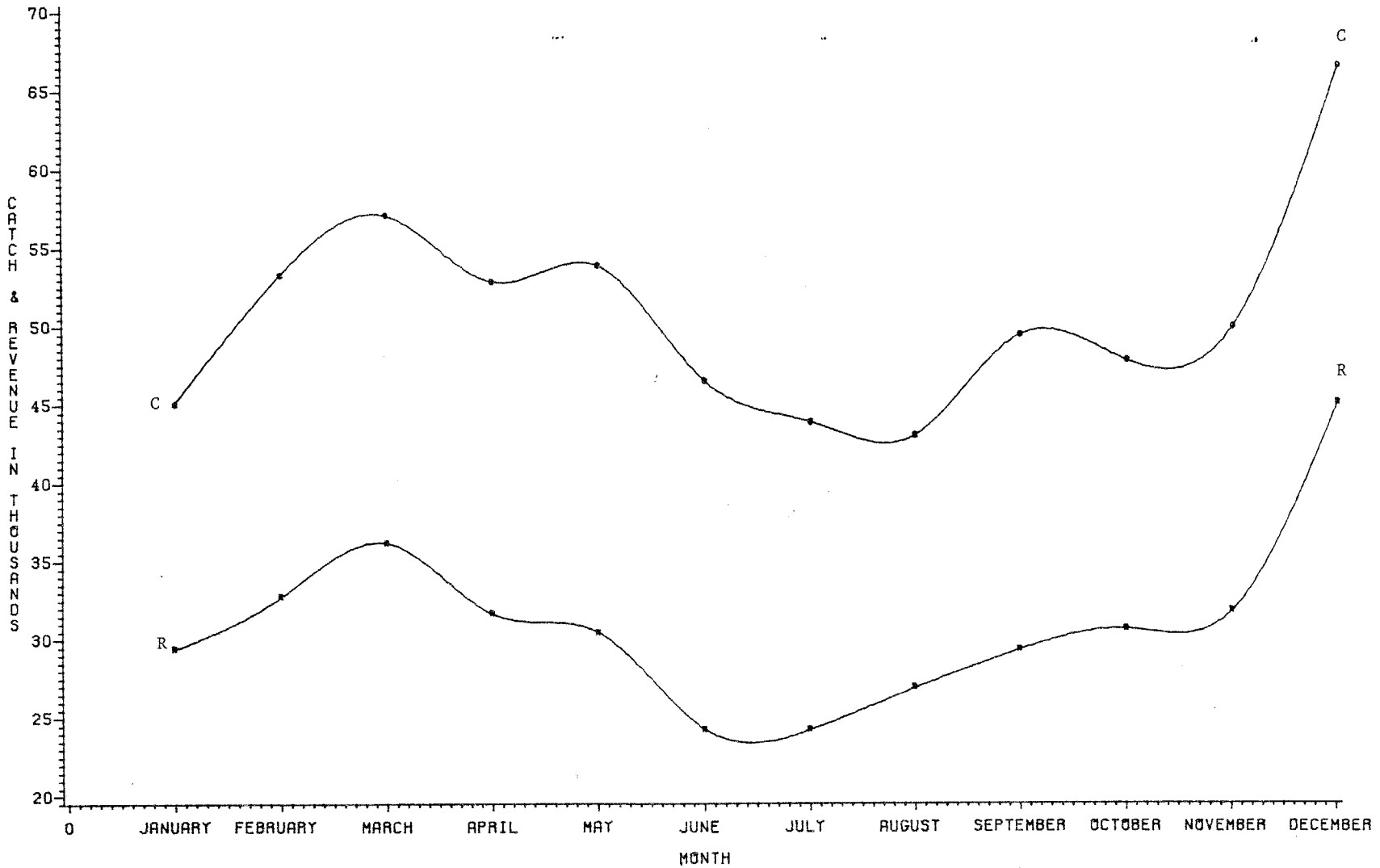

Figure 1-B.--Bottom fish (management unit species). Monthly catch and revenues, 1949-78.

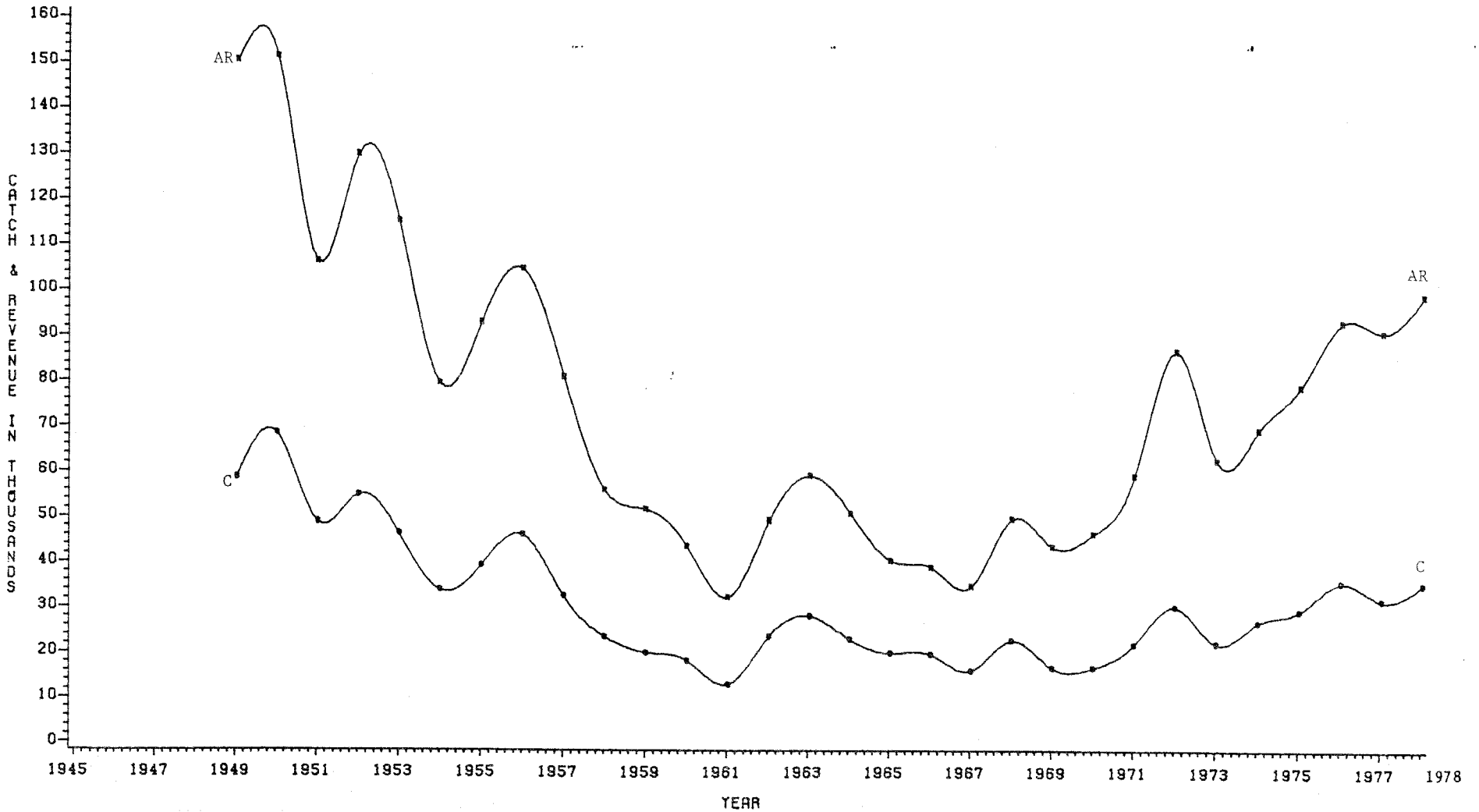

Figure 2-A.--Ehu. Annual catch and revenues, 1949-78.

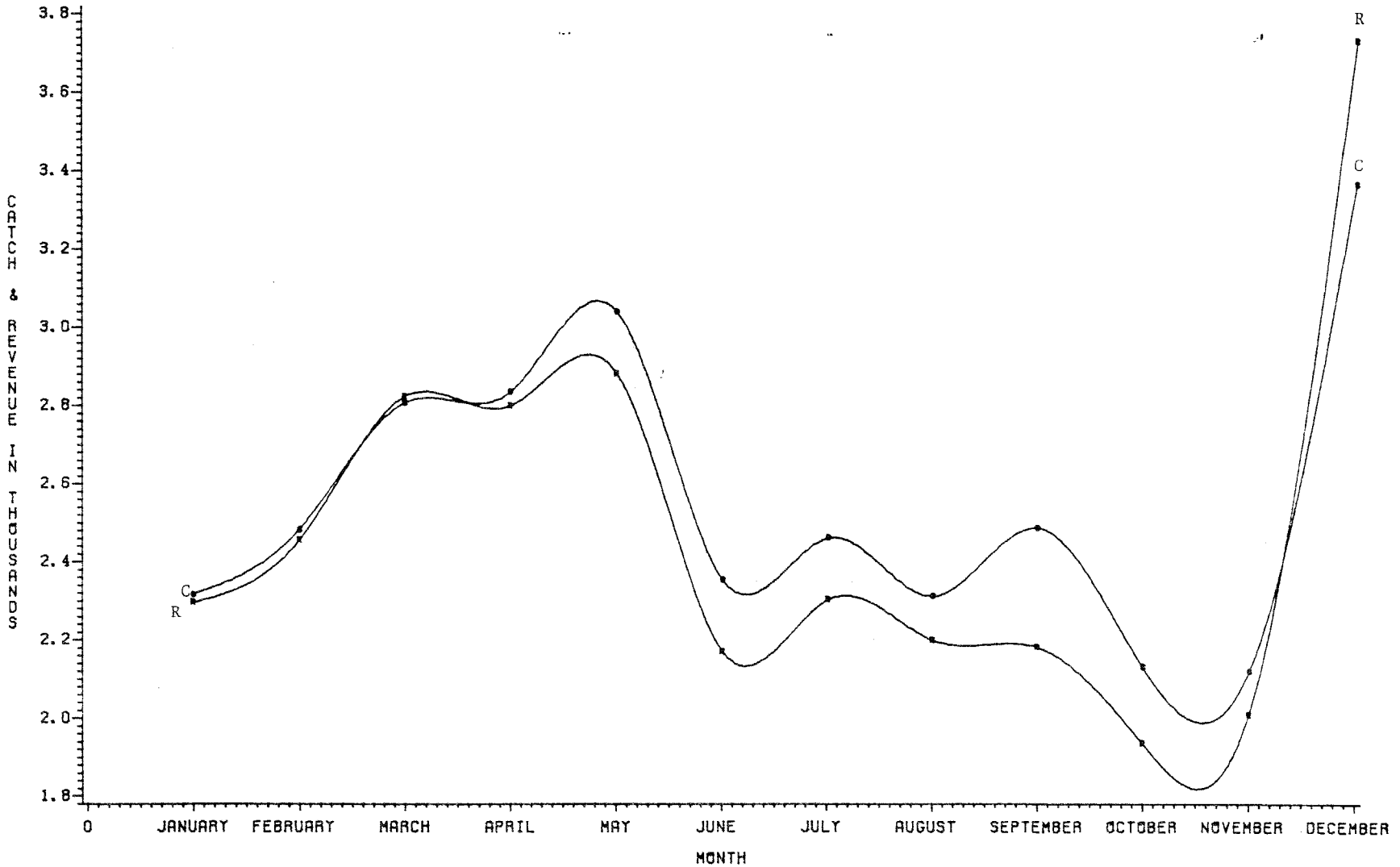

Figure 2-B.--Ehu. Monthly catch and revenues from 1949-78.

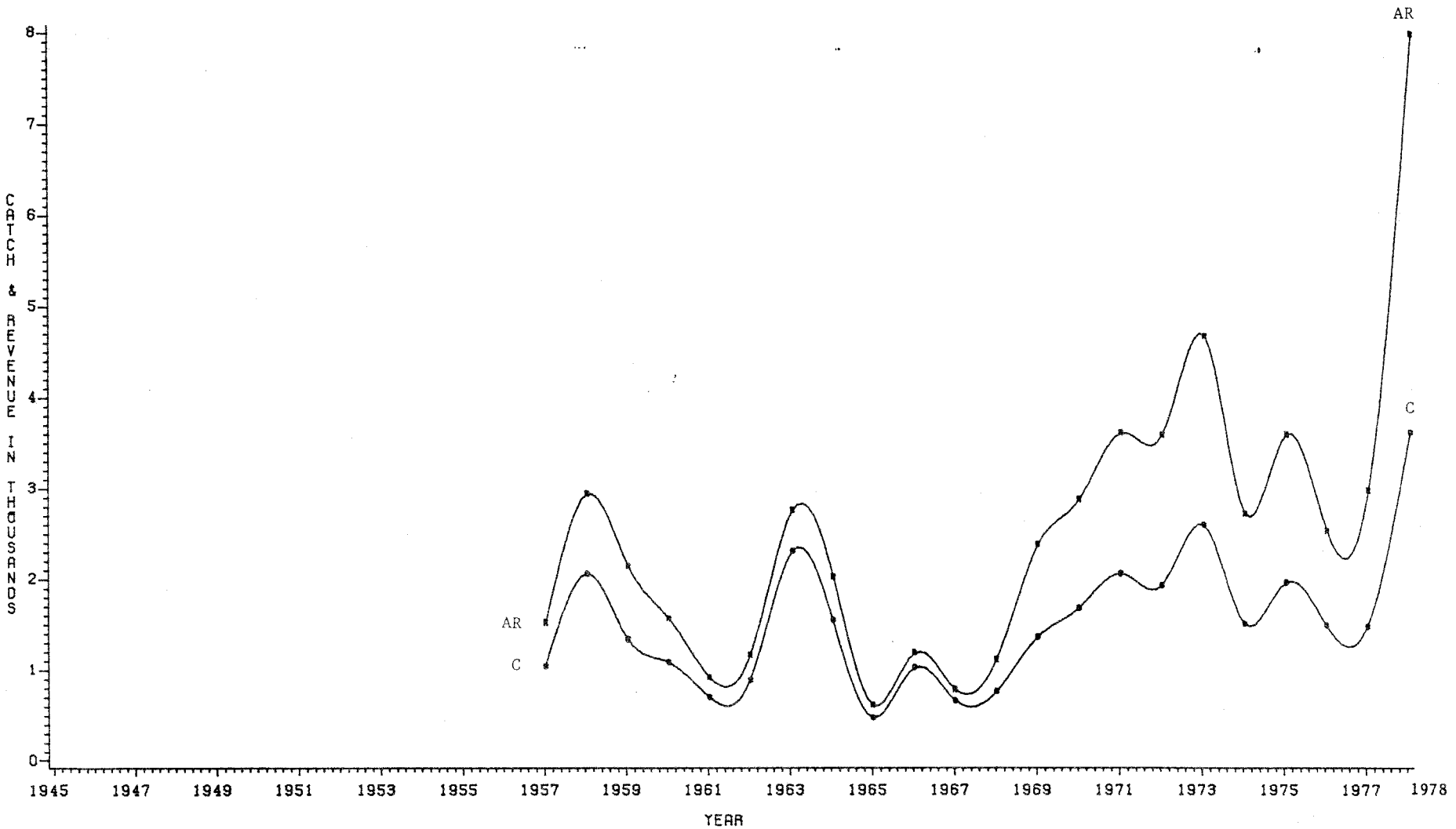

Figure 3-A.--Gindai. Annual catch and revenues, 1949-78.

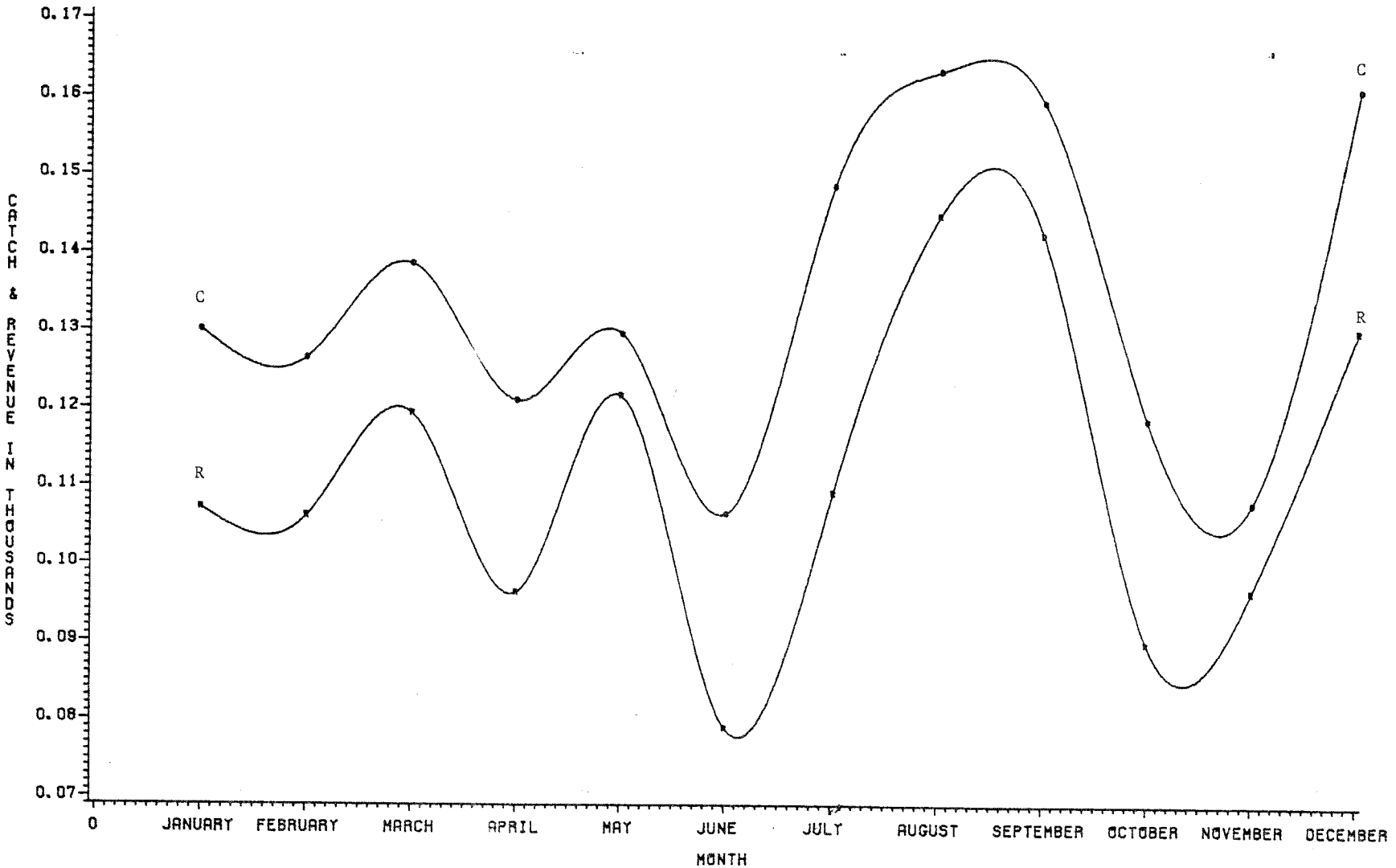

Figure 3-B.--Gindai. Monthly catch and revenues, 1949-78.

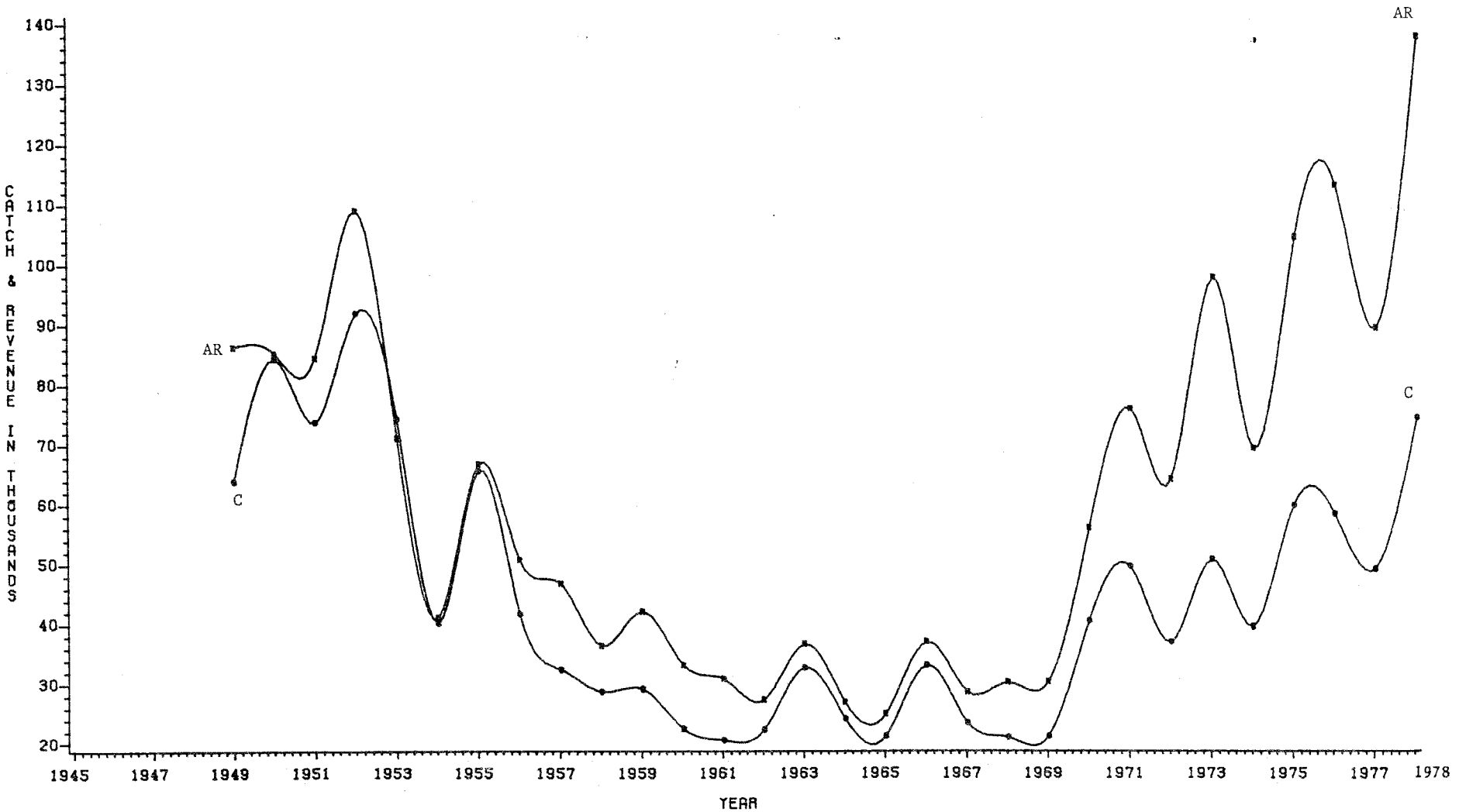

Figure 4-A.--Hapuupuu. Annual catch and revenues, 1949-78.

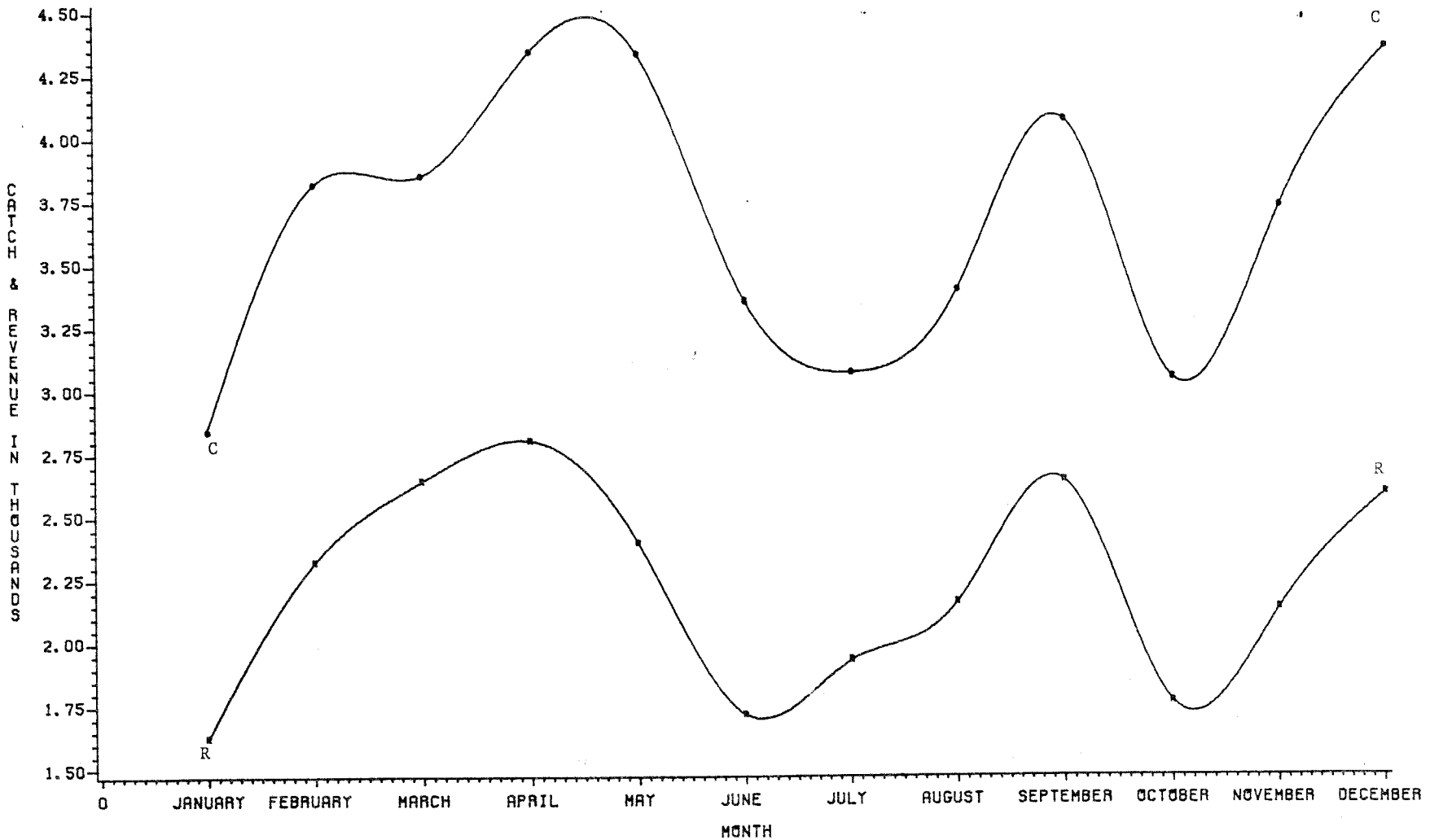

Figure 4-B.--Hapuupuu. Monthly catch and revenues, 1949-78.

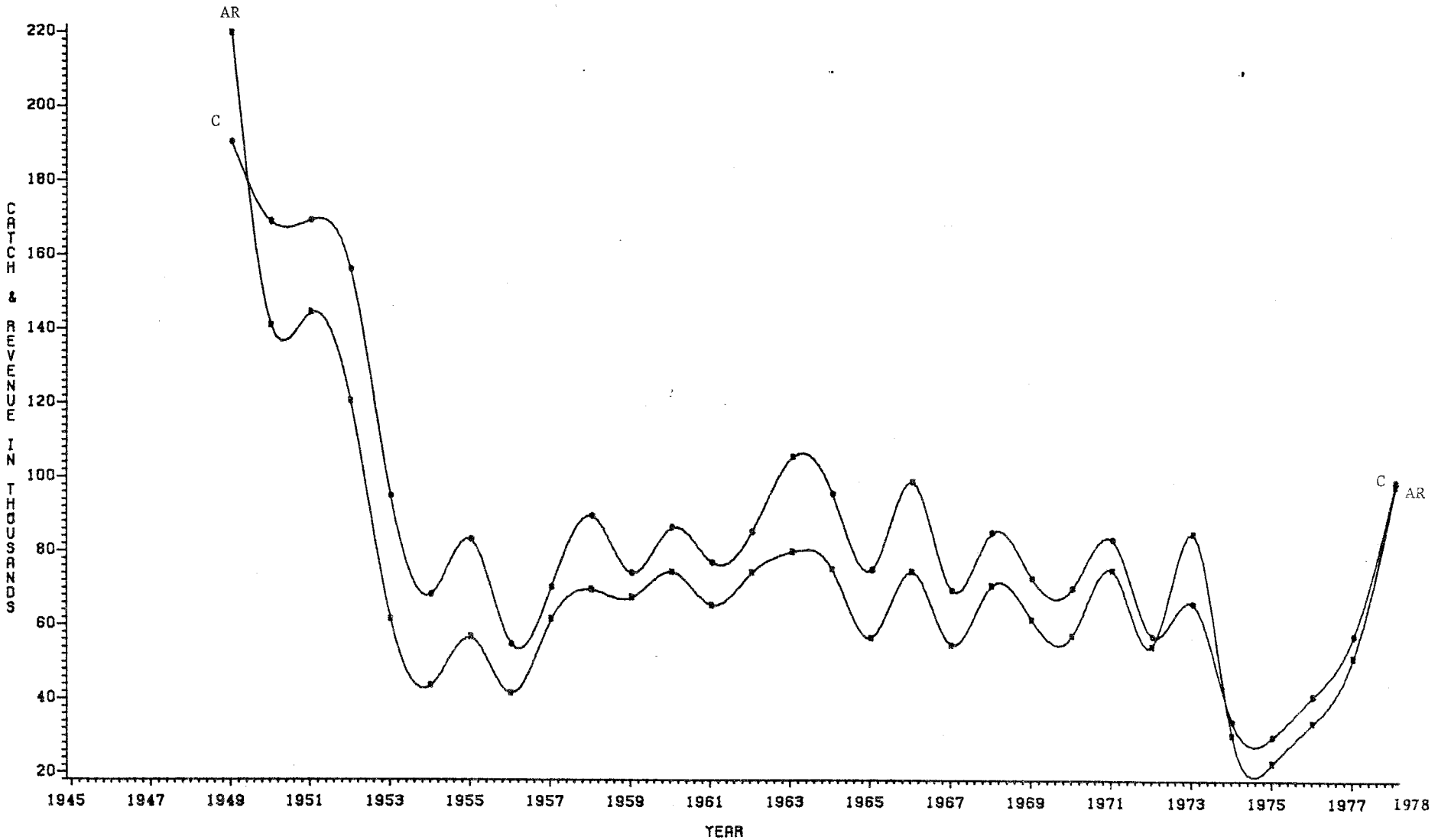

Figure 5-A.--Kahala. Annual catch and revenues, 1949-78.

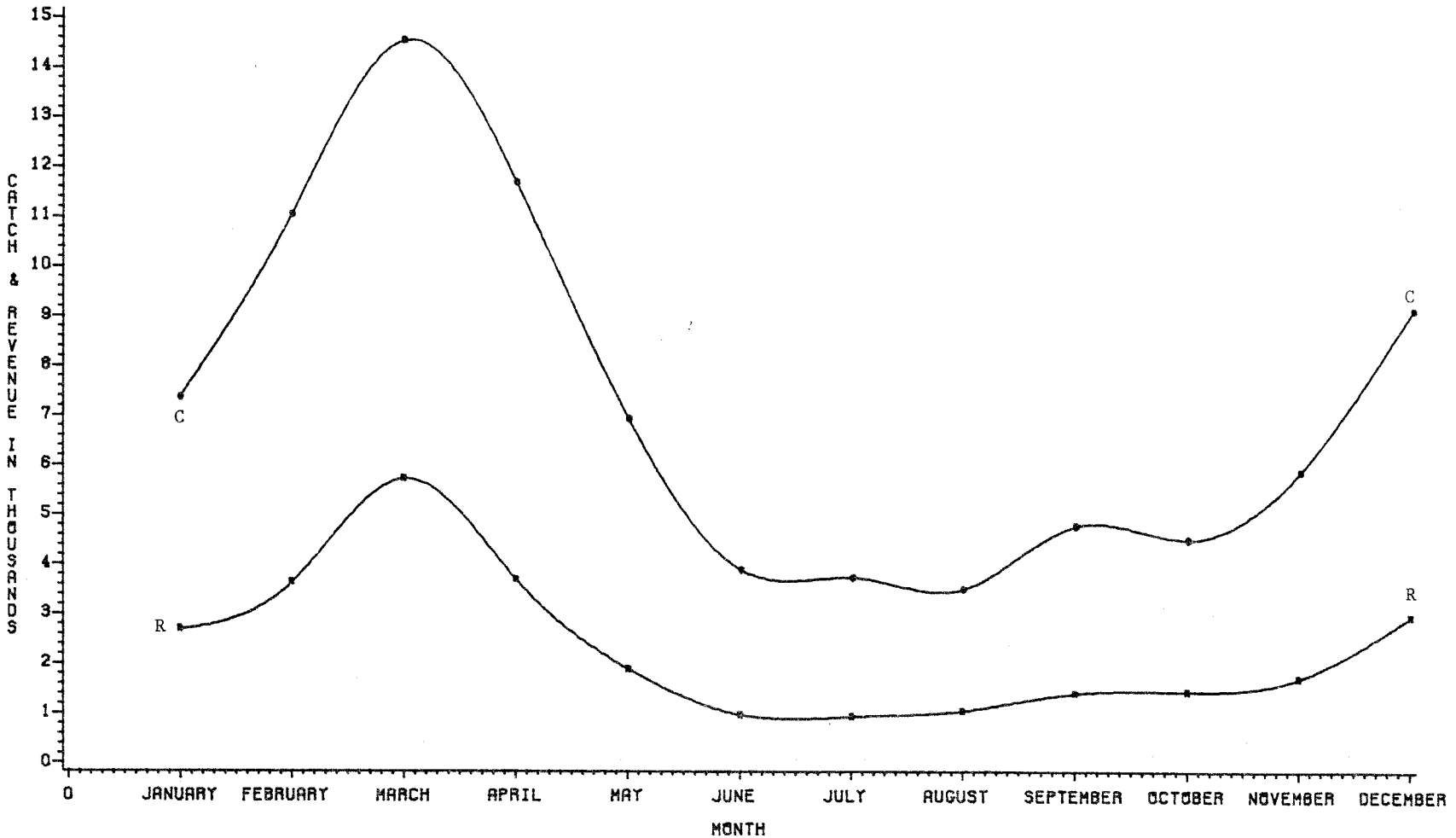

Figure 5-B.--Kahala. Monthly catch and revenues, 1949-78.

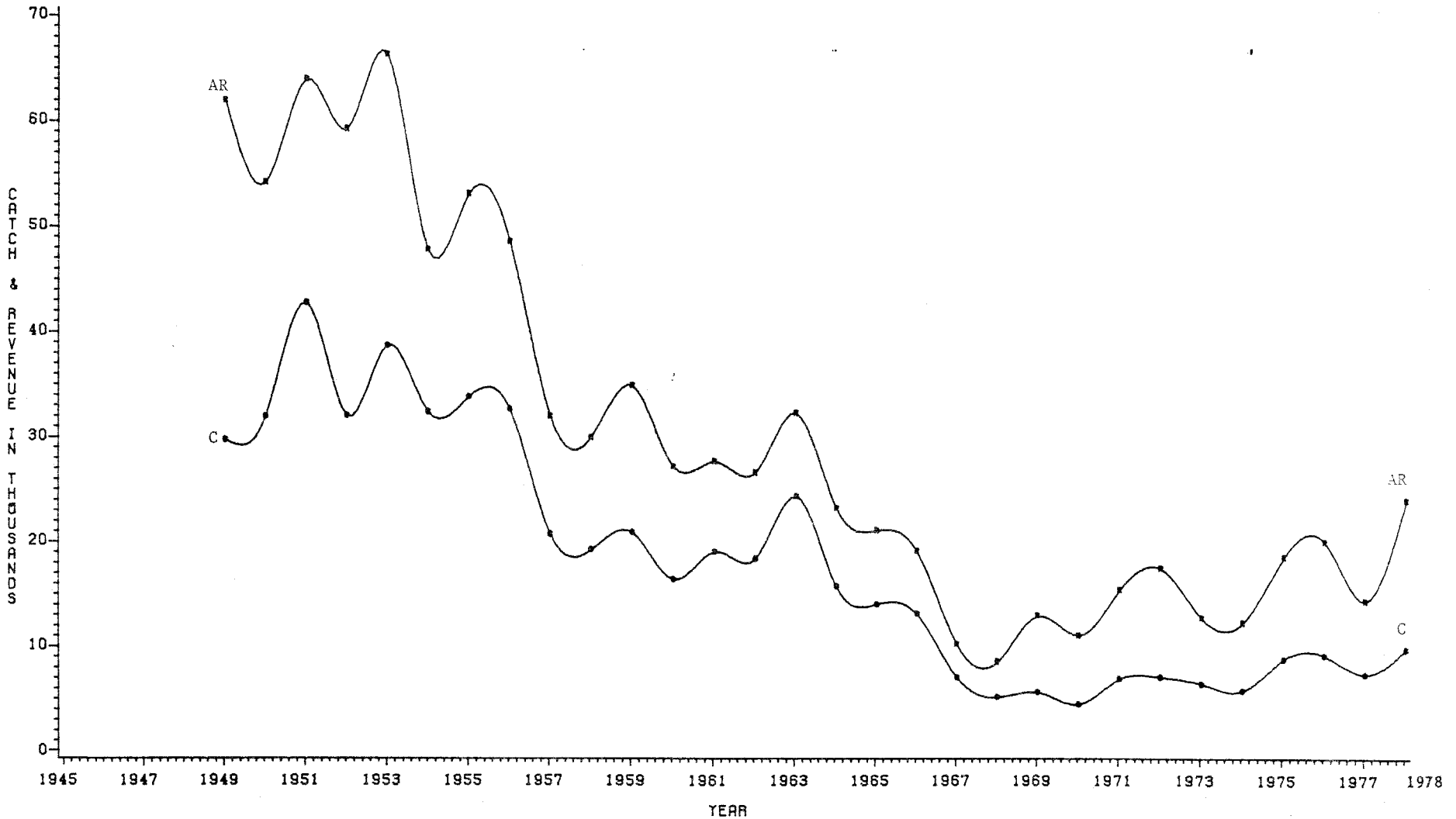

Figure 6-A.--Kalekale. Annual catch and revenues, 1949-78.

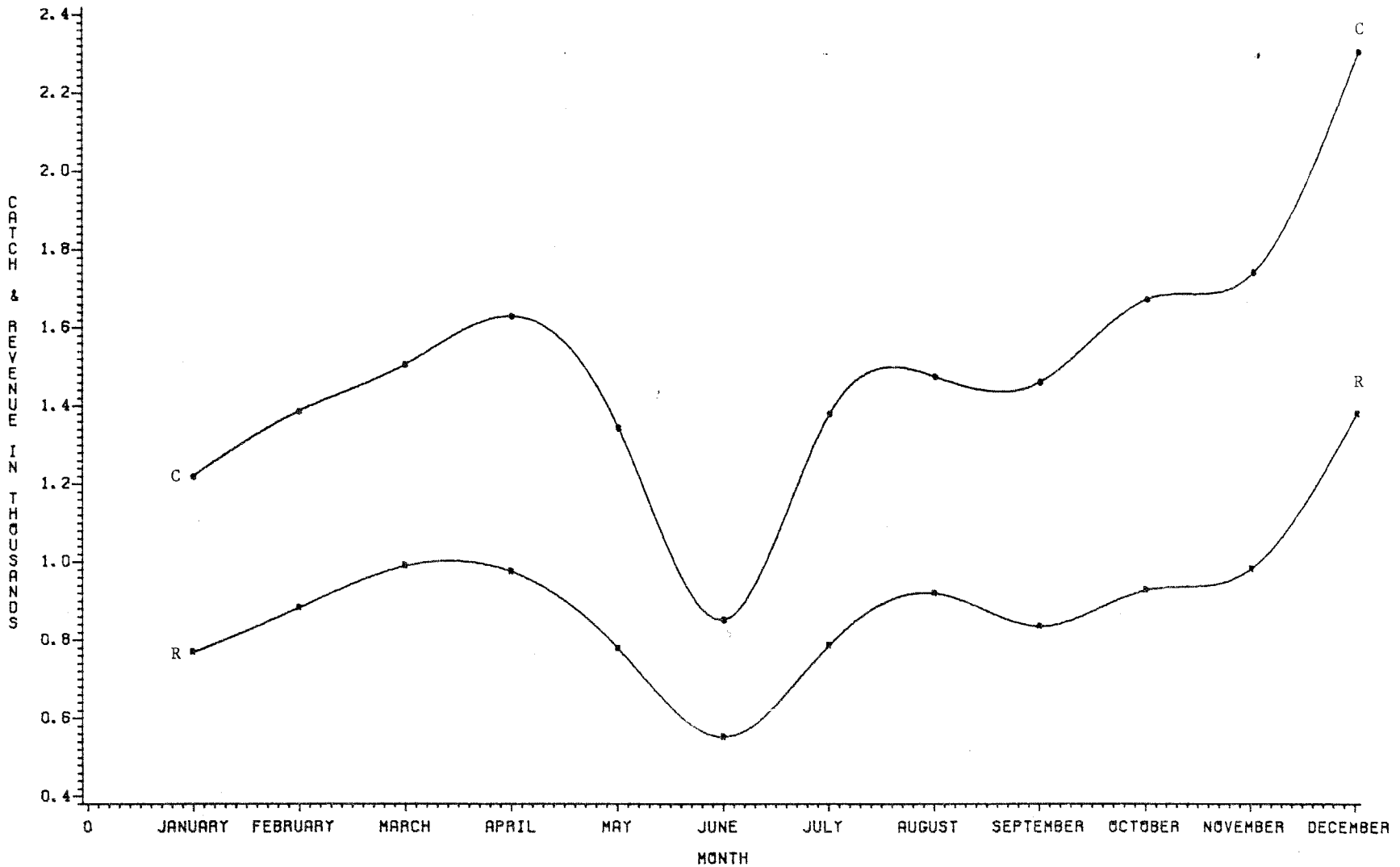

Figure 6-B.--Kalekale. Monthly catch and revenues, 1949-78.

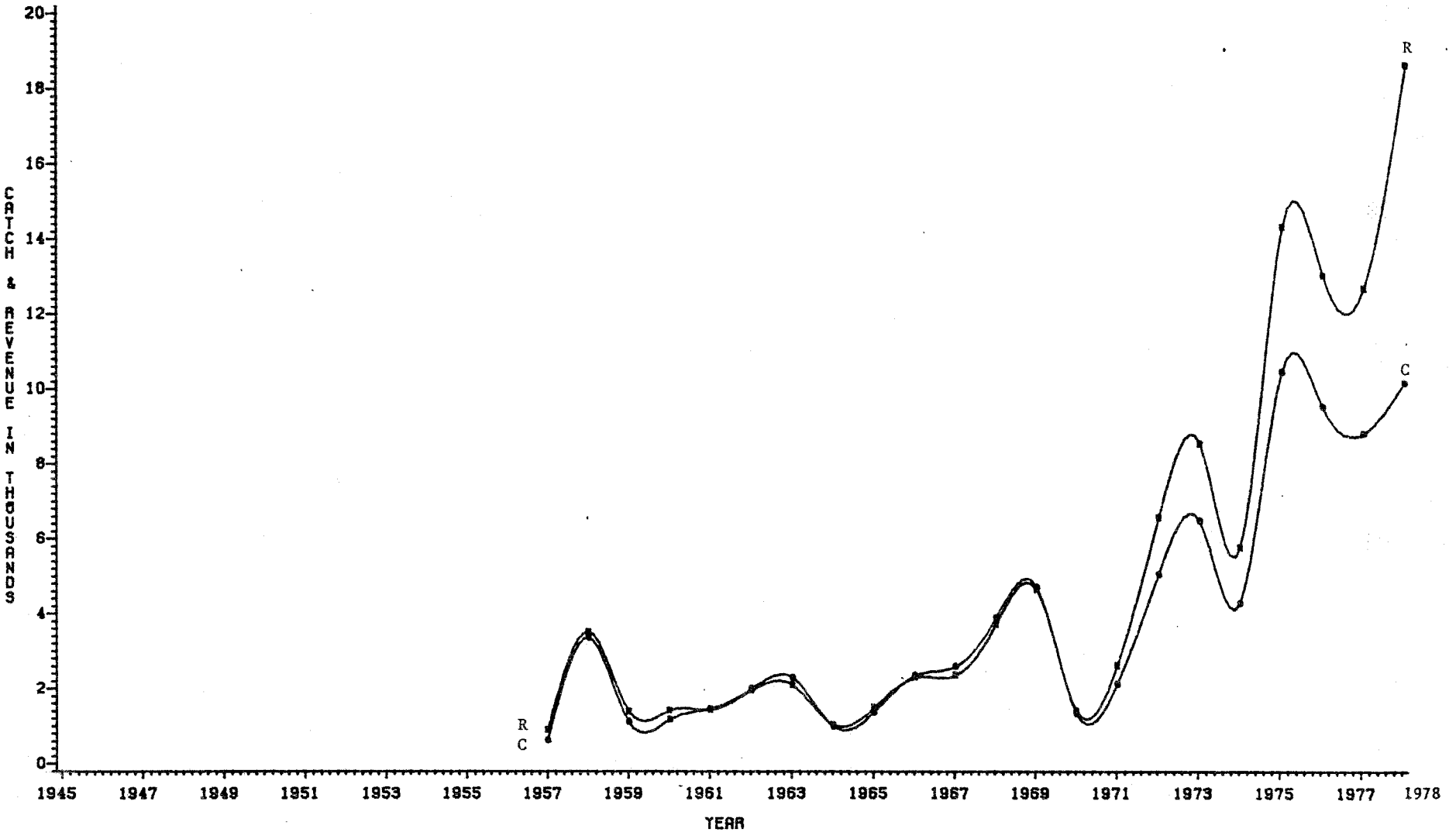

Figure 7-A.--Lehi. Annual catch and revenues, 1949-78.

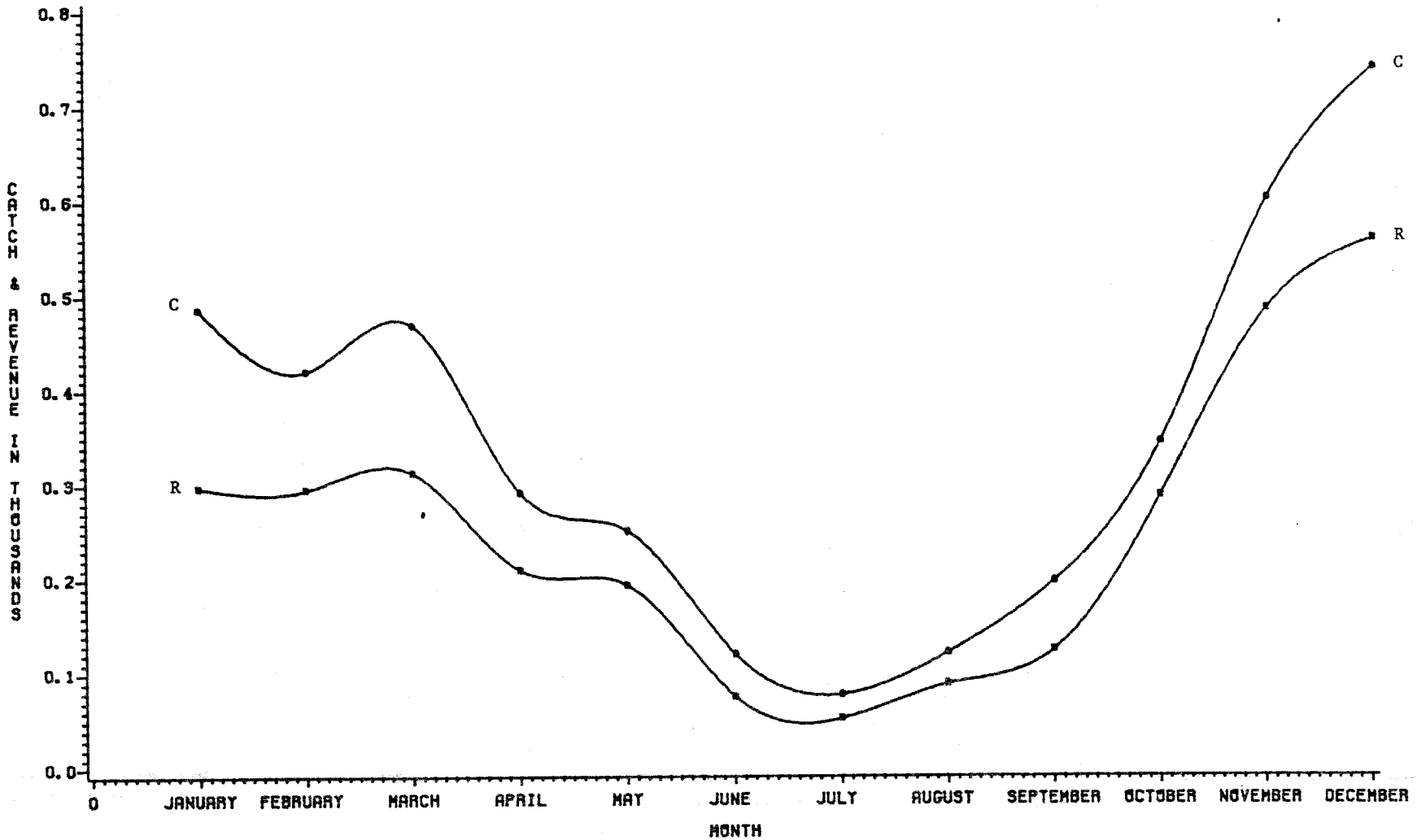

Figure 7-B.--Lehi. Monthly catch and revenues, 1949-78.

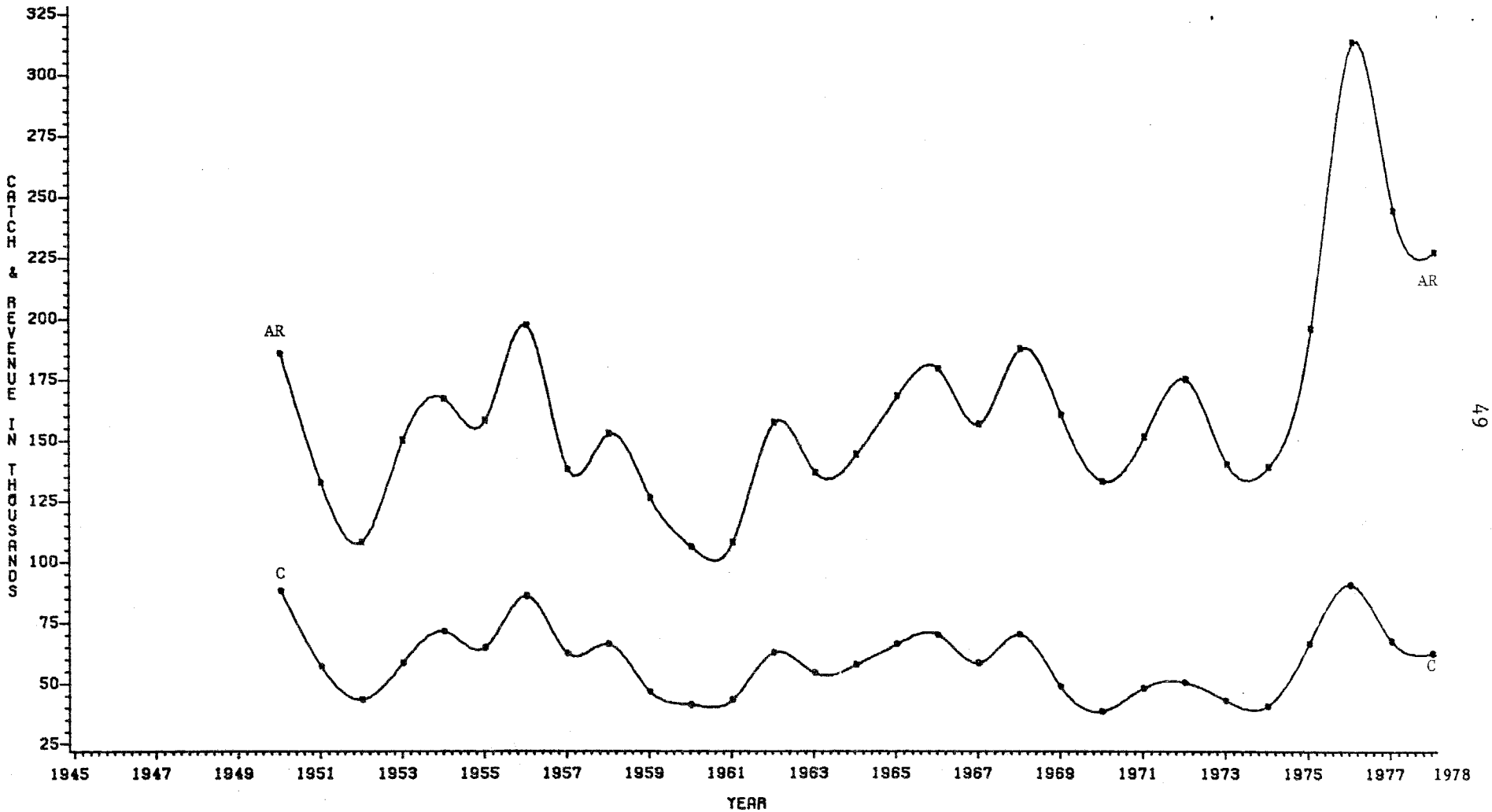

Figure 8-A.--Onaga. Annual catch and revenues, 1949-78.

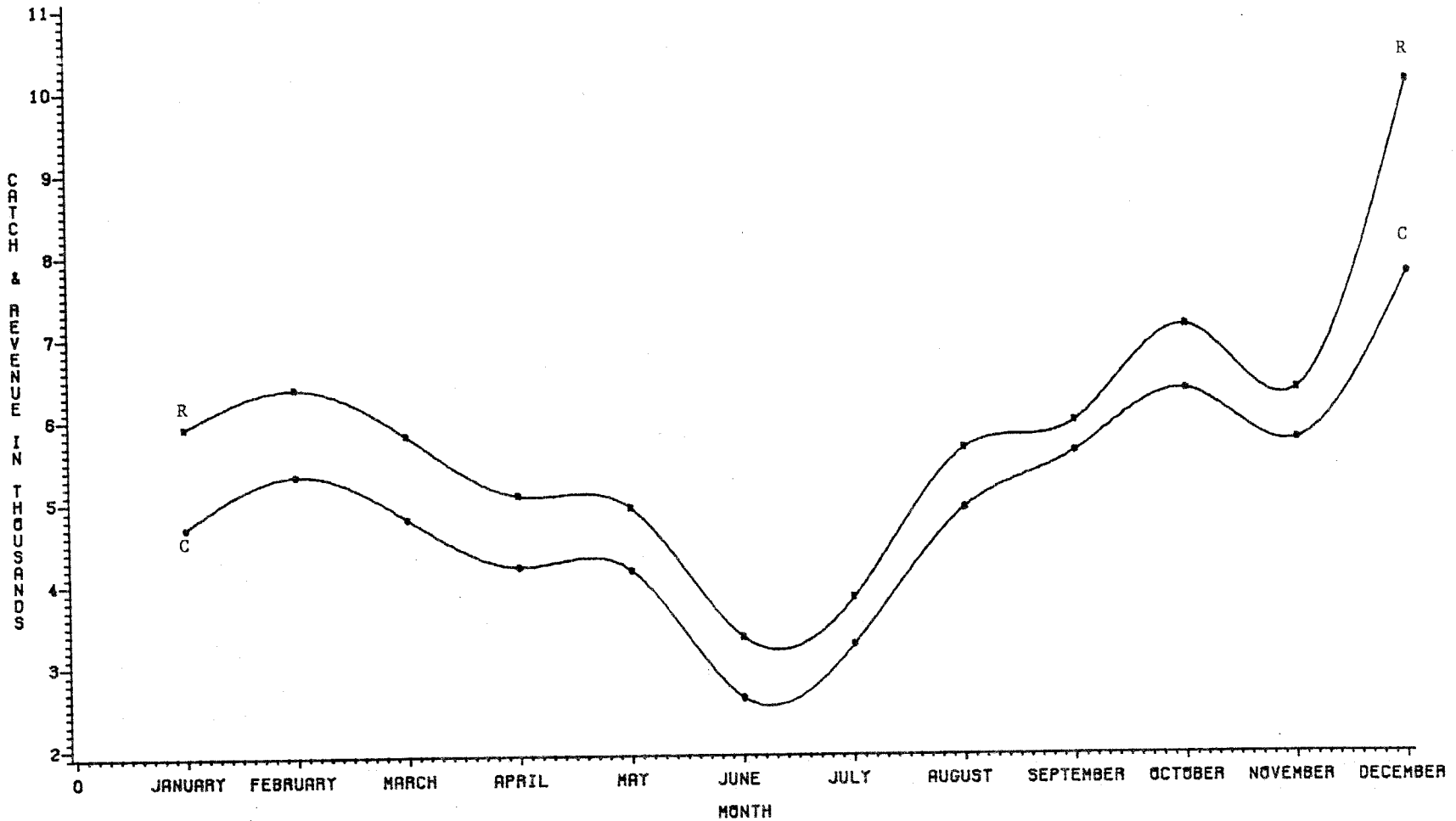

Figure 8-B.--Onaga. Monthly catch and revenues, 1949-78.

Figure 9-A.--Opakapaka. Annual catch and revenues, 1949-78.

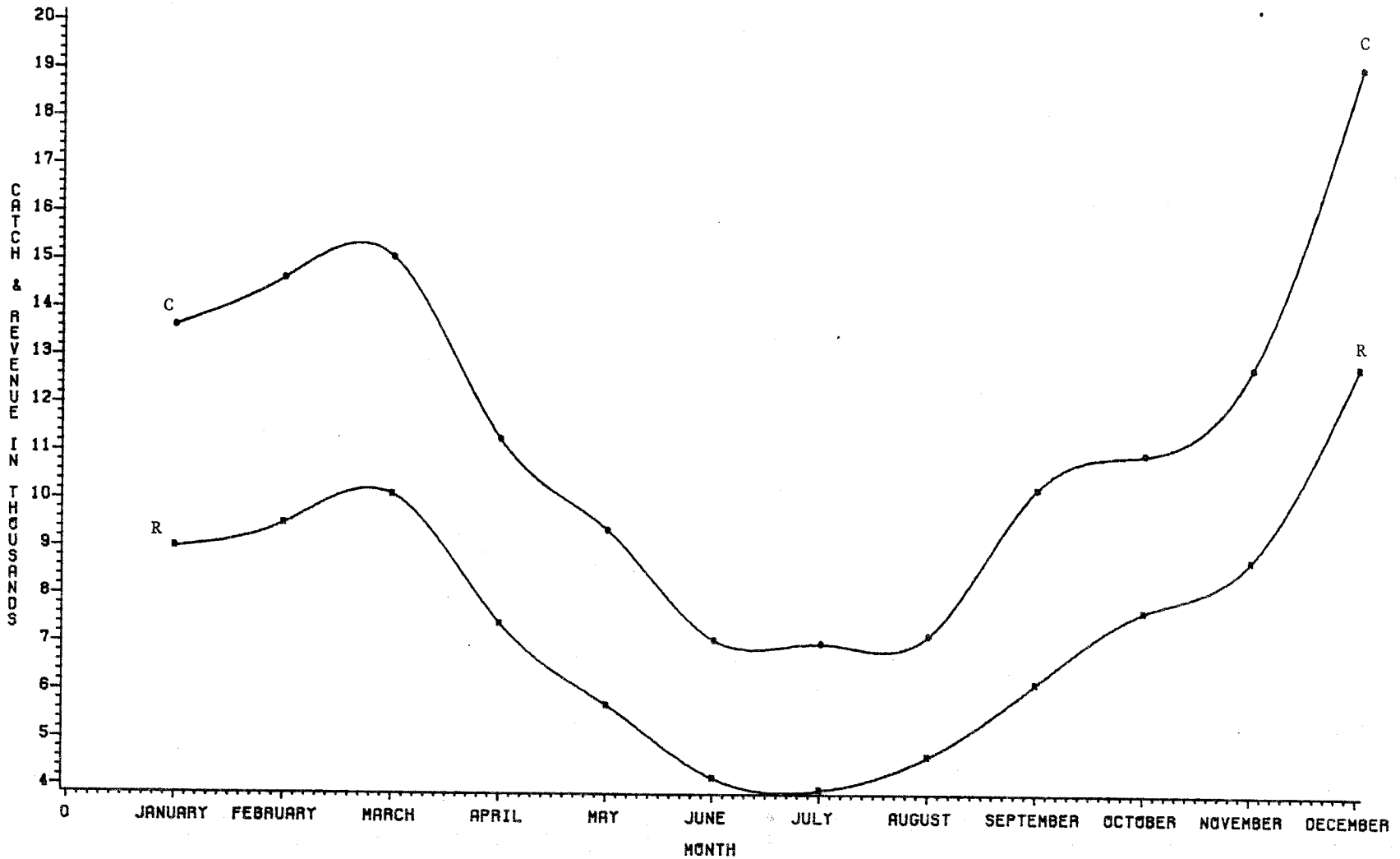

Figure 9-B.--Opakapaka. Monthly catch and reveneus, 1949-78.

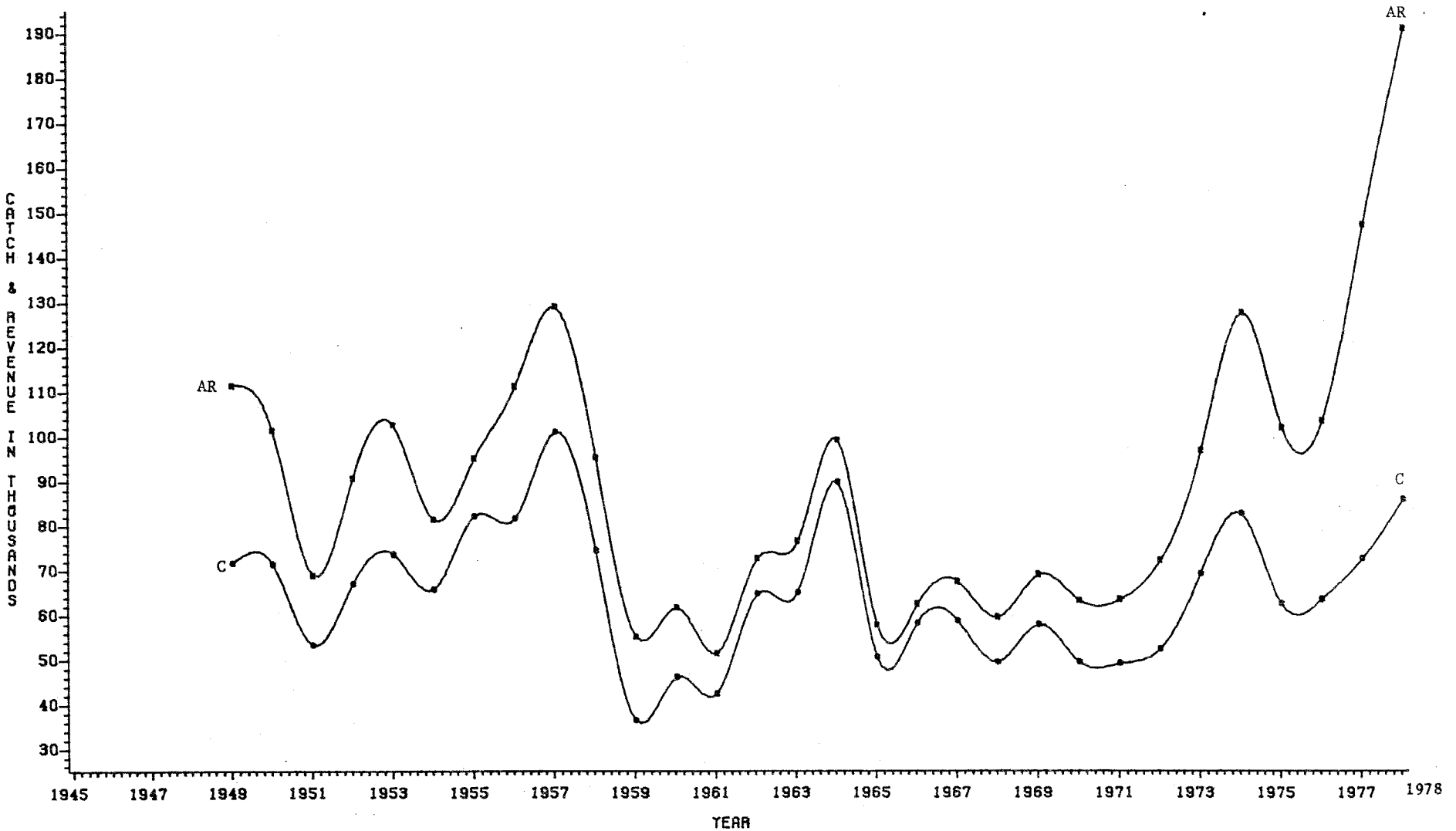

Figure 10-A.--Uku. Annual catch and revenues, 1949-78.

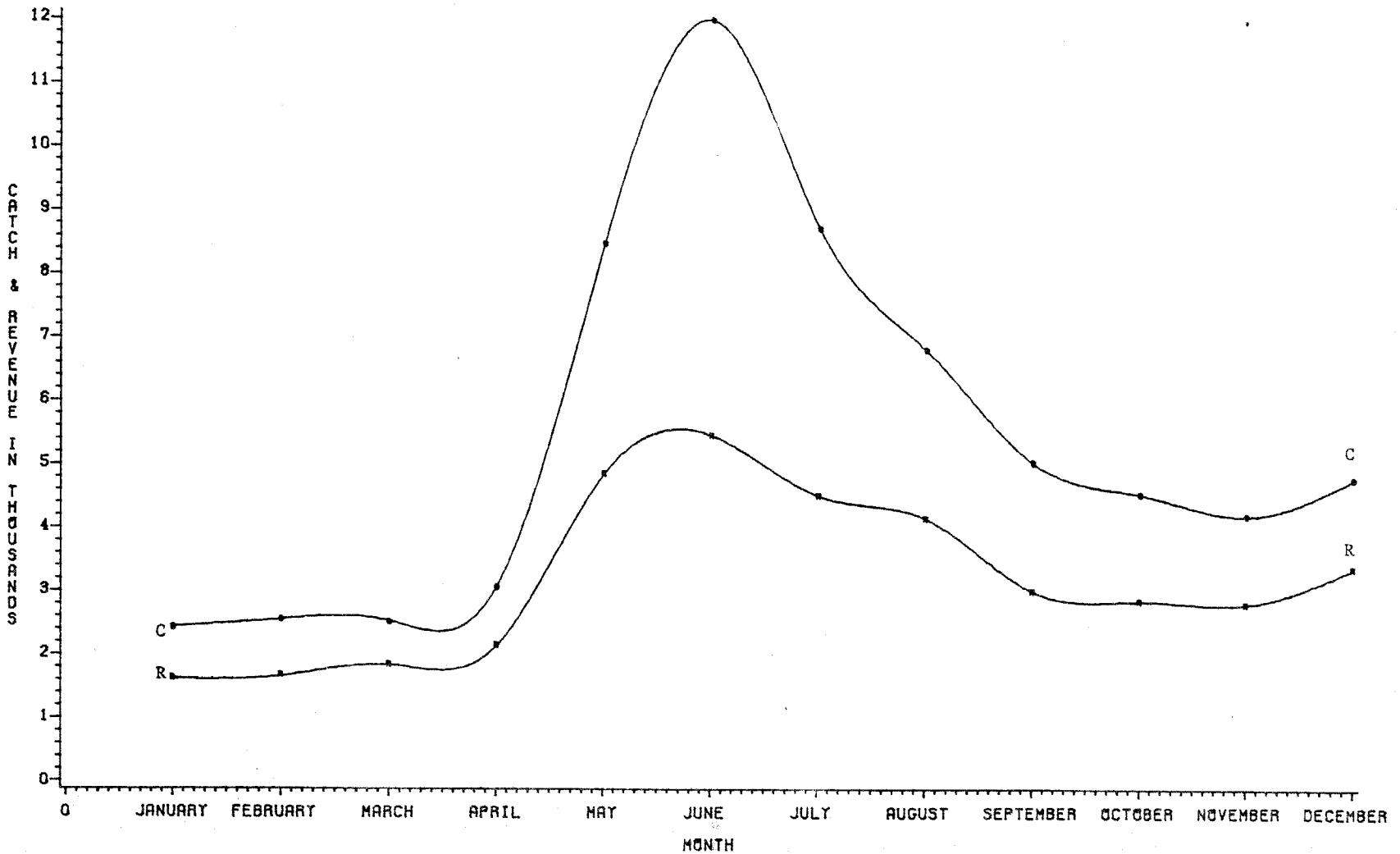

Figure 10-B.--Uku. Monthly catch and revenues, 1949-78.

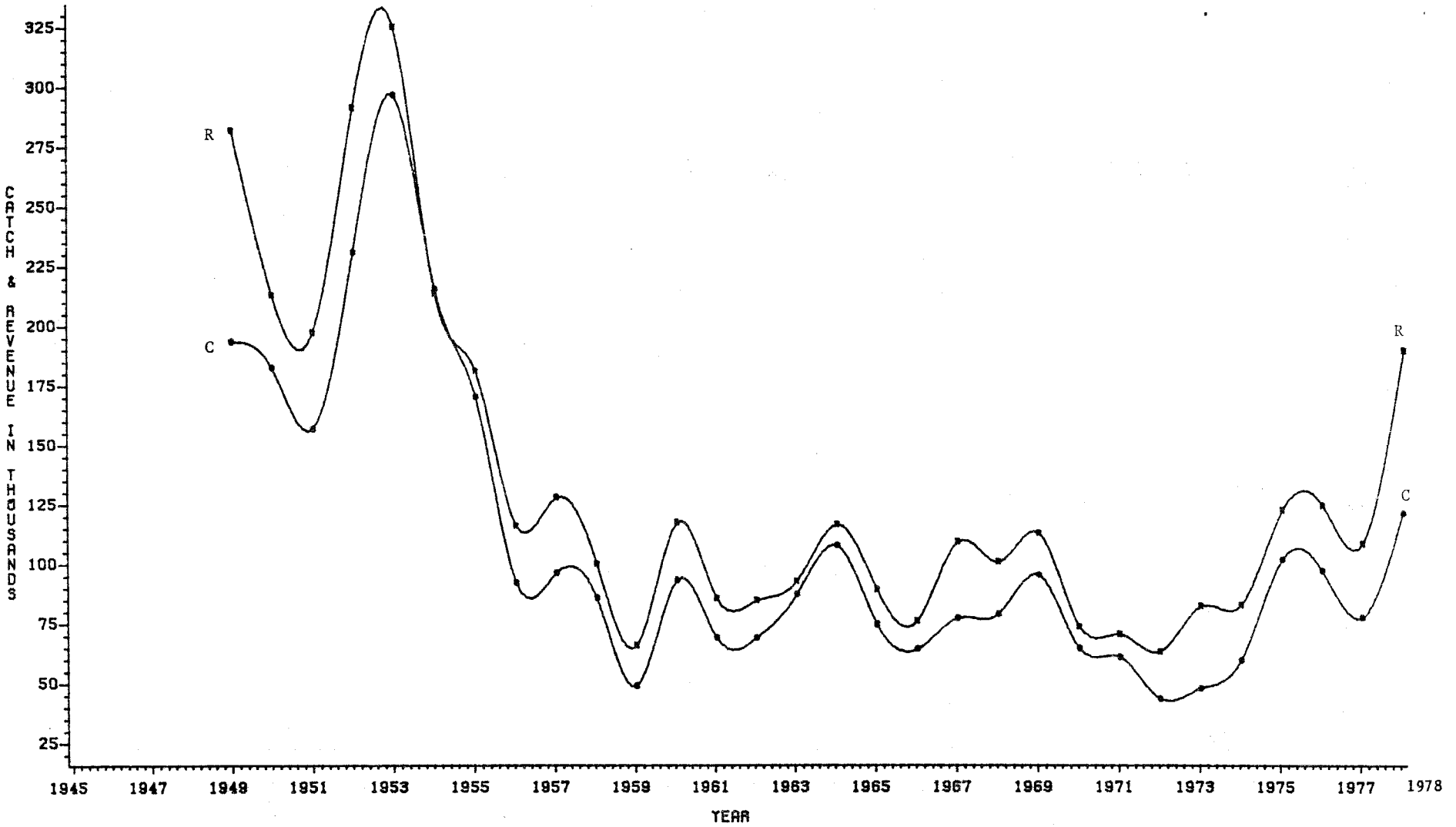

Figure 11-A.--Ulua. Annual catch and revenues, 1949-78.

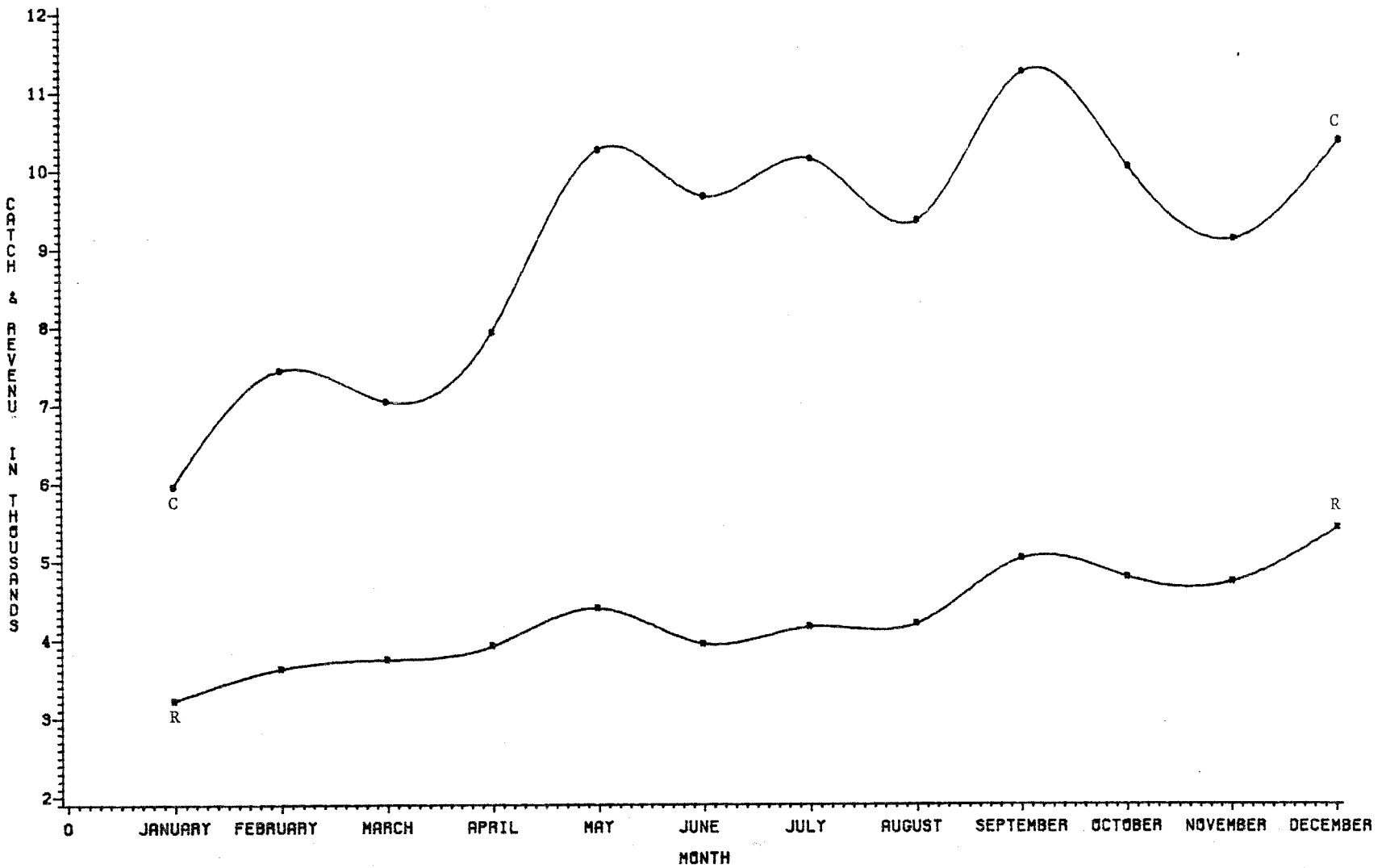

Figure 11-B.--Ulua. Monthly catch and revenues, 1949-78.

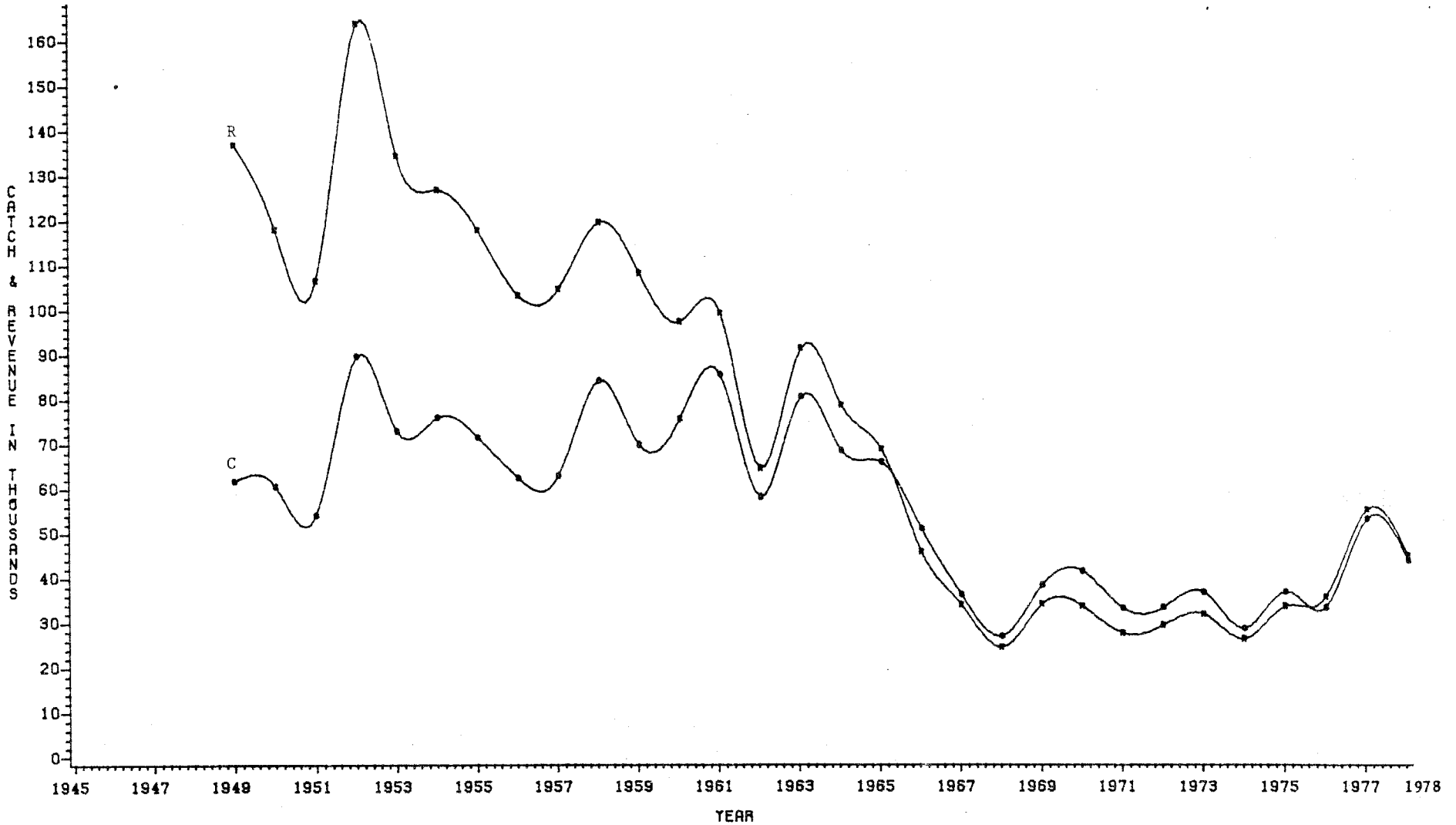

Figure 12-A.--Weke. Annual catch and revenues, 1949-78.

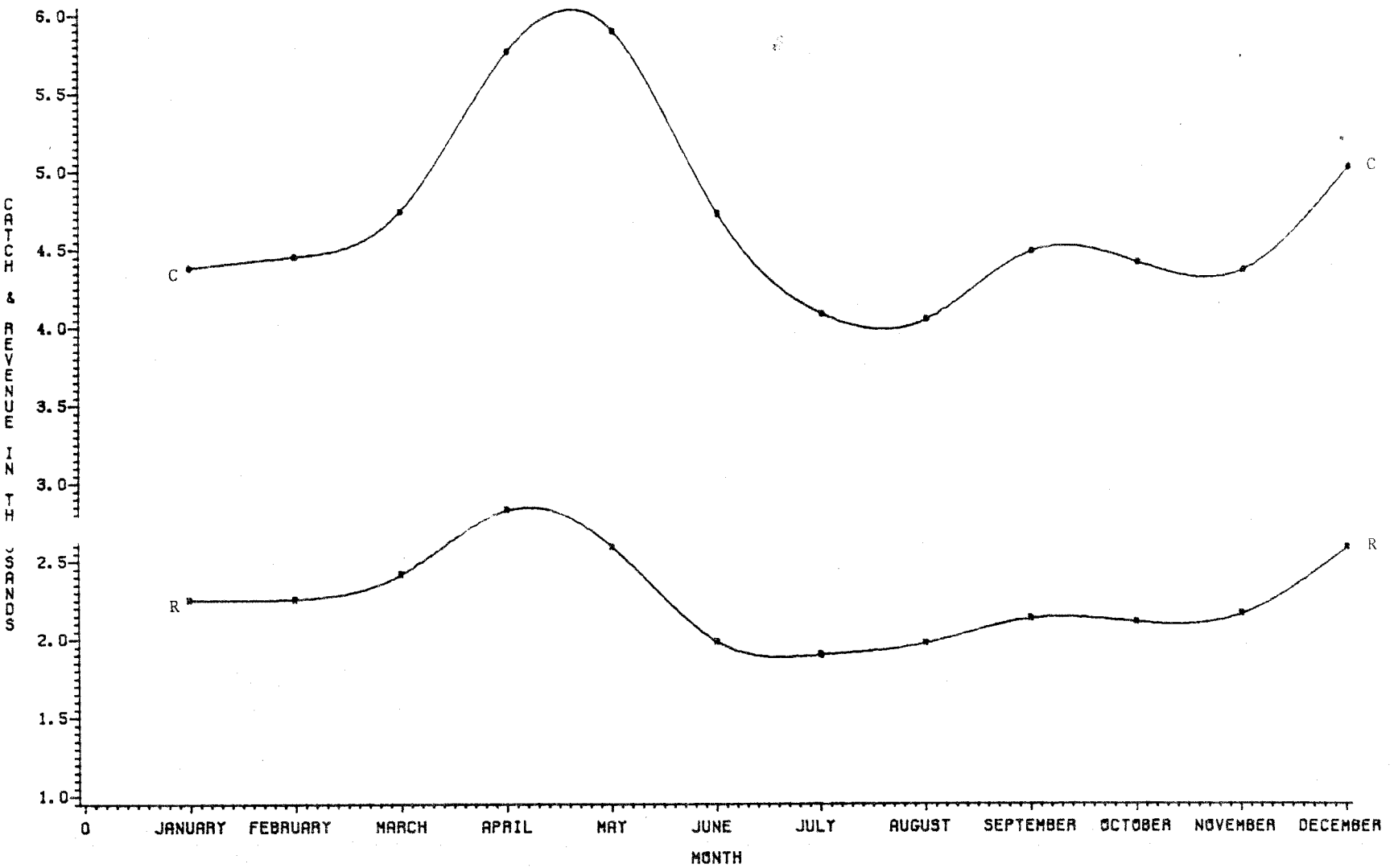

Figure 12-B.--Weke. Monthly catch and revenues, 1949-78.

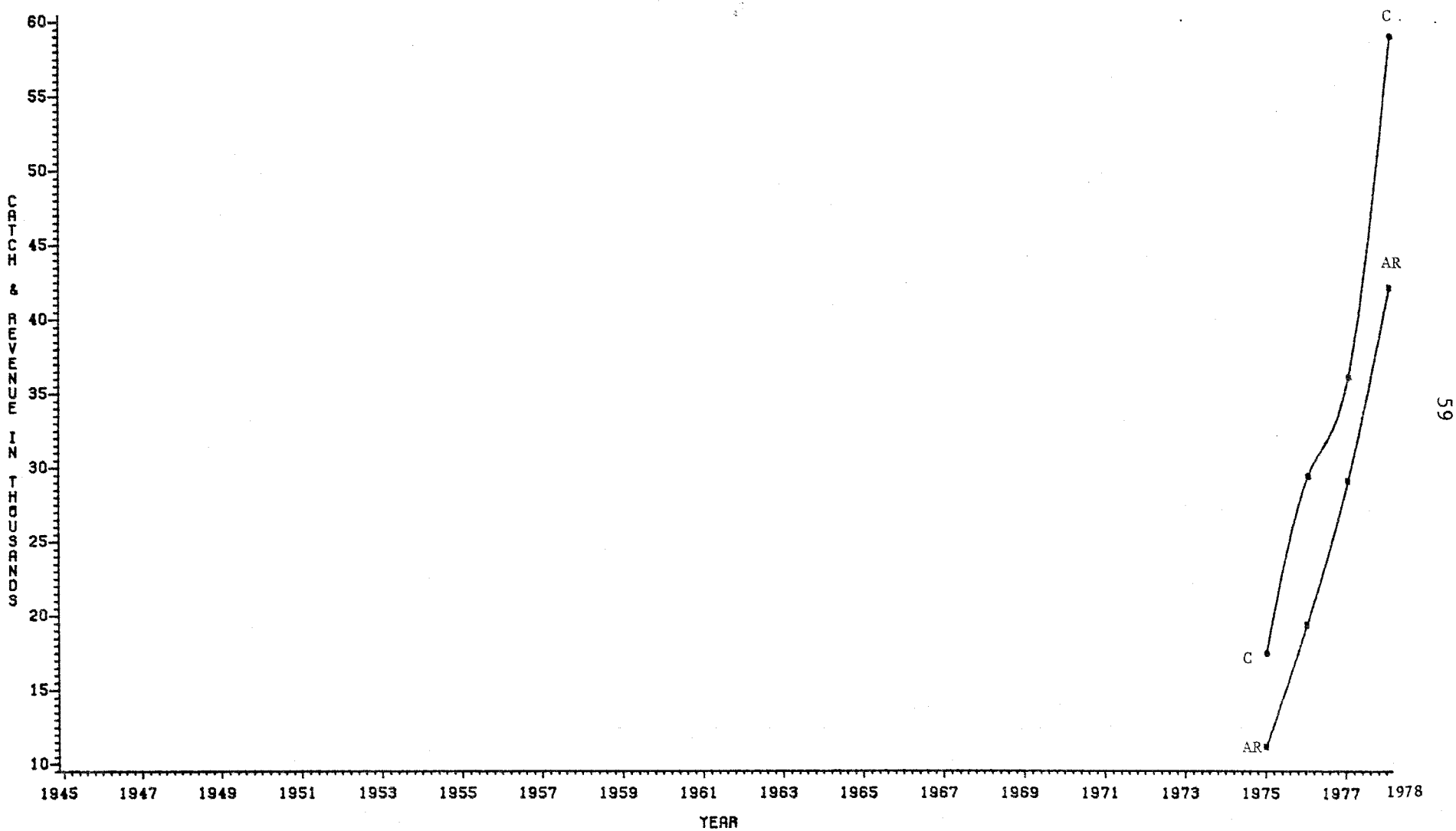

Figure 13-A.--Taape. Annual catch and revenues, 1949-78.

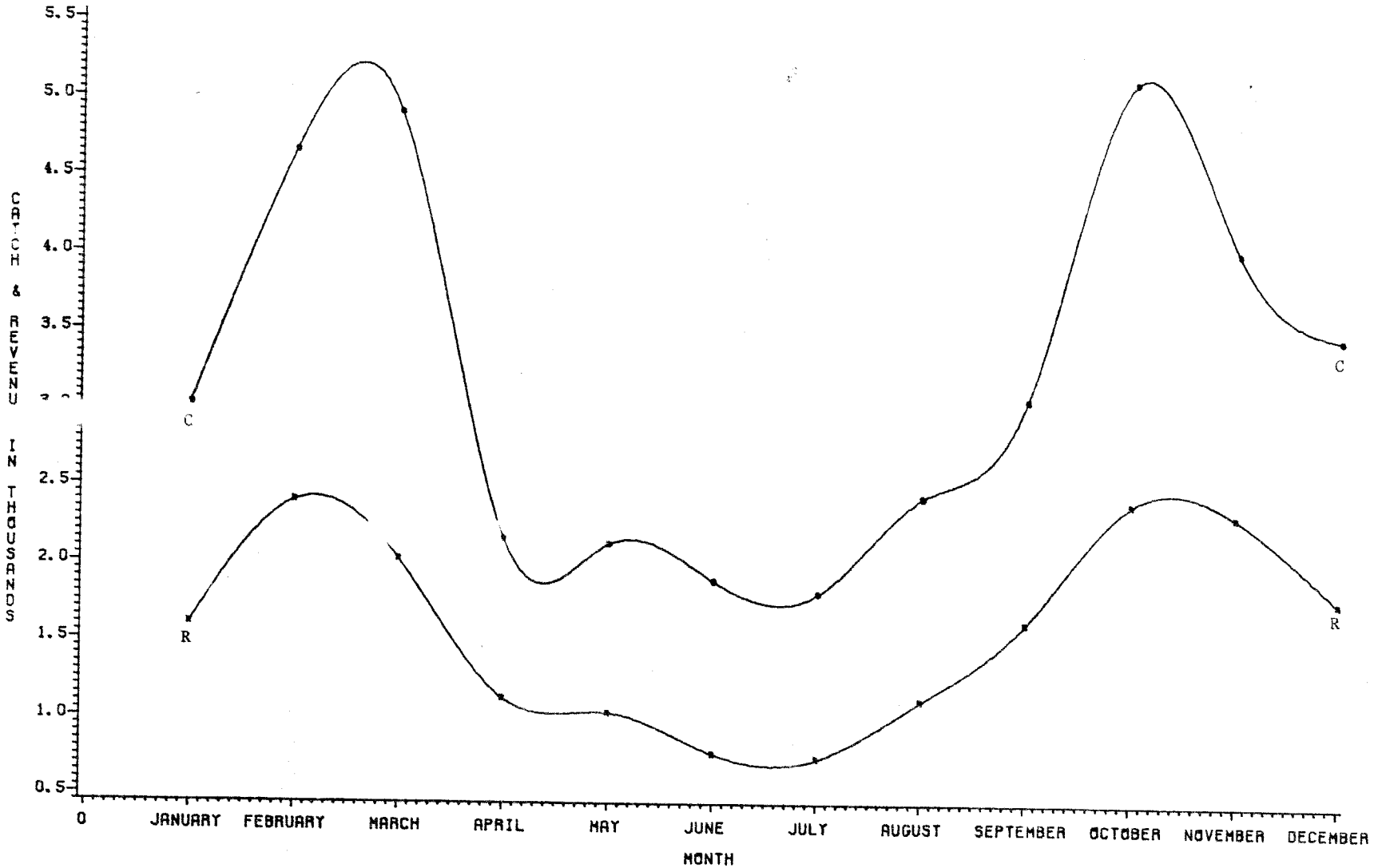

Figure 13-B.--Taape. Monthly catch and revenues, 1949-78.

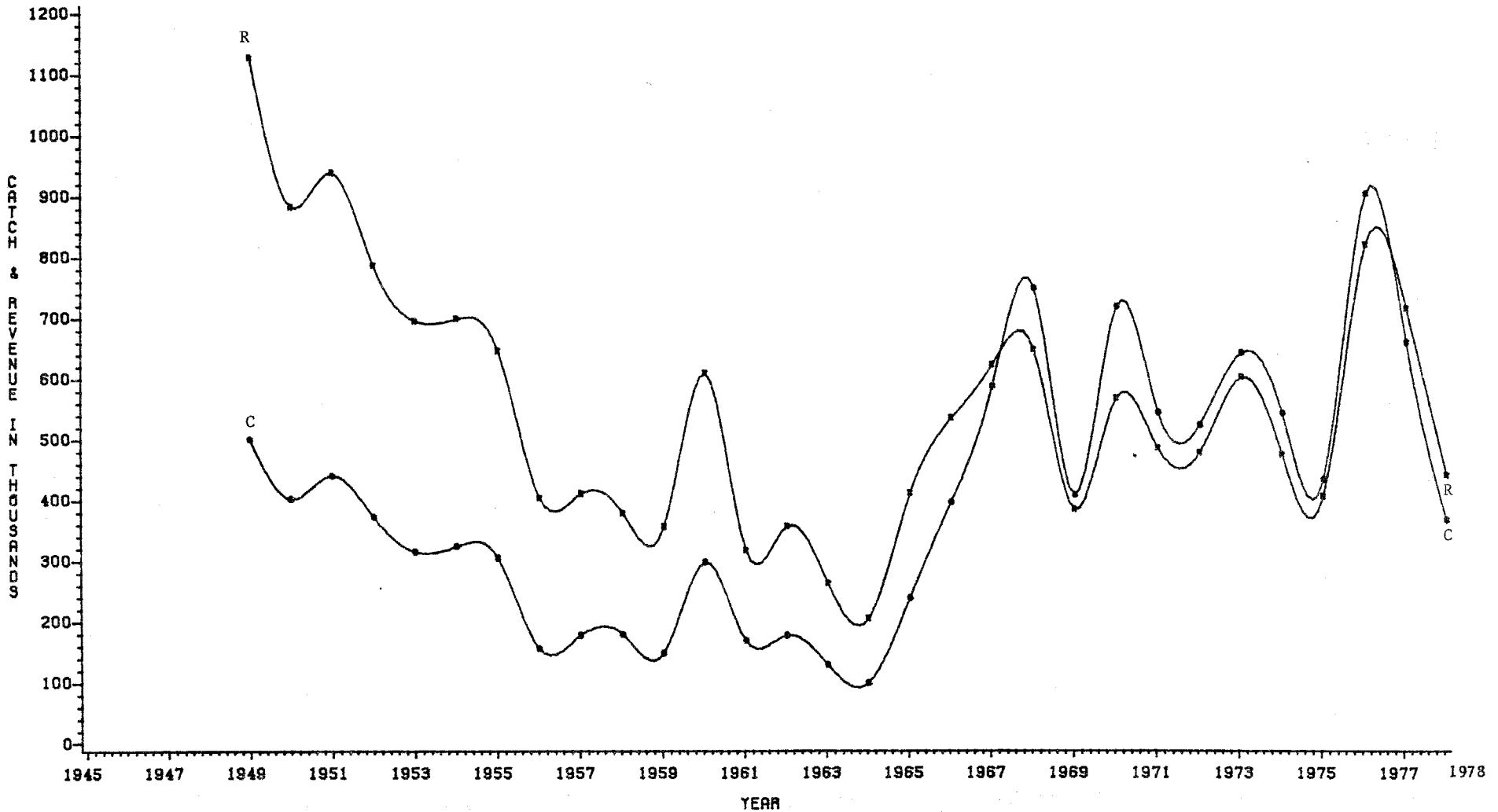

Figure 14-A.--Akule. Annual catch and revenues, 1949-78.

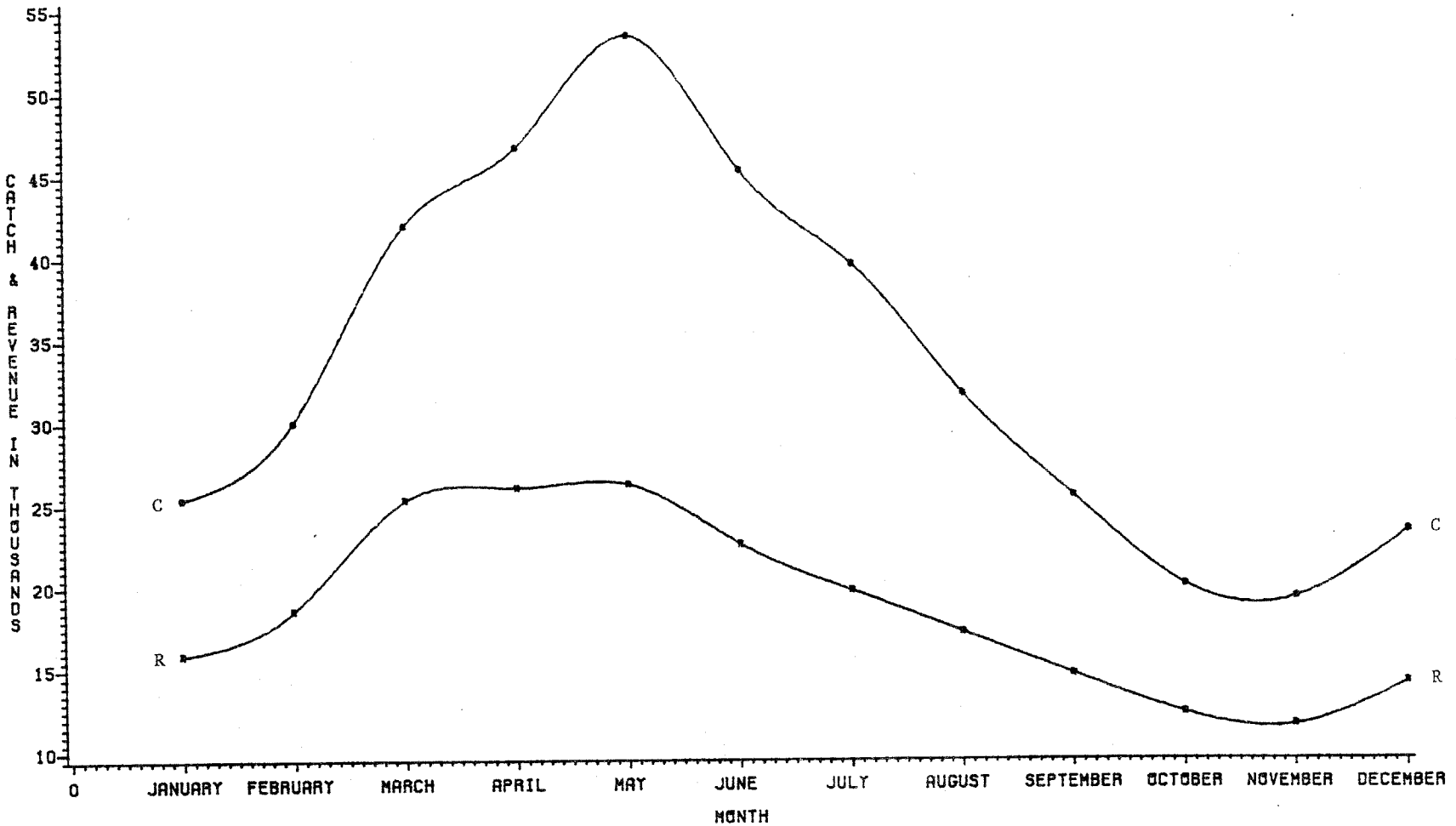

Figure 14-B.--Akule. Monthly catch and revenues, 1949-78.

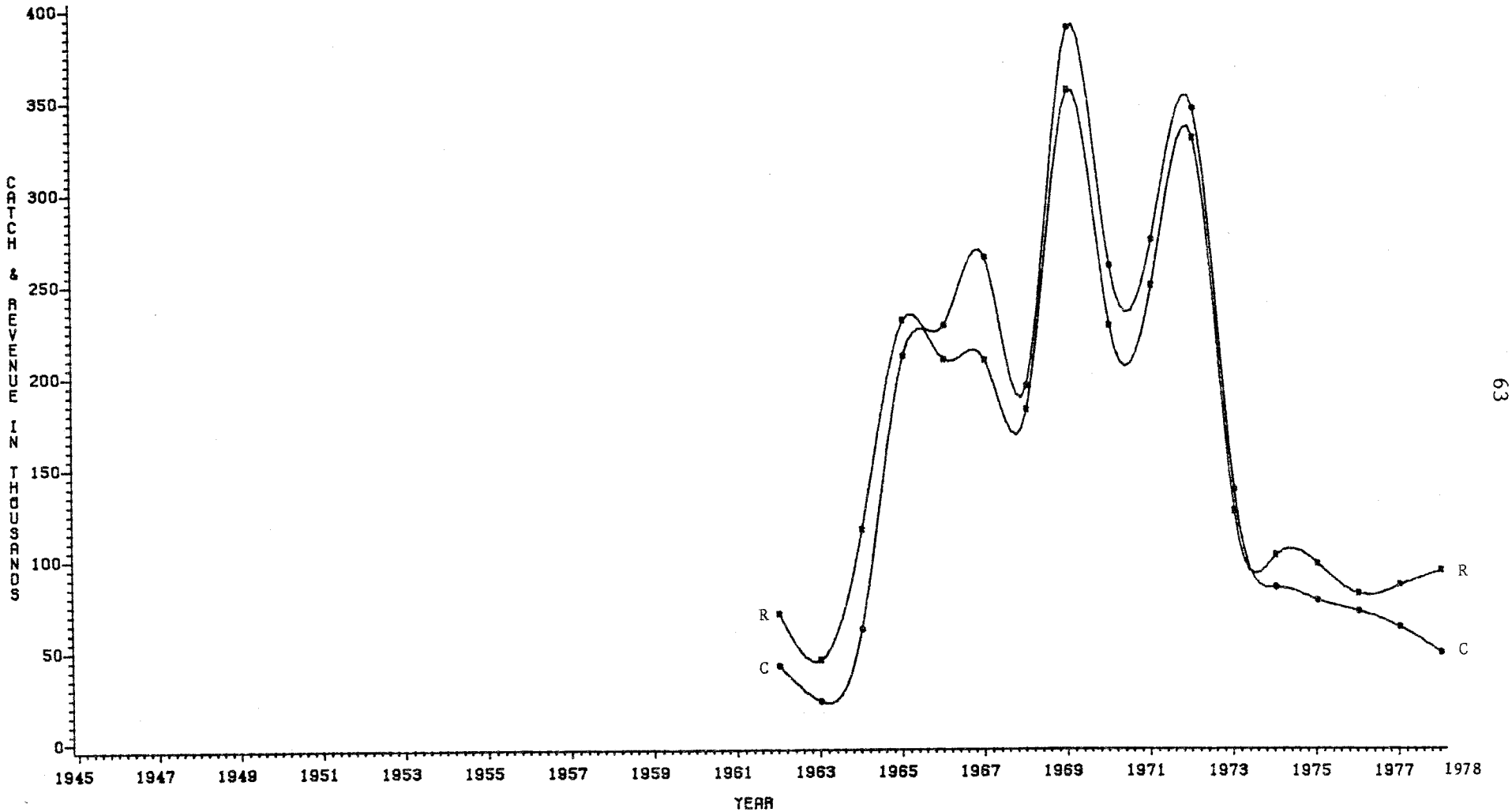

Figure 15-A.--Hahalalu. Annual catch and revenues, 1949-78.

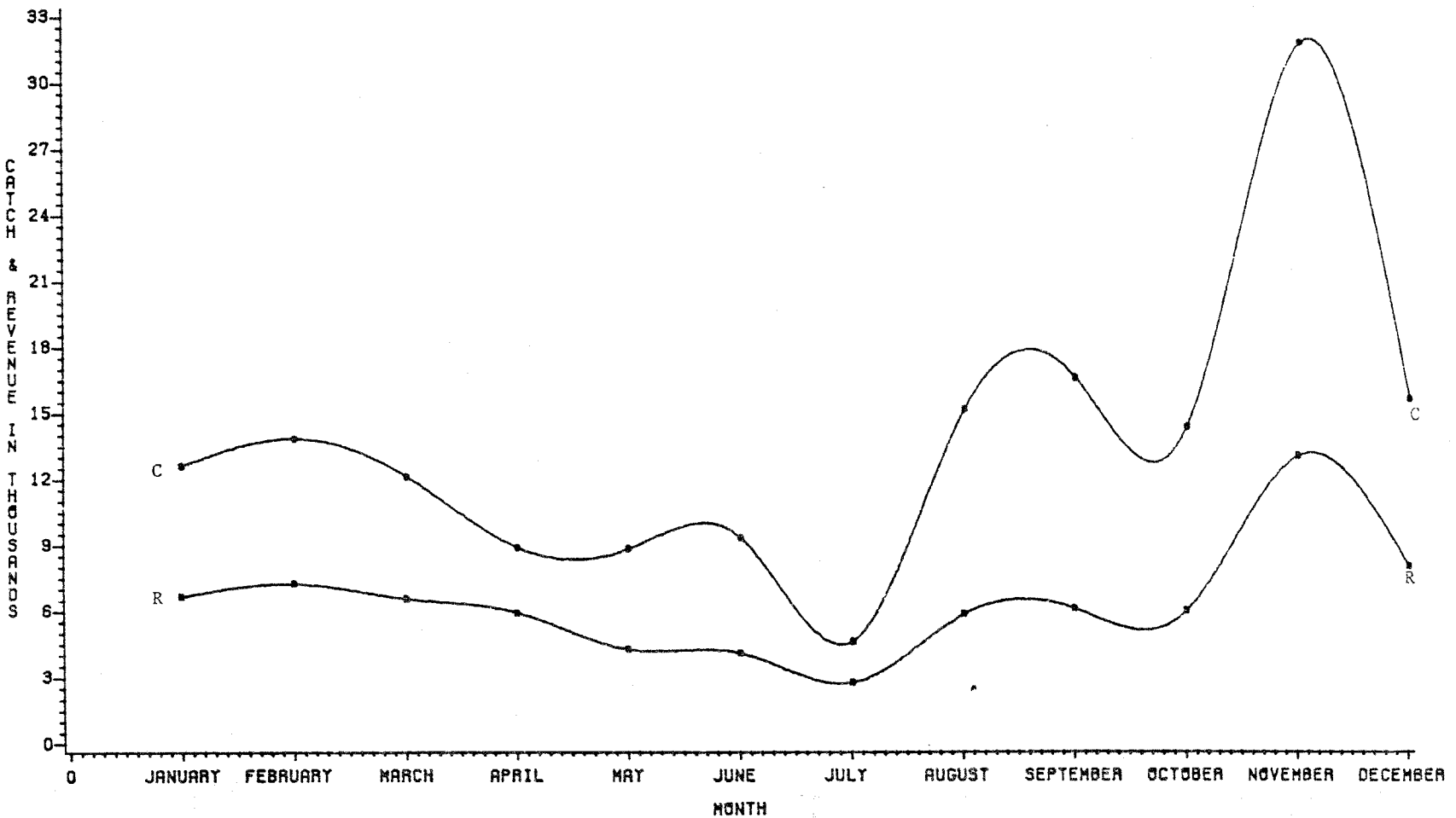

Figure 15-B.--Hahalalu. Monthly catch and revenues, 1949-78.

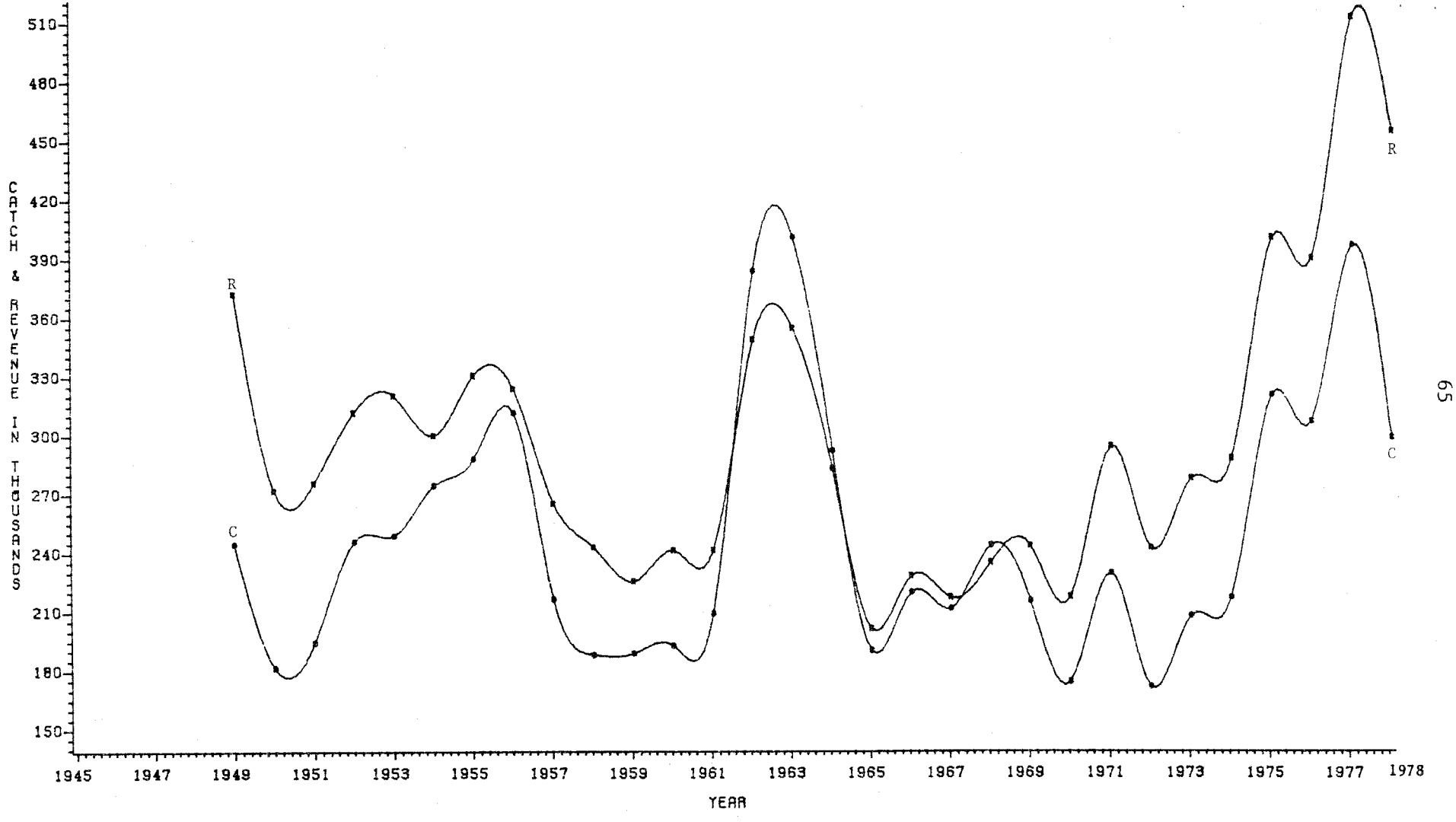

Figure 16-A.--Opelu. Annual catch and revenues, 1949-78.

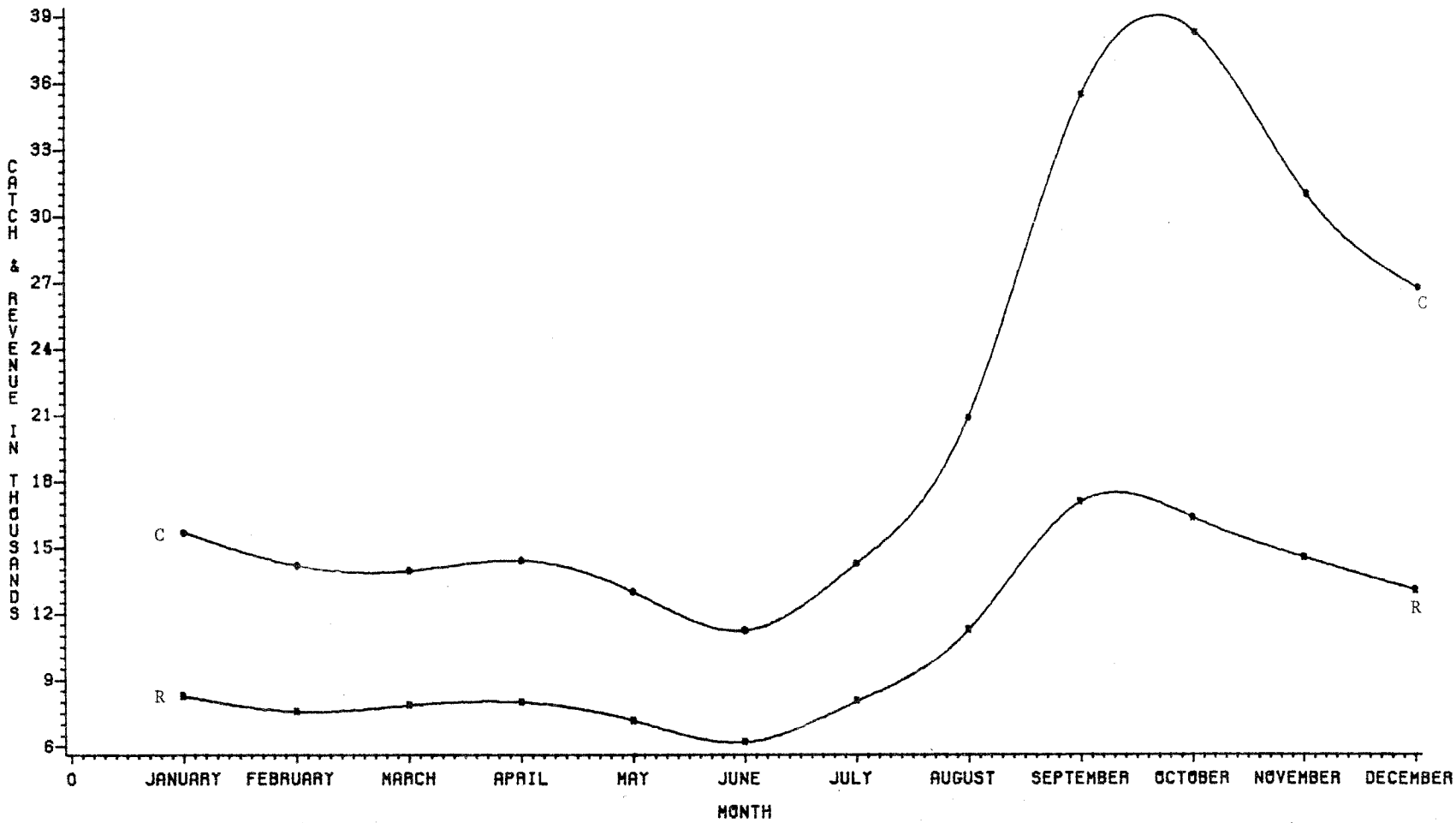

Figure 16-B.--Opelu. Monthly catch and revenues, 1949-78.