

# Mosquito Control Annual Report

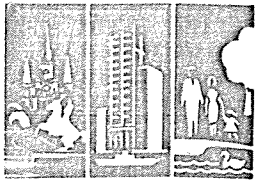
CITY OF NEW ORLEANS

## 1975



### THE STAFF





**PRIDE BUILDS  
NEW ORLEANS**

MOON LANDRIEU  
MAYOR

# CITY OF NEW ORLEANS

ORLEANS PARISH MOSQUITO CONTROL

11TH ANNUAL REPORT

1975

MAYOR'S ADVISORY COMMITTEE ON MOSQUITO CONTROL

D. F. ROWLAND  
HARRY BATT, SR.  
CHARLES NUTTER  
DORIS THOMPSON, M.D.  
P. C. CIACCIO  
W. E. WUNDERLICH  
HON. N. G. KIEFER  
HAROLD SCOTT, Ph. D.  
J. E. CASSREINO  
M.M. FALCON

---

GEORGE T. CARMICHAEL, DIRECTOR

*Department of Sanitation/George T. Carmichael, Administrative Director/Division of Mosquito Control  
6601 Lakeshore Drive/New Orleans, La. 70126*

*"An Equal Opportunity Employer"*

[illegible]

# TABLE OF PERSONNEL

1	Director
1	Assistant Director
1	Entomologist
1	Engineering Aid
1	Source Reduction Supervisor
1	Mosquito Control Specialist
1	Equipment Operator IV
1	Master Mechanic
2	Equipment Operators III
1	Steno-Clerk
1	Mosquito Control Inspection Chief
1	Taxonomist
8	Mosquito Control Inspectors II
2	Maintenance Repairmen
3	Equipment Operators I
3	Laborers
10	Seasonal Part-time Workers

## MOSQUITO CONTROL EQUIPMENT LIST

1	1970	4-dr. Ford Sedan
1	1970	Ford Station Wagon
1	1973	4-dr. Ford Sedan
1		Douglas DC-3
1		Grumman Ag-Cat
2		Allis-Chalmers Backhoes
1		350 Case Crawler
1		Little Giant Dragline
6	1964	Ford F-250 Fog Trucks
1	1965	Ford F-250 Fog Truck
10	1971	International Pickups
1		GM Pickup Truck
1		Ford Pickup 4-Wheel Dr.
4	1975	GMC Pickups
1	1965	Ford 3/4 Ton Larv. Truck
1		Wheel Buggy
1		Track Buggy
1		Caterpillar Forklift
1		Allis-Chalmers Forklift
1		Tractor Mule
3		Utility Trailers
1		Tank Trailer
1		Trailer Tractor
2		Gasoline Tank Trucks
1		Boat, 15' Fiberglass
2		Boat Trailers
2		33 Hp. + 5 Hp. Outboard Motors
2		Flatboats
4		Honda CT-70 Motorcycles
2	1973	Ford Econoline Vans
1	1960	International Van
4		Electrical Power Plants
2		Lawn Care Mowers

## ANNUAL REPORT FOR 1975

Our main problem for many years has been keeping trained personnel. Since our staff has stabilized in the last few years, 1975 was devoted to personnel appreciation, with a picture and back-ground information of two staff members included in each monthly report.

The year 1975 was one of our wettest years to date, with a total rainfall of 72.23 inches, which is 14.20 inches above our 82 year average. Rain fell on 177 days, and there were 55 days on which rain amounting to one inch or more fell on the City. This rainfall had a definite effect on mosquito breeding and control activities. The details of this effect are summarized within this report.

A new dimension in our operations was the establishment of a new position in our staff for the express purpose of conducting continuous calibration and evaluation of our program activities. The evaluation has already begun producing results of more effective control. A portion of this report includes this activity as does each of our monthly reports.

The encephalitis epidemic throughout the country caused a renewed interest in our encephalitis surveillance program. Although there were no human cases in New Orleans, there were six (6) confirmed human cases in Monroe, La. (225 miles from N.O.). This city was treated at cost under contract with 1 oz. Dibrom 14 ULV per acre by our DC-3. There were no additional cases after treatment was completed (September 4, 1975).

Aedes aegypti continued to re-invade New Orleans and our oviposition-trap surveillance program had provided excellent baseline information on their activities. Several control measures are now being evaluated to determine the most effective and economical methods to use on this particular species.

## ENTOMOLOGICAL REPORT - 1975

Change and the subsequent adaptation to change would have to be the main theme for 1975. Individuals who deal with living organisms have long since learned the unpredictability involved in attempting to control a prolific, viable, mobile insect such as the mosquito. Mosquito control workers must always reserve the right to change, as their adversary is in a constant state of change. New Orleans Mosquito Control was initiated to control Aedes sollicitans (saltmarsh mosquito), and previous publications have proven how effective our control efforts have been. But now an entirely different species, Culex salinarius (permanent water breeder), has emerged as our dominant pest species. The events of 1975 will verify that Culex salinarius must now be brought under control. New methods and different chemicals must now be used to accomplish this end. In addition to Culex salinarius, Aedes aegypti (yellow fever mosquito), the most domestic and probably the most efficient vector mosquito yet discovered, has been detected in alarming numbers. Control of Aedes aegypti may well prove to be even more difficult than control of Culex salinarius.

The year 1975 started with light trap collections in January that were higher than July and August combined. Both ULV spray trucks and aircraft were pressed into service during a month when this equipment is usually being repaired and painted. February turned out to be the most active February in the history of OPMC. March light trap collections reached the highest total for that particular month, and April was also very active, although not quite as severe as were February and March. May, as was February, was the most active May in the eleven year history of OPMC. Very mild winter conditions, excessive rainfall, a high water table, and limited treatment time were responsible for the first five months of 1975 being such productive mosquito months. Temperature and wind speed are

determining factors in mosquito activity. During winter and early spring, when the temperatures are optimum for mosquito treatment, the winds are too high. At night when the winds are low, it is too cold for the mosquitoes to be active. The answer to this treatment time problem is being worked on, but the solution is not at hand.

Mosquito collections for the next seven months were very low and of little significance as far as total numbers were concerned. There was larval activity during the summer months but our larviciding program was adequate for control. August and September were active months because of the presence of St. Louis Encephalitis virus in neighboring areas. Mississippi, Texas, Tennessee and finally Monroe, Louisiana were producing human cases of St. Louis Encephalitis. Control and surveillance procedures were stepped up, and New Orleans was thought to be safe from any encephalitis outbreaks. For an epidemic to take place; 1) the encephalitis virus must be overflowing from the bird population, 2) the vector mosquito must be present in significant numbers, and 3) the human victim must be exposed to a mosquito that has fed on the infected bird. Here in Orleans Parish, the human population is ever present, the encephalitis virus was found to be present in less than 1% of birds tested, and we felt assured that the proven vector of St. Louis Encephalitis, Culex quinquefasciatus (southern house mosquito) was well controlled.

The secure attitude of OPMC was rocked considerably when it was determined that Culex salinarius was indicated as a possible vector of SLE in both Cook County, Illinois and Shelby County, Tennessee. In fact, when statistics were available on the Memphis outbreak, Culex salinarius turned out to have three times the infection rate of Culex quinquefasciatus. Culex quinquefasciatus accounted for less than 1% of the Orleans Parish light trap collections, while Culex salinarius

accounted for 72% of all mosquitoes collected. Culex salinarius not only pose a problem by their threat as a vector of SLE, difficulty in controlling them presents an even more severe problem when an attempt is made to break the transmission cycle by killing the infected adults. Distribution of species as shown by light trap collections, further indicated the severity of the problem. "Quinks" are seldom found in more than two light traps, while Culex salinarius is in every light trap in Orleans Parish. By necessity, the coming year must be a period of progress in controlling these newly discovered vector mosquitoes, otherwise the threat of vector-borne disease will become a reality.

#### DOMESTIC MOSQUITO REPORT - 1975

The breeding of floodwater mosquitoes was unusual during 1975 insofar as unusually high breeding occurred during the first half of the year, while the last 5 months were unusually low. Of the more than 650 breeding sites inspected during January and February, 28% were reported positive. Although temperatures and rainfall increased during the month of March, the number of larvae decreased and only 15% of the breeding sites inspected were positive. Inspection was increased during the late spring and early summer months, and nearly 2,300 areas were checked for larvae. During this period from April through July, nearly 33% of the areas checked were found to contain larvae. To combat this infestation, over 3,000 gallons of "T-2" larviciding oil (2 qts. surfactant per 100 gallons #2 diesel) were applied to the positive areas by means of aerial spray, motorized larviciding spray units, and hand-held B&G units. This represents a 500% increase over the amount used during the same period in 1974. From August through the remainder of the year, very little floodwater breeding was reported. (Threatened by a hurricane for the 2nd consecutive year during September, little in the way



of floodwater breeding occurred as compared to September 1974 when 600 gallons of larviciding oil were used to control breeding.)

While permanent water mosquito larvae are still a decided problem in the New Orleans area, less time and effort was required to control this problem by means of larviciding as compared to the floodwater breeders. Because permanent water breeders are seldom found in large concentrations, a difficult situation exists for the efficient treatment of these larvae. A small amount of "T-2" larviciding oil was used in treating these species of mosquitoes.

#### AVIATION REPORT - 1975

January was the most active month of the year for the small bi-plane (Grumman Ag-Cat) that is used to larvicide and treat localized adult mosquito problems. Over one-half of the annual gallonage of larvicide mix was applied during the month of January. Adulticiding operations were also carried out by the Ag-Cat and some 350 gallons of 3% Dibrom in HAN was used to control the mosquitoes that escaped the larviciding operation. These adulticiding operations were carried on through February and an additional 400 gallons of 3% Dibrom in HAN was necessary to control the remainder of the Aedes sollicitans brood of the previous month. Larviciding activity continued and 1,933 gallons of Florida mix (Triton X-207, non detergent motor oil in diesel) were used to combat a brood of A. sollicitans that hatched off in late February. The first quarter of 1975 ended on a quiet note as no aerial treatment was needed during the month of March.

As the temperature warmed up and weather conditions became more stable, some 537 gallons of 3% Dibrom in HAN mix was used in April against adult permanent water mosquitoes. As these permanent water broods continued to cause problems in eastern New Orleans and Algiers the DC-3 was pressed into service and 20,000 acres

of infested areas were treated with 1 oz. Dibrom per acre. Control efforts were accomplished and no treatments were needed in the month of June.

The third quarter of 1975 started with the Ag-Cat being fitted with a new Ultra Low Volume spray system capable of applying 0.5 to 1.0 oz per acre of Dibrom 14. Field evaluation of the new system was more than gratifying as truck trap and CO<sub>2</sub> landing rates indicated 95% control of the target population. This ULV system on the Ag-Cat is being used to treat small areas of 1,500 to 3,000 acres. Any infestation greater than 3,000 acres would justify the use of the DC-3. Virus activity in our sister State of Mississippi and in the Monroe, La. area was responsible for increased larviciding and adulticiding operations at Orleans Parish Mosquito Control. The Ag-Cat treated 8,500 acres in eastern New Orleans and the DC-3 treated 18,000 in Monroe, La., on a cost reimbursement contract. The virus activity continued into September and the 18,000 acres in Monroe, Louisiana, were treated again. The Monroe treatments were very successful as no additional human cases were reported after the treatments were completed.

Aerial activity for the last quarter of 1975 was restricted to maintenance flights, check flights and inspection flights. If it were not for the St. Louis Encephalitis virus activity during August and September the months of January and February would have been the most active aerial mosquito control months of the year. As it was, 4,566 gallons of the total 6,705 gallons of larviciding mix applied during the year, were applied in January and February. Over 75% of the 3% Dibrom mix used in 1975 was also used in the first two months. What a strange mosquito control year 1975 was with January and February surpassed only by the activity created by the presence of St. Louis Virus activity during the months of August and September.

<u>Adulticiding</u>	<u>Hrs. Flown</u>	<u>Gallons</u>	<u>AG-CAT Acres Treated</u>	<u>Cost/acre</u>	<u>Cost (operations)</u>
Dibrom 3%	10.41	1,289	5,864.00	\$ 0.42	\$ 2,504.32
Dibrom 14 @ULV					
Rates .50; .75;					
1.0 oz./1A	10.27	81	14,483.00	\$ 0.24	\$ 3,598.95
Larviciding					
Florida	17.63	6,905	761.44	\$ 4.90	\$ 3,738.40
Maintenance,					
Test and					
Calibration	8.24	-	-	-	\$ 700.40

Total Operational Cost: \$ 10,542.07

			<u>DC-3</u>		
Dibrom 14	10.90	433	44,624.00	\$ 0.36	\$ 16,357.00
Maintenance,					
Test and					
Calibration	65.30	-	-	-	\$ 9,795.00

Total Operational Cost \$ 26,152.00

#### RENTAL AIRCRAFT

Hours Flown	132		\$ 2,853.09
-------------	-----	--	-------------

#### HELICOPTER

Hours Flown	10.3		\$ 1,030.00
-------------	------	--	-------------

#### Aedes Aegypti REPORT - 1975

Aedes aegypti surveillance for 1975 completed the first full year of oviposition surveys in Orleans Parish. The use of the "ovitrap" as a tool for Aedes aegypti detection and density determinations has proven to be quite effective in all areas surveyed. Oviposition surveys were expanded to include premise areas surrounding the cemetery foci, and the total number of ovitraps was increased to 245. This expansion of ovitrap surveillance has resulted in a better understanding of the Aedes aegypti mosquito's preferred habitat in the

New Orleans area, allowing control techniques to be tested and established.

Aedes aegypti oviposition has been detected during all months of 1975. An unusually mild winter precipitated the first detection of activity during January in the St. Vincent de Paul survey area. Positives continued to occur in all areas during succeeding months until a noticable build-up occurred toward the end of May. During the summer and fall months, all areas produced high percentages of Aedes aegypti activity, with the St. Vincent de Paul and St. Roch survey areas recording the highest percentages of positive ovitraps (the week of August 11-18 showed 67% positive in St. Vincent survey area). A reduction in activity did not occur until mid-November, and some activity was detected as late as December 19 in the Garden District area.

Ground ULV adulticiding tests were conducted during August-September, 1975 to evaluate the effectiveness of Malathion and Dibrom against the Aedes aegypti mosquito. Two caged mosquito tests were conducted in St. Vincent de Paul - St. Roch survey areas. In the first field trial, ULV Malathion was applied to the St. Vincent area while ULV Dibrom 14 was simultaneously applied to the St. Roch area. These adulticides were reversed for the second field test in order to compensate for possible variables in caged mosquito locations. In both field trials, Malathion appeared to have superior control capabilities against Aedes aegypti. Further evaluations will be conducted during the summer of 1976, including field tests using OPMC's DC-3.

House-to-house inspections during 1975 have revealed that the public is not as aware of the Aedes aegypti problem as anticipated. As high as 12% of all premises inspected during July were breeding Aedes aegypti in some type of artificial container. Continued public information efforts during 1976 should instill a greater awareness of the problem.

<u>Inspections:</u>	<u># LBJ's Inspected</u>	<u>% Paddles Positive</u>
Cemetery	3,956	13%
Premise	4,167	12%
Riverfront	1,983	1%
House-to-house inspection	662	9%
Junkyards	0	0
Ovitrap in operation	245	
Total paddles collected	9,579	11%
Total paddles positive	1,061	
Total <u>Aedes aegypti</u> eggs	22,814	

#### GROUND ULV REPORT - 1975

Due to the threat of encephalitis, ground adulticiding activities in 1975 were the highest of any year since ULV adulticiding was started at OPMC. In an effort to keep the adult mosquito population as low as possible thus decreasing the threat of an encephalitis outbreak, the entire city was treated on a regular basis from Mid-May through Mid-September. This resulted in a total of 226 fogging assignments completed for the year, nearly doubling the number assignments for 1974.

Ground units spent a large number of evenings (59% more hours than in 1974) adulticiding over 360,000 acres of Orleans Parish at a cost of just over \$17,000. This was an increase of 56% over the acres covered in 1974.

Mid-way through the spray season, a policy decision was made based on collected data. Until mid-summer, ground ULV units would operate in Orleans Parish from 12 midnight till daybreak. This 6 hour period was changed to a 3 hour period from 7 P.M. till 10 P.M. utilizing 2 trucks in an area instead of one. There were two basic reasons for this change; 1) adulticiding from midnight to 7 A.M. was very hard on the ULV operators, 2) the peak activity period for Culex salinarius (OPMC greatest problem species) is at dusk.

The changeover was made very smoothly. The areas were divided to allow the



operators to cover them in the shortened time period, and more operators and vehicles were used. The new system has proven very satisfactory to date.

A complete cost breakdown of the operations as follows:

Total Man-hours	1,421.89
Hours Adulticiding	976.20
Gallons of Malathion (Tech.) Used	1,345.03
Gallons of 10% Dibrom-HAN Used	1,324.48
Total Miles Traveled	16,184.50
Miles Adulticided	9,762.00
Insecticide Cost	\$ 11,196.62
Labor Cost	\$ 5,316.75
Oil and Gas Cost	\$ 908.76
Total Cost	\$ 17,422.13
Total Acres	360,000
Cost/Acre	4.8 cents/acre

#### ENCEPHALITIS SURVEILLANCE REPORT - 1975

Two factors contributed to the importance of Encephalitis Surveillance in 1975. First was the outbreak of St. Louis Encephalitis in 29 states, the second factor was the discovery of St. Louis Encephalitis arbovirus in mosquito pools of Culex salinarius.

According to the CDC Morbidity and Mortality Report, a total of 1,367 confirmed cases of St. Louis Encephalitis had been reported from 29 states, and the District of Columbia. An additional 496 cases with some serologic evidence have also been reported and 93 confirmed, and 77 suspected cases occurred in our neighboring state of Mississippi.

The Center for Disease Control has recently isolated the St. Louis Encephalitis virus from mosquito pools of Culex salinarius collected from the Cook County, Illinois and Memphis, Tennessee areas. This information is extremely important to the New Orleans area since 72% of all mosquitoes collected in Orleans Parish

during 1975 are of this species. Culex salinarius was not previously confirmed as a positive vector for encephalitis.

Migratory birds taken during the last 2 months of 1975 showed a 8.8% positive reaction to tests for encephalitis antibodies. Since these birds were taken in a marsh area, infected with Culex salinarius, it is not known whether this represents a peak in indigenous virus activity, or the importation of the virus from the northern states by the birds themselves. Whether the virus is indigenous or imported the fact remains that the virus is present along with sufficient number of vector mosquitoes to cause interest and concern among the people charged with the responsibility of preventing an encephalitis outbreak.

#### ENCEPHALITIS SURVEILLANCE RESULTS

<u>YEAR</u>	<u>BIRDS</u>	<u>% POS.</u>	<u>CHICKENS</u>	<u>% POS.</u>	<u>MIGRATORY BIRDS</u>	<u>% POS.</u>	<u>MAMMALS</u>	<u>% POS.</u>
1967	1,517	1.7	601	1.2	-	-	-	-
1968	2,656	2.1	525	1.1	-	-	-	-
1969	993	.7	472	1.5	-	-	-	-
1970	642	1.9	330	2.4	-	-	-	-
1971	466	1.0	221	.45	93	16.1	-	-
1972	504	.3	679	.4	40	10.0	-	-
1973	415	1.9	316	1.9	51	9.8	60	8.3
1974	1,076	1.4	-	-	168	2.9	51	3.9
1975	1,487	.7	-	-	147	8.8	96	3.1

#### TESTING AND EVALUATION - 1975

With respect to evaluation, 1975 can be characterized as the year of the aircraft. Although other research was done, major emphasis was placed on testing

and calibration of spray aircraft.

In May, a comprehensive program was devised to evaluate the Douglas DC-3's ability to kill adult mosquitoes during an actual treatment. CDC light trap collections, landing rate counts, and truck trap collections were made one day before, immediately after, and one day after an area of New Orleans East was treated. The same type of surveys were done on a similar area not treated. Based on the information of this test, the DC-3 did a very effective job of reducing the population of adult mosquitoes in the area treated. The reduced population prohibited further adulticiding tests of the DC-3.

In June, the Grumman Ag-Cat was equipped with a ULV spray system designed at OPMC. Using technical grade Dibrom 14 as the adulticiding agent, this system was calibrated and field tested to determine flow rate, swath width, particle size, and its ability to kill mosquitoes in cages and in the natural population. The system was calibrated for dosage rates of 1.00, 0.75, and 0.50 ounces per acre of technical grade Dibrom 14, and the swath width was chosen to be 300 ft. Depending upon the nozzles used, the Mass Median Diameter of the particles was determined to be 20-53 microns. The system killed 100% of caged mosquitoes and showed an extremely satisfactory reduction in the natural population. The only operational limitation seemed to be wind conditions, i.e. wind speeds in excess of 5 mph caused swath width displacement too far downwind. The Ag-Cat ULV spray system is proving to be an effective tool in situations where use of the DC-3 would not be economically feasible.

In an effort to reduce size of particles produced by ground ULV units, surfactants were evaluated. Cyanamid's C-61 and OT-S, both additives for Cythion, were tested. OT-S was found to be unacceptable because of the difficulty in mixing with Cythion. C-61 was better and showed some improvement in reducing particle

size, but not enough to justify its use. Surfactants are still being tested at OPMC as of this printing.

A Buffalo Turbine ground ULV machine was sent to OPMC for evaluation. An experimental machine, the original nozzles were found defficient, and at this printing substitute nozzles are being evaluated.

Projects for 1976 were brought forward in November and December. Determination of susceptability of adult mosquitoes in Orleans Parish will be evaluated by microinjection techniques. A new small ground ULV unit is being developed and will be evaluated. Methods and times of adult surveillance will be re-evaluated to more accurately correlate peak activities with control operations.

#### SOURCE REDUCTION - 1975

Source reduction activities in 1975 began with DL-1, the amphibious dragline, working in area X-30, and the two backhoes BH-1 and BH-2 down waiting for parts. Area X-30 is an area of approximately 420 acres located outside of the levee system in Eastern New Orleans. The area is just South of US 90 and is adjacent to the Ventian Isles residential community. The original project was completed in 1972, however, inspections of the area revealed that the marsh vegetation was growing over and into the ditches. To regain the original effectiveness of the ditches we decided to do maintenance digging of the ditches to 6' wide and 3' deep. (The original ditch size was 3' by 3'). The original porta-plank aluminum weirs (water control structures installed in the tidal connection) also needed to be replaced with more substantial steel sheet pilings. However, before the project could be completed we had to stop work in the area until we could obtain a Corps of Engineers permit to do source reduction work in the wetland.

Due to the age of the backhoes (5 years) we are now in the process of obtaining two new machines. To aid us in the selection of the new machines we reviewed the maintenance records of the old machines. All of the major repair items were listed and their frequency recorded. We checked these items on the machines for which a bid was received. In addition to the maintenance item comparisons we had a demonstration of the different machines under actual field conditions. We are now in the process of comparing the results of these evaluations. The machine which has the best maintenance item check and field evaluation, and can be backed with adequate parts and service will be selected.

Even with the problem of permits and breakdowns we were able to accomplish effective source reduction on 275 acres of mosquito breeding area in Orleans Parish. (See Source Reduction map).

YEARLY TOTALS - 1975

	<u>DRAGLINE</u>	<u>BH-1, BH-2</u>
Total Hours	454.5	453
Total Diggins Hrs.	221.9	216.1
% Time Digging	49%	48%
Total Linear Feet	23,725	14,715
Total Cubic Feet	16,407.39	6,371.7
Cost of Fuel and Oil	\$ 127.71	\$ 54.49
Salary Cost	\$ 3,788.25	\$ 2,771.03
Miscellaneous Cost	\$ 1,689.45	\$ 43.05
Total Cost	\$ 5,605.41	\$ 2,868.57
Cost/Linear Foot	\$ 0.24	\$ 0.19
Cost/Cubic Foot	\$ 0.34	\$ 0.45
Linear Ft./Digging Hour	106.91	68.09

A complete program review has been undertaken and with new equipment it is anticipated that a more effective program will be accomplished in 1976.



SOURCE REDUCTION  
PROJECT LOCATIONS

PROJECTS COMPLETED IN 1976

ST. TAMMANY PARISH

THE  
RIGOLETS

LAKE  
ST. CATHERINE

INTRACASTAL CANAL

LEVEE

HWY. 11

I-10

V-8

CHEF HWY.

CHEF PASS

V-5

PARIS RD.

LAKE BORGNE

20 MI.

15 MI.

M.R.G.O.

BIENVILLE

10 MI.

ST. BERNARD PARISH

5 MI.

B-2

PLAQUEMINES PARISH

LAKE PONTCHARTRAIN

INDUSTRIAL CANAL

CENTRAL CITY

### FIELD OPERATIONS AND ADULT DENSITY SURVEYS - 1975

The unusually high amount of rainfall for 1975 resulted in an extensive amount of time used for inspection and larviciding of floodwater mosquitoes. This situation changed, however, when the threat of St. Louis Encephalitis forced the inspection of permanent water breeding to eliminate the vector.

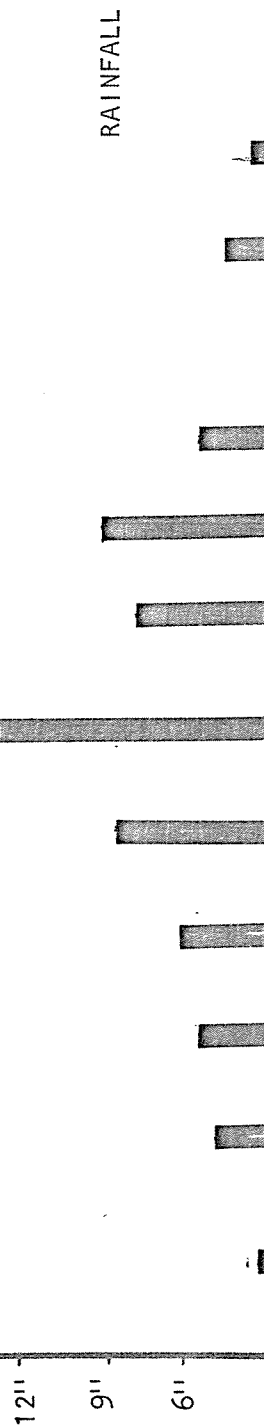
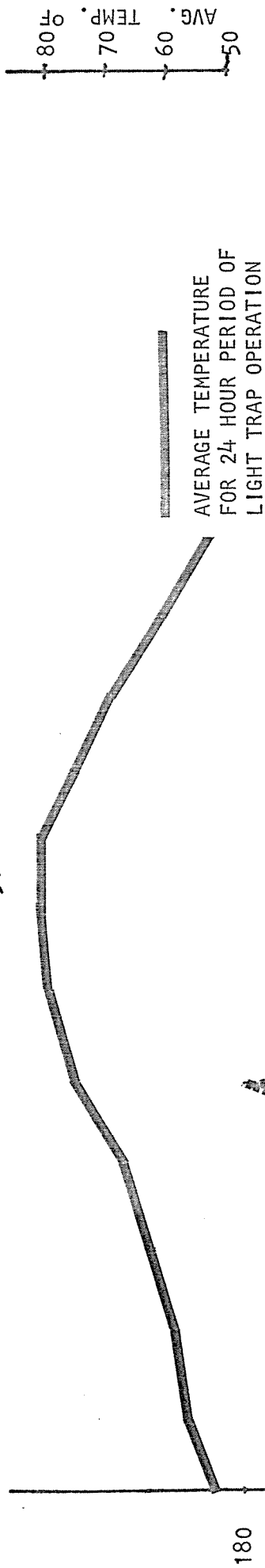
Adult surveillance was continued throughout the year. New Jersey Light Traps were operated on a twice a week basis for the entire year. The problem of losing information because volunteers sometimes fail to operate their traps, was solved with the installation of 7-day timers on every light trap in the parish. CO<sub>2</sub> attracted, man-biting counts were taken daily during most of the year and the truck trap was operated nightly (at dusk) from March through September. Although these surveillance activities occupy a large portion of the working time of the inspectors, the information is very important, not only for the ground and aerial ULV assignments, but for the assignment of permanent control activities.

Many of the problems with equipment which hampered much of the 1974 field operations, were straightened out in 1975 and all of the new equipment was marked with city identification tags.

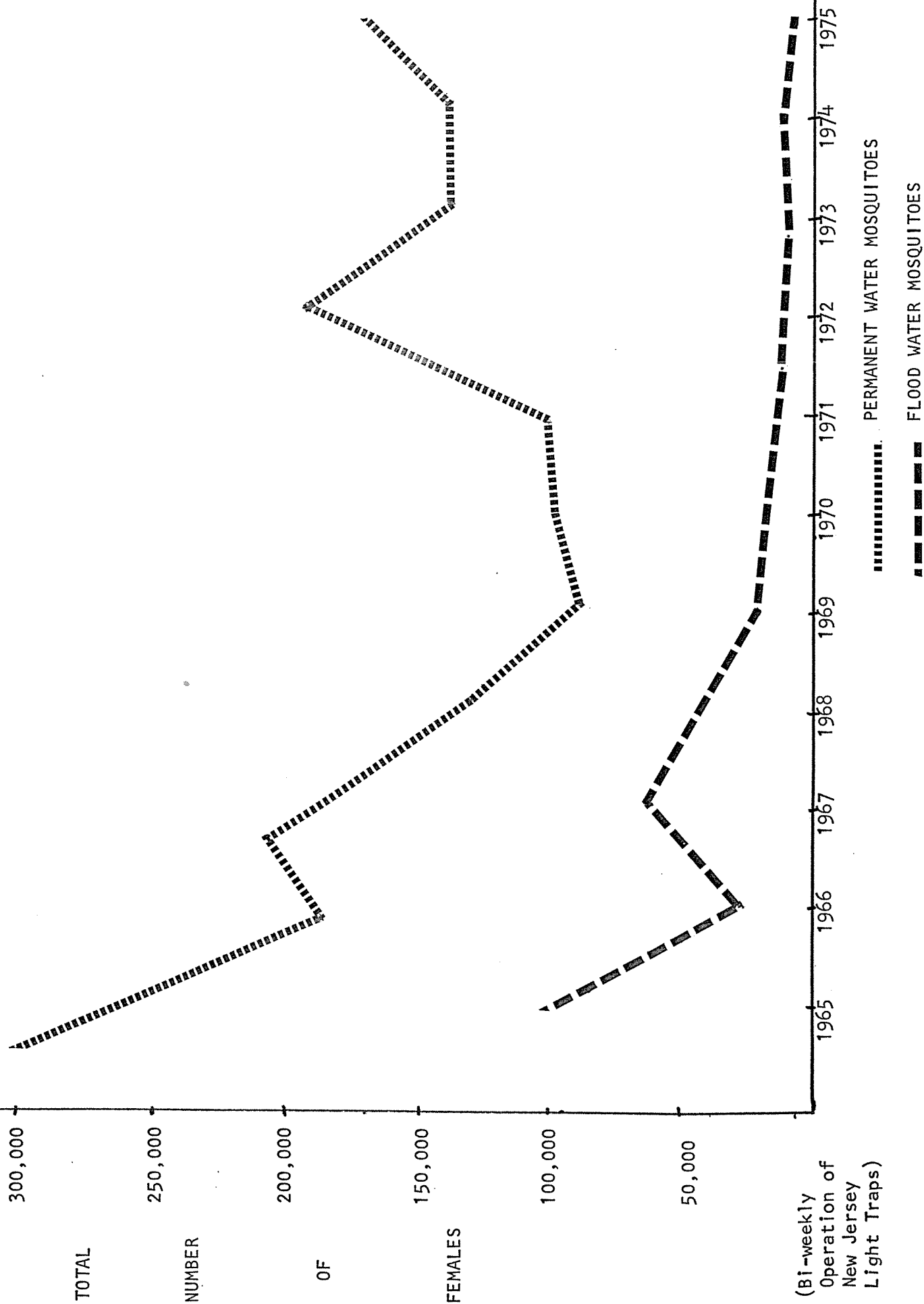
Total Man-hours	19,651.25
Total Light Trap Collections	2,233.00
Landing Rates Collected	3,372.00
Mosquitoes Collected	258,944.00
Larvae Collected	6,647.00
Gallons of Larvicide	3,580.00
Total Miles Traveled	53,224.00
Total Cost of Operations	\$ 74,419.81

# 1975 Mosquito Correlation

MOSQUITO AVERAGE PER TRAP NIGHT



ORLEANS PARISH LIGHT TRAP COLLECTIONS



LOCATION	TOTAL		AEDES		ANOPHELES		CULEX			UL	Pc	Mp	Aae	Cr	Oth.	#
	MALE	FEMALE	SOIL	VEX	CRUC.	QUAD.	QUINQ.	SAL.	CSI	CSm						
LOW. ALGERS	1,678	43,380	58	403	3,515	779	8	34,268	502	2660	823	83	16	0	62	203
MID. ALGERS	427	2,842	20	406	152	84	3	1,719	34	61	188	60	3	0	91	21
UP. ALGERS	186	1,148	3	88	26	9	0	761	23	31	47	22	2	0	111	25
CAPPIN AVE.	142	380	11	52	12	4	4	152	22	5	92	4	2	4	10	6
VIEUX CARRE	197	722	6	64	22	3	1	476	54	29	42	3	0	0	21	1
IRISH CHANN.	205	426	0	58	31	3	6	203	39	3	26	0	1	0	51	5
HA FOLTON	97	256	1	58	14	1	3	91	49	22	11	0	0	0	6	0
AUDITON	115	378	3	34	22	2	4	198	31	48	15	2	1	0	16	2
CITY PARK	247	1,063	11	106	64	12	3	621	72	63	24	16	2	3	64	2
LAKEWOOD	543	2,989	5	478	140	11	0	1,879	190	17	53	11	6	0	188	11
WEST END	653	2,314	40	291	239	17	1	1,280	125	83	117	18	1	0	81	21
LSUNO	40	210	0	21	3	4	0	91	13	8	15	0	1	1	53	0
PEOPLES AVE.	160	472	0	88	27	4	0	190	107	6	37	7	1	0	1	4
LEADS	66	379	2	104	10	6	2	153	42	20	25	3	0	2	0	10
CENTILLY E.	13	180	16	22	14	7	2	67	7	8	10	10	0	0	17	0
LAKE AIR	496	1,597	8	205	87	10	1	778	88	70	42	16	2	0	269	21
LITTLE WOODS	383	4,987	59	192	451	197	2	3,113	184	67	299	31	175	0	121	96
VIL. DEL EST	236	2,735	93	219	208	82	0	1,620	140	132	85	5	52	0	54	45
REVENUE	277	3,167	54	226	168	43	3	1,966	159	55	364	7	36	1	61	24
MICHOUD	2,879	20,468	49	96	1490	272	1	13,813	152	306	4100	27	28	0	18	116
ROVERS JCT.	1,058	12,393	77	4	1117	54	2	8,105	271	1096	1501	13	19	0	27	107
SO. SHORE	2,133	14,036	11	63	2482	67	8	10,656	93	59	471	5	58	0	33	30
CHIEF MONTENAR	2,044	25,046	110	26	3870	100	0	19,241	143	329	1026	22	8	0	51	120
GREENS DITCH	262	13,430	187	12	3972	119	0	7,789	247	0	937	138	0	0	11	18
RIGOLETS	536	22,786	308	45	2866	78	0	18,438	288	379	312	24	10	0	9	29
TOTAL	15,073	177,784	1132	3358	21006	1968	54	127,668	3075	5557	10662	527	424	11	1426	917