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(W)

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SUMMARY OF MOTOR VEHICLE OPERATIONS

FOR THE CALENDAR YEAR 1942

by

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The following tables have been compiled from the monthly motor vehicle reports.

This report was prepared in order to furnish comparable figures on the cost of operations of the various types of vehicles, and for purposes of comparison with a similar report that was prepared in 1941 (Report No. 752). It should aid in preparation of monthly requisitions and in budget estimates. These figures should also be helpful in deciding on the type of vehicle to secure in the future.

Most of the tables are self explanatory. All of the state-owned vehicles used by the Institute are listed in Table 1. The monthly and biweekly cost of operations for each unit is presented in Tables 2-10, inclusive. The total monthly cost of operations is presented in Table 11. The summary of individual motor vehicle operations for 1942 is presented in Table 12.

The comparison between the 1941 and 1942 mileage is presented in Table 13. In 1942 a considerable reduction in the mileage was shown for each month except December. In December, 1942 the Institute had 3 mapping parties in the field, while the previous year the mapping parties were unable to start work until January. A total reduction in mileage of 34.9 per cent, or 36,920 miles was effected in 1942 over that of 1941.

Table 14 was prepared in order to determine whether the reduction in the speed limit would have any noticeable effect upon the miles per gallon, and the total cost of operations per mile. A noticeable increase was noted in the miles per gallon for all units except one (Truck #47). This increase in mileage is undoubtedly due to the decrease in the speed of all units during 1942. It is rather difficult to make any comparison

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between the total cost per mile for the various units in 1941 and 1942 because of the usual increase in the cost of operations due to age and wear. The decrease in the cost for several of the units can be attributed to the decreased speed limit and the fact that these units were not driven much during 1942.

Table 1

Vehicles used during 1942 by the Institute for Fisheries Research

License number	
24	1942, Chevrolet sedan delivery truck.
28	1941, Chevrolet sedan delivery truck.
33	1938, Chevrolet, $\frac{1}{2}$ -ton panel truck.
34	1939, Ford, $\frac{1}{2}$ -ton panel truck.
35	1939, Ford, $\frac{1}{2}$ -ton panel truck.
16	1939, Ford, $\frac{1}{2}$ -ton stake-hoist truck.
44	1941, Chevrolet suburban carryall.
45	1941, Chevrolet coupe.
47	1941, Chevrolet, $\frac{3}{4}$ -ton panel truck.

Table 2
License number 24. (1942 Chevrolet sedan delivery truck)

Month	Gasoline used (gallons)	Cost gasoline	Oil used (quarts)	Cost oil	Cost of tires and tubes	Cost—repairs, grease, and accessories	Mileage during month	Total cost during month	Total cost of operations to date
January	48.75	\$ 8.17	...	...	...	...	844	\$ 8.17	\$ 9.10
February	62.00	11.59	5	\$1.82	...	\$ 6.00	1,073	19.41	28.51
Mar. 1-15	37.00	6.86	1	0.15	...	...	623	7.01	35.52
Mar. 16-31	35.50	6.39	5	0.75	...	1.00	688	8.14	43.66
April 1-15	30.00	5.40	...	...	...	4.67	607	10.07	53.73
April 16-30	64.00	11.54	5	0.75	...	1.00	1,174	13.29	67.02
May 1-15	31.50	5.67	...	...	\$0.50	2.47	804	8.64	75.66
May 16-31	37.50	6.75	...	...	...	...	679	6.75	82.41
June 1-15	25.00	4.50	5	0.75	...	2.30	395	7.55	89.96
June 16-30	44.00	7.92	...	...	...	...	723	7.92	97.88
July 1-15	30.50	5.54	6	0.90	...	2.00	797	8.44	106.32
July 16-31	79.00	14.27	...	...	...	1.50	1,308	15.77	122.09
Aug. 1-15	51.00	9.18	5	0.75	...	1.00	985	10.93	133.02
Aug. 16-31	51.00	9.20	...	...	...	2.50	925	11.70	144.72
Sept. 1-15	29.00	5.24	5	0.75	...	1.00	385	6.99	151.71
Sept. 16-30	...	...	...	...	...	...	31	...	151.71
Oct. 1-15	19.00	3.42	...	...	0.50	0.50	311	4.42	156.13
Oct. 16-31	22.00	3.98	5	0.75	...	13.40	614	18.13	174.26
Nov. 1-15	...	...	...	...	...	...	...	...	174.26
Dec. 15-31	15.00	2.70	...	...	...	...	215	2.70	176.96
Totals	711.75	\$128.32	42	\$7.37	\$1.00	\$39.34	13,181	\$176.03	...

Table 3

License number 28. (1941 Chevrolet sedan delivery truck)

Month	Gasoline used (gallons)	Cost of gasoline	Oil used (quarts)	Cost of oil	Cost of tires and tubes	Cost—repairs, grease, and accessories	Mileage during month	Total cost during month	Total cost of operations to date
January	...	...	...	...	...	...	94	...	\$314.86
February	10.00	\$ 1.40	2	\$0.24	...	...	258	\$ 1.64	316.50
Mar. 1-15	11.50	1.61	...	...	...	...	30	1.61	318.11
Mar. 16-31	22.50	3.90	1	0.15	...	...	393	4.05	322.16
April 1-15	10.50	1.58	...	...	...	...	275	1.58	323.74
April 16-30	37.00	6.18	7	1.77	...	\$ 5.10	852	13.05	336.79
May 1-15	38.00	5.86	2	0.24	...	2.00	880	8.10	344.89
May 16-31	64.50	11.07	1	0.15	...	0.20	1,059	11.42	356.31
June 1-15	23.30	3.52	1	0.12	...	...	422	3.64	359.95
June 16-30	37.00	5.98	...	...	...	9.50	819	15.48	375.43
July 1-15	29.00	5.00	6	1.70	...	2.75	579	9.45	384.88
July 16-31	13.00	1.82	...	...	...	...	7	1.82	386.70
Aug. 1-15	19.00	3.06	...	...	...	...	445	3.06	389.76
Aug. 16-31	7.50	1.05	1	0.12	...	...	210	1.17	390.93
Sept. 1-15	15.00	2.10	...	...	...	3.00	249	5.10	396.03
Sept. 16-30	16.00	2.52	1	0.15	...	...	354	2.67	398.70
Oct. 1-15	14.00	1.96	...	...	...	...	187	1.96	400.66
Oct. 16-31	47.00	7.34	1	0.15	...	...	1,044	7.49	408.15
Nov. 1-15	21.50	3.49	5	1.50	...	6.45	502	11.44	419.59
Nov. 16-30	21.75	3.52	...	...	\$0.85	...	387	4.37	423.96
Dec. 1-15	8.00	1.44	...	...	...	...	186	1.44	425.40
Dec. 16-31	18.00	3.43	2	0.63	...	...	167	4.06	429.46
Totals	484.05	\$77.83	30	\$6.92	\$0.85	\$29.00	9,399	\$114.60	...

Table 4

License number 33. (1938 Chevrolet $\frac{1}{2}$ -ton panel truck)

January	...	...	...	...	...	...	...	...	\$795.61
February	...	...	...	...	...	...	...	...	795.61
Mar. 16-31	32.5	\$ 5.65	2	\$0.51	...	\$ 7.50	613	\$ 13.66	809.27
Apr. 1-15	26.0	4.68	4	0.60	...	...	400	5.28	814.55
Apr. 16-30	34.0	6.12	5	0.75	...	9.75	560	16.62	831.17
May 1-15	35.0	6.30	3	0.45	...	0.65	465	7.40	838.57
May 16-31	...	...	...	...	...	...	74	...	838.57
June 1-15	21.0	3.78	2	0.30	...	...	296	4.08	842.65
June 16-30	27.0	4.86	2	0.30	...	...	412	5.16	847.81
July 1-15	26.0	4.68	...	...	...	9.95	383	14.63	862.44
July 16-31	27.0	4.86	3	0.45	...	...	428	5.31	867.75
Aug. 1-15	36.0	6.53	...	...	...	0.50	562	7.03	874.78
Aug. 16-31	42.0	7.56	4	0.60	...	...	700	8.16	882.94
Sept. 1-15	61.0	10.98	4	0.60	...	12.95	964	24.53	907.47
Sept. 16-30	33.0	5.94	3	0.45	...	10.51	475	16.90	924.37
Oct. 1-15	22.5	4.05	2	0.30	...	...	471	4.35	928.72
Oct. 16-31	...	...	...	...	...	2.40	...	2.40	931.12
Nov. 1-15	14.0	2.52	2	0.30	...	...	195	2.82	933.94
Nov. 16-30	...	...	...	...	...	...	...	...	933.94
Dec. 1-15	...	...	...	...	...	1.75	14	1.75	935.69
Dec. 16-31	10.0	1.80	...	...	...	0.70	201	2.50	938.19
Totals	447.0	\$80.31	36	\$5.61	...	\$56.66	7,213	\$142.58	...

Table 5

License number 34. (1939 Ford 1½-ton panel truck)

Month	Gasoline used (gallons)	Cost gasoline	Oil used (quarts)	Cost oil	Cost of tires and tubes	Cost—repairs, grease, and accessories	Mileage during month	Total cost during month	Total cost of operations to date
January	115.2	\$ 19.50	2	\$0.60	...	\$ 5.00	1,168	\$ 25.10	\$320.77
February	137.3	21.76	7	2.25	...	3.00	1,346	30.01	350.78
Mar. 1-15	57.0	10.26	1	0.20	...	0.60	480	11.06	361.84
Mar. 16-31	52.0	9.36	1	0.25	...	...	517	9.61	371.45
Apr. 1-15	40.0	4.44	1	0.23	...	...	429	4.67	376.12
Apr. 16-30	45.0	5.42	2	0.43	...	...	625	5.85	381.97
May 1-15	13.0	1.45	...	...	...	...	184	1.45	383.42
May 16-31	8.0	1.44	...	...	...	...	383	1.44	384.86
June 1-15	...	...	...	...	...	...	...	...	384.86
June 16-30	12.5	1.75	2	0.24	...	170.00	137	171.99	556.85
July 1-15	53.3	9.06	5	1.50	...	10.85	760	21.41	578.26
July 16-31	28.5	4.85	3	0.36	...	4.00	304	9.21	587.47
Aug. 1-15	22.0	3.44	2	0.24	...	2.50	276	6.18	593.65
Aug. 16-31	...	...	...	...	...	...	...	...	593.65
Sept. 1-15	7.5	1.35	...	...	...	...	234	1.35	595.00
Sept. 16-30	...	...	...	...	...	...	...	...	595.00
Oct. 1-15	...	...	...	...	...	...	...	...	595.00
Oct. 16-31	26.5	4.39	1	0.12	...	2.00	322	6.51	601.51
Nov. 1-15	...	...	5	1.50	...	8.13	26	9.63	611.14
Nov. 16-30	9.25	1.30	...	...	...	...	...	1.30	612.44
Dec. 16-31	10.00	1.98	...	...	...	...	152	1.98	614.42
Totals	637.05	\$104.75	32	\$7.92	...	\$206.08	7,343	\$318.75	...

Table 6

License number 35. (1939 Ford 1½-ton panel truck)

January	126.60	\$ 19.44	7	\$0.99	...	\$ 11.60	1,233	\$ 32.03	\$383.22
February	97.50	17.55	1	0.15	...	3.50	901	21.20	404.42
Mar. 1-15	40.00	7.20	2	0.30	...	...	544	7.50	411.92
June 1-15	34.50	5.91	6	0.87	...	2.10	350	8.88	420.80
June 16-30	12.00	2.18	...	...	...	...	213	2.18	422.98
July 1-15	12.00	2.12	...	...	...	...	76	2.12	425.10
July 16-31	61.80	11.06	...	...	...	...	691	11.06	436.16
Aug. 1-15	47.40	8.69	5	1.16	...	...	350	9.85	446.01
Aug. 16-31	20.50	3.70	2	0.30	...	1.50	343	5.50	451.51
Sept. 1-15	51.05	8.80	5	0.69	...	...	492	9.49	461.00
Sept. 16-30	...	...	...	...	...	...	16	...	461.00
Nov. 1-15	...	...	5	1.50	\$4.00	6.63	39	12.13	473.13
Nov. 16-30	13.00	1.82	...	...	...	...	...	1.82	474.95
Dec. 16-31	36.40	5.11	...	...	...	0.25	435	5.36	480.31
Totals	552.75	\$93.58	33	\$5.96	\$4.00	\$25.58	5,683	\$129.12	...

Table 7

License number 16. (1939 Ford 1½-ton stake-hoist truck)

Month	Gasoline used (gallons)	Cost gasoline	Oil used (quarts)	Cost oil	Cost of tires and tubes	Cost—repairs, grease, and accessories	Mileage during month	Total cost during month	Total cost of operations to date
January	44.5	\$ 8.28	10	\$3.11	...	\$ 3.35	228	\$ 14.74	\$ 94.90
February	20.0	3.90	2	0.60	...	11.00	156	15.50	110.40
Mar. 1-15	35.0	6.31	2	0.30	...	...	161	6.61	583.30
Mar. 16-31	15.0	2.70	1	0.25	...	...	70	2.95	586.25
April 1-15	28.0	5.04	5	1.50	...	5.58	268	12.12	598.37
April 16-30	31.0	5.58	1	0.15	...	...	248	5.73	604.10
May 1-15	12.0	2.16	1	0.15	...	...	63	2.31	606.41
May 16-31	...	...	...	...	...	...	6	...	606.41
June 1-15	...	...	...	...	...	...	2	...	606.41
June 16-30	23.0	3.41	...	...	...	0.50	195	3.91	610.32
July 1-15	37.0	6.74	4	0.60	...	...	282	7.34	617.66
July 16-31	28.0	5.04	4	0.60	...	...	287	5.64	623.30
Aug. 1-15	17.0	3.24	...	...	...	...	100	3.24	626.54
Aug. 16-31	...	...	...	...	...	...	39	...	626.54
Sept. 1-15	10.0	1.80	6	0.90	...	...	58	2.70	629.24
Sept. 16-30	71.0	12.52	9	1.35	...	9.79	936	23.66	652.90
Oct. 1-15	42.0	6.56	1	0.15	...	...	406	6.71	659.61
Oct. 16-31	28.0	5.04	2	0.30	...	...	256	5.34	664.95
Nov. 1-15	52.0	9.36	6	0.90	...	6.90	526	17.16	682.11
Nov. 16-30	16.0	2.88	...	...	...	4.60	52	7.48	689.59
Dec. 1-15	...	...	...	...	...	0.50	24	0.50	690.09
Dec. 16-31	9.0	1.62	...	...	...	...	62	1.62	691.71
Totals	518.5	\$ 92.18	54	\$10.86	...	42.22	4,425	\$145.26	...

Table 8

License number 44. (1941 Chevrolet suburban carryall)

January	15.00	\$ 2.10	...	...	...	...	32	\$ 2.10	\$279.27
February	52.45	8.94	1	\$0.12	...	\$ 7.75	895	16.81	296.08
Mar. 1-15	70.50	12.76	...	...	...	...	1,304	12.76	308.84
Mar. 16-31	19.00	3.26	...	...	...	...	541	3.26	312.10
Apr. 1-15	52.50	9.20	...	...	\$1.25	0.96	909	11.41	323.51
Apr. 16-30	21.00	3.54	5	1.50	6.50	1.25	576	12.79	336.30
May 16-31	10.50	1.47	...	...	...	...	148	1.47	337.77
June 1-15	...	...	...	...	...	...	...	...	337.77
June 16-30	27.00	4.58	...	...	...	...	523	4.58	342.35
July 1-15	56.00	9.48	2	0.24	...	2.40	1,244	12.12	354.47
July 16-31	21.00	3.50	5	1.50	...	4.25	342	9.25	363.72
Aug. 1-15	9.50	1.71	...	...	...	...	260	1.71	365.43
Aug. 16-31	16.00	2.88	...	...	...	0.65	370	3.53	368.96
Sept. 1-15	23.00	4.14	...	...	...	7.25	332	11.39	380.35
Sept. 16-30	27.00	4.58	5	1.50	...	1.25	282	7.33	387.68
Oct. 1-15	33.50	5.63	...	...	...	...	913	5.63	393.31
Oct. 16-31	21.00	3.78	...	...	...	...	482	3.78	397.09
Nov. 1-15	15.00	2.72	...	...	...	0.44	290	3.16	400.25
Nov. 16-30	13.00	2.34	...	...	...	...	151	2.34	402.59
Dec. 1-15	18.00	3.24	5	0.75	...	1.70	409	5.69	408.28
Dec. 16-31	24.00	4.32	...	...	...	...	329	4.32	412.60
Totals	544.95	\$94.17	23	\$5.61	\$7.75	\$27.90	10,332	\$135.43	...

Table 9

License number 45. (1941 Chevrolet coupe)

Month	Gasoline used (gallons)	Cost of gasoline	Oil used (quarts)	Cost of oil	Cost of tires and tubes	Cost—repairs, grease, and accessories	Mileage during month	Total cost during month	Total cost of operations to date
January	34.50	\$ 5.25	1	\$0.12	...	\$ 2.50	595	\$ 7.87	\$309.61
February	...	...	...	...	...	...	...	...	309.61
Mar. 1-15	23.00	3.74	...	...	...	...	458	3.74	313.35
Mar. 16-31	9.00	1.26	...	...	...	...	164	1.26	314.61
April 1-15	8.00	1.12	...	...	...	5.00	136	6.12	320.73
April 16-30	24.50	4.16	1	0.12	...	...	538	4.28	325.01
May 1-15	22.75	3.19	...	...	...	...	424	3.19	328.20
May 16-31	39.10	6.76	...	...	...	...	785	6.76	334.96
June 1-15	14.00	2.30	1	0.12	...	...	138	2.42	337.38
June 16-30	35.60	5.61	5	1.50	...	2.25	819	9.36	346.74
July 1-15	23.00	3.84	...	...	...	2.00	559	5.84	352.58
July 16-31	27.95	3.92	1	0.12	...	...	554	4.04	356.62
Aug. 1-15	...	...	...	...	...	...	...	...	356.62
Aug. 16-31	...	...	...	...	...	...	...	...	356.62
Sept. 1-15	...	...	5	1.50	...	2.00	3	3.50	360.12
Sept. 16-30	10.00	1.40	...	...	...	...	139	1.40	361.52
Oct. 1-15	...	...	...	...	...	...	56	...	361.52
Oct. 16-31	10.00	1.40	...	...	...	...	138	1.40	362.92
Nov. 1-15	...	...	5	1.50	...	6.63	3	8.13	371.05
Nov. 16-30	13.50	1.98	...	...	...	...	144	1.98	373.03
Dec. 16-31	51.00	9.24	5	1.35	...	3.91	987	14.50	387.53
Totals	345.90	\$55.17	24	\$6.33	...	\$24.29	6,640	\$85.79	...

Table 10

License number 47. (1941 Chevrolet 3/4-ton panel truck)

January	61.50	\$ 8.62	...	...	...	\$ 3.00	816	\$11.62	\$ 99.69
February	82.00	12.03	1	\$0.12	...	...	1,194	12.15	111.84
Mar. 1-15	22.00	3.08	...	...	...	...	331	3.08	114.92
Mar. 16-31	...	...	...	...	...	...	9	...	114.92
April 1-15	...	...	...	...	...	...	...	...	114.92
April 16-30	8.25	1.16	...	...	...	...	112	1.16	116.08
May 1-15	...	...	...	...	...	...	20	...	116.08
May 16-31	...	...	...	...	...	...	9	...	116.08
June 1-15	...	...	...	...	...	...	20	...	116.08
June 16-30	27.30	4.62	5	\$1.50	...	2.50	383	8.62	124.70
July 1-15	5.00	0.90	...	...	...	...	136	0.90	125.60
July 16-31	30.00	5.40	...	...	...	3.00	478	8.40	134.00
Aug. 1-15	...	...	...	...	...	...	50	...	134.00
Aug. 16-31	11.00	1.98	1	0.15	...	...	119	2.13	136.13
Sept. 1-15	...	...	...	...	...	...	...	...	136.13
Sept. 16-30	15.00	2.78	...	...	...	...	240	2.78	138.91
Oct. 1-15	...	...	...	...	...	16.70	17	16.70	155.61
Oct. 16-31	10.00	1.80	...	...	...	...	72	1.80	157.41
Nov. 1-15	20.00	3.60	...	...	...	3.08	251	6.68	164.09
Nov. 16-30	5.00	0.90	...	...	...	...	68	0.90	164.99
Dec. 16-31	15.00	2.78	...	...	...	...	338	2.78	167.77
Totals	312.05	\$49.65	7	\$1.77	...	\$28.28	4,663	79.70	...

Table 11

Monthly cost of operations for all vehicles during 1942

Month	Gasoline used (gallons)	Cost gasoline	Oil used (quarts)	Cost oil	Cost of tires and tubes	Cost—repairs, grease, and accessories	Total mileage during period	Total cost during month
January	446.05	\$ 71.36	20	\$ 4.82	...	\$ 25.45	5,010	\$ 101.63
February	461.25	80.17	19	5.30	...	31.25	5,823	116.72
March	481.50	84.34	16	2.86	...	9.10	6,926	96.30
April	459.75	75.16	36	7.80	\$7.75	33.31	7,709	124.02
May	311.85	52.12	7	0.99	0.50	5.32	5,983	58.93
June	363.20	60.92	29	5.70	...	189.15	5,847	255.77
July	588.05	102.08	39	7.97	...	42.70	9,215	152.75
August	349.90	62.22	20	3.32	...	8.65	5,734	74.19
September	368.55	64.15	43	7.89	...	47.75	5,190	119.79
October	295.50	49.35	12	1.77	0.50	35.00	5,289	86.62
November	214.00	36.43	28	7.20	4.85	42.86	2,634	91.34
December	214.40	37.66	12	2.73	...	8.81	3,519	49.20
Totals	4,554.00	775.96	281	58.35	13.60	479.35	68,879	1,327.26

Table 12

Summary of individual motor vehicle operations for 1942

License number	Gasoline used (gallons)	Cost gasoline	Oil used (quarts)	Cost oil	Cost of tires and tubes	Cost—repairs, grease, and accessories	Mileage during 1942	Total cost of operations	Miles per gallon gas	Total cost per mile
16	518.50	\$ 92.18	54	\$10.86	...	\$ 42.22	4,425	\$ 145.26	8.55	3.28¢
24	711.75	128.32	42	7.37	1.00	39.34	13,181	176.03	18.52	1.34¢
28	484.05	77.83	30	6.92	0.85	29.00	9,399	114.60	19.42	1.22¢
33	447.00	80.31	36	5.61	...	56.66	7,213	142.58	16.14	1.98¢
34	637.05	104.75	32	7.92	...	206.08	7,343	318.75	11.53	4.34¢
35	552.75	93.58	33	5.96	4.00	25.58	5,683	129.12	10.28	2.27¢
44	544.95	94.17	23	5.61	7.75	27.90	10,332	135.43	18.96	1.31¢
45	345.90	55.17	24	6.33	...	24.29	6,640	85.79	19.20	1.29¢
47	312.05	49.65	7	1.77	...	28.28	4,663	79.70	14.94	1.71¢
Totals	4,554.00	\$775.96	281	\$58.35	13.60	\$479.35	68,879	\$1,327.26	15.12	1.93¢

√ This truck was wrecked in 1942 and repairs amounted to over \$170.00, which brings up the total cost per mile.

√ Does not include \$42.00 paid by insurance company to repair truck after wreck.

Table 13

Comparison between 1941 and 1942 mileages

Month	1941	1942	Per cent reduction
January	5,832	5,010	14.10
February	7,000	5,823	16.82
March	8,466	6,926	18.19
April	9,641	7,709	20.04
May	10,347	5,983	42.18
June	12,191	5,847	52.04
July	12,693	9,215	27.41
August	10,298	5,734	44.32
September	10,567	5,190	50.88
October	11,063	5,289	52.20
November	4,349	2,634	39.44
December	3,352	3,519	+4.75
Totals	105,799	68,879	34.90

Table 14

Comparison of mileage, miles per gallon of gasoline, and total cost per mile of all units during 1941 and 1942

License number	Mileage		Total truck mileage to date	Miles per gallon		Total cost per mile	
	1941	1942		1941	1942	1941	1942
16	2,766	4,425	39,555	6.87	8.55	\$0.0343	\$0.0328
24	150	13,181	13,331	...	18.52	...	0.0134
28	20,134	9,399	29,540	17.40	19.42	0.0156	0.0122
33	6,962	7,213	53,733	13.85	16.14	0.0180	0.0198
34	4,740	7,343	21,480	9.51	11.53	0.0260	0.0434
35	5,882	5,683	24,375	10.01	10.28	0.0242	0.0227
44	16,887	10,332	30,723	17.54	18.96	0.0142	0.0131
45	24,162	6,640	31,638	18.62	19.20	0.0122	0.0129
47	6,816	4,663	11,479	16.44	14.94	0.0129	0.0171

INSTITUTE FOR FISHERIES RESEARCH

By W. F. Carbine

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