

## LITTER SURVEY — STATUS REPORT 2

by

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(A Study conducted for the Virginia Division of Litter Control.)

(The opinions, findings, and conclusions expressed in this report are those of the author and not necessarily those of the sponsoring agencies.)

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## ABSTRACT

This report discusses the results of three series of litter pickups at twenty 0.1-mile long sites on Virginia highways; 4 sites on the interstate system, and 8 each on the primary and secondary systems. This study is a continuing effort to monitor quantities of litter and is considered the best approach available short of extensive survey sampling that would require large monetary expenditures. The rationale behind the study methodology is explained in "Litter Survey - Status Report 1". It should be understood that the results as discussed herein pertain to the twenty sites mentioned, and should not necessarily be generalized to apply to the entire Virginia highway system; i.e., the twenty sites are not considered a statistical sampling from which generalizations about the entire highway system can be made with stated levels of confidence. Nevertheless, it is believed that the results obtained at the twenty sites are an indication of what may be occurring on the Virginia highway systems.

The primary measure used in this study to quantify litter is item count. The results indicate a rather dramatic reduction in litter from survey to survey at the twenty sites as indicated on the bar graph given on page 5 of the report. Analyses showed the reductions, in most cases, to be statistically significant at a 95% confidence level. Whether or not the items per day continue to decrease or remain at the lower levels can be answered only by future surveys.

It would be invalid to compare the quantities in terms of items per day in the study to results obtained in the 1976 litter survey, since the twenty sites used in the current study were selected with certain characteristics in mind and in no way represent "average" sites. However, proportions of litter by type can be compared, and on the basis of this study it is felt that the 1976 study under-represented paper and plastic items. Proportions by category shown in Table 4 on page 12 of the report indicate about 70% paper and plastic as opposed to the 54% reported in 1976. This difference, it is believed, is due primarily to the long time periods preceding the litter pickups in the 1976 study allowing many paper and plastic items to be removed from the sites by natural forces.

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## INTRODUCTION

As discussed in the report "Litter Survey — Status Report 1", approximately 25 roadway sites, each 0.1 mile in length, were selected to be surveyed three times annually in an attempt to monitor the rates of litter accumulation on Virginia's highways.(1) During each survey period, each site was to be surveyed four times at approximately 2-week intervals. The reasoning underlying this approach, along with the results of the initial series of litter pickups, was discussed in Status Report 1.

## PURPOSE AND SCOPE

The purpose of this status report is to discuss the results of the 2nd and 3rd series of litter pickups and to compare these results to those from the initial series. Where appropriate, the results obtained in the current study will be compared to those obtained in the 1976 litter survey conducted by the author in response to the Virginia Litter Control Act.

The primary discussions in this report are in terms of item count, the measure considered by the author to be most important in measuring the magnitudes of change in quantities of litter generated. Data are also available in terms of volume and weight for several of the sites surveyed, but these are closely related to the item count data in that constants derived in the 1976 survey were utilized to estimate the volume and weight measures.

It should be mentioned that throughout the current study only items of litter equal to or larger than a folded matchbook are included in the litter pickups. Also, in determining item counts certain judgments are made with regard to what constitutes an item. For instance, if several pieces of glass were found in a small area and obviously resulted from a broken bottle, the item count would be one bottle. The same would be true for several small pieces of paper from the same paper item.

## SITE DESCRIPTIONS AND DETAILED DATA

Each highway site included in the survey is approximately 0.1 mile long and generally includes the area from the edge of the pavement to the ditch line in one direction of travel. Thus, the entire area along a given segment of highway is not included in the site.

After an evaluation of the 34 original sites as discussed in "Litter Survey — Status Report 1", it was decided to utilize 27 sites; 7 on the interstate system, 11 on the primary system, and 9 on the secondary system. Included were sites 1, 2, 3, 5, 6, 7 and 8 on the interstate system; sites 2, 3, 4, 5, 6, 7, 9, 10, 12, 13, and 15 on the primary system; and sites 1, 2, 3, 4, 5, 7, 8, 9, and 10 on the secondary system.

Additionally, survey methods in the 2nd and 3rd surveys differed somewhat for approximately one-half of the sites because of the observation, based on the initial survey results, that the rate of litter accumulation at the sites decreased for each subsequent pickup. The following excerpt from Status Report 1 explains the different survey method used for some sites.

The reason for the decrease in average items per day for each subsequent pickup is not known, but it is believed that it may be due to conditioning at the site; i.e., people might be less likely to litter at sites that are clean due to frequent pickups. It is also felt that the decrease between pickups is not a result of seasonal influences because of the relatively short periods of time between pickups. If the decrease is due to site conditioning as suggested, it may be desirable to alter the sampling method in an attempt to counter this effect and thus reduce the within site variability. One alternative would be to simply record the number of items for each litter survey date with the difference in the number of items between survey dates being considered the amount littered since the last previous survey date; i.e., to leave the litter in place. This approach will be used for about one-half the sites for the next survey period.

The sites chosen by random selection for the alternative survey method were sites 1, 2, and 5 on the interstate system; sites 2, 4, 7, 10, and 12 on the primary system; and sites 2, 4, 8, and 9 on the secondary system.

Detailed data for the three series of litter pickups conducted so far are contained in Appendix Tables A-1 through A-27. Shown in Tables A-1 through A-9 are the dates of litter pickups, the number of days since the previous pickup (unknown for the initial pickup), and the number of items in each of four categories: cans, bottles, paper and plastic items, and other items. The same data are summarized for each site showing the total for all pickups, and for all pickups excluding the initial pickup. The sites at which the alternative survey method was employed are designated by an asterisk.

Tables A-10 through A-19 contain data similar to those discussed above, except they are given in terms of weight instead of item count, and Tables A-20 through A-29 give the data in terms of volume. However, no weight or volume data were available at sites where the alternate survey method was used, since the method did not permit the determination of weights and volumes.

### DATA ANALYSIS

Essentially the analyses were concerned with two things: the items per day of litter discarded at the sites, and, the proportions of litter discarded by four categories.

#### Analysis of Items Per Day of Litter Discarded

From the data in Tables A-1 through A-9 the items per day of litter were computed and summarized as shown in Table 1. The column headings  $\bar{X}_2$ ,  $\bar{X}_3$ , and  $\bar{X}_4$  represent the 2nd, 3rd and 4th litter pickups for each series. Normally the time between pickups was about two weeks. The heading  $\bar{X}_{2-4}$  represents the item/day figure from the entire period between the initial and 4th pickups and is not necessarily the average of  $\bar{X}_2$ ,  $\bar{X}_3$ , and  $\bar{X}_4$ , because the time periods between pickups sometimes differed. As in the Appendix tables, the asterisks denote sites where the alternative survey method was used. Only sites where complete data were obtained for all three series of pickups have been included in Table 1 so that comparisons from series to series are compatible by sites.

It is obvious from looking at Table 1 that the rate of litter accumulation at the 20 sites shown decreased from series to series. This decrease is shown quite evidently in Figure 1, where the overall item per day figure for each series is shown for each highway system and all 20 sites combined. Not only is the decrease evident, it is consistent for all highway systems.

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Table 1

## Summary of Item Count Data

System	Site	Items/Day 1st Series				Items/Day 2nd Series				Items/Day 3rd Series			
		$\bar{X}_2$	$\bar{X}_3$	$\bar{X}_4$	$\bar{X}_{2-4}$	$\bar{X}_2$	$\bar{X}_3$	$\bar{X}_4$	$\bar{X}_{2-4}$	$\bar{X}_2$	$\bar{X}_3$	$\bar{X}_4$	$\bar{X}_{2-4}$
Interstate	1*	2.78	1.23	0.50	1.33	1.00	0.71	0.27	0.65	0.06	0.21	2.00	0.74
	3	5.11	4.00	1.36	3.27	1.50	1.78	1.00	1.34	1.07	0.42	1.93	1.14
	5	4.11	1.30	0.88	2.11	1.57	0.30	2.40	1.51	0.73	0.57	0.57	0.61
	7	2.38	2.27	1.54	2.07	1.31	0.93	1.15	1.31	0.83	0.75	0.56	0.71
Primary	2*	3.60	4.00	2.00	3.33	0.14	5.43	0.79	1.04	0.21	0.57	2.29	1.02
	3	5.10	5.00	3.33	5.38	2.00	5.14	2.36	2.55	2.50	2.14	2.79	2.48
	4*	5.70	5.00	4.33	5.12	0.25	5.13	2.86	1.33	0.07	0.07	1.07	0.38
	5	5.67	2.38	1.50	2.86	3.36	2.36	1.87	2.70	3.64	4.00	4.29	3.98
	6	7.11	6.08	2.93	5.11	5.79	2.43	3.00	3.72	1.29	1.57	2.71	1.86
	10*	4.11	1.79	1.35	2.39	3.00	0.57	3.18	2.20	0.84	0.71	0.07	0.42
	12*	5.46	1.20	1.32	2.79	1.36	0.54	0.00	0.56	0.56	0.14	0.86	0.50
	13	8.67	1.40	0.88	3.67	1.64	1.20	0.70	1.16	1.53	1.06	2.57	1.37
	Secondary	1	3.31	1.40	2.17	2.25	2.50	2.00	3.08	2.55	1.50	1.50	1.63
2*	3.20	3.25	2.50	3.00	0.25	0.00	0.21	1.63	0.36	0.21	1.00	0.69	
3	7.12	4.33	1.71	3.32	2.26	5.14	4.07	3.21	0.79	3.14	2.60	2.20	
4*	8.11	2.92	1.17	3.42	1.43	1.50	0.47	1.12	1.14	2.36	0.21	1.24	
5	3.27	4.64	3.43	3.82	4.00	2.57	1.00	2.28	2.21	1.71	2.14	2.02	
7	3.11	1.30	1.75	2.08	1.43	1.35	1.00	1.27	1.00	0.66	1.43	0.84	
3*	3.00	2.20	1.00	2.11	1.00	0.35	2.27	1.12	0.33	0.63	0.28	0.51	
9*	4.88	1.67	1.00	2.19	0.43	0.50	0.27	0.41	0.13	0.40	0.57	0.35	
$\bar{X}$ (Interstate)		3.60	2.20	0.82	2.20	1.35	1.06	1.21	1.20	0.66	0.49	1.27	0.80
$\bar{X}$ (Primary)		5.68	3.36	2.71	3.83	2.13	2.36	1.35	1.97	1.30	1.28	2.08	1.51
$\bar{X}$ (Secondary)		3.00	2.71	2.59	2.84	1.66	2.33	1.55	1.70	1.00	1.33	1.23	1.17
$\bar{X}$ (Total)		6.19	2.87	2.28	3.11	1.79	2.53	1.60	1.71	1.05	1.14	1.58	1.23
$\bar{X}$ (Regular)						2.53	2.34	1.97		1.55	1.59	2.11	
$\bar{X}$ (Alternate)	*					0.99	2.76	1.15		0.43	0.59	0.93	



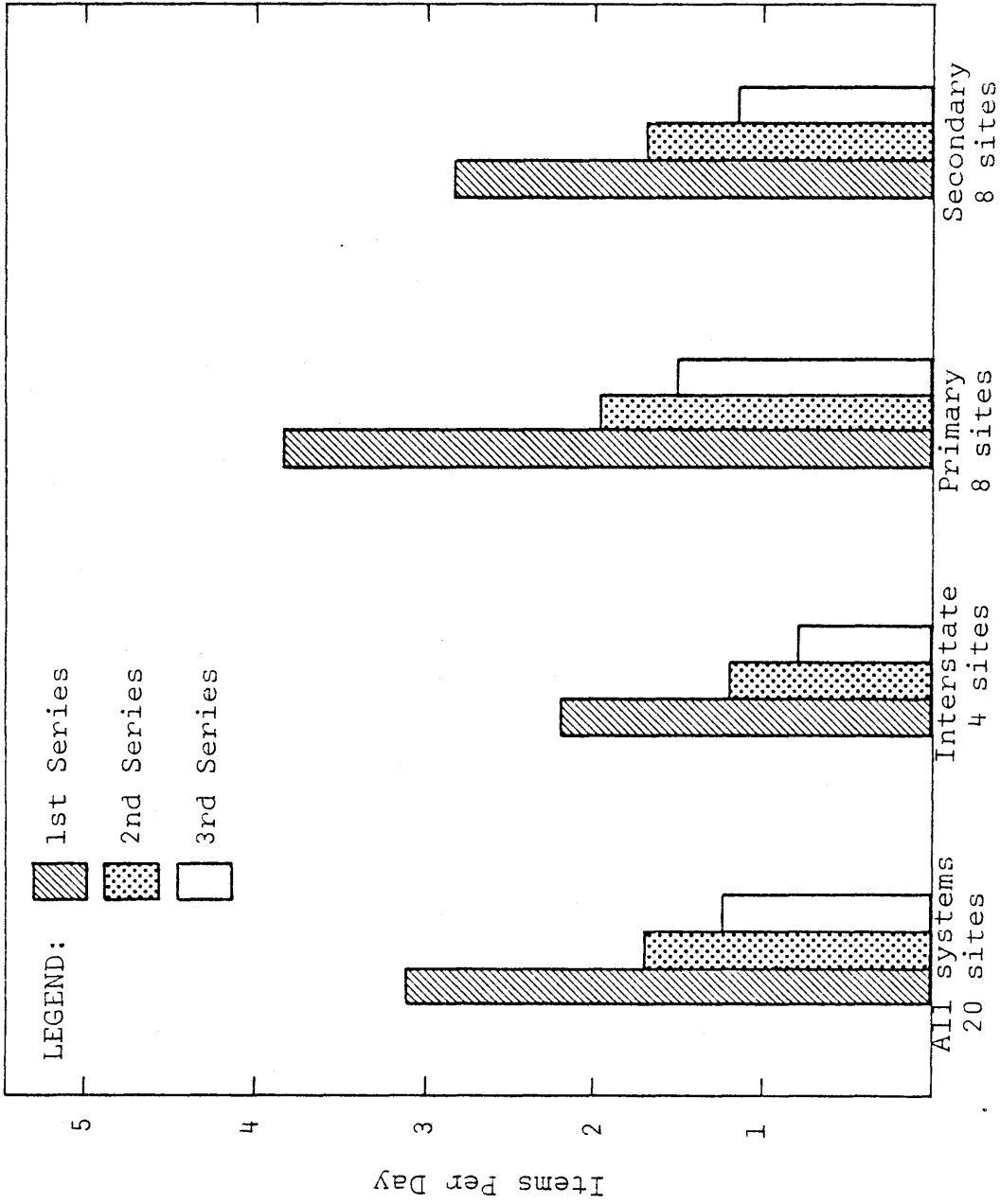


Figure 1. Decrease in items/day by survey period.

The overall decrease noted above was greatest from the 1st to the 2nd series, about 45% as opposed to about 28% from the 2nd to 3rd series as shown in Table 2. From a statistical standpoint the reduction in items per day were significant at a 95% confidence level for all highway systems between the 1st and 2nd series based on a t-test comparison for paired data. Between the 2nd and 3rd series the reductions in items per day were not significant at 95% for the interstate and primary systems, but were for the secondary system and all systems combined. Obviously, reductions from the 1st to 3rd series would be judged significant for all systems.

Primarily, the larger decrease in item count from the 1st to the 2nd series was due to the much greater items per day value for the 2nd pickup in the 1st series. Figure 2 illustrates the decrease in items per day by pickup in each series. While in Figure 2 there is some decrease in all cases, it is much larger for the 1st pickup in the series. No explanation is offered for this occurrence.

In a somewhat related situation, the decrease in items per day from pickup to pickup as occurred in the first series was not evident in the 2nd and 3rd series, as is illustrated graphically in Figure 3, where the change from pickup to pickup for each series is shown for each highway system. In addition, it was not clear, as illustrated in Figure 4, that the survey method used influenced the change in items per day from pickup to pickup, especially for the 3rd series of pickups.

Table 2

## Decrease in Item Count from Series to Series

System	1st - 2nd	Percent Decrease	Sig.*	2nd - 3rd	Percent Decrease	Sig.*
Interstate	2.20 - 1.20 = 1.00	45	Yes	1.20 - 0.80 = 0.40	33	No
Primary	3.83 - 1.87 = 1.86	49	Yes	1.97 - 1.51 = 0.46	23	No
Secondary	2.84 - 1.55 = 1.29	45	Yes	1.70 - 1.17 = 0.53	31	Yes
All Systems	3.11 - 1.71 = 1.40	45	Yes	1.71 - 1.23 = 0.48	28	Yes

\*At  $\alpha = 0.05$ , or 95% Confidence Level.

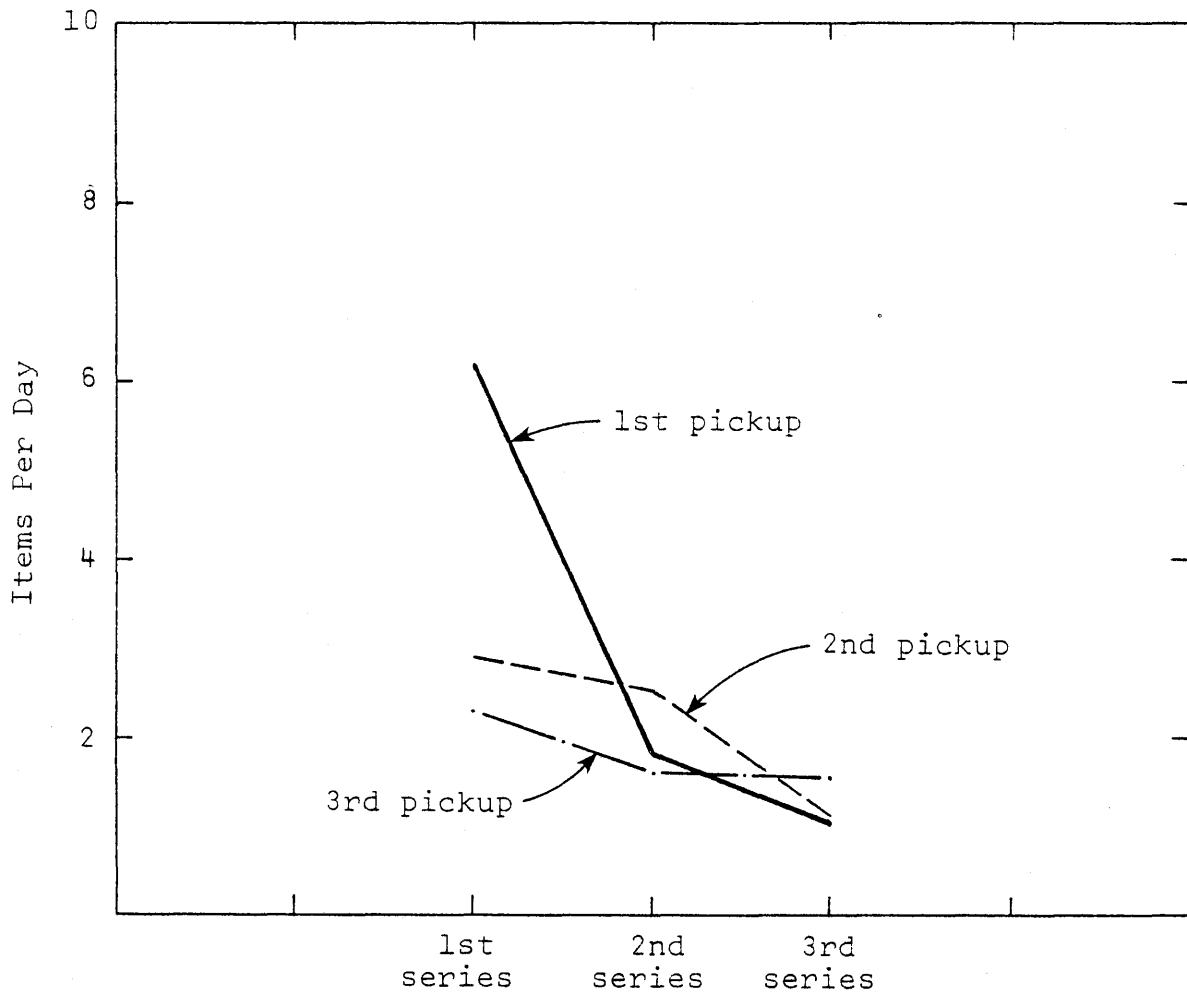


Figure 2. Decrease in items per day by pickup from series to series.

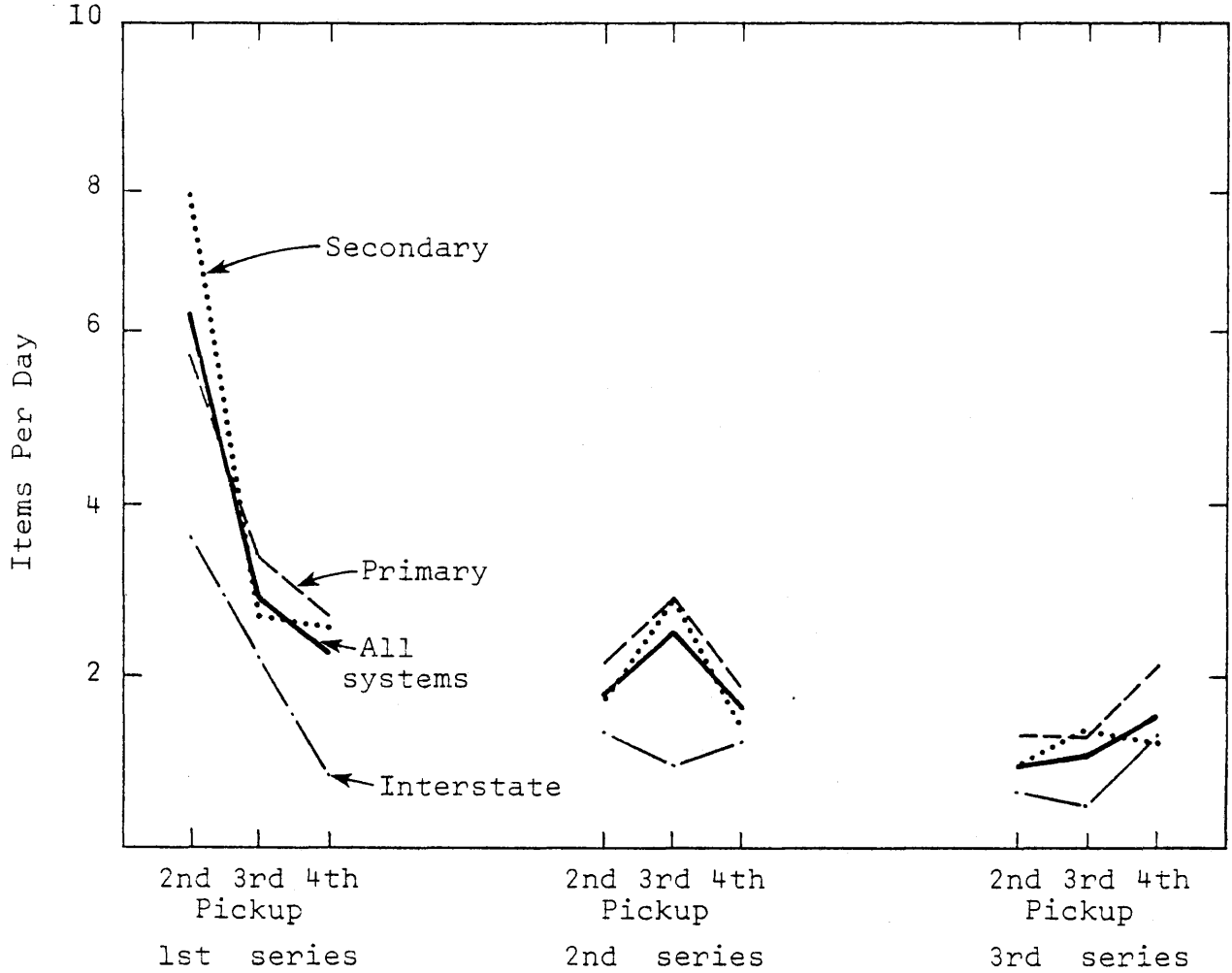


Figure 3. Decrease in items per day from pickup to pickup for each series.

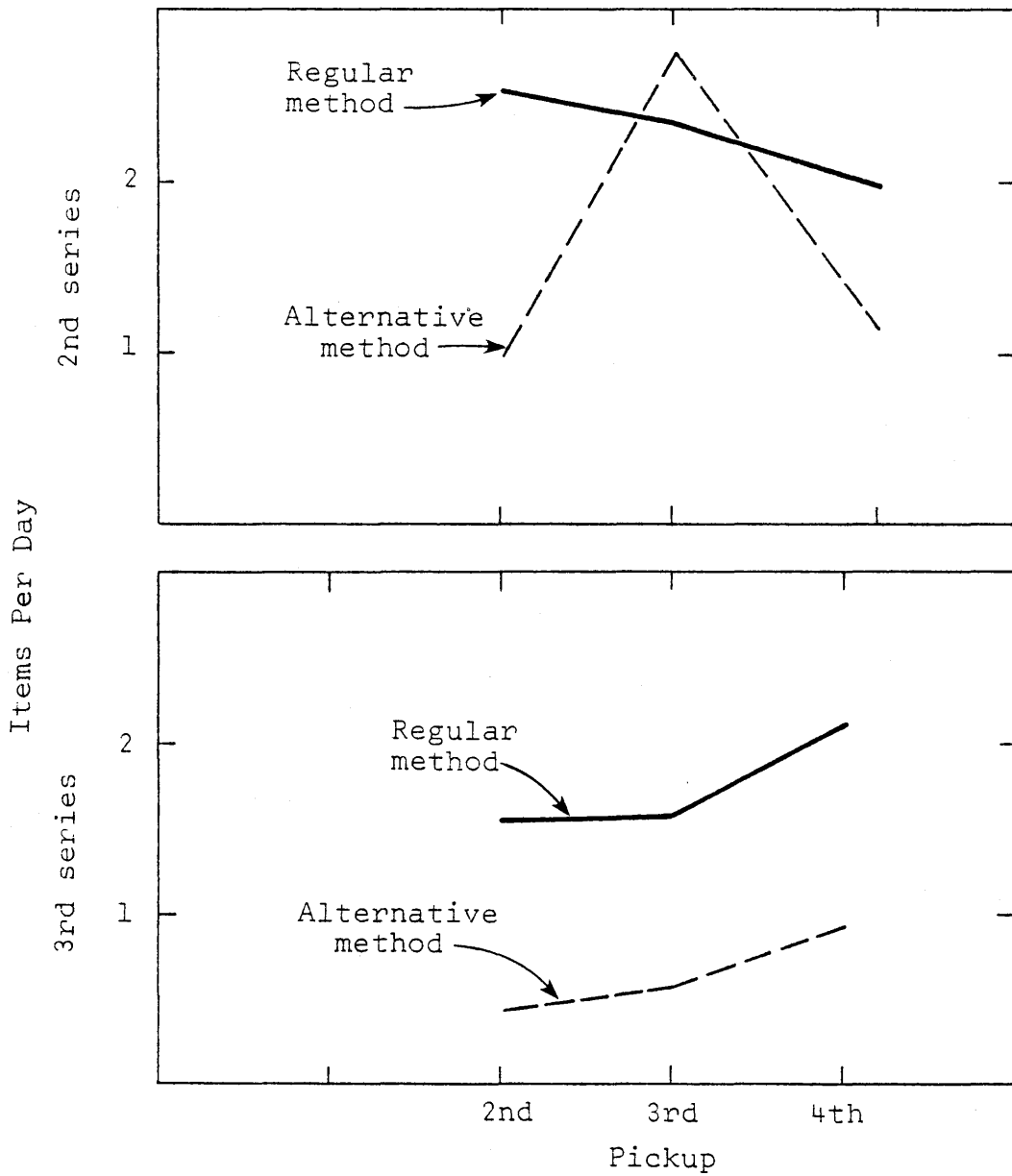


Figure 4. Change in items per day from pickup to pickup - regular and alternative method.

Proportions of Litter by Category

The proportions of litter by categories of cans, bottles, paper and plastic, and auto and other items have been summarized from Tables A-1 through A-9 as shown in Table 3. While there certainly is some variation from site to site for the three series of pickups, the overall proportions by highway systems are rather consistent from series to series. These data are further summarized in Table 4, which also includes the 1976 survey results.

The larger proportion of paper and plastic items as related to the 1976 survey was noted in the initial series for this study and continued for the 2nd and 3rd series (about 70% as compared to about 54%). While this difference in proportions by categories may be due to differences in sites, actual changes, or both, it is felt by the author that the difference is due primarily to the much shorter time periods used in the last 3 series. It is felt that for longer time periods (greater than 2 or 3 weeks) the proportion of paper items, in particular, is understated.

Table 3  
 Proportions of Litter by Category  
 By Item Count

System	Site	1st Series				2nd Series				3rd Series			
		Cans	Bottles	Paper/ Plastic	Auto/ Other	Cans	Bottles	Paper/ Plastic	Auto/ Other	Cans	Bottles	Paper/ Plastic	Auto/ Other
Interstate	1	19	8	68	8	18	11	60	21	6	0	94	0
	3	16	11	63	6	6	4	67	33	15	0	69	16
	6	17	2	68	3	4	1	65	20	5	3	68	3
	7	18	1	71	10	2	4	66	38	3	0	63	9
Primary	2	9	6	78	7	17	11	66	6	26	7	53	14
	3	24	3	66	1	14	6	80	0	9	19	73	0
	4	11	7	90	2	14	8	79	1	29	12	47	12
	5	15	4	76	4	5	11	60	3	13	15	55	1
	6	9	4	62	0	4	3	69	1	13	3	78	0
	10	22	13	59	6	5	7	65	3	30	16	40	16
	11	6	9	34	1	43	21	11	25	29	5	37	28
	12	6	6	84	6	4	4	82	10	6	2	60	2
Secondary	1	13	11	76	0	12	14	73	1	23	1	76	0
	2	10	11	73	6	5	6	66	3	13	3	79	0
	3	33	15	51	1	21	16	63	0	46	8	46	0
	4	28	3	67	2	3	3	77	7	2	4	87	7
	5	26	16	56	2	11	11	75	2	13	5	77	0
	7	2	9	89	2	6	10	81	3	23	6	69	2
	8	13	28	51	6	16	6	73	6	14	4	69	3
	9	34	13	47	1	6	16	80	0	30	26	45	0
	$\bar{x}$ (Interstate)		16	5	74	6	8	62	25	9	1	83	7
$\bar{x}$ (Primary)		13	9	76	3	13	9	72	6	20	11	60	9
$\bar{x}$ (Secondary)		21	13	64	2	10	11	76	3	22	7	69	2
$\bar{x}$ (Total)		16	10	71	3	11	9	72	6	19	7	68	6

Table 4

Proportions of Litter by Category (Item Count)  
Summarized by Highway System

Survey	System	Cans	Bottles	Paper/ Plastic	Auto/ Other
1976	Interstate	24	5	57	14
	Primary	30	9	56	5
	Secondary	39	11	49	1
	$\bar{X}$	31	8	54	7
Current (1)	Interstate	15	5	74	6
	Primary	13	8	76	3
	Secondary	21	13	64	2
	$\bar{X}$	16	9	71	4
Current (2)	Interstate	8	5	62	25
	Primary	13	9	72	6
	Secondary	10	11	76	3
	$\bar{X}$	10	8	70	12
Current (3)	Interstate	9	1	83	7
	Primary	20	11	60	9
	Secondary	22	7	69	2
	$\bar{X}$	17	6	71	6



## SUMMARY AND CONCLUSIONS

It is certainly evident that the rate of litter accumulation (expressed as items per day) for the 20 sites for which complete data were available for all litter series has consistently decreased across the series. This decrease has been consistent for all highway systems, and, in general terms, for all sites (there were a few sites that were exceptions). As yet the cause of this decrease is not known; i.e., it is not known if the decrease is due to program efforts or to seasonal or other factors. It should be pointed out that the three series conducted thus far were in different seasons - late fall 1978, early spring 1979, and early summer 1979. Future series will duplicate seasons and may help pinpoint seasonal influences if they exist. It did not appear that the major changes noted from pickup to pickup in the first series continued for the 2nd and 3rd series, nor that the method of survey made much difference in the results.

With respect to proportions of litter by category, the proportions were relatively consistent for the 3 series and indicated a greater proportion of paper and plastic items than was found in the 1976 survey. It is felt by the author that the greater proportion of paper and plastic items in the present study is a result of the length of the time periods chosen for the pickups, and that the proportion of paper and plastic of about 70% is more accurate than the 54% figure reported in 1976. Because of natural forces (wind, etc.) some paper items are probably lost over longer time periods and this results in proportions of less than 70% remaining on the roadsides.

Finally, it should be understood that the results reported herein pertain to the sites used, and it is not intended that they can or should be generalized to the entire interstate, primary and secondary systems.

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APPENDIX

DETAILED DATA BY ITEM COUNT, WEIGHT AND VOLUME

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Table A-1  
Litter Survey - 1st Series  
Interstate by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
1*	9-26	-	45		8		54		29		136	
	10-5	9	7		1		14		3		25	2.78
	10-18	13	1		1		14		0		16	1.23
	11-1	14	1		1		5		0		7	0.50
	Total (1-4)		54	29	11	6	87	47	32	18	184	
Total (2-4)	36	9	19		3	6	33	69	3	6	48	1.33
2*	10-19	-	17		19		157		1		194	
	11-2	14	17		12		57		0		86	6.14
	11-13	11	0		2		44		0		46	4.18
	Total (1-3)		34		33	10	258	79	1	0	326	
	Total (2-3)	25	17	13		14	11	101	76	0	0	132
3	9-26	-	59		6		66		2		113	
	10-5	9	6		7		29		4		46	5.11
	10-19	14	9		5		40		2		56	4.00
	11-2	14	4		1		14		0		19	1.36
	Total (1-4)		58	25	19	8	149	64	8	3	234	
Total (2-4)	37	19	16		13	11	83	68	6	5	121	3.27
5*	10-13	-	35		11		191		2		239	
	10-23	10	3		4		55		0		62	6.20
	10-31	8	1		2		18		0		21	2.62
	11-14	14	10		3		34		0		47	3.36
	Total (1-4)		49	13	20	5	298	81	2	1	369	
Total (2-4)	32	14	11		9	7	107	82	0	0	130	4.00
6	10-4	-	11		3				4		68	
	10-15	9	3		1				1		37	4.11
	10-23	10	1		0		11		1		13	1.30
	10-31	8	0		0		7		0		7	0.88
	Total (1-4)		15	12	4	3	100	80	6	5	125	
Total (2-4)	27	4	7		1	2	50	88	2	3	57	2.11
7	9-28	-	6		1		54		1		62	
	10-11	13	3		1		22		5		31	2.38
	10-26	15	7		0		25		2		34	2.27
	11-8	13	5		0		13		2		20	1.54
	Total (1-4)		21	14	2	1	114	78	10	7	147	
Total (2-4)	41	15	18		1	1	60	71	9	10	85	2.07
8	10-26	-	23		40		45		0		108	
	11-9	14	2		1		12		0		15	1.07
	11-17	8	0		2		14		0		16	2.00
	Total (1-3)		25	18	43	31	71	51	0	0	139	
	Total (2-3)	22	2	6		3	10	26	84	0	0	31

Table A-2

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## Litter Survey - 1st Series

## Primary by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
2*	9-22	-	32		12		43		6		93	-
	10-2	10	4		5		24		3		36	3.60
	10-10	3	2		0				3		32	4.00
	10-16	6	1		0				0		12	2.00
	Total (1-4)		39	22	17	10	105	61	12	7	173	
Total (2-4)	24	7	9	5	6	62	78	6	7	80	3.33	
3	9-22	-	61		29		43		9		142	-
	10-2	10	15		4		32		0		51	5.10
	10-10	3	3		3		28		1		40	5.00
	10-16	6	3		5		25		0		38	6.33
	Total (1-4)		92	34	41	15	128	47	10	4	271	
Total (2-4)	24	31	24	12	9	85	66	1	1	129	5.38	
4*	9-22	-	54		39		131		6		230	-
	10-2	10	6		5		44		2		57	5.70
	10-10	3	5		1		34		0		40	5.00
	10-16	6	3		2		21		0		26	4.33
	Total (1-4)		68	19	47	14	230	65	8	2	353	
Total (2-4)	24	14	11	3	7	99	80	2	2	123	5.12	
5	9-26	-	74		18		94		4		190	-
	10-5	9	7		2		39		3		51	5.67
	10-18	13	2		2		26		1		31	2.38
	11-1	14	8		0		13		0		21	1.50
	Total (1-4)		91	31	22	7	172	59	8	3	293	
Total (2-4)	36	17	16	4	4	78	76	4	4	103	2.86	
6	9-26	-	25		1		150		4		180	-
	10-5	9	9		8		47		0		64	7.11
	10-18	13	2		2		75		0		79	6.08
	11-1	14	6		6		29		0		41	2.93
	Total (1-4)		42	11	17	5	301	83	4	1	364	
Total (2-4)	36	17	9	16	9	151	82	0	0	184	5.11	
7*	10-18	-	17		15		111		0		143	-
	11-1	14	4		5		32		1		42	3.00
	11-15	14	0		3		19		1		23	1.64
	Total (1-3)		21	10	23	11	162	78	2	1	208	
	Total (2-3)	28	4	6	8	12	51	79	2	3	65	2.52
9	10-16	-	18		7		83		6		114	-
	11-1	14	3		3		12		3		21	1.50
	11-15	14	4		2		24		1		31	2.21
	Total (1-3)		25	15	12	7	119	72	10	6	166	
	Total (2-3)	28	7	13	5	10	36	69	4	2	52	1.86
10*	9-26	-	47	22	26	12	135	64	3	2	211	-
	10-5	9	8	22	5	13	21	57	3	3	37	4.11
	10-19	14	5		2		16		2		25	1.79
	11-2	13	6		4		14		0		24	1.85
	Total (1-4)		66	22	37	12	186	63	8	3	297	
Total (2-4)	36	19	22	11	13	51	59	5	6	86	2.39	
12*	10-6	-	26		3		61		9		99	-
	10-19	13	2		5		63		1		71	5.46
	11-3	15	3		1		14		0		18	1.20
	11-14	11	1		4		15		0		20	2.82
	Total (1-4)		32	15	13	6	153	74	10	5	208	
Total (2-4)	39	6	6	10	9	92	34	1	1	109	2.79	
13	10-4	-	15		6		77		6		104	-
	10-13	9	1		5		69		3		78	8.67
	10-23	10	2		1		10		1		14	1.40

1608

Table A-2 (cont.)

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
15	10-31	8	2		0		4		1		7	0.88
	Total (1-4)		20	10	12	6	160	79	11	5	203	
	Total (2-4)	27	5	5	6	6	83	84	5	5	99	3.67
	9-28	-	12		6		165		2		185	
	10-11	13	2		2		70		0		74	5.69
	10-26	15	20		27		48		0		95	6.33
	11-8	13	4		3		37		0		44	3.38
	Total (1-4)		38	10	38	10	820	80	2	0	398	
	Total (2-4)	41	26	12	32	15	155	75	0	0	213	5.20

Table A-3

## Litter Survey - 1st Series

1699

## Secondary by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
1	9-20	-	39		21		80		0		140	
	10-12	13	6		4		33		0		43	3.31
	10-27	15	1		2		18		0		21	1.40
	11-8	12	5		4		17		0		26	2.17
	Total (1-4)		51	22	31	14	148	64	0	0	230	
	Total (2-4)	40	12	13	10	11	68	76	0	0	90	2.25
2*	9-22	-	60		39		53		5		157	
	10-2	10	5		4		20		3		32	3.20
	10-10	8	2		3		20		1		26	2.25
	10-16	6	0		2		13		0		15	2.50
	Total (1-4)		67	29	48	21	106	46	9	4	230	
	Total (2-4)	24	7	10	9	12	53	73	4	5	73	3.00
3	10-2	-	121		56		157		1		335	
	10-10	8	17		5		34		1		57	7.12
	10-16	6	11		9		6		0		26	4.33
	10-30	14	7		2		15		0		24	1.71
	Total (1-4)		156	35	72	16	212	48	2	1	442	
	Total (2-4)	28	35	33	16	15	55	51	1	1	107	3.82
4*	9-26	-	14		2		131		2		149	
	10-5	9	26		1		44		2		73	3.11
	10-18	13	5		2		31		0		38	2.92
	11-1	14	4		1		7		0		12	1.17
	Total (1-4)		49	18	6	2	213	78	4	2	272	
	Total (2-4)	36	35	28	4	3	82	67	2	2	123	3.42
5	9-25	-	21		4		64		0		89	
	10-6	11	7		2		25		2		36	3.27
	10-20	14	19		8		37		1		65	4.64
	11-3	14	13		13		22		0		48	3.43
	Total (1-4)		60	25	27	12	148	62	3	1	258	
	Total (2-4)	39	39	26	23	16	84	56	3	2	149	3.82
7	10-4	-	7		5		71		2		85	
	10-13	9	0		0		27		1		28	3.11
	10-23	10	0		2		11		0		13	1.30
	10-31	8	1		2		11		0		14	1.75
	Total (1-4)		8	6	9	6	120	86	3	2	140	
	Total (2-4)	27	1	2	4	7	49	89	1	2	55	2.08
8*	10-4	-	22		20		27		0		69	
	10-18	9	4		8		13		2		27	3.00
	10-23	10	5		5		11		1		22	2.20
	10-31	8	2		1		5		0		8	1.00
	Total (1-4)		33	26	34	27	56	44	3	3	126	
	Total (2-4)	27	11	19	14	25	29	51	3	5	57	2.11
9*	9-27	-	37		24		35		0		96	
	10-5	8	16		7		16		0		39	4.88
	10-23	18	7		7		15		1		30	1.67
	11-2	10	4		0		6		0		10	1.00
	Total (1-4)		64	37	38	22	72	41	1	0	175	
	Total (2-4)	36	27	34	14	18	37	47	1	1	79	2.19
10	10-26	-	95		43		156		1		295	
	11-8	12	20		7		17		1		45	3.75
	11-16	8	10		1		24		0		35	4.38
	Total (1-3)		125	33	51	14	197	53	2	0	375	
	Total (2-3)	20	30	38	8	10	41	51	1	1	80	4.00

1610

Table A-4  
Litter Survey - 2nd Series  
Interstate by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
1*	2-28-79		5		9		40		4		58	
	3-14	14	0		0		14		4	0	14	1.0
	3-28	14	+3		+3		0		8	4	10	0.71
	4-12	15	+2		0		0		10	2	4	0.27
	Total (1-4)		10		12		54		10		86	
	Total (2-4)	43	5	18	3	11	14	50	6	21	28	0.65
2*	3-1		6		7		96		2		111	
	3-15	14	0		+3		+73		0		76	5.29
	3-29	14	+4		+8		+18		2		32	2.43
	4-20	22	+6		+1		0		0		7	0.31
	Total (1-4)		16		19		187		4		226	
	Total (2-4)	50	10	9	12	10	91	79	2	2	115	2.3
3	3-1		9		6		50		4		69	
	3-15	14	1				13		7		21	1.5
	3-29	14	1		2		17		5		25	1.78
	4-20	22	3		1		8		10		22	1.0
	Total (1-4)		13		9		88		26		136	
	Total (2-4)	50	4	6	3	4	38	57	22	33	67	1.34
6	3-7		5		11		40		4		60	
	3-21	14	2				19		1		22	1.57
	4-10	20	1				11		4		16	0.80
	4-25	15			1		33		2		36	2.4
	Total (1-4)		8		12		103		11		134	
	Total (2-4)	49	3	4	1	1	63	85	7	10	74	1.51
7	3-9		1		2		8		9		20	
	3-22	13			1		7		9		17	1.31
	4-5	14	1		1		6		5		13	0.93
	4-18	13					12		3		15	1.15
	Total (1-4)		2		4		33		26		65	
	Total (2-4)	40	1	2	2	4	25	56	17	33	45	1.13
8	3-9		1		6		7				14	
	3-22	13			3		31		1		35	2.69
	4-5	14					16				16	1.14
	4-18	13	1		6		12				19	1.46
	Total (1-4)		2		15		66				83	
	Total (2-4)	40	1	1	9	4	59	84	1	1	70	1.75



## Litter Survey - 2nd Series

1611

Primary by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
2*	2-5-79		9		6		42				57	
	3-6	28	4		0		0				4	0.14
	3-13	7	+2		+1		32		+3		38	5.43
	3-27	14	+3		+5		+3		0		11	0.79
	Total (1-4)		18		12		76		3		108	
	Total (2-4)	49	9	17		6	11	35	66	6	3	53
3	2-5		16		6		83		1		106	
	3-6	28	10		1		45				56	2.0
	3-13	7	1		5		30				36	5.14
	3-27	14	6		2		25				33	2.36
	Total (1-4)		33		14		183		1		281	
	Total (2-4)	49	17	14		8	6	100	80	0	0	125
4*	2-6		7		11		122		3		143	
	3-6	27	10		0		0		0		10	0.26
	3-13	7	0		0		38		0		38	5.13
	3-27	14	+2		+5		+32		+1		40	2.86
	Total (1-4)		17		12		202		3		231	
	Total (2-4)	48	12		5		70		1		88	1.83
5	2-28		5		8		19				32	
	3-14	14	1		4		47		2		54	3.86
	3-23	14	2		6		25		1		34	2.36
	4-12	15	4		3		21				28	1.87
	Total (1-4)		12		21		112		3		148	
	Total (2-4)	43	7		13		93		3		116	2.7
6	2-28		19		35		185		1		240	
	3-14	14	2		3		76				81	5.79
	3-28	14	2		5		25		2		34	2.43
	4-12	15	2		1		41		1		45	3.0
	Total (1-4)		25		44		327		4		400	
	Total (2-4)	43	6		9		142		3		160	3.72
10*	3-1		11		37		86		5		139	
	3-15	14	0		0		42		0		42	3.00
	3-29	14	+3		+5		0		0		8	0.57
	4-20	22	+3		+3		49		+5		70	3.18
	Total (1-4)		11		37		180		7		259	
	Total (2-4)	50	6		8		94		2		110	2.2
12*	3-1		10		4		93		3		110	
	3-15	14	4		6		3		6		19	1.36
	3-29	14	+8		0		0		+1		9	0.64
	4-20	22	0		0		0		0		0	0.00
	Total (1-4)		22		10		96		10		138	
	Total (2-4)	50	12		6		3		7		28	0.56
13	3-7		16		4		61		1		82	
	3-21	14	2		1		19		1		23	1.64
	4-10	20			1		22		1		24	1.2
	4-25	15	General Pickup previous				6		4		10	0.7
	Total (1-4)		18		6		108		7		139	
	Total (2-4)	49	2		2		47		6		57	1.16
15	3-8		10		11		171		1		193	
	3-22	14	3		2		82				87	6.21
	4-5	14	2		1		42		2		47	3.36
	4-18	13			6		30		1		37	2.85
	Total (1-4)		15		20		325		4		364	
	Total (2-4)	41	5		9		154		3		171	4.17

1612

Table A-5 (cont.)

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
7*	3-14		9		5		114		3		131	
	3-28	14	0		+1		41		0		42	3.0
	4-12	15	+6		+2		+4		0		12	0.8
	4-26	14	1						6		7	0.5
	Total (1-4)		16		8		159		9		192	
	Total (2-4)	43	7		3		45		6		61	1.42
9	3-14		9		5		115		9		138	
	3-28	14	4				36		1		41	2.93
	4-12	15	1				15		3		19	1.27
	4-27	15	2		1		16		9		28	1.37
	Total (1-4)		16		6		182		22		226	
	Total (2-4)	44	7		1		67		13		88	2.0

Table A-6

## Litter Survey - 2nd Series

1613

## Secondary by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
1	3-8-79		24		14		75		2		115	
	3-22	14	4		6		25				35	2.5
	4-5	14	2		1		24				27	2.0
	4-18	13	6		7		25		2		40	3.08
	Total (1-4)		36		28		149		4		217	
	Total (2-4)	40	12		14		74		2		102	2.55
2*	2-5		7		4		38		2		101	
	3-6	28	3		3		0		+1		7	0.3
	3-13	7	+1		0		69		0		70	9.43
	3-27	14	0		+2		0		+1		3	0.21
	Total (1-4)		11		9		157		4		181	
	Total (2-4)	49	4		5		69		2		80	1.37
3	2-6		11		4		51		1		67	
	3-6	27	12		10		39				61	2.26
	3-13	7	12		4		24				36	5.14
	3-27	14	8		14		34		1		57	4.07
	Total (1-4)		43		28		148		2		221	
	Total (2-4)	48	32		24		97		1		154	3.21
4*	2-28				3		66				69	
	3-14	14	+1		0		+19				20	1.43
	3-28	14	+1		+4		+16				21	1.5
	4-12	15	+2		0		+2		+3		7	0.47
	Total (1-4)		4		7		103		3		117	
	Total (2-4)	43	4		4		37		3		48	1.12
5	3-1		32		9		180		8		229	
	3-15	14	6		7		41		2		56	4.0
	3-29	14	6		4		25		1		36	2.57
	4-20	22	1		2		19				22	1.0
	Total (1-4)		45		22		265		11		343	
	Total (2-4)	50	13		13		85		3		114	2.28
7	3-7		6		2		44		2		54	
	3-21	14	1		3		15		1		20	1.43
	4-10	20	3		2		22				27	1.35
	4-25	15			1		13		1		15	1.0
	Total (1-4)		10		8		94		4		116	
	Total (2-4)	49	4		6		50		2		62	1.27
8*	3-7		11		19		45				75	
	3-21	14	5		1		8				14	1.0
	4-10	20	4		+1		0		+2		7	0.35
	4-25	15	0		+1		32		+1		34	2.27
	Total (1-4)		20		22		85		3		130	
	Total (2-4)	49	9		3		40		3		55	1.12
9*	3-7		10		9		27		0		46	
	3-21	14			1		5		0		6	0.43
	4-10	20	+1		0		+9		0		10	0.5
	4-25	15	0		+2		2		0		4	0.27
	Total (1-4)		11		12		43		0		66	
	Total (2-4)	49	1		3		16		0		20	0.41
10	3-9		23		19		52		1		95	
	3-23	14	1		4		24		1		30	2.14
	4-6	14	2				12		1		15	1.07
	4-19	13	3		1		22		1		27	2.08
	Total (1-4)		29		24		110		4		167	
	Total (2-4)	40	6		5		58		3		72	1.8

1614

Table A-7  
Litter Survey - 3rd Series  
Interstate by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
1*	5-31-79		6		1		28		11		47	
	6-14	14	0		0		0		0		0	
	6-28	14	0		0		3		0		3	0.21
	7-12	14	2		0		26		0		28	2.0
	Total (1-4)		8		1		57		11		78	
	Total (2-4)	42	2		0		29		0		31	0.74
2*	6-1		21		8		107		2		138	
	6-15	14	3		0		46		0		49	3.5
	6-29	14	0		+6		60		1		67	4.79
	7-13	14	2		8		20		1		31	2.21
	Total (1-4)		26		22		233		4		285	
	Total (2-4)	42	5		14		126		2		147	3.5
3	6-1		9				14		7		30	
	6-15	14					10		5		15	1.07
	6-29	14	2				4				6	0.42
	7-13	14	5				19		3		27	1.93
	Total (1-4)		16				47		15		78	
	Total (2-4)	42	7				33		8		48	1.14
5*	6-6		13		3		70		0		86	
	6-21	15	4		0		83	13	1		18	1.2
	7-25	35	0		1		137	54	1		56	1.6
	8-1	7	2		3		159	22	0		27	3.86
	Total (1-4)		19		7		159		2		187	
	Total (2-4)	57	6		4		89		2		101	1.77
6	6-6		3				25				28	
	6-21	15	1		1		9				11	0.73
	7-25	35	1				19				20	0.57
	8-1	7					3		1		4	0.57
	Total (1-4)		5		1		56		1		63	
	Total (2-4)	57	2		1		31		1		35	0.61
7	6-7		1		1		17		2		21	
	6-19	12	1				8		1		10	0.83
	7-17	28	2				17		2		21	0.75
	8-2	16					8		1		9	0.56
	Total (1-4)		4		1		50		6		61	
	Total (2-4)	56	3				33		4		40	0.71
8	6-7		2				3				5	
	6-19	12					2				2	0.17
	7-17	28	3		1		6				10	0.36
	8-3	17	1				7				8	0.47
	Total (1-4)		6		1		18				25	
	Total (2-4)	57	4		1		15				20	0.35

Table A-8  
Litter Survey - 3rd Series  
Primary by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
2*	5-30-79		17		7		58		3		85	
	6-13	14	0		0		0		3		3	0.21
	6-27	14	6		2		0		0		8	0.57
	7-11	14	5		1		23		3		32	2.29
	Total (1-4)		28		10		81		9		128	
	Total (2-4)	42	11		3		23		6		43	1.02
3	5-30		15		6		61				82	
	6-13	14	3		12		20				35	2.5
	6-27	14	2		4		24				30	2.14
	7-11	14	3		4		32				39	2.79
	Total (1-4)		23		26		137				186	
	Total (2-4)	42	8		20		76				104	2.48
4*	5-30		17		3		91		1		112	
	6-13	14	0		1		0		0		0	0.07
	6-27	14	0		0		0		1		1	0.07
	7-11	14	5		1		8		1		15	1.07
	Total (1-4)		22		5		99		3		128	
	Total (2-4)	42	5		2	2	8		2		17	0.38
5	5-31		14		11		41				66	
	6-14	14	10		8		32		1		51	3.64
	6-28	14	15		11		30				56	4.0
	7-12	14	7		6		47				60	4.29
	Total (1-4)		46		36		150		1		233	
	Total (2-4)	42	32		25		109		1		167	3.98
6	5-31		5		4		58		1		63	
	6-14	14	2		5		11				18	1.29
	6-28	14	3		3		19				22	1.57
	7-12	14	5		2		31				38	2.71
	Total (1-4)		15		11		119		1		146	
	Total (2-4)	42	10		7		61				78	1.86
7*	5-31		10				67		2		79	
	6-14	14	9		2		6		0		17	1.21
	6-28	14	0		3		17		0		20	1.43
	7-12	14	4		4		64		3		75	5.36
	Total (1-4)		23		9		154		5		191	
	Total (2-4)	42	13		9		87		3		112	2.67
9	5-31						32				32	
	6-14	14	3		1		20		3		27	1.93
	6-28	14	1		4		19				24	1.71
	7-26	14	5		1		19		2		27	1.93
	Total (1-4)		9		6		90		5		110	
	Total (2-4)	42	9		6		58		5		78	1.36
10*	6-1		1		1		41		1		44	
	6-15	14	2		0		6		1		9	0.64
	6-29	14	3		3		2		2		10	0.71
	7-13	14	1		0		0		0		1	0.07
	Total (1-4)		7		4		49		4		64	
	Total (2-4)	42	6		3		8		3		20	0.48
12*	6-1		7		4		50		0		61	
	6-15	14	3		0		0		4		7	0.50
	6-29	14	+1		+1		0		0		2	0.14
	7-13	14	2		0		8		2		12	0.36
	Total (1-4)		13		5		58		6		82	
	Total (2-4)	42	6		1		8		6		21	0.50

1616

Table A-8 (cont.)

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
13	6-6		2				15		6		23	
	6-21	15			1		21		1		23	1.53
	7-25	35	5				32				37	1.06
	8-1	7	1				17				18	2.57
	Total (1-4)		8		1		85		7		101	
	Total (2-4)	57	6		1		70		1		78	1.37
15	6-7		3				44				47	
	6-19	12	3		3		12		1		19	1.58
	8-2	17	2		6		21				29	1.71
	Total (1-3)		8		9		77		1		95	
	Total (2-3)	29	5		9		33		1		48	1.66

Table A-9

3rd Series

1617

## Secondary by Item Count

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Items/ Day
			No.	%	No.	%	No.	%	No.	%		
1	6-7-79		22		2		26		1		51	
	6-19	12	5				13				18	1.5
	7-17	28	9		1		32				42	1.5
	8-2	16	6				20				26	1.63
	Total (1-4)		42		3		91		1		137	
	Total (2-4)	56	20		1		65				86	1.54
2*	5-30		7		3		61		1		72	
	6-13	14	0		+1		11		0		12	0.86
	6-27	14	0		0		3		0		3	0.21
	7-11	14	5		0		9		0		14	1.0
	Total (1-4)		12		4		84		1		100	
	Total (2-4)	42	5		1		23		0		29	0.69
3	5-30		7				31				38	
	6-13	14	6				5				11	0.79
	6-27	14	19		4		21				44	3.14
	7-11	14	17		3		17				37	2.6
	Total (1-4)		49		7		74				130	
	Total (2-4)	42	42		7		43				92	2.2
4*	5-31		7		4		78			0	89	
	6-14	14	+1		+1		14			0	16	1.14
	6-28	14	0		+1		31		1	+1	33	2.36
	7-12	14	0		0		0		3		3	0.21
	Total (1-4)		8		6		123		4		141	
	Total (2-4)	42	1		2		45		4		52	1.24
5	6-1		+		+		+				200+	
	6-15	14	5		2		24				31	2.21
	6-29	14	6				18				24	1.71
	7-13	14	4		2		24				30	2.14
	Total (1-4)		15+		4+		66+				285+	
	Total (2-4)	42	15		4		66				85	2.02
7	6-6		2		3		10		2		17	
	6-21	15	5				9		1		15	1.0
	7-25	35	5		1		17				23	0.66
	8-1	7	1		2		7				10	1.43
	Total (1-4)		13		6		43		3		65	
	Total (2-4)	57	11		3		33		1		48	0.84
8*	6-6		9		6		34			0	49	
	6-21	15	1		0		4			0	5	0.33
	7-25	35	2		4		16			0	22	0.63
	8-1	7	1		0		0			1	2	0.28
	Total (1-4)		13		10		54		1		78	
	Total (2-4)	57	4		4		20		1		29	0.51
9*	6-6		2		1		16			0	19	
	6-21	15	1		1		0			0	2	0.13
	7-25	35	5		2		7			0	14	0.40
	8-1	7	0		2		2			0	4	0.57
	Total (1-4)		8		6		25		0		39	
	Total (2-4)	57	6		5		9		0		20	0.35
10	6-8		2		8		10		1		21	
	6-20	12	5		2		6				13	1.08
	7-18	28	17		4		30		1		52	1.86
	8-3	16	8		11		21				40	2.5
	Total (1-4)		32		25		67		2		126	
	Total (2-4)	56	30		17		57		1		105	1.88

1618

Table A-10

## Litter Survey - 1st Series

## Interstate by Weight

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
1*	9-26-78		4.4		4.5		1.0		7.6		17.5	
	10-5	9	.6		.5		.9		1.2		3.2	0.36
	10-18	13	.1		.5		.1				.7	0.05
	11-1	14	.1		1.0		.1				1.2	0.08
	Total (1-4)		5.2		6.5		2.1		8.8		22.6	
	Total (2-4)	36	.8		2.0		1.1		1.2		5.1	0.14
2*	10-19		1.3		10.1		3.3		.3		15.0	
	11-2	14	1.3		5.9		.7				7.9	0.56
	11-13	11			1.4		1.3				2.7	0.19
	Total (1-3)		2.6		17.4		5.3		.3		25.6	
	Total (2-3)	25	1.3		7.3		2.0				10.6	0.42
3	9-26		2.9		3.2		1.0		4.4		11.5	
	10-5	11	.4		3.3		.6		10.0		14.3	1.30
	10-19	14	.5		1.9		2.2		20.0		24.6	1.76
	11-2	14	.3		.5		.4				1.3	0.09
	Total (1-4)		4.1		8.9		4.2		34.4		40.1	1.03
	Total (2-4)	39	1.2		5.7		3.2		30.0		40.1	1.03
5*	10-13		3.5		5.9		4.6		12.0		26.0	
	10-23	10	.3		2.2		.9				3.4	0.34
	10-31	8	.1		.9		1.2				2.2	0.28
	11-14	14	1.0		1.4		3.3				5.7	0.41
	Total (1-4)		4.9		10.4		10.0		12.0		37.3	
	Total (2-4)	32	1.4		4.5		5.4				11.3	0.35
6	10-4		1.4		1.4		3.1		.8		6.7	
	10-13	9	.2		.5		.9		.1		1.7	0.19
	10-23	10	.1				.2		.3		.6	0.06
	10-31	8					.1				.1	0.01
	Total (1-4)		1.7		1.9		4.3		1.2		9.1	
	Total (2-4)	27	.3		.5		1.2		.4		2.4	0.09
7	9-28		.6		.5		2.6		5.0		8.7	
	10-11	13	.2		.5		.2		4.3		5.2	0.40
	10-26	15	.7				.1		1.0		1.8	0.12
	11-8	13	.4				.8		.8		2.0	0.15
	Total (1-4)		1.9		1.0		3.7		11.1		17.7	
	Total (2-4)	41	1.3		.5		1.1		6.1		9.0	0.22
8	10-26		2.0		18.3		1.1				21.4	
	11-9	14	.2		.5		.8				1.5	0.11
	11-17	8	.9				1.4				2.3	0.29
	Total (1-3)		3.1		18.8		3.3				25.2	
	Total (2-3)	22	1.1		.5		2.2				3.8	0.17



Table A-11

## Litter Survey - 1st Series

Primary by Weight

1619

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
2*	9-22-78		2.6		5.5		1.5		1.4		11.0	
	10-2	10	.5		2.8		.4		.2		3.9	0.39
	10-10	8	.2				.2		.5		.9	0.11
	10-15	6	.1				.4				.5	0.08
	Total (1-4)		3.4		8.3		2.5		2.1		16.3	
	Total (2-4)	24	.8		2.8		1.0		.7		5.3	0.22
3	9-22		5.5		13.9		3.7		5.0		28.1	
	10-2	10	1.2		.4		.8				2.4	0.24
	10-10	8	.7		1.4		.7		.1		2.9	0.36
	10-16	6	.8		2.7		1.0				4.5	0.75
	Total (1-4)		8.2		18.4		6.2		5.1		37.9	
	Total (2-4)	24	2.7		4.5		2.5		.1		9.8	0.41
4*	9-22		3.9		20.0		2.7		1.1		27.7	
	10-2	10	.2		2.7		.9		.8		4.6	0.46
	10-10	8	.5		.5		.5				1.5	0.19
	10-16	6	.2		.9		1.0				2.1	0.35
	Total (1-4)											
	Total (2-4)	24										
5	9-26		6.1		8.8		4.8		.4		20.1	
	10-5	10	.5		1.3		.9		1.0		3.7	0.37
	10-18	12	.1		.9		2.3		.8		4.1	0.34
	11-1	14	.7				.9				1.6	0.11
	Total (1-4)											
	Total (2-4)	36										
6	9-26		2.3		.1		2.3		.3		5.0	
	10-5	10	1.1		3.7		.6				5.4	0.54
	10-18	12	.1		.9		1.8				2.8	0.23
	11-1	14	.5		2.8		.2				3.5	0.25
	Total (1-4)		4.0		7.5		4.9		.3		16.7	
	Total (2-4)	36	1.7		7.4		2.6				11.7	0.33
7*	10-18		1.5		8.7		3.3				13.5	
	11-1	14	.4		2.7		.5				3.6	0.26
	11-15	14			1.4		1.4		.8		3.6	0.26
	Total (1-3)		1.9		12.8		5.2		.8		20.7	
	Total (2-3)	28	.4		4.1		1.9		.8		7.2	0.26
9	10-18		1.3		3.3		2.4		1.3		3.3	
	11-1	14	.2		1.3		3.4		1.3		6.2	0.44
	11-15	14	.2		.9		.5		.1		1.7	0.12
	Total (1-3)		1.7		5.5		6.3		2.7		16.2	
	Total (2-3)	28	.4		2.2		3.9		1.4		7.9	0.28
10*	9-26		3.6		12.0		4.5		.3		20.4	
	10-5	10	.5		2.3		.3		.1		3.7	0.37
	10-19	14	.4		.9		.6		1.1		3.0	0.21
	11-2	14	.6		1.9		.4				2.9	0.21
	Total (1-4)		5.1		17.1		5.8		1.5		29.5	
	Total (2-4)	38	1.5		5.1		1.3		1.2		9.1	0.24
12*	10-6		2.0		1.4		2.2		10.0		15.6	
	10-19	13	.1		2.3		1.5		.3		4.7	0.36
	11-3	15	.3				1.8				2.1	0.14
	11-14	11	.1		1.7		1.1				2.9	0.26
	Total (1-4)		2.5		5.4		6.6		10.8		25.3	
	Total (2-4)	39	.5		4.0		4.4		.3		9.7	0.25

1620

Table A-11 (cont.)

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
13	10-4		1.1		3.4		3.3		22.0		29.8	
	10-13	9	.1		3.3		1.5		.4		5.3	0.59
	10-23	10	.1		.5		1.0		10.0		11.6	1.16
	10-31	8	.2				.1		3.0		3.3	0.41
	Total (1-4)		1.5		7.2		5.9		35.4		50.0	
	Total (2-4)	27	.4		3.8		2.6		13.4		20.2	0.75
15	9-28		5.5		.6		2.4		1.1		9.6	
	10-11	13	.2		.9		.4				1.5	0.12
	10-26	15	1.7		12.4		.3				14.4	0.96
	11-8	13	.4		.9		.7				2.0	0.15
	Total (1-4)		7.8		14.8		3.8		1.1		27.5	
	Total (2-4)	41	2.3		14.2		1.4				17.9	0.44

Table A-12

## Litter Survey - 1st Series

1621

## Secondary by Weight

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
1	9-29-78		2.8		11.4		9.1				23.3	
	10-12	13	.5		1.9		.7				3.1	0.24
	10-27	15	.1		.9		.8				1.8	0.12
	11-8	12	.4		1.9		.8				3.1	0.26
	Total (1-4)		3.8		16.1		11.4				31.3	
	Total (2-4)	40	1.0		4.7		2.3				8.0	0.20
2*	9-22		5.0		18.9		4.7		.8		29.4	
	10-2	10	.5		2.3		.4		.9		4.1	0.41
	10-10	8	.1		1.8		.3		.3		2.5	0.31
	10-16	6			.9		.4				1.3	0.21
	Total (1-4)		5.6		23.9		5.8		2.0		37.3	
	Total (2-4)	24	.6		5.0		1.1		1.2		7.9	0.33
3	10-2		10.6		26.8		4.3		.4		42.1	
	10-10	8	1.7		2.3		.8		.3		5.1	0.64
	10-6	6	.8		4.2						5.0	0.83
	10-30	14	.6		.9		.8				2.3	0.16
	Total (1-4)		13.7		34.2		5.9		.7		54.5	
	Total (2-4)	28	3.1		7.4		1.6		.3		12.4	0.44
4*	9-26		1.3		1.3		3.8		1.7		8.1	
	10-5	9	2.2		.5		.9		.2		3.8	0.42
	10-18	13	.4		.9		.2				1.5	0.12
	11-1	14	.4		.9		.5				1.8	0.13
	Total (1-4)		4.3		3.6		5.4		1.9		15.2	
	Total (2-4)	36	3.0		2.3		1.6		.2		7.1	0.20
5	9-25		1.4		1.8		2.7				5.9	
	10-6	11	.7		.9		1.0		.5		3.1	0.28
	10-20	14	1.6		3.7		3.2		.2		8.7	0.62
	11-3	14	.8		6.0		1.3				8.1	0.59
	Total (1-4)		4.5		12.4		8.2		.7		25.8	
	Total (2-4)	39	3.1		10.6		5.5		.7		19.9	0.51
7	10-4		.6		2.3		1.3		.1		4.3	
	10-13	11					.3		.1		.4	0.04
	10-23	10			.9		.5				1.4	0.14
	10-31	8	.1				.8				.9	0.11
	Total (1-4)		.7		3.2		2.9		.2		7.0	
	Total (2-4)	29	.1		.9		1.6		.1		2.7	0.09
8*	10-4		1.6		10.5		1.3				13.4	
	10-13	11	.3		4.1		.1		.4		4.9	0.45
	10-23	10	.3		3.4		.7		.2		4.6	0.46
	10-31	8	.1		.5		.1				.7	0.09
	Total (1-4)		2.3		18.5		2.2		.6		23.6	
	Total (2-4)	29	.7		8.0		.9		.6		10.2	0.35
9*	9-27		2.9		13.1		1.6				17.6	
	10-5	8	1.3		3.3		.4				5.0	0.63
	10-23	18	.5		3.3		.6		1.5		5.9	0.33
	11-2	10	.3				.3				.6	0.06
	Total (1-4)		5.0		19.7		2.9		1.5		29.1	
	Total (2-4)	36	2.1		6.6		1.3		1.5		11.5	0.32
10	10-26		8.8		22.5		2.8		.4		34.5	
	11-8	13	1.7		3.2		1.3		1.2		7.4	0.57
	11-16	8	.8		.5		1.6				2.9	0.36
	Total (1-3)		11.3		26.2		5.7		1.6		44.8	
	Total (2-3)	21	2.5		3.7		2.9		1.2		10.3	0.49

1622

Table A-13

## Litter Survey - 2nd Series

## Interstate by Weight\*

\* in Pounds

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
1												
2												
3	3-1-79		.7		3.0		1.2		1.0		5.9	
	3-15	14	.2				.5		2.5		3.2	0.23
	3-29	14	.1		.9		.3		.4		1.7	0.12
	4-20	22	.4		1.1		.1		1.0		2.6	0.12
	Total (1-4)		1.4		5.0		2.1		4.9		13.4	
Total (2-4)	50	.7		2.0		.9		3.9		7.5	0.15	
5												
6	3-7		.4		5.1		N/A		3.5		N/A	
	3-21	14	.1				.7		.2		1.0	0.07
	4-10	20	.1				1.6		.5		2.2	0.11
	4-25	15			.5		1.6		.3		2.4	0.16
	Total (1-4)		.6		5.6				4.5			
Total (2-4)	49	.2		.5		3.9		1.0		5.6	0.11	
7	3-9		.1		.9		.3		3.2		4.5	
	3-22	13			.5		.1		1.8		2.4	0.18
	4-5	14	.2		.5		.1		.6		1.4	0.1
	4-18	13					.1		.2		.3	0.02
	Total (1-4)		.3		1.9		.6		5.8		8.6	
Total (2-4)	40	.2		1.0		.3		2.6		4.1	0.1	
8	3-9		.1		2.8		.2				3.1	
	3-22	13			1.4		.2		.2		1.8	0.14
	4-5	14					.1				.1	0.01
	4-20	13	.1		2.7		.1				2.9	0.22
	Total (1-4)		.2		6.9		.6		.2		7.9	
Total (2-4)	40	.1		4.1		.4		.2		4.8	0.12	

Table A-14

## Litter Survey - 2nd Series

1623

Primary by Weight\*

\*in Pounds

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
2												
	2-5-79		1.2		2.6		2.2		.5		6.5	
	3-6	28	.8		.5		.9				2.2	0.08
3	3-13	7	.1		3.1		.9				4.1	0.59
	3-27	14	.5		1.7		.9				3.1	0.22
	Total (1-4)		2.6		7.9		4.9		.5		15.9	
	Total (2-4)	49	1.4		5.3		2.7		.0		9.4	0.19
4												
	2-28		.5		4.5		1.3				6.3	
	3-14	14	.1		1.9		1.3		.5		3.8	0.27
5	3-28	14	.1		4.0		.3		.5		4.9	0.35
	4-12	15	.4		1.4		.3				2.1	0.21
	Total (1-4)		1.1		11.8		3.2		1.0		17.1	
	Total (2-4)	43	.6		7.3		1.9		1.0		10.8	
	2-28		1.6		3.8		5.9		.2		11.5	
	3-14	14	.1		1.8		.8				2.7	0.19
6	3-28	14	.2		2.3		.4		.3		3.2	0.23
	4-12	15	.2		.5		.3		.1		1.1	0.07
	Total (1-4)		2.1		8.4		7.4		.6		18.5	
	Total (2-4)	43	.5		4.6		1.5		.4		7.0	0.16
10												
	3-7		1.0		2.3		13.0		.2		16.5	
	3-21	14	.2		.5		.1				.8	0.06
13	4-10	20			1.0		.3		.3		1.6	0.08
	4-25	15					.1		.3		.4	0.03
	Total (1-4)		1.2		3.8		13.5		.8		19.3	
	Total (2-4)	49	.2		1.5		.5		.6		2.8	0.06
	3-8		.7		5.0		N/A		.3		N/A	
	3-21	14	.2		.9		.2				1.3	0.09
15	4-5	14	.1		.5		.3		.5		1.4	0.1
	4-18	13			2.8		.2		.1		3.1	0.24
	Total (1-4)		1.0		9.2		.7		.9			
	Total (2-4)	40	.3		4.2		.7		.6		5.8	0.145

1624

Table A-14 (cont.)

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
7												
	3-14		.7		2.7		1.3		1.3		6.0	
	3-28	14	.4				.3		.1		.8	0.06
9	4-12	15	.1				.1		3.1		3.2	0.22
	4-27	15	.2		.5		.1		2.1		2.9	0.19
	Total (1-4)		1.4		3.2		1.8		6.6		13.0	
	Total (2-4)	44	.7		.5		.5		5.3		7.0	0.16

Table A-15

## Litter Survey - 2nd Series

1625

## Secondary by Weight\*

\*in Pounds

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
1	3-8-79		1.8		7.0		4.9		4.0		17.7	
	3-22	14	.4		3.2		.6				4.2	0.3
	4-5	14	.2		.5		3.2				3.9	0.28
	4-18	13	.4		3.3		4.0				9.9	0.76
	Total (1-4)		2.8		14.0		12.7		6.2		35.7	
	Total (2-4)	40	1.0		7.0		7.8		2.2		18.0	0.45
2												
3	2-6		.9		2.3		N/A		.3		N/A	
	3-6	27	1.1		5.9		1.0				8.0	0.30
	3-13	7	.8		1.9		1.3				4.0	0.57
	3-27	14	.7		6.5		.8		.3		8.3	0.59
	Total (1-4)		3.5		16.6				.6			
	Total (2-4)	48	2.6		14.3		3.1		.3		20.3	0.42
4												
5	3-1		2.9		5.4		3.0		1.8		13.1	
	3-15	14	.5		3.3		1.8		.3		5.9	0.42
	3-29	14	.6		2.2		1.5		.1		4.4	0.31
	4-20	22	.1		1.3		.1				1.5	0.07
	Total (1-4)		4.1		12.2		6.4		2.2		24.9	
	Total (2-4)	50	1.2		6.8		3.4		.4		11.3	0.236
7	3-7		.7		.6		1.5		.8		3.6	
	3-21	14	.1		1.4		.2		1.5		3.2	0.23
	4-10	20	.2		1.4		.4				2.0	0.10
	4-25	15			1.0		.1		.1		1.2	0.08
	Total (1-4)		1.0		4.4		2.2		2.4		10.0	
	Total (2-4)	49	.3		3.8		.7		1.6		6.4	0.13
8												
9												
10	3-9		1.9		10.3		1.5		.3		14.0	
	3-23	14	.1		1.8		.8		.2		3.5	0.25
	4-6	14	.2				.1		.1		.4	0.03
	4-19	13	.2		.5		.4		.1		1.2	0.09
	Total (1-4)		2.4		12.6		2.8		.7		19.1	
	Total (2-4)	40	.5		2.3		1.3		.4		5.1	0.128

Table A-16

## Litter Survey - 3rd Series

## Interstate by Weight

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
3	6-1-79		.7				.5		12.0		13.2	
	6-15	14					.4		2.3		2.7	0.19
	6-29	14	.2				1.1				2.3	0.16
	7-13	14	.4				.4		1.3		2.1	0.15
	Total (1-4)		1.3				2.4		15.6		19.3	
	Total (2-4)	42	.6				1.9		3.6		6.1	0.15
6	6-6		.2				.8				1.0	
	6-21	15	.1		.5		.1				.7	0.05
	7-25	35	.1				.2				.3	0.01
	8-1	7					.1		.2		.3	0.04
	Total (1-4)		.4		.5		1.2		.2		2.3	
	Total (2-4)	57	.2		.5		.4		.2		1.3	0.02
7	6-7		.1		.5		.3		5.0		5.9	
	6-19	12	.1				.7		.5		1.3	0.11
	7-17	28	.2				.3		1.7		2.2	0.08
	8-2	16					.5		1.5		2.0	0.13
	Total (1-4)		.4		.5		1.8		8.7		11.4	
	Total (2-4)	56	.3				1.5		3.7		5.5	0.10
8	6-7		.2				.1				.3	
	6-19	12					.3				.3	0.03
	7-17	28	.3		.5		.3				1.1	0.04
	8-3	17	.1				.2				.3	0.02
	Total (1-4)		.6		.5		.9				2.0	
	Total (2-4)	57	.4		.5		.8				1.7	0.03



1627

Table A-17

Litter Survey - 3rd Series

Primary by Weight

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
3	5-30-79		1.3		3.2		.7				5.2	
	6-13	14	.2		6.1		.8				7.1	0.51
	6-27	14	.2		2.2		.8				3.2	0.23
	7-11	14	.2		1.8		.6				2.6	0.18
	Total (1-4)		1.9		13.3		2.9				18.1	
	Total (2-4)	42	.6		10.1		2.2				12.9	0.31
5	5-31		1.3		10.1		.9				12.3	
	6-14	14	.7		4.4		.7		1.0		6.8	0.49
	6-28	14	1.3		6.3		12.0				19.6	1.40
	7-12	14	.6		2.8		1.1				4.5	0.32
	Total (1-4)		3.9		23.6		14.7		1.0		43.2	
	Total (2-4)	42	2.6		13.5		13.8		1.0		30.9	0.74
6	5-31		.4		2.3		1.1		.2		4.0	
	6-14	14	.2		2.4		.2				2.8	0.20
	6-28	14	.2				.3				.5	0.04
	7-12	14	.4		1.5		.5				2.4	0.17
	Total (1-4)		1.2		6.2		2.1		.2		9.7	
	Total (2-4)	42	.8		3.9		1.0				5.7	0.14
9	5-31						1.7				1.7	
	6-14	14	.2		.5		.5		6.5		7.7	0.55
	6-28	14	.1		2.3		.3				2.7	0.19
	7-26	14	.4		.5		.3		.8		2.0	0.14
	Total (1-4)		.7		3.3		2.8		7.3		14.1	
	Total (2-4)	42	.7		3.3		1.1		7.3		12.4	0.30
13	6-6		.1				.3		15.5		15.9	
	6-21	15			1.0		.9		.2		2.1	0.14
	7-25	35	.4				.5				.9	0.02
	8-1	7	.1				.4				.5	0.07
	Total (1-4)		.6		1.0		2.1		15.7		19.4	
	Total (2-4)	57	.5		1.0		1.8		.2		3.5	0.06
15	6-7		.2				.3				.5	
	6-19	12	.2		1.4		.2		.6		2.4	0.20
	8-2	17	.1		3.3		.5				3.9	0.26
	Total (1-4)		.5		4.7		1.0		.6		6.8	
	Total (2-4)	29	.3		4.7		.7		.6		6.3	0.22

1628

Table A-18

## Litter Survey - 3rd Series

## Secondary by Weight

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Pounds/ Day
			No.	%	No.	%	No.	%	No.	%		
1	6-7-79		1.7		.9		1.3		1.0		4.9	
	6-19	12	.4				.5				.9	0.08
	7-17	28	1.0		.5		.8				2.3	0.08
	8-2	16	.5				.3				.8	0.05
	Total (1-4)		3.6		1.4		2.9		1.0		8.9	
	Total (2-4)	56	1.9		.5		1.6				4.0	0.07
3	5-30		.6				1.0				1.6	
	6-13	14	.4				.5				.9	0.06
	6-27	14	1.6		1.8		.4				3.8	0.27
	7-11	14	1.3		1.4		.6				3.3	0.24
	Total (1-4)		3.9		3.2		2.5				9.6	
	Total (2-4)	42	3.3		3.2		1.5				8.0	0.19
5	6-1		WET & CONTAMINATED								60.0+	
	6-15	14	.4		.9		.3				1.6	0.11
	6-29	14	.5				.3				.8	0.06
	7-13	14	.4		.9		1.0				2.3	0.16
	Total (1-4)										64.7+	
	Total (2-4)	42	1.3		1.8		1.6				4.7	0.11
7	6-6		.1		1.4		.2		.7		2.4	
	6-21	15	.3				.6		.1		1.0	0.07
	7-25	35	.3		.5		.2				1.0	0.03
	8-1	7	.1		.9		.3				1.3	0.19
	Total (1-4)		.8		2.8		1.3		.8		5.7	
	Total (2-4)	57	.7		1.4		1.1		.1		3.3	0.06
10	6-8		.2		5.0		.1		.1		5.4	
	6-20	12	.4		1.5		.2				2.1	0.18
	7-18	28	1.3		1.8		.8		.2		4.1	0.15
	8-3	16	.5		5.7		.7				6.9	0.43
	Total (1-4)		2.4		14.0		1.8		.3		18.5	
	Total (2-4)	56	2.2		9.0		1.7		.2		13.1	0.23

Table A-19  
Litter Survey - 1st Series  
Interstate by Volume

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Volume/ Day
			No.	%	No.	%	No.	%	No.	%		
1*	9-26-78		1.1		.3		.7		.5		2.6	
	10-5	9	.2				.6		.2		1.0	0.11
	10-13	13					.1				.1	0.01
	11-1	14					.1				.1	0.01
	Total (1-4)		1.3		.3		1.5		.7		3.8	
	Total (2-4)	36	.2				.8		.2		1.2	0.03
2*	10-19		.4		.6		2.3				3.3	
	11-2	14	.4		.4		.5				1.3	0.09
	11-13	11			.1		.9				1.0	0.09
	Total (1-3)		.8		1.1		3.7				5.6	
	Total (2-3)	25	.4		.5		1.4				2.3	0.09
3	9-26		1.0		.2		.7		.3		2.2	
	10-5	11	.2		.2		.4		.7		1.5	0.14
	10-19	14	.2		.1		1.6		1.4		3.3	0.24
	11-2	14	.1				.3				.4	0.03
	Total (1-4)		1.4		.5		3.0		2.5		6.4	
	Total (2-4)	39	.4		.3		2.3		2.1		4.2	0.11
5*	10-13		.9		.3		3.3		1.9		6.4	
	10-23	10	.1		.1		.6				.8	0.08
	10-31	8			.1		.9				1.0	0.13
	11-14	14	.3		.3		2.4				3.0	0.21
	Total (1-4)		1.3		.8		7.2		1.9		11.2	
	Total (2-4)	32	.4		.5		3.9				4.8	0.15
6	10-4		.3		.3		2.2		.1		2.9	
	10-13	9	.1				.6				.7	0.08
	10-23	10					.1				.1	0.01
	10-31	8					.1				.1	0.01
	Total (1-4)		.4		.3		3.0		.1		3.8	
	Total (2-4)	27	.1				.8				.9	0.03
7	9-28		.1				1.8		.4		2.3	
	10-11	13	.1				.1		.3		.5	0.04
	10-26	15	.1				.1		.1		.3	0.02
	10-8	13	.1				.5		.1		.7	0.05
	Total (1-4)		.4				2.5		.9		3.8	
	Total (2-4)	41	.3				.7		.5		1.5	0.04
8	10-26		.6		1.2		.8				2.6	
	11-9	14	.1				.5				.6	0.04
	11-17	8			.1		1.0				1.1	0.14
	Total (1-3)		.7		1.3		2.3				4.3	
	Total (2-3)	22	.7		.1		1.5				1.7	0.07

1630

Table A-20

## Litter Survey - 1st Series

## Primary by Volume

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Volume/ Day	
			No.	%	No.	%	No.	%	No.	%			
2*	9-22-78		.8		.4		1.0		.2		2.4		
	10-2	10	.1		.2		.3				.6	0.06	
	10-10	8	.1				.2		.1		.4	0.05	
	10-16	6					.3				.3	0.05	
	Total (1-4)												
	Total (2-4)	24	.2		.2		.8		.1		1.3	0.05	
3	9-22		1.5		.8		2.6		.5		5.4		
	10-2	10	.4		.1		.6				1.1	0.11	
	10-10	8	.2		.1		.5				.8	0.10	
	10-16	6	.2		.2		.7				1.1	0.18	
	Total (1-4)		2.3		1.2		4.4		.5		8.4		
	Total (2-4)	24	.8		.4		1.8				3.0	0.13	
4*	9-22		1.4		1.2		1.9		.1		4.6		
	10-2	10	.2		.2		.6		.1		1.1	0.11	
	10-10	8	.1				.3				.4	0.05	
	10-16	6	.1		.1		.7				.9	0.15	
	Total (1-4)		1.8		1.5		3.5		.2		7.0		
	Total (2-4)	24	.4		.3		1.6		.1		2.4	0.10	
5	9-26		1.8		.5		3.4		.1		5.8		
	10-6	10	.2		.1		.6		.1		1.0	0.10	
	10-18	12	.1		.1		1.7		.1		2.0	0.17	
	11-1	14	.2				.6				.8	0.06	
	Total (1-4)												
	Total (2-4)												
6	9-26		.6				1.6				2.2		
	10-5	10	.4		.2		.4				1.0	0.10	
	10-18	12	.1		.1		1.2				1.4	0.12	
	11-1	14	.2		.2		.2				.6	0.04	
	Total (1-4)		1.3		.5		3.4				5.2		
	Total (2-4)	36	.7		.5		1.8				3.0		
7*	10-18		.4		.5		2.4				3.3		
	11-1	14	.1		1.6		.3				2.0	0.14	
	11-15	14			.1		1.0		.1		1.2		
	Total (1-3)												
	Total (2-3)												
9	10-18		.5		.2		1.7		.2		2.6		
	11-1	14	.1		.1		2.4		.1		2.7	0.19	
	11-15	14	.1		.1		.3		.1		.6	0.04	
	Total (1-3)		.7		.4		4.4		.4		5.9		
	Total (2-3)	28	.2		.2		2.7		.2		3.3	0.12	
10*	9-26		1.2		.7		3.4		1.4		6.7		
	10-5	10	.2		.1		.2				.5	0.05	
	10-19	14	.1		.1		.4		.1		.7	0.05	
	11-2	14	.2		.1		.3				.6	0.04	
	Total (1-4)		1.7		1.0		4.3		1.5		8.5		
	Total (2-4)	38	.5		.3		.9		.1		1.8	0.05	
12*	10-6		.7		.1		1.6		1.3		3.7		
	10-19	13	.1		.1		1.1		.1		1.4	0.11	
	11-3	15	.1				1.3				1.4	0.09	
	11-14	11			.1		.7				.8	0.07	
	Total (1-4)		.9		.3		4.7		1.4		7.3		
	Total (2-4)	39	.2		.2		3.1		.1		3.6	0.09	

Table A-20 (cont.)

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Volume/ Day
			No.	%	No.	%	No.	%	No.	%		
13	10-4		.4		1.8		2.4		1.2		5.8	
	10-13	9			.1		1.1		.3		1.5	0.17
	10-23	10	.1				.7		.7		1.5	0.15
	10-31	8	.1				.1		.2		.4	0.05
	Total (1-4)											
	Total (2-4)	27										
15	9-28		.3		.2		1.7		.1		2.3	
	10-11	13	.1		.1		.3				.5	0.04
	10-26	15	.5		.8		.2				1.5	0.10
	11-8	13	.1		.1		.5				.7	0.05
	Total (1-4)			1.0		1.2		2.7		.1		5.0
	Total (2-4)	41	.7		1.0		1.0				2.7	0.07

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Table A-21

## Litter Survey - 1st Series

## Secondary by Volume

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	Volume/ Day
			No.	%	No.	%	No.	%	No.	%		
1	9-29-78		1.0		.6		6.5				8.1	
	10-12	13	.2		.1		.5				.8	0.06
	10-27	15			.1		.5				.6	0.04
	11-8	12	.1		.1		.5				.7	0.06
	Total (1-4)		1.3				8.0				10.3	
	Total (2-4)	40	.3		.3		1.5				2.1	0.05
2*	9-22		1.9		1.0		3.1		.1		6.1	
	10-2	10	.1		.1		.3		.1		.6	0.06
	10-10	8	.1		.1		.2				.4	0.05
	10-16	6			.1		.3				.4	0.07
	Total (1-4)		2.1		1.3		3.9		.2		7.5	
	Total (2-4)	24	.2		.3		.8		.1		1.4	0.06
3	10-2		3.0		1.6		3.0		.1		7.7	
	10-10	8	.4		.1		.6				1.1	0.14
	10-16	6	.3		.3						.6	0.1
	10-30	14	.2		.1		.5				.8	0.06
	Total (1-4)		3.9		2.1		4.1		.1		10.2	
	Total (2-4)	28	.9		.5		1.1				2.5	0.09
4*	9-26		.4		.1		2.7		.1		3.3	
	10-5	9	.7				.6				1.3	0.14
	10-18	13	.1		.1		.2				.4	0.03
	11-1	14	.1				.4				.5	0.04
	Total (1-4)		1.3		.2		3.9		.1		5.5	
	Total (2-4)	36	.9		.1		1.2				2.2	0.06
5	9-25		.5		.1		1.9				2.5	
	10-6	11	.2		.1		.7		.1		1.1	0.10
	10-20	14	.5		.2		2.3				3.0	0.21
	11-3	14	.3		.4		.9				1.6	0.11
	Total (1-4)		1.5		.8		5.8		.1		8.2	
	Total (2-4)	39	1.0		.7		3.9		.1		5.7	0.15
7	10-4		.2		.1		.9				1.2	
	10-13	11					.2				.2	0.02
	10-23	10			.1		.4				.5	0.05
	10-31	8					.5				.5	0.06
	Total (1-4)		.2		.2		2.0				2.4	
	Total (2-4)	29			.1		1.1				1.2	0.04
8*	10-4		.5		.6		.9				2.0	
	10-13	11	.1		.2		.1				.4	0.04
	10-23	10	.1		.2		.5				.8	0.08
	10-31	8	.1				.1				.2	0.03
	Total (1-4)		.8		1.0		1.5				3.4	
	Total (2-4)	29	.3		.4		.7				1.4	0.05
9*	9-27		.9		.7		1.1				2.7	
	10-5	8	.4		.2		.3				.9	0.11
	10-23	18	.2		.2		.4				.8	0.04
	11-2	10	.1				.2				.3	0.03
	Total (1-4)		1.6		1.1		2.0				4.7	
	Total (2-4)	36	.7		.4		.9				2.0	0.06
10	10-26		2.4		1.3		2.0				5.7	
	11-8	13	.5		.2		.9		.1		1.7	0.13
	11-16	8	.3				1.1				1.4	0.18
	Total (1-3)		3.2		1.5		4.0		.1		8.8	
	Total (2-3)	21	.8		.2		2.0		.1		3.1	0.15

Table A-22

## Litter Survey - 2nd Series

## Interstate by Volume\*

\*in ft<sup>3</sup>

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	ft <sup>3</sup> / Day
			No.	%	No.	%	No.	%	No.	%		
1*												
2*												
3	3-1-79		.2		.2		.9		.1		1.4	
	3-15	14	.1				.4		.2		.7	0.05
	3-29	14					.2		.1		.3	0.02
	4-20	22	.1		.1				.1		.3	0.01
	Total (1-4)		.4		.3		1.5		.5		1.4	
Total (2-4)	50	.2		.1		.6		.4		1.3	0.026	
5*												
6	3-7		.1		.3		N/A		.4		N/A	
	3-21	14	.1				.5				.6	0.04
	4-10	20					1.1				1.1	0.06
	4-25	15					1.1				1.1	0.07
	Total (1-4)		.2		.3				.4			
Total (2-4)	49	.1				2.7				2.8	0.06	
7	3-9				.1		.2		.4		.7	
	3-22	13					.1		.2		.3	0.02
	4-5	14	.1						.1		.2	0.01
	4-18	13					.1		.2		.3	0.02
	Total (1-4)		.1		.1		.4		.9		1.5	
Total (2-4)	40	.1				.2		.5		.8	0.02	
8	3-9				.2		.1				.3	
	3-22	13			.1		.1				.2	0.02
	4-5	14					.1				.1	0.01
	4-18	13			.2		.1				.3	0.01
	Total (1-4)				.5		.4				.9	
Total (2-4)	40			.3		.3				.6	0.015	

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Table A-23

## Litter Survey - 2nd Series

Primary by Volume\*

\*in ft<sup>3</sup>

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	ft <sup>3</sup> / Day
			No.	%	No.	%	No.	%	No.	%		
2*												
	2-5-79		.4		.5		1.6		.1		2.6	
3	3-6	28	.3				.6				.9	0.03
	3-13	7			.2		.7				.9	0.13
	3-27	14	.1		.1		.6				.8	0.06
	Total (1-4)		.8		.8		3.5		.1		5.2	
	Total (2-4)	49	.4		.3		1.9				2.6	0.05
4*												
	2-28		.1		.3		.9				1.3	
5	3-14	14			.1		.9		.1		1.1	0.08
	3-28	14	.1		.2		.2		.1		.6	0.04
	4-12	15	.1		.1		.2				.4	0.02
	Total (1-4)		.3		.7		2.2		.2		3.4	
	Total (2-4)	43	.2		.4		1.3		.2		2.1	0.049
6	2-28		.5		1.1		4.2				5.8	
	3-14	14	.1		.1		.6				.8	0.06
	3-28	14	.1		.2		.3		.1		.7	0.05
	4-12	15	.1				.2				.3	0.02
	Total (1-4)		.8		1.4		5.3		.1		7.6	
	Total (2-4)	43	.3		.3		1.1		.1		1.8	
10*												
12*												
	3-7		.4		.1		9.2		.2		9.9	
13	3-21	14	.1				.1				.2	0.01
	4-10	20					.2				.2	0.01
	4-25	15					.1				.1	
	Total (1-4)		.5		.1		9.6		.2		10.4	
	Total (2-4)	49	.1				.4				.5	0.01
15	3-8		.3		.3		N/A				N/A	
	3-22	14	.1		.1		.1				.3	0.02
	4-5	14	.1				.2				.3	0.02
	4-18	13			.2		.2		.1		.5	0.04
	Total (1-4)		.5		.6		.5		.1			
	Total (2-4)	40	.2		.3		.5		.1		1.1	0.028



Table A-23 (cont.)

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	ft <sup>3</sup> / Day
			No.	%	No.	%	No.	%	No.	%		
7*												
	3-14		.2		.2		.9		.1		1.4	
	3-28	14	.1				.2				.3	0.02
9	4-12	15					.1		.3			0.03
	4-27	15					.1		.2		.3	
	Total (1-4)		.3		.2		1.3		.6		2.0	
	Total (2-4)	44	.1				.4		.5		1.0	0.02

Table A-24

## Litter Survey - 2nd Series

Secondary by Volume\* \*in ft<sup>3</sup>

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	ft <sup>3</sup> / Day
			No.	%	No.	%	No.	%	No.	%		
1	3-8-79		.7		.4		3.4		.3		4.8	
	3-22	14	.1		.2		.4				.7	0.05
	4-5	14	.1				2.3				2.4	0.17
	4-18	13	.2		.2		2.8		.3		3.5	0.27
	Total (1-4)		1.1		.8		9.0		.6		11.4	
	Total (2-4)	40	.4		.4		5.5		.3		6.6	0.165
2*												
3	2-6		.3		.1		N/A				N/A	
	3-6	27	.3		.3		.7				1.3	0.05
	3-13	7	.2		.1		.9				1.2	0.17
	3-27	14	.2		.4		.5				1.1	0.08
	Total (1-4)		1.0		.9							
	Total (2-4)	48	.7		.8		2.1				3.6	0.08
4*												
5	3-1		.9		.3		2.1		.2		3.5	
	3-15	14	.2		.2		1.3				1.7	0.12
	3-29	14	.2		.1		1.1				1.4	0.10
	4-20	22			.1		.1				.2	0.01
	Total (1-4)		1.3		.7		4.6		.2		6.8	
	Total (2-4)	50	.4		.4		2.5				3.3	0.066
7	3-7		.2		.1		1.0		.1		1.4	
	3-21	14			.1		.2		.1		.4	0.03
	4-10	20	.1		.1		.3				.5	0.01
	4-25	15					.1				.1	
	Total (1-4)		.3		.3		1.6		.2		2.4	
	Total (2-4)	49	.1		.2		.6		.1		1.0	0.02
8*												
9*												
10	3-9		.6		.6		1.1				2.3	
	3-23	14			.1		.5				.6	0.04
	4-6	14	.1				.1				.2	0.01
	4-19	13	.1				.3				.4	0.03
	Total (1-4)		.8		.7		2.0				3.5	
	Total (2-4)	40	.2		.1		.9				1.2	0.03

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Table A-25  
Litter Survey - 3rd Series  
Interstate by Volume

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	ft <sup>3</sup> / Day
			No.	%	No.	%	No.	%	No.	%		
3	6-1-79		.2				.4		.9		1.5	
	6-15	14					.3		.2		.5	0.04
	6-29	14	.1				.8				.9	0.06
	7-13	14	.1				.3		.1		.5	0.03
	Total (1-4)		.4				1.8		1.2		3.4	
	Total (2-4)	42	.2				1.4		.3		1.4	0.05
6	6-6		.1				.6				.7	
	6-21	15					.1				.1	0.01
	7-25	35					.2				.2	0.01
	8-1	7					.1				.1	0.01
	Total (1-4)		.1				1.0				1.1	
Total (2-4)	57					.4				.4	0.01	
7	6-7						.2		.4		.6	
	6-19	12					.5				.5	0.04
	7-17	28	.1				.2		.1		.4	0.01
	8-2	16					.3		.1		.4	0.03
	Total (1-4)		.1				1.2		.6		1.9	
Total (2-4)	56	.1				1.0		.2		1.3	0.02	
8	6-7		.1				.1				.2	
	6-19	12					.2				.2	0.02
	7-17	28	.1				.2				.3	0.01
	8-3	17					.1				.1	0.01
	Total (1-4)		.2				.6				.8	
Total (2-4)	57	.1				.5				.6	0.01	

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Table A-26

## Litter Survey - 3rd Series

## Primary by Volume

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	ft <sup>3</sup> / Day
			No.	%	No.	%	No.	%	No.	%		
3	5-30-79		.4		.1		.5				1.0	
	6-13	14	.1		.3		.5				.9	0.06
	6-27	14	.1		.1		.6				.7	0.05
	7-11	14	.1		.1		.4				.6	0.04
	Total (1-4)		.6		.6		2.0				3.2	
	Total (2-4)	42	.2		.5		1.5				2.2	0.05
5	5-31		.3		.6		.6				1.5	
	6-14	14	.3		.3		.5		.2		1.3	0.09
	6-28	14	.4		.3		8.5				9.2	0.66
	7-12	14	.2		.2		.8				1.2	0.08
	Total (1-4)		1.2		1.4		10.4		.2		12.2	
	Total (2-4)	42	.9		.8		9.8		.2		11.7	0.29
6	5-31		.1		.1		.8				1.0	
	6-14	14	.1		.1		.2				.4	0.03
	6-28	14	.1				.2				.3	0.02
	7-12	14	.1		.1		.4				.6	0.04
	Total (1-4)		.4		.3		1.6				2.3	
	Total (2-4)	42	.3		.2		.8				1.3	0.03
9	5-31						1.2				1.2	
	6-14	14	.1				.3		.5		.9	0.06
	6-28	14			.1		.2				.3	0.02
	7-26	14	.1				.2		.1		.4	0.03
	Total (1-4)		.2		.1		1.9		.6		2.8	
	Total (2-4)	42	.2		.1		.7		.6		1.6	0.04
13	6-6		.1				.2		1.7		2.0	
	6-21	15					.6				.6	0.04
	7-25	35	.1				.4				.5	0.01
	8-1	7					.3				.3	0.04
	Total (1-4)		.2				1.5		1.7		3.4	
	Total (2-4)	57	.1				1.3				1.4	0.02
15	6-7		.1				.2				.3	
	6-19	12	.1		.1		.1		.1		.4	0.03
	8-2	17	.1		.2		.3				.6	0.04
	Total (1-3)		.3		.3		.6		.1		1.3	
	Total (2-3)	29	.2		.3		.4		.1		1.0	0.03

Table A-27

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## Litter Survey - 3rd Series

## Secondary by Volume

Site	Date	Days	Cans		Bottles		Paper/ Plastic		Auto/ Other		Total	ft <sup>3</sup> / Day
			No.	%	No.	%	No.	%	No.	%		
1	6-7-79		.5		.1		.9		.2		1.7	
	6-19	12	.1				.4				.5	0.04
	7-17	28	.2				.6				.8	0.03
	8-2	16	.2				.2				.4	0.03
	Total (1-4)		1.0		.1		2.1		.2		3.4	
Total (2-4)	56	.5				1.2				1.7	0.03	
3	5-30		.2				.7				.9	
	6-13	14	.2				.4				.6	0.04
	6-27	14	.5		.1		.3				.9	0.06
	7-11	14	.4		.1		.4				.9	0.06
	Total (1-4)		1.3		.2		1.8				3.3	
Total (2-4)	42	1.1		.2		1.1				2.4	0.06	
5	6-1		WET & CONTAMINATED								18+	
	6-15	14	.1		.1		.2				.4	0.03
	6-29	14	.1				.2				.3	0.02
	7-11	14	.1		.1		.7				.9	0.06
	Total (1-4)		.3		.2		1.1				1.6	
Total (2-4)	42	.3		.2		1.1				1.6	0.04	
7	6-6		.1		.1		.1		.1		.4	
	6-21	15	.1				.4				.5	0.03
	7-25	35	.1				.1				.2	0.01
	8-1	7			.1		.2				.3	0.04
	Total (1-4)		.3		.2		.8		.1		1.4	
Total (2-4)	57	.2		.1		.7				1.0	0.02	
10	6-8		.1		.3		.1				.5	
	6-20	12	.1		.1		.2				.4	0.03
	7-18	28	.4		.1		.6				1.1	0.04
	8-3	16	.2		.3		.5				1.0	0.06
	Total (1-4)		.8		.8		1.4				3.0	
Total (2-4)	56	.7		.5		1.3				2.5	0.04	

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