



SMYRNA SAFETY REST AREA

DEDICATION

MAY 12, 1969





THE PARKS BY THE SIDE OF THE ROAD

I've sat and wondered of the things we have done
 In those years of Roadside improvement
 And the greatest of all, since it has begun
 And serves a means of contentment,
 Is the Parks By The Side of The Road.

There's many a change since the first one was built,
 And we wondered if it would succeed.
 But there's been little doubt when we know how folks felt
 Little Pleasures they do now receive
 In The Parks By The Side of The Road.

Many travelers have told us in praiseful writing
 Of the good these places have done;
 Of the toilets and well and the shade so enticing
 That it's restful and nice and actually fun,
 In the Parks By The Side of The Road.

Of course we're discouraged when vandals do roam
 And wreck a new oven or table,
 But this we overlook and do not bemoan,
 For few are the folks that we can so label
 In The Parks By The Side of The Road.

Now there's many a one who stops and does slumber,
 While others hold their courtship;
 And then I've known of quite a number
 Who held their morning worship
 In The Parks By The Side of The Road.

I've seen colored and white and men that look hard
 Enjoy a cold drink from the well;
 And others that seem from society were barred,
 Sit alone their troubles to quell,
 In The Parks By The Side of The Road.

Now such are the things I can see and behold
 And others in their registrations,
 So I know people like and we need not be told
 They enjoy the small recreations
 In The Parks By The Side of The Road.

I've seen things come and I've seen things go
 In this work that does interest us all,
 But there's something we've built, I believe and I know
 That the people will never let fall,
 Is The Parks By The Side of The Road.

Loy Stevely



STATUS OF AUTHORIZED PROJECTS IN NEW CASTLE COUNTY

PROJECTS UNDER DESIGN FISCAL YEAR 1968 - 1969

1. Route 896 - Newark to Maryland Line
2. Route 896 - I-95 to Chrysler Plant
3. Red Mill Road
4. McKennans Church Road
5. Hercules Road - Route 41 to Route 48
6. 12th Street Wilmington - Washington St. to Walnut St.
7. Shipley Road - Washington St. Ext. to Murphy Road
8. Silverside Road - Philadelphia Pike to Marsh Road
9. U.S. 13 - St. Georges to Rogers Corner
10. Route 9 - Road 381 to Washington St. in New Castle
11. I-495, Christina Interchange to I-95
12. Route 141, I-95 to Prices Corner Interchange
13. Route 141, Lancaster Pike to Concord Pike
14. Linden Hill Road, Polly Drummond Hill Rd. to Limestone Rd.
15. Harmony Road, Stanton-Ogletown Rd. to Kirkwood Hwy.
16. Centerville Road, Kirkwood Hwy. to Lancaster Pike
17. Barksdale Road, B&O Railroad to Maryland Line
18. Lancaster Ave. (Wilmington), Greenhill Ave. to S. duPont Road

PROJECTS ADVERTISED FISCAL YEAR 1968 - 1969

19. Townsend Streets
20. South Chapel Street
21. Route 72 - Milford Crossroads to Limestone Road
22. Stoney Batter Road
23. New Castle Avenue - Rogers Road to Heald Street
24. Concord Pike - Foulk Road to Talleyville
25. I-495 Stoney Creek
26. Elkton Road

PROJECTS UNDER DESIGN FISCAL YEAR 1968 - 1969

1. Existing Dover Bypass - Coopers Corner to State College
2. Old Mill Road
3. Lebanon Road
4. Delaware State College, Circumferential Road
5. Route 14, Milford Bypass
6. U.S. #113 Connector, Frederica to Camden

STATUS OF
AUTHORIZED PROJECTS
IN

PROJECTS ADVERTISED FISCAL YEAR 1968 - 1969

7. Camden to Wyoming
8. Route 10 - Camden to Rising Sun
9. U.S. 113 - Administration Center
10. Route 12 - Felton to Hollandsville
11. Harrington to Whiteleysburg
12. Route 9 - Road 12 to Road 6
13. Maryland Line to Blackiston

KENT COUNTY

PROJECTS UNDER DESIGN FISCAL YEAR 1968 - 1969

STATUS OF
AUTHORIZED PROJECTS
IN

SUSSEX COUNTY

1. Route 76 - Packing House Corner to Route 24
2. Road 70 - Laurel to U.S. 13
3. Route 26 - Dagsboro to Shaft Ox Corner
4. Road 331 - Millsboro to Dagsboro
5. Millsboro Pond Bridge
6. Road 545 - U.S. 13 to Road 594
7. Road 562 - West of Bridgeville
8. Route 14 - Route 16 to Milford Bypass
9. Route 14 - Fenwick Island to Bethany Beach

PROJECTS ADVERTISED FISCAL YEAR 1968 - 1969

10. Road 494 - Route 24 to Road 495
11. Route 26 - Dagsboro to Clarksville
12. Route 24 - Bridge 516 to Route 14

MOSQUITO CONTROL

The State of Delaware reached a milestone in the Mosquito Control effort this year with the completion of projects undertaken through the Capital Improvement Fund Program, financed by a \$2 million appropriation from the Divestiture Fund which was initiated in April of 1965 (See special report).

The ditching accomplished by the regular general fund appropriation amounted to 364,155 linear feet. Of this figure, 335,115 linear feet was constructed in Sussex County, 26,440 linear feet in New Castle and 2,600 linear feet in Kent County. In addition, 9,000 linear feet of hand cleaning was completed in Kent County and 28,855 linear feet in Sussex County. Sussex County also had 1,327 linear feet of machine ditching.

There was a decrease in the airspray acreage, due to the low amount of rainfall during July and August of 1968 and the lack of lunar tides during the same period. A total of 175,994 acres was sprayed both as an adulticide and larvicide. Of the total acreage, 32,260 was covered in New Castle County, 99,512 acres in Kent County and 44,222 acres in Sussex.

In addition to the airspraying, it was necessary to disperse 3,880 gallons of Baytex, 100 gallons of Abate 4E liquid and 2,135 lbs. of Abate granular. This was all accomplished in New Castle County, Kent County received 465 gallons of Abate and 480 gallons of Baytex was dispersed in Sussex County. All of this material was used in isolated and inaccessible breeding areas throughout the three counties. This work was all accomplished by ground spraying equipment.

The Thermo Aerosol fogging machines were used to compliment aerial operations against adult mosquitoes. These machines were employed for a total of 250 hours in the three Counties, dispersing 2,140 gallons of solution containing 1.25 percent Dibrom. The majority of this operation was performed in New Castle County.

Ultra low volume Abate insecticide was used and found to be very effective. This material is a proven larvicide and has a low toxicity against wildlife. Two factors have to be considered when spraying ultra low volume: (1) Maximum velocity should be about five miles per hour whereas ten

miles per hour is the maximum for applying conventional oil spray or two quarts per acre. (2) The penetration in heavy foliage is nil, and Granular material is therefore substituted.

In the field of research, the Department of Entomology and Applied Ecology of the University of Delaware made several tests during the summer of 1968 on various materials, thereby, keeping the state well ahead of the resistant buildup in presently used insecticides. The University staff also identified the numbers and species of mosquitoes collected in the Mosquito Control Division's 21 New Jersey type mosquito traps, which are located in each County of the State. These traps are collected daily with the exception of Saturday and Sunday. In addition, the Mosquito Control Division operates portable light traps for surveillance of *Culiseta Melanura*, the principal vector of "Sleeping Sickness" or Eastern Equine Encephalitis.

Special Report

Organized mosquito control began in Delaware in 1932 with surveys of breeding areas and species identification. From 1934 to 1938 the Civilian Conservation Corps (CCC) instituted a ditching program designed to control mosquito breeding. 44,000 acres of marsh were ditched and maintained to permit rain or tidal water to carry the eggs from their natural habitat to a hostile environment, permit them to dry before they developed further, and permit the introduction of fish to devour the eggs. The program was effective.

Unfortunately there was no adequate program to maintain the ditches. Their effectiveness diminished over the years and except for a limited footage cleaned periodically by the Mosquito Control Division forces, the original installation became ineffective.

The second major control system, begun in 1947, was the use of insecticides to destroy the mosquito in its larval stage. Resistance of the species to DDT rendered this method and the recourse to other insecticides futile. Many objec-

tions to the use of insecticides arose because of the harm to fish and wildlife. The criticism spurred a search for control by nonchemical methods.

The area involved in mosquito control approximates 107,000 acres of tidal salt marsh along the eastern border of the State, of which an estimated 70,000 acres are believed capable of producing the offensive "salt-marsh" mosquito. There are other types of mosquito originating in fresh water swamps and pools, in backyard containers, in inland ditches and similar water depositor-ies; but these are relatively insignificant in number and innocent in behavior.

By 1965, and following two or three seasons of heavy mosquito infestations, there was considerable public concern for alleviating the problem. Mosquitoes not only became a source of growing discomfiture and censure; but many authorities, including the U.S. Public Health Service, recognized them as carriers of several diseases and a menace to public health. Other authorities pointed out that an effective mosquito control program would promote economic development by attracting new industry and tourist travel to Delaware.

Legislative recognition of the problem occurred when on April 1, 1965, Senate Bill No. 75 was signed into law. The Bill provided two million dollars to the State Highway Department for the purpose of mosquito control. It specified that the funds were to be utilized to initiate a permanent mosquito control program, and were to be used solely for ditching, impounding, filling, draining and other expenses incident thereto. No funds appropriated were permitted for spraying, fogging, or expenses relative to this procedure.

With financing available, the Department after appropriate study implemented a program.

I. The first step was to assign personnel to the program and appoint a Project Determination Committee. The committee consisted of representatives from the University of Delaware, Game & Fish Commission, State Highway Department, and Mosquito Control Division. The purpose of the committee was to review the projects proposed by the Mosquito Control Division and to approve the methods suggested to control mosquitoes in each particular area, keeping in mind the other interests with which a Mosquito Control Program might be in conflict. The Staff Entomologist examined each of

the areas individually and recommended appropriate control measures.

The basic procedure adopted was to provide ditching (24" x 24") and a network of spillgates, outlet boxes, tide gates, and culverts laced throughout the marsh. This system removed the mosquito eggs from their natural habitat and relocated them where they could be consumed by fish or washed into the bay.

Alternate methods of control were adopted where feasible or for experimentation. The impoundment concept consists of diking and flooding the breeding marshes, thereby preventing egg laying on the marsh surface. There are definite limitations to this method because a ready source of water in huge quantities must be available, limiting the number of impoundment sites. Another limitation is that impoundment eliminates run-off which deprives fish and other marine life of food material.

A second alternate to ditching is the use of "champagne pools" which consists of creating a series of ponds about 100 feet in diameter to which are connected drainage ditches. Water is trapped and retained within this system. The water control in the drainage ditches is regulated so that daily high tide will lap over the pools, replenishing the pool complex. Water levels thus do not depend upon rainfall. The tidal water brings with it fish which devour mosquito larvae. This method cannot be used in large marsh lands that are isolated from tidal action.

While the major portion of the work was done by contractors through the competitive bid procedure, it was necessary to assign Engineering Division personnel to the preparation of contract plans and specifications. Division Construction personnel were assigned to laying out the work to be done in the marshes and for inspection to assure compliance with the contracts.

Where it was found to be impractical for various reasons to let work to contract, Mosquito Division personnel were assigned the actual work. This required supplementing these forces and providing appropriate equipment.

It is difficult to evaluate the reduction of salt-marsh mosquitoes solely upon numbers of mosquitoes collected in a light trap because factors other than ditching such as tides, rainfall, humidity greatly influence the results. In addition, the trap locations were varied within an individual

area in some cases.

Despite these influencing factors, however, a comparison of an eleven year period prior to beginning of the large scale ditching and impounding program with the three year post-ditching period of 1966-68 should give some insight into the value of the Senate Bill 75 program. Averaging the three year period 1966-68 indicating the number of nights when mosquitoes were above the tolerance level (See Appendix II) and comparing it to the period 1955-65, all locations show reductions in numbers of salt-marsh mosquitoes. Since all of the areas were not ditched in 1965 it would benefit to make comparisons for individual locations of the post-ditching mosquito counts and compare these to the prior eleven years. From the data it is obvious that the ditching and impounding work completed has had a significant effect on the reduction of salt-marsh mosquitoes. Especially significant are the greatly reduced counts in the Dover area during 1966-68 as compared to the previous eleven years.

Permanent control measures have been taken on most of the large mosquito breeding areas in the State, however, there are two locations under federal control that are problem areas. They are Bombay Hook Federal Wildlife Refuge and Prime Hook Federal Wildlife Refuge.

As of July 1, 1969, most of the salt-marsh drainage system is in good operable condition. It is imperative that adequate funds be appropriated yearly for proper maintenance of these permanent mosquito control systems. If funds are not forthcoming the systems will fall into a state of disrepair and in many areas there will be an increase in mosquito breeding rather than a reduction.

Number of Nights With More Than 25 Female Salt-Marsh Mosquitoes

Years (Before Mosquito Control Program)

Years (After Mosquito Control Program)

	1955	1956	1957	1958	1959	1960	1961	1962	1963	1964	1965	1966	1967	1968
Lewes	28	3	7	2	13	3	3	5	2	13	2	-	1	-
Rehoboth	26	-	3	-	11	6	-	-	-	5	2	-	1	-
Dewey	-	-	-	-	-	12	-	3	7	16	8	-	4	-
Bethany	17	-	5	4	16	4	2	5	3	14	5	-	1	5
Dover														
Airport	-	-	-	-	-	-	-	-	-	-	29	20	17	4
Dover	59	23	8	30	60	28	2	-	6	7	6	1	-	-

MOTOR VEHICLE

The Motor Vehicle Department experienced a general increase in the overall business transactions which was much higher than was recorded last year. The Department's grand total of business transactions increased 10.7% over last year which is quite a significant factor.

MOTOR VEHICLE DEPARTMENT

AUDITING DEPARTMENT

Approximate Distribution of Motor Vehicles in Reference to Counties

Classification of Vehicles Registered by Counties as of

7-1-69	Sussex Co.	Kent Co.	N.Castle Co.	Total
Pleasures	30,596	41,114	149,219	220,929
Commercials	7,316	13,986	14,505	35,807
Trailers	2,906	9,773	6,401	19,080
Tractors	7	232	322	561
Motor Cycles	281	952	1,614	2,847
Stock Cars	29	46	27	102
Farm Trucks	1,624	1,061	159	2,844
Totals	42,759	67,164	172,247	282,170

TRANSACTIONS FOR THE FISCAL YEAR (7-1-68 to 6-30-69)

July 1, 1968 to June 30, 1969

REGISTRATIONS	MAIL	DOVER	WILMINGTON	NEW CASTLE	GEORGETOWN	TOTAL
Pleasures (1 yr.)	14,103	29,398	80,313	83,483	32,820	240,117
Pleasures (½ yr.)	2,609	6,037	3,121	5,392	4,317	21,476
Pleasures (¼ yr.)	111	276	209	342	97	1,030
Commercials (1 yr.)	6,902	5,877	5,926	10,219	8,010	36,884
Commercials (½ yr.)	4,482	987	341	1,045	1,006	7,861
Commercials (¼ yr.)	770	55	13	58	67	963
Trailers (1 yr.)	7,583	2,698	2,962	4,732	3,493	21,468
Trailers (½ yr.)	1,140	170	48	171	193	1,722
Trailers (¼ yr.)	190	18	2	22	26	258
Tractors	230	47	195	196	13	681
Motor Cycles (1 yr.)	541	712	657	1,487	405	3,802
Motor Cycles (½ yr.)	2	7	-	2	2	11
Stock Cars	32	45	12	24	45	158
Dealers	1,129	81	698	793	601	3,302
Farm Trucks (1 yr.)	198	959	28	150	1,777	3,112
Farm Trucks (½ yr.)	12	47	-	6	74	139
Farm Trucks (¼ yr.)	1	2	-	-	-	3
Exempt	638	1,020	491	1,343	966	4,458
Transfers	13,819	3,437	17,334	20,255	6,730	61,575
Extra Weight	177	25	38	91	77	408
Total	54,669	51,848	112,388	129,809	60,714	409,128
OPERATORS						
Operator Renewals	57,272	4,347	11,876	9,055	4,698	87,248
Chauffeur Renewals	5,887	1,168	2,542	1,920	1,738	13,255
Applications	8	4,231	10,193	9,364	3,356	27,152
Permanent Operators	170	255	1,137	737	248	2,547
Permanent Chauffeurs	47	74	85	115	77	398
Taxi Renewals (1969)	-	53	118	54	21	246
Taxi Renewals (1970)	-	62	111	37	31	241
Driver Training School	4	-	-	-	-	4
Driver Training Instructor	10	-	-	-	-	10
Total	63,198	10,190	26,662	21,282	10,169	131,101
MISCELLANEOUS						
Tag Retainer Fees	2,986	428	2,109	1,530	1,012	8,065
Lost Tag	1,802	-	1,792	1,481	920	5,995
Duplicate Reg. Cards	5,352	1,333	4,563	5,019	2,213	18,480
Reference Money	4,128	-	-	-	4,128	4,128
Temp. Vehicle Permits	1,274	3,467	12,162	9,658	5,964	32,525
Bad Check Collections	1	-	-	-	-	1
Exchange Oper. & Chauff. Cds.	27	248	326	509	329	1,439
Dup. Oper. & Chauff. Cds.	890	1,211	5,122	2,867	1,145	11,235
A.H.O. Fees	14	-	-	-	-	14
Temporary Tags	84,930	-	-	-	-	84,930
New Car List	26	-	-	-	-	26
Thermo-Fax	25	-	-	-	-	25
Vanity Tags	2,356	64	230	164	56	2,870
Suspended License	21	-	-	-	-	21
Totals	103,837	6,751	26,304	21,228	11,639	169,754
TITLES						
New Car Titles	13,507	2,064	10,524	12,548	4,416	43,059
Used Car Titles	30,015	12,439	30,790	39,479	17,132	129,859
Corrected Titles	1,257	230	1,150	1,036	418	4,121
Duplicate Titles	2,478	1	304	288	19	3,090
Lions	19,207	2,824	8,277	11,595	5,079	46,977
Satisfactions	34,548	-	-	-	-	34,548
Supplementary Titles	5,120	21	289	127	59	5,616
Exempt Titles	246	51	232	230	109	870
Total	106,377	17,632	51,566	65,303	27,262	268,110
GRAND TOTALS						
Transactions & Percentages	328,276 33.6%	86,421 8.8%	216,320 22.1%	237,622 24.3%	109,784 11.2%	978,423

	Collections	Refunds	Unclaimed Checks Cancelled	Total Net Income
REGISTRATIONS				
Pleasures.....	\$5,044,775.20	\$1,634.60	-	
Commercials.....	2,851,293.15	1,767.30	-	
Trailers.....	574,602.65	271.00	-	
Tractors.....	3,405.00	5.00	-	
Motor Cycles.....	22,856.00	-	-	
Stock Cars.....	790.00	-	-	
Farm Trucks.....	124,868.60	36.40	-	
Dealers.....	35,099.00	39.00	-	
Extra Weight.....	9,536.42	21.90	-	
Total	\$8,667,226.02	\$3,775.20	-	\$8,663,450.82
LICENSES				
Operators, Chauffeurs & Applications.....	\$ 540,557.00	\$ 244.00	-	
Driver Training School & Instructor.....	130.00	-	-	
Total	\$ 540,687.00	\$ 244.00	-	\$ 540,443.00
MISCELLANEOUS				
Duplicate Cards.....	\$ 40,950.00	\$ 53.00	\$ -	
Exchange Operator Cards.....	719.50	-	-	
Reference Money.....	103,880.30	-	-	
Temporary Vehicle Permits.....	65,050.00	2.00	2.00	
Tag Retainer Fees.....	40,325.00	30.00	-	
Bad Check Collections.....	5.00	-	-	
Lost Tags.....	17,984.00	2.00	-	
Amateur Radio Operators.....	135.50	-	-	
Temporary Tags.....	169,860.00	-	-	
Vanity Tags.....	56,168.75	50.00	-	
Suspended Licenses.....	105.00	-	-	
New Car List.....	8,099.57	-	-	
Thermo-Fax.....	32.00	-	-	
Shortage.....	(749.13)	-	-	
Bad Checks.....	(3,741.50)	-	-	
Total	\$ 500,823.99	\$ 137.00	\$ 2.00	\$ 500,688.99
TITLING				
Titles.....	\$ 357,068.00	\$ 56.00	\$ -	
Corrected Titles.....	8,242.00	-	-	
Duplicate Titles.....	6,180.00	44.00	2.00	
Lions.....	46,977.00	25.00	-	
Satisfactions.....	25,911.00	-	-	
Total	\$ 445,378.00	\$ 125.00	\$ 2.00	\$ 445,255.00
Non-Revenue Receipts				
New Car List.....	\$ (8,099.57)	-	-	
Thermo-Fax.....	(32.00)	-	-	
Total	\$ (8,131.57)	-	-	\$ (8,131.57)
NET INCOME				
	\$10,144,983.44	\$4,281.20	\$4.00	\$10,140,706.24



The lobby of the Motor Vehicle Department located at the north end of the new Highway Administration Center.