

November 28, 1966.

MR. CORWIN: I should like to move to dismiss the (75)  
complaint as against the County Executive and the County.

Now I should like to call to Your Honor's attention (76)  
that the allegations of any complaint against them is based upon  
information and belief in the complaint, and that their participation  
in anything complained of is categorically denied in the verified  
answer.

The two defendants, Dennison and the county, have  
nothing to do with the commission or the spraying of DDT. The  
demand for relief cannot be directed at them, Your Honor, and  
under the circumstances we say the complaint should be dismissed  
as to them.

I should also like to call to Your Honor's attention  
a Court of Appeals case that was handed down last Tuesday, the  
day after we argued. This is Nassau Neuropsychiatry, Inc. -v-  
Adelphi University. That was an action for a declaratory judgment.

\* \* \*

Now in that case, the question or let me put it this way: (77)  
A local society of doctors sought an injunction against Adelphi  
University on the ground that Adelphi was training unlicensed  
persons to practice medicine and from allegedly practicing  
medicine, psychotherapy, without a license. The court held  
that the plaintiffs had no standing in that the Education Department  
and the Attorney General had primary jurisdiction to bring that  
type of an action.

We feel that here in this case we are dealing with an  
area in the law where some basic principles about the declaratory  
judgment type of relief should be given consideration by the court,  
and that the plaintiffs here have no standing to sue for the relief  
for which they are asking here. As I understand it, in order to  
have a proper standing, a plaintiff has got to be in a position dif- (78)  
ferent from that of everybody else in the State of New York, and  
in this case there is no allegation that that is the situation here.

More than that, however, there is also the very  
serious question of whether or not we are encouraging here a mul-  
tiplicity of actions and whether or not the relief that the court could  
grant under these pleadings would be at all effective.

We say that it would not be, and for that reason the  
complaint should be dismissed, Your Honor.

You will remember perhaps, last Monday something  
like this happened: You said to Mr. Yannacone, "Supposing I  
grant judgment in your favor, what is going to happen?"

Reluctantly there came out the answer, "Well maybe  
we would go to the Legislature, and maybe we would go to the Board  
of Supervisors." But more likely, another lawsuit against the corner

drug store, the hardware store, the Long Island Agway, and all those people. (79)

I submit, Your Honor, that what we are going to have here as a result of this precedent in this case is a multiplicity of actions, all seeking the same thing. We submit that under the circumstances the action for declaratory judgment is not the proper remedy for the people to bring, and that they are in the wrong forum, and that the action is in the wrong form.

We submit that on those grounds the complaint should be dismissed, even at this point.

\* \* \*

MR. YANNACONE: Your Honor, it seems as though the defendants in this case speak out of both sides of their mouth. At the hearing in front of Judge Tasker, they decided that it was improper to bring in the tree spraying companies; that they were good enough (80) as a defendant. The memorandum that they have submitted this morning indicates that the Board of Supervisors would be a proper party defendant, and that perhaps we didn't join them as defendants because we were afraid of their legislative power.

Now, I submit, Your Honor, that this is sort of ridiculous. I would like to cross-move at this time to add the Board of Supervisors, if counsel insists as county attorney that he needs the Board of Supervisors here, and we have already had the county in this, the County Mosquito Commission, and the county executive. I don't see why the Board of Supervisors are not already involved in this.

THE COURT: Why didn't you bring them in in the first instance?

MR. YANNACONE: Because, Your Honor, I felt the joining of the county as the institution and that service properly upon the county was sufficient to give us jurisdiction over the Board of Supervisors. I still feel that way. If that is not so, and if counsel (81) wants me to make sure that the record is absolutely complete, I would like to ask at this time that we join nominally the Board of Supervisors. We have the county attorney, Your Honor, who is going to represent them anyway.

THE COURT: Counsel, I couldn't very well do that at this point. If I did, I would have to remand this case, and you would have to take such steps as a litigant usually takes after a person is made a party, such as, perhaps examining them before trial or anything else.

Now, what do you want me to do? If you want me to remand it, I will do so.

MR. YANNACONE: Your Honor, I submit that we have jurisdiction over the County of Suffolk by virtue of proper service.

THE COURT: If you do, then you don't have to add them as a defendant. (82)

\* \* \*

MR. YANNACONE: I also submit, Your Honor, that counsel's motion is premature until such time as Mr. Williamson has testified, and I respectfully move that it be denied at this time.

THE COURT: I will say this to you: Your motion is dismissed at this time, and I will reserve my decision on the motion to dismiss by Mr. Corwin.

CHRISTIAN T. WILLIAMSON, called as a witness in behalf of the plaintiffs, . . . testified as follows: (84)

\* \* \*

MR. YANNACONE: Your Honor, before we proceed, may I respectfully, more out of curiosity than everything else, ask who the other two gentlemen at the county attorney's counsel table are?

\* \* \*

MR. CORWIN: . . . The gentleman on my right is Dr. James Dewey, who is an entomologist with Cornell University and will be here in connection with state policy among other things. On his right is Dr. Maurie Semel, who is connected with the agricultural experimental station out here in Baiting Hollow. (85)

DIRECT EXAMINATION BY MR. YANNACONE:

Q. Mr. Williamson, will you please tell us what your present occupation is?

A. I am superintendant and director of the Suffolk County Mosquito Control Commission.

Q. And would you tell us who your employer is?

A. The Suffolk County Mosquito Control Commission.

Q. And would you tell us how long you have been so employed?

A. Since November 1935.

Q. And who was your employer in November, 1935?

A. Suffolk County Mosquito Control Commission.

Q. Has your employer been continuously the same agency from 1935 to date? (86)

A. Yes.

Q. . . . Will you please tell us to the best of your knowledge what is the Suffolk County Mosquito Control Commission?

A. Well, the Suffolk County Mosquito Control Commission is set up by an act of the Legislature to develop a comprehensive mosquito control program and to exercise that program in Suffolk County.

Q. Does this mosquito control commission exist under or by operation of any particular law? (87)

A. It does, the N.Y. State Public Health Law, Article 15, sections 1520 to 1530.

Q. Now, are there any other sections of the Public Health Law that relate to the Suffolk County Mosquito Control Commission . . .

A. Not to my knowledge.

Q. Are there any other sections to the best of your knowledge of the Public Health Law, Article 15, that relate to mosquito control?

A. Yes, there are.

Q. And these do not apply to Suffolk County?

A. No they do not.

Q. Are there any other mosquito control commissions organized and existing under and by virtue of the sections of the Public Health Law you related other than Suffolk County?

A. No.

MR. CORWIN: Objection, Your Honor, as irrelevant.

THE COURT: I will allow it. Go ahead. (88)

Q. Now, the Suffolk County Mosquito Control Commission, what is it? Will you tell us technically what kind of an organization it is? (89)

A. Well, it is an organization consisting of several members. Some are appointed by the Board of Supervisors and one is appointed by the State Health Commissioner. They are a policy making board which controls and approves and dictates the actions of the commission. (90)

Q. Are they in a position to establish policy as to mosquito control independent of any other agency or authority?

A. I believe so.

Q. And do they generally consult with any other agency or body prior to establishing the policy for mosquito control in the county of Suffolk?

A. They do.

Q. What bodies?

A. The State Education Department, the state entomologists, other states that are concerned in the same work.

Q. . . . Will you tell us over what geographical area your mosquito control commission has jurisdiction?

A. All of Suffolk County with the exception of the east end of the North Fork of Suffolk County, going from the neck at East Marion to Orient Point.

\* \* \*

Q. And is your jurisdiction absolute or concurrent (91) with another agency?

A. I would say it was absolute. That's my understanding.

Q. To the best of your knowledge then, there are no other agencies involved, no municipal agencies involved in mosquito control in the County of Suffolk in the area you described other than the Suffolk County Mosquito Control Commission?

A. Yes.

\* \* \*

Q. Now in the course of your operation, will you please describe to the Court the nature and extent of your duties as executive director?

A. Well, my duties include the establishment of a comprehensive mosquito control program throughout the areas which I have specified. That includes water management and all recognized and accepted features of a comprehensive mosquito control program including spraying, temporary control, larviciding and adulticiding. (92)

Q. Now in the course of your activities, do you have occasion to prepare plans of work.

A. I do, that is required under the statute.

Q. And who are these plans of work submitted to?

A. They are submitted to the Board of Supervisors and to the State Health Commissioner.

Q. Are they reviewable by these agencies as to method?

A. They are.

Q. How long have you been so required by the statute to submit these plans of work?

A. I believe that has been part of the statute right along.

Q. Since 1935?

A. Yes.

"

Q. Have you regularly submitted the plans of work since 1935?

(93)

A. No, I have not.

Q. When was the first year you submitted a plan of work?

A. Sometime in the 50's. I have forgotten just when.

Q. 1957?

\* \* \*

Q. This is a two-page statement each year?

A. Yes.

\* \* \*

(The annual plans were received in evidence from 1957 to date and marked as PLAINTIFF'S EXHIBIT 1.)

(95)

THE COURT: Can I ask you this so far as the contents are concerned? Does it make any difference how they kill a mosquito?

MR. YANNACONE: In the County of Suffolk, yes, Your Honor, in this case especially.

\* \* \*

And, Your Honor, the line of questioning that I am going to direct myself to right now is relevant primarily because the issue is whether or not DDT is a method that should be, and the only method available to the county, or whether there are some equally effective methods that don't have the damaging consequences as DDT.

(96)

THE COURT: Will that be shown in these? Do they say that DDT is the only kind or what?

MR. YANNACONE: They don't say a thing.

MR. CORWIN: In our verified answer, Your Honor, we admit that there are other ways.

\* \* \*

THE COURT: Counsel, counsel. Do this, He admits that there are other ways of killing it. It is a stipulation. He concedes it.

\* \* \*

MR. YANNACONE: Your Honor, it may be conceded for this moment, but yet every time a paper is submitted they keep saying DDT is the only way to kill mosquitoes.

(97)

THE COURT: I will take care of them. Go ahead.

Q. Mr. Williamson, will you look at those for a moment . . . They are plans of work copies, are they not?

A. Yes.

Q. Are they substantially identical from 1957 through whatever the last date is?

A. That's right.

Q. And '65 and '66 are exactly the same also? (98)

A. No they are not.

\* \* \*

Q. In what ways are '65 and '66 different?

A. Well, in the '64 plan of work, we listed some 64,500 corner catch basins that will require attention. Substantially that is the only change.

Q. But the text material remains the same?

A. Yes.

Q. . . . Is there any specific indication of the chemical substances used by the mosquito commission in any of those plans of work?

A. No.

Q. Will you please tell us the current makeup of the mosquito commission? (99)

A. Well, the chairman is the presiding officer of the Board of Supervisors, an ex officio member, under the law having all the rights and powers of a regular member; Gustav Shebar of Islip, the president of the commission; Mr. Walter Fasbender of Centerport, who is the treasurer; Mr. Vincent Reilly of Remsenberg; Dr. George Leone, County Health Commissioner, is a member of the commission. At the present time we have one vacancy on the commission.

\* \* \*

Q. How often does this commission meet?

A. At the call of the chairman.

\* \* \*

Q. And how often did this commission meet during the last year to the best of your knowledge? \* \* \* (100)

A. Four or five times.

Q. And do you recall for '65, roughly?

A. Roughly the same number of times, probably. (101)

\* \* \*

Q. At these meetings, have you ever had occasion to actually describe the day by day operation of your work as executive director? In other words, how you control mosquitoes in the County of Suffolk?

A. Yes.

\* \* \*

Q. Mr. Williamson, how far back do your minutes go? \* \* \* From '35? (102)

A. I think so, yes. I won't guarantee that, but they are pretty complete.

\* \* \*

Q. Are you familiar with an agency called the New York State Museum and Science Service? (104)

A. Yes.

Q. And do you have any dealings with this agency?

A. I do.

Q. And do you have reports from this agency?

A. I do.

\* \* \*

Q. Do you read these reports?

A. Yes, I do.

Q. And are you familiar with them?

A. Reasonably so.

Q. Do they deal with the methods and the nature of the control of mosquitos in Suffolk County?

A. In some respects, yes.

Q. Have they been prepared since about 1936 or '37? (105)

A. No.

Q. Do you have any knowledge of the reports submitted by the New York State Museum and Science Service from about the year 1939 relating to mosquito control in Suffolk County?

\* \* \*

Q. All right. Were such reports ever submitted to the Suffolk County Mosquito Control Commission?

A. Not concerning mosquito control, not to my knowledge.

Q. What type of records do you keep as executive director in the regular course of your business? \* \* \*

A. Well, we keep a financial record. We keep a record of daily operation of the field crews.

Q. All right. Hold it for a moment. The daily records, how far back have you kept this?

A. We have kept them for a number of years, many years.

\* \* \*

Q. How far back did the records of daily operation go that you had destroyed in the fire to the best of your recollection? (107)

A. Oh, 1936.

Q. Did you have them complete from 1936 to the date of the fire?

A. Yes.

Q. Are you sure about that?

A. As far as I can recall, yes.

Q. All right. Now, the daily work records, tell us what is in these, in substance?

A. The areas that are treated, the problems that are found on the areas concerned, and the method of treatment.

Q. Is there a record of the substance used to treat the area or the method?

A. Yes.

Q. Is there an exact location indicated? \* \* \*

In other words, you could point to a map and look at one of these records and say that on such and such a place somebody sprayed thus and thus at such and such a point, is that correct? (108)

A. I think so.

\* \* \*

Q. Can you tell us during the year 1966 how much DDT you purchased? (111)

A. I can. \* \* \*

We purchased 5,040 gallons of 25% emulsion concentrate.

\* \* \*

Q. Will you tell us what strength you normally use this material at? (112)

A. 2 - 1/2 %

\* \* \*

Q. All right, so you sprayed approximately 3,540 gallons (during 1966), is that right?

A. That's right.

Q. And that gave you roughly 35,400 gallons of actual spray?

A. That's right.

Q. Now, during the year 1965, how much did you spray?

\* \* \* A. As near as I can remember, we purchased and used 20,000 odd gallons of 25% concentrate. (113)

Q. Can you recall, . . . , 1964?

A. I think we used a little bit more than we did in '65. I don't remember the exact figures. \* \* \*

Q. And do you recall '63?

A. No, I don't. I would say approximately the same amount. It varies a little bit.

Q. When did your department, to the best of your recollection, first start to use DDT?

A. I believe it was 1946.

Q. And this was roughly the first year it was available really?

A. Yes.

Q. And in 1946, down through 1964, did you use substantially at least 20,000 gallons yearly in those years?

A. Yes, substantially the same amount.

\* \* \*

Q. . . . How did you apply it in 1966? (114)

A. We applied it with knapsack sprayers and with power driven hydraulic sprayers.

Q. In what form?

A. In water emulsion form in speaking of this emulsion concentrate, and in an oil solution form through compressed air sprayers. (115)

\* \* \*

Q. And if I asked you whether this is generally the method used by the mosquito commission, it has been hasn't it?

A. Yes.

Q. Since 1946?

A. Yes.

Q. Now, do you have any procedural guides to follow in determining the methods used to apply this DDT?

A. Manufacturer's recommendations.

Q. And who is the manufacturer?

A. Well, the manufacturer has been many manufacturers-- DuPont, Monsanto, Mathieson.

Q. Let us say in 1966, who made the 1966 DDT?

A. I don't know. (116)

MR. CORWIN: If the Court pleases, I submit that this is subject to public bidding, and that the manufacturer would depend upon who the wholesaler was who got the low bid.

Q. It wasn't DuPont in 1966, was it?

A. I don't know whether it was DuPont's DDT or not.

Q. If you checked your records though, you could find out?

A. No, I could not.

Q. Just for curiosity then, how does DDT come to you, in unlabeled cans?

A. It comes to us through a formulator, who buys the DDT and formulates the material, and he then in turn sells it to us.

\* \* \*

Q. Now, what relationship is there between the Suffolk County Mosquito Control Commission and the County of Suffolk? (117)

A. Well, we are a part of the county government.

Q. Are you sure about that?

A. I assume we are.

Q. Are you under the supervision and control of the count board?

A. Well, I'm not going to make a decision on law there. I would assume that the commission is an autonomous group.

Q. Then you are not really under the jurisdiction of the Suffolk County Board of Supervisors?

A. I don't know. I would not give a positive answer to that. We certainly cooperate with the county board.

Q. Is there any agency of county government that can issue a binding order to you on the use of DDT, to your knowledge? (118)

A. Not to my knowledge.

Q. In other words, this is solely within your jurisdiction and discretion?

A. I would assume so.

Q. Now who pays for your DDT?

A. The county of Suffolk.

Q. How?

A. Out of the appropriations made to the Suffolk County Mosquito Control Commission.

Q. Is the appropriation made to the Suffolk County Mosquito Control Commission a single lump appropriation that is administered by the commission itself?

A. It is administered by the commission with the exception of the disbursements of funds.

Q. Who disburses the funds?

A. The County comptroller.

\* \* \*

Q. Do you have the authority as a commission to shift appropriations within your overall budget item? (119)

A. Within an individual account, yes; not from one account to the other. . . .

\* \* \*

Q. The County Executive as budget officer of the County of Suffolk, does he have anything to do with the budget?

A. He reviews the budget, and he makes recommendations at the time of budget making, yes.

Q. What effect do these recommendations have?

A. I don't know what you mean by that.

Q. In other words, can he reduce the budget?

A. Yes.

Q. Can you do anything about this reduction?

A. Appeal to the Board of Supervisors.

Q. And what can the Board of Supervisors do about it?

A. Replace the reductions that the county executive has made or change or modify the budget.

Q. In other words, then, the entire control of the Board of Supervisors and the county executive is in the field of budgetary appropriation?

MR. CORWIN: I object to that. He is now impeaching his own witness, Your Honor. He already exacted from him something.

MR. YANNACONE: I will withdraw the question and save you some time.

\* \* \*

Q. Now, the operation of your commission, of your department, is to basically rid the county of mosquitos, is that correct? (123)

A. To control the mosquitos in Suffolk County.

Q. To control them or eliminate them?

A. You can't eliminate them. You can control them, but you can't eliminate them.

THE COURT: You mean you can make an effort to eliminate them, but the best you can do is to control. Is that what you mean? (124)

THE WITNESS: Yes.

THE COURT: All right. Go ahead. They keep on having baby mosquitos.

Q. But your mission though, if you could do it, would be to eradicate them?

A. Our mission is just as the title of the act says-- Mosquito Control Commission.

MR. CORWIN: Your Honor, I will concede that if he had some way of eliminating all the mosquitos that might come across the boundary without any passports driven in by the wind, we would do that.

\* \* \*

Q. Are you just interested in mosquitos or are you interested in getting rid of flies too? (125)

A. We are primarily interested in mosquitos only.

Q. You don't do any work then and your interest is not directed at the salt water marsh tabanidae class of mosquitos, the green head fly?

MR. CORWIN: Objection, Your Honor, This is irrelevant. He said he is after mosquitos and if one of these green head flies happens to get in the way, why he is dead, I suppose.

THE COURT: Is that right? (126)

THE WITNESS: Yes.

\* \* \*

Q. In other words then, you don't make any effort to control the green head fly as such?

A. No, we don't.

Q. In that 36 year or 30 year history that you have been involved, to the best of your knowledge you have made, or the commission has made no effort to control the green head fly?

A. Yes, we have conducted a research study on the possibility of controlling the green head fly.

Q. Do you recall when you did this?

MR. CORWIN: Objection, Your Honor, This is irrelevant. It is the improper use of public funds perhaps, but----

THE COURT: Counsel, we are talking about mosquito control. You are talking about mosquitos. The case revolves around mosquitos. We have enough problems with mosquitos. Why don't we stay with mosquitos? . . . (127)

MR. YANNACONE: You Honor, I don't want to belabor the point, but mosquitos and flies generally cause similar problems.

THE COURT: I can think of a lot of miserable things that bite me in the summertime, and I wish they would kill them all.

MR. YANNACONE: We would like to cooperate by the way, Your Honor, in the removal of mosquitos and flies. We would like to eliminate them and not just suppress them.

THE COURT: If he does, he is out of a job. Now let us go on with something else.

\* \* \*

Q. Now, Mr. Williamson, in the course of your work, in your thirty years of working against the mosquito inhabitants of this county, have you had any occasion to measure your success?

A. Oh, I think so, yes.

Q. What is your educational background, Mr. Williamson?

A. I am a graduate of the Pratt Institute, class of 1929, (128) as a mechanical engineer.

Q. Have you had any additional graduate study?

A. No.

Q. Have you had any specialized training in entomology?

A. Only as it relates to mosquito control. I might say short courses, no extension courses, or----

Q. Who gave these courses?

A. I have taken them at Rutgers University under Dr. Bailey Pappas' guidance.

Q. When did you take your last training, as it were?

A. Several years ago.

Q. Where did you take that.

A. Rutgers University.

Q. How long do these courses normally last?

A. Some of them are three days to a week or two weeks.

MR. CORWIN: I am going to object, to this line of (129) testimony, Your Honor, unless he tells me that he is trying to qualify him to express an opinion and to give some expert testimony. In that case, I am willing to concede his qualifications.

MR. YANNACONE: Your Honor, this gentlemen is at best an adverse witness who we are trying not to call an adverse witness. All I want to do is lay a background for some questions that are going to involve opinion. I won't concede that he is qualified.

THE COURT: . . . Now, let me put it to you for my own edification. The case has just started. I want to know if there is any claim that the commission was negligent in the use of DDT or was the fact that they used DDT per se something that was wrong and had to be stopped?

MR. YANNACONE: The use of DDT per se was wrong and should be stopped.

THE COURT: What difference does it make if he is Santa Claus then? What is the difference? (130)

MR. YANNACONE: Your Honor, we have in the record, many, many statements that the commission said, or Mr. Williamson says in an affidavit that DDT is the most effective method of mosquito control. I want to hear Mr. Williamson say that under oath, and I want to find out why.

THE COURT: Ask him.

MR. YANNACONE: I don't know what Mr. Williamson's background is. I don't know whether he is making that pronouncement as a mechanical engineer or an entomologist.

THE COURT: I think that he has said that he knows a certain amount. He never did go to school to study it. He did certain work. I think he took some courses with an individual, which to my mind would eliminate him so far from being what I would call an expert, as such.

MR. YANNACONE: Right. (131)

THE COURT: However, he does say here, "I have been with this commission. I am the head of this commission. I know that we use"--or I assume he will say that--"we use this material, whatever it might be."

Now, what is the difference how important he is so long as he has enough muscle to turn that stuff and throw it wherever he is going to use it. It shouldn't interest me, and it shouldn't interest you. Let us stay with the facts.

MR. CORWIN: On the question of his qualifications, Your Honor, to answer the question as to whether or not DDT is the most effective chemical to abolish the mosquito, may I inquire on the voir dire?

THE COURT: What is the difference?

MR. CORWIN: I suspect there may be a difference. There is a difference.

MR. YANNACONE: I haven't asked the question yet. (132)

THE COURT: All right. You ask the question then, and then maybe I will give you something on the voir dire. How is that?

MR. YANNACONE: I am not going to ask it that way.

THE COURT: All right, go ahead.

Q. Now, Mr. Williamson, you said before we got into your qualifications that you had some measure of the effectiveness of your commission's operation in controlling mosquitos in the County of Suffolk. Will you tell us how you measured the effects of your operation?

A. Well, we placed in said locations a device known as a New Jersey Light trap which collects mosquitos by virtue of attracting them with a light and a fan sucking them into a collecting jar. There is an agent in the jar which kills the mosquitos, and these traps are collected every other day. The mosquitos are classified and counted, and by that count we can determine whether our work is effective or whether it is not.

Q. Do you supervise this work? (133)

A. I do.

Q. . . . But let us talk about 1966, where I assume you have records, and it is fresh in your mind. How many of these traps did you set throughout the county?

A. Six.

Q. Can you tell us approximately their location?

A. Well, there is one just east of Amityville. There is one in Bay Shore. There is one in Great River. There is one in Sayville. There is one in Mastic, and there is one in Westhampton.

Q. Do they run continuously throughout the summer and are counts taken daily?

A. They are run continuously throughout the summer, and the collection is made every other day.

Q. And they are counted by someone who is qualified (134) I assume to tell one mosquito from another?

A. That is correct.

Q. Can you tell us who does the mechanical counting, or how it is done?

A. One of our employees, a man by the name of Kelly.

Q. And is this man qualified by degree or the necessary experience to separate species of mosquitos?

A. He is qualified by experience.

\* \* \*

Q. Does anyone ever check his work?

A. I do.

Q. And you have been qualified by 30 years of work and experience among different types and species of mosquitos?

A. I believe so.

\* \* \*

Q. Do you keep records of these counts? (135)

A. I do.

Q. Now, are these traps set in the areas where within the activities of your commission it is reasonable to assume there would be quantities of mosquitos found?

A. They are.

Q. And the mosquito commission, your group, works in the neighborhood of these traps, don't they?

A. They do.

Q. And they work on a regular basis?

A. Yes.

\* \* \*

Q. In and about the vicinity of the traps, is DDT applied?

A. If mosquito breeding is present it is applied. (136)

Q. In other words, if one of the regular counts finds some mosquitos, you spray the area about the traps?

A. No.

Q. Tell me what you do?

A. If a trap collects a certain species of mosquito, if that is a salt marsh mosquito, then we will check the salt marshes adjacent to the trap within several miles of the trap. \* \* \*

And where mosquito breeding is found, sprays are applied.

Q. How many of these six traps are in or near salt marshes?

A. Well, they are all adjacent to salt marshes.

Q. In other words then, the only measurements of mosquito population you make in the county are salt-marsh mosquitos?

A. No. (137)

Q. The mosquito traps you said are in the vicinity of salt marshes?

A. That's right. \* \* \*

No. Well, let me correct that. I would say probably one or two of them are in salt marsh areas or adjacent to the marginal marsh.

\* \* \*

Q. And are these six locations for these traps, have these locations been substantially the same for some time? (138)

A. They have. \* \* \*

Q. Have they been there since sometime in the late '40s?

A. Yes. (139)

Q. Were they there before 1946?

A. They were there, yes. They were there before '46.

Q. In other words, some records were available then prior to the fire as to the relative mosquito population from the time when DDT was not available?

A. Yes. \* \* \*

Q. Are any of these traps in areas which are substantially the same now as they were back in '46? What about the two in the marshes? (140)

A. The one in Great River, the one at the Great River Country Club, that is virtually the same as it has been for a period of years.

Q. What about the one that is actually in the marsh or around the edge of the marsh?

A. That is just east of Amityville, and there the population growth has occurred.

Q. Has the marsh remained substantially the same though?

A. No, the marsh is changing all the time.

Q. In other words, there has been changing of the habitat in which these traps have been located over this past 20 year period?

A. Oh, yes, surely. (141)

**THE COURT:** Can I make a suggestion? I think you are anticipating, both of you. Unless I am mistaken now, as I understand it, you buy this material that you use. It doesn't come to you in its primary state, and it is put into an emulsion, is that right?

**THE WITNESS:** Yes.

**THE COURT:** And it comes to you in cans or however it might come?

**THE WITNESS:** Yes.

**THE COURT:** Now you did not go any further because you were not asked. Is that emulsion, the formula of that emulsion, the DDT, is it plus a base or has it got something else in it? (142)

**THE WITNESS:** Well, it is DDT and an emulsifier and a solvent.

\* \* \*

**MR. YANNACONE:** I will pick it up from there your Honor.

**Q.** Is the DDT in those emulsions that you purchase in emulsion form, the active ingredient? (143)

**A.** It is.

**Q.** Is it the only active ingredient?

**A.** That's right. \* \* \*

**Q.** Now, during the year 1966, and I'm going to have to go back now year, by year, because it has changed, did you purchase any other insecticides besides DDT?

**A.** We did.

**Q.** What insecticides?

**A.** We purchased----

**MR. CORWIN:** I'm going to object to this. This is irrelevant. We are talking about DDT.

**MR. YANNACONE:** I would like to know just a little bit more, Your Honor.

**THE COURT:** Counsel, please let me get in this. (144) I haven't got a jury, and I have got to know facts. I don't know a thing about mosquitos other than they fly and bite. I am trying to learn something. Now, let me move out a little bit and find out. What I don't need, I will eliminate.

**MR. CORWIN:** Judge, I submit that anything that you can properly learn about the mosquitos should be confined to the issues raised by the pleadings in this case, and I am going to continue to object to the irrelevant questions that are being asked.

**THE COURT:** Well, if some of the questions are going to have to be built up, I am going to allow it. Go ahead.

\* \* \*

Q. Mr. Williamson, have you purchased any other insecticides besides DDT during the year 1966? \* \* \*

A. Abate, malathion, and pyrethrins.

Q. Is abate a brand name or a chemical name?

A. No, that is a brand name.

Q. For what chemical substance?

A. I would not venture to give you the chemical name. It is an organophosphorus compound.

Q. That will be sufficient. What is malathion?

A. A chemical name or a trade name that is a trade name for another organophosphorus material.

Q. To the best of your knowledge, is malathion a chlorinated hydrocarbon insecticide? (146)

A. To the best of my knowledge, it is an organo-phosphorus material.

Q. And the last one, I think you indicated it was pyrethrin? \* \* \*

Are the pyrethrins to the best of your knowledge natural chemical substances removed from plants?

A. I don't know whether they are natural or whether it is synthetic.

Q. . . . Back in the '30's and in the early '40's, prior to DDT, were you using pyrethrins?

A. We were.

Q. Are the pyrethrins generally used by your department as larvicides?

A. Yes.

Q. And are they used as regular insecticides or adulticides or just larvicides?

A. Just larvicides.

Q. And what do you use them for? (147)

A. Adulticiding and larviciding.

Q. And what do you use the DDT for?

A. Larviciding. \* \* \*

In 1966 we used DDT in the corner catch basins, in the drainage sumps, in the sewage filtration beds in the county.

\* \* \*

Q. And you spray the catch basins in the Incorporated Village of Patchogue?

A. We do.

Q. Do you have any knowledge as to whether or not there are any materials in these catch basins such as water?

A. Yes.

Q. And how many times during 1966 did you spray these catch basins?

A. These basins are sprayed on an average of once every three weeks.

Q. And is this on a regular routine basis?

A. Yes.

Q. And when do you commence this spray?

A. By the 1st of April, the very first or the middle of April.

Q. And when do you terminate it?

A. The latter part of September or early October.

\* \* \*

THE COURT: Now, something was said before (149) as to where you used DDT, and I think it was mentioned that it was used in some thousands of catch basins, and then in the following year more catch basins. During those years or during that period of time, did they also use it other than at the catch basins or only in catch basins?

THE WITNESS: Other years we used it in other places.

THE COURT: How about the years of these catch basins.

THE WITNESS: In 1966, we just used it in the catch basins in the three locations I mentioned--drainage sumps and sewage filtration beds.

Q. Did you use it in all the drainage sumps?

A. Yes, sir.

Q. Do you recall roughly how many there are in (150) your jurisdiction?

A. Roughly 1000.

Q. And in the year '66, how many catch basins did you say you had?

A. 64,500 from actual count.

Q. And these were sprayed regularly every two or three weeks?

A. Every third week.

Q. In the year 1965, you again sprayed DDT in the catch basins, the sumps, and the sewers. Did you spray it in any other area?

A. We did.

Q. Where?

A. In the fresh water breeding areas, where we found breeding in fresh water and swamp areas, and where breeding was habitual in salt-marsh areas.

Q. Can you tell us to the best of your recollection what salt-marsh areas?

A. Well, all of the salt-marsh areas of the county.

Q. Did you spray the salt-marsh areas on a regular basis? (151)

A. They are controlled on a regular basis and sprayed when necessary.

Q. Can you tell us in 1965 how many times you sprayed the salt marshes?

A. We did not spray the entire salt marsh. I think that that might be a confusing thought there. We spray on the salt marshes where breeding occurs.

Q. Well, let us get a little bit more specific. Do you have any records of what areas, their size and location, that you did spray --the salt marshes?

A. We did spray in the salt marshes but not the entire salt marsh area.

Q. Well, did you keep records of what areas you sprayed.

A. Not pin-pointed areas, because those areas--

Q. You sprayed locations within plus or minus a quarter or a half mile?

A. Yes, I would say in that respect.

Q. Did you have occasion to spray the fresh-water marshes with the same kind of procedure? (152)

A. Yes.

Q. Do you recall how many times you sprayed the fresh-water marsh areas?

A. Probably five or six times.

Q. And when you refer to fresh water marsh areas, are you referring to areas such as exist around and between the upper and lower lakes at Yaphank?

A. No, we did not spray around or on Yaphank Lake.  
\* \* \* In '65.

Q. Do you at any time take any samples of water or soil of any of the areas where you have sprayed or do spray DDT?

A. No.

Q. In the entire 20 years since you have been spraying DDT, you never took any samples?

A. No.

Q. So you have no record whatsoever of the total accumulation of DDT?

A. No.

Q. Now to the best of your knowledge, does anyone else spray the salt-marsh areas? (153)

A. Not that I know of.

\* \* \*

Q. To the best of your knowledge, has anyone sprayed the fresh-water marsh areas with DDT?

A. Yes. \* \* \*

I believe it was in 1957. The federal and state governments sprayed all of these areas. (154)

Q. A single application?

A. I believe it was a single application. They may have repeated in one or two areas.

Q. But just for one season?

A. One season, yes.

Q. And this was an aerial spraying for the gypsy moth?

A. Yes.

Q. Did any other groups use DDT to the best of your knowledge in the fresh or salt-water marshes other than that?

A. Not generally no. Individuals might have.

Q. But no other organized effort that you know of?

A. Not that I know of.

Q. What other areas in the year '65 were sprayed besides the fresh and salt marshes, the catch basins, the sumps and the sewers?

A. Those are the only ones that I can recall at this time. I don't know that we did any others.

\* \* \*

Q. Mr. Williamson, from the time you started using DDT in 1946, through 1965, did you have occasion to spray the sumps that were then in existence, the sewer plants that were then in existence, the catch basins that were then in existence, and the salt and fresh-water marshes? Cover the field. Tell us what you did, and how many catch basins you sprayed. You know what to say. (155)

A. We carried on the programs annually generally with DDT from 1947 or thereabouts.

Q. To the best of your knowledge, during that year was DDT applied by anyone else? \* \* \* (156)

A. No.

Q. . . . During the course of your work with the use of DDT in the County of Suffolk, have you had occasion to examine any scientific literature with respect to the use of DDT?

A. I have.

Q. Have you had occasion to digest, and do you feel that you understand the scientific literature?

A. Reasonably so.

Q. Have you ever used any other chlorinated hydrocarbon pesticides other than DDT in the course of your activities?

THE COURT: He said he did. He mentioned those others.

MR. YANNACONE: They are not chlorinated hydrocarbon compounds, Your Honor. They are organophosphorus compounds.

A. I believe dieldrin is a chlorinated hydrocarbon. (157)

Q. Yes, when did you use dieldrin?

A. That goes back to in the '50's, as I recall

Q. Do you recall what you used it for?

A. We used it for a larvicide.

Q. And do you recall where you used it?

A. We used it on the salt-marsh areas.

Q. And do you recall the quantities that you used?

A. We applied it at the rate of ten pounds to the acre, 10%.

\* \* \*

Q. Now, Mr. Williamson, the chlorinated hydrocarbons you used were DDT and dieldrin, am I right? (158)

A. Yes. \* \* \*

Q. The other compounds you have described are abate and malathion, and they are organic phosphate compounds or insecticides, and they are not related to DDT, is that correct? (159)

A. That's correct.

Q. They are chemically different?

A. Yes. \* \* \*

Q. Now, do you have a 1967 plan of work?

A. I have.

Q. Do you have any details as to the spraying of DDT in 1967.

A. No, we have no plan to use DDT in 1967.

Q. Do you have any plans to use DDT under any circumstances henceforth or in the future?

A. We do.

Q. You indicated that you have no plans for using DDT next year, and this means in your regular activities such as spraying catch basins, sewers, sumps?

A. That's right.

Q. Do you have any plans to use DDT on certain occasions during next year?

MR. CORWIN: I object to this line of questioning, Your Honor. I submit that the defendant is under an order of this court not to use it. Under the circumstances, of course he is not going to use it.

MR. YANNACONE: I will rephrase the question, Your Honor.

Q. Assuming that there is no longer a court order restraining you from the use of DDT, do you have any plans to use DDT next year? (161)

A. Not in a general control program, no.

Q. Under what circumstances do you plan to use DDT?

THE COURT: If any.

\* \* \*

A. That would depend upon an emergency situation.

Q. Such as?

A. Such as an outbreak of encephalitis, where mosquito control was needed, and we might almost say this shotgun procedure would have to be followed to relieve a specific area of adult mosquito larvae.

Q. Who would make this decision as to when to use DDT?

A. It would be made by the commission upon my recommendation.

Q. And who would make the decision--oh, on your recommendation?

A. I certainly would recommend to the commission.

Q. How would you determine when there was an outbreak of encephalitis?

A. From advisory in the health department.

Q. Which health department?

A. The Suffolk County Health Department.

THE COURT: And also from the State of New York. When they come to my own house and get one of my pheasants and bleed them, and if they find it, they know there is encephalitis on Long Island, because I breed pheasants for that purpose.

Now, go ahead.

Q. Are there any other occasions that you might use DDT?

A. Oh, I guess you could imagine occasions, but that is our only thought at this time.

Q. And how much notice would you have of this encephalitis danger?

MR. CORWIN: I object to this as highly speculative and irrelevant.

MR. YANNACONE: Your Honor, we are looking for an injunction.

THE COURT: You are almost making a doctor out of this man, I told both of you that I was working with the State of New York in the encephalitis program, and I told you how it works, as I know it to be. In spite of this, you said that you wanted me to try this case. Now, I tell you this: The Court takes as much notice as he can that he doesn't know the time between the bite and when you are going to get encephalitis. At least, I don't know.

Do you know?

THE WITNESS: No, of course not.

MR. YANNACONE: I wanted to find out from this witness what the procedure of getting this warning was.

(164)

THE COURT: All right. Your objection is overruled. Go ahead.

MR. YANNACONE: I think this is of interest to the community as well as to the court.

Q. How would you get this warning or should I say do you know, of your own knowledge, how the health department will make this determination?

A. No, I don't.

MR. CORWIN: I'm objecting to this, Your Honor.

THE COURT: He doesn't know.

MR. CORWIN: May I state my objection?

THE COURT: He has already answered.

MR. CORWIN: We are getting into a field now where we are becoming argumentative. What they are driving at, this determination Williamson is going to make will be with the help of the Suffolk County Health commissioner, who is a member of his commission, put there by the State of New York, or is Carol Yannacone, the plaintiff in this action, going to make it? The answer is, and we will concede it, that he is going to make it on the basis of what he reads in the newspapers and hears from Dr. Leone and 1000 other people. It is a matter of common knowledge when there is an encephalitis epidemic.

(165)

You will know it if we have it, and that is for sure.

MR. YANNACONE: Correct.

Q. Now, Mr. Williamson, the operation of your commission with DDT involves catch basins, sewers, and to other standing water areas, basically, including salt and fresh-water marshes. Have you any measure of the effectiveness of DDT on the insects sought to be destroyed in these areas?

A. Well, you will have to clarify that a little bit more.

Q. Can you tell me how effective DDT was in the control of insects arising in these areas sprayed?

THE COURT: Did it do a good job?

THE WITNESS: It did a very good job.

Q. It did a good job you said?

A. Yes.

Q. How do you rate a good job?

A. Well, it has to be relative. You have to measure it against other materials that are available.

Q. Tell me the method that you used to measure the effectiveness of DDT in the County of Suffolk for mosquito control?

A. By observing the rate of breeding and the frequency of hatching and the breeding of mosquito larvae.

Q. Now, you measured the breeding, you say. Tell us how you measured the breeding . (167)

A. Observing the larval population in a breeding area.

Q. How many breeding areas did you observe larval population in?

A. Hundreds of them.

Q. Who did the observation?

A. I did most of them. I did many of them.

Q. Did you keep records of these observations?

A. Yes.

Q. Do you have those records?

A. No.

Q. Did you do any such record keeping in 1966 ?

A. No.

Q. And you have no records?

A. No.

Q. Well, then how do you know? (168)

A. I remember.

Q. All right. Tell me. Name any particular area you want to, and tell me about the breeding population in that area that you have observed and measured.

A. Do you want me to deal with one specific spot?

Q. I will take anything you want to start with, and we will go through the rest one at a time, if necessary.

A. Well, breeding, first off, you have to know what I mean when I say mosquito breeding.

Q. Tell me.

A. Mosquito eggs are deposited in an area that will eventually be flooded when temperature and water conditions become right.

Q. Stop a moment. Is this all species of mosquitos or only one particular specie?

A. This is a particular species known as the aedes sollicitans.

Q. All right . Keep going.

A. When the water and temperature are right, these eggs will start to hatch, and with an application of DDT in this specific area, it will kill the larvae as it hatches for up to three to four weeks at a time with one application of material. (169)

Q. Mr. Williamson, have you had occasion, and we will take this step by step, have you had occasion to ever measure the persistence of DDT applied by your commission?

A. What do you mean by that?

Q. How long it remains in roughly the approximate toxic strength?

THE COURT: He just said three to four months.

THE WITNESS: No, three or four weeks.

MR. YANNACONE: No, I asked him if he measured, not the effect he observed, but I want to know if he has measured, and how much DDT is still in that mudbank.

THE COURT: All right. You may answer that question.

THE WITNESS: No.

Q. You never did that? (170)

A. No.

Q. Then you don't know of your own knowledge how long the DDT you applied remains?

MR. CORWIN: Objection. It doesn't follow, and I object to the form of the question.

THE COURT: I think I am going to let him answer it.

A. The only reason I know that it is still effective is because breeding has been inhibited for that period.

Q. During that period, have you measured the climatological factors in the area, such as moisture and humidity?

A. No.

Q. If there was no water and it was in a period of drought, would those larvae hatch?

A. If the water disappeared from the breeding area, they would not hatch.

Q. You just said that these eggs are laid in areas where the water will come and the larvae will ultimately hatch. They are laid on dry land, aren't they? (171)

A. They are laid on the stems of plants and attached to the stems of grasses and plants.

Q. Above water level?

A. Yes.

Q. They must then become flooded, and there must be standing water for them to hatch, is that correct?

A. That's right.

Q. All right. If there is no water, they will not hatch?

A. That's right.

Q. If there is a drought, they will not hatch, whether or not you apply DDT, is that right?

A. That's right.

Q. Have you had occasion to examine the climatological factors of these areas that you described?

A. No.

Q. Do you know when they get dry and when they get wet?

A. Yes, we know when they get wet. . . \* \* \*

Yes, I know when they get wet.

(172)

Q. You say your DDT was effective in application for a period of about four weeks. What happened at the end of that four weeks for you to say that it was ineffective?

A. Because there was breeding evident again in that water.

Q. Did you actually physically find egg masses?

A. I found larvae. You do not find egg masses with sollicitans.

\* \* \*

Q. How many days a week do you spend hunting around for larvae?

\* \* \*

A. Oh, I may spend a day a week. I may spend two days a month. I may spend in check areas, where I am observing closely, I may check every day.

Q. All right. In other words then, you are making representative statements about entire areas of this county from a rather small number of local observations, is that correct?

A. That's right. They are typical.

(173)

Q. They are absolutely typical?

A. In my opinion.

Q. Now let us talk about this typical area, and let us talk about aedes sollicitans. Give me a location where you made an observation for these aedes sollicitans?

THE COURT: What are sollicitans?

MR. YANNACONE: Sollicitans are a species or a subspecies of the genus aedes mosquito. The aedes mosquito in one of its other species, used to carry yellow fever until it got eradicated.

Q. Mr. Williamson, do you know of any cases, just to clarify the record, of yellow fever in the County of Suffolk within the past 20 years?

A. No.

Q. The aedes sollicitans is one of the mosquitos you do try to eliminate?

A. Yes. (174)

Q. Is it the yellow fever carrier?

A. No.

Q. Is the yellow fever version of the aedes mosquito present in the County of Suffolk?

A. Not native.

\* \* \*

THE COURT: . . . However, what I want to know, (176) and if I am wrong, you tell me, how much of that is used? Does the County use it? Prove to me the effects that you claim in your papers.

MR. YANNACONE: All right, Your Honor, we will stick to effects.

\* \* \*

Q. Mr. Williamson, give us an area where you observed these aedes sollicitans?

A. Hecksher State Park.

Q. And how often do you make these observations?

\* \* \* Let us take '65.

A. Okay. We observed in Hecksher Park with the assistance of an entomologist whom we employed in the summertime----

Q. What is his name? (177)

A. Dr. Schobor. \* \* \*

He is currently living in Shirley, and at the time we hired him he was living in Albany.

Q. Was he an employee of any educational or state institution at the time?

A. He was a teacher in Albany State College.

Q. A teacher of what?

A. Entomology. \* \* \*

Q. What did you observe with this entomologist? (178)

A. We observed the frequency of mosquito larvae in the Hecksher Park marsh areas.

Q. Did you make any measurements?

A. Of what?

Q. Did you make any physical measurements of these larvae?

THE COURT: As to volume?

Q. As to numbers? (179)

A. Yes, we noted the presence of mosquito larvae.

Q. Did you break it down? Did you write it down?

A. At that time, yes, we wrote it down.

Q. What did you do with the record? \* \* \*

A. They were part of the ones that were burned.

Q. Did you have any conversations with representatives of the conservation department with respect to those records before they were burned?

A. Unquestionably we did.

Q. Did you ever tell the conservation department that these records were not available?

A. No.

Q. They were available?

A. Sure, they were available.

Q. In the year 1966, subsequent to the fire, have you had occasion with or without the entomologist to examine areas for aedes sollicitans anywhere in the county?

A. Yes. (180)

Q. Now, let us talk about where you looked in 1966, where you should have records?

A. In Hecksher Park.

Q. You examined an area with the entomologist?

A. Yes. \* \* \*

THE COURT: What did your examination consist of?

Q. Describe the field work you actually did.

A. We take a dipper on the end of a long handle and take samples of the water in confined water areas, in the ditch, drainage systems, to check for the presence of mosquito larvae. \* \* \*

... you take them probably every five or ten feet. You have a long dipper, and you take several samples out.

\* \* \*

Q. Somewhere between 100 and 200. (181)

A. It could be, yes.

Q. And what is the relative volume of these samples?

A. Maybe a dipper full.

\* \* \*

Q. Now, the water that you take, is it put in separate bottles?

A. No.

Q. What do you do with it?

A. Throw it away.

Q. You just look in the dipper?

A. Yes, that's right.

Q. And do you make a record of where you take these dippers from?

A. Generally in a part of Hecksher Park, yes.

Q. How often during the course of the past season did you take these measurements? (182)

\* \* \*

A. Oh, I would say once a week throughout the entire breeding season.

\* \* \*

Q. Now, do you know of your own knowledge or do you have an estimate of the total number of aedes sollicitans larvae found in Hecksher State Park over the summer of 1966? (183)

A. Of course not.

MR. CORWIN: I object to the form of the question.

A. Of course not.

THE COURT: The answer is of course not. \* \* \*

He says he doesn't know. He has (184)

no records of any kind and no information. He was very emphatic, and he said he doesn't know.

Q. Mr. Williamson, then you have no information of your own knowledge as to the relative scarcity or abundance of aedes sollicitans in the Hecksher State Park area through 1966? \* \* \*

A. Yes, I have knowledge.

Q. How did you receive this knowledge? (185)

A. Because I was informed by those who made the tests or the checks.

Q. Did they give you reports in writing?

A. No. \* \* \*

They told me. \* \* \*

Q. What did they tell you?

A. They told me that breeding was occurring in Hecksher Park.

Q. Did they tell you to what extent breeding was occurring?

A. They said breeding is either light or heavy.

\* \* \*

THE COURT: Counsel, both of you hold it a minute.

Mr. Witness, when you took that dipper and put (186)  
it in the water, you did something. You looked at something  
then, didn't you?

THE WITNESS: Yes.

THE COURT: What did you look at?

THE WITNESS: We looked to see if there were mosquito  
larvae present in that dipper of water.

THE COURT: And they are visible, is that right?

THE WITNESS: Oh, Yes.

THE COURT: Now, let us suppose you went to another  
hole, and you dipped in your dipper. Could you tell whether there was  
less in that hole or in the first hole by looking at it?

THE WITNESS: Oh, yes.

THE COURT: All right, Go Ahead. You see, what he  
does, he takes the dipper, and he dips it. He looks and he sees the  
larvae. He doesn't count one, two, three, four, five, because he (187)  
takes his sample of another hole, and he compares them. If they  
have more, he probably sends his men in. They say, "Good lord,  
they are knocking them dead in Hecksher State Park. Let us get  
the Army, the Navy, and the Marines over there to put an end to it."

So why go into all these questions, counsel?

I can visualize the situation here.

MR. YANNACONE: Before we go too much further, Your  
Honor, throughout this case, statistics are in issue. We play the  
numbers game.

THE COURT: Well, son, answer me this: Aren't  
we trying to determine the numbers killed as against the numbers  
that are hatched, or are we trying to prove that we do use it in this  
county, and that it is in fact dangerous, and then your experts will  
undoubtedly say why it is dangerous? Is that what we are trying to do?

MR. YANNACONE: So far perfect, Your Honor. (188)

THE COURT: Now, if we are trying to do this, it  
will be just as dangerous if they walk into a hole where there is  
only half as many mosquito larvae as someplace else. What is  
the difference in how many?

MR. YANNACONE: But, your Honor, the issue has been  
raised and joined as to the effectiveness of DDT in killing mosquitos.  
You heard it in the opening, and you saw it in the memorandum of  
law by the defendants. I want to know how effective DDT is in this  
county. I don't think it is.

THE COURT: All right. Go ahead. Let us see if  
we can stay with the effectiveness, which is exactly what I said to  
you, only I put it the other way. What effect does it have?

\* \* \*

MR. CORWIN: Your Honor, either he is about to (189)  
impeach his own witness or else he has the wrong witness on the  
stand to exact the proof that he wants.

THE COURT: He is not impeaching his witness.  
He is asking him questions and I will permit this.

MR. CORWIN: I'm going to object to his qualifications.

MR. YANNACONE: All right, Your Honor, that is just what I wanted to hear.

You are now objecting to the qualifications of Christian T. Williamson, the executive director of the Suffolk County Mosquito Control Commission, and who is in complete charge.

THE COURT: Gentlemen--

MR. YANNACONE. May I finish, Your Honor, for the record? Mr. Williamson is in complete charge of the operation, day by day, of the Suffolk County Mosquito Control Commission, and you are objecting to his qualifications to render a statement as to the measured effect of DDT on killing mosquitos in the County of Suffolk? Is that what you are objecting to? If so, I will accept the objection, and I will release the witness. (190)

MR. CORWIN: No, not on a general basis like that. But if he is talking about laboratory tests and scientific proof, then yes.

THE COURT: Counsel, please take it easy and don't get excited. I repeat again: This man said he went through what was the Pratt Institute.

THE WITNESS: Yes.

THE COURT: He graduated in 1929. He said he had no formal experience in colleges in this particular field, but he has been, I think, chairman or associated with it since 1935, was it?

THE WITNESS: Yes.

THE COURT: He looks like a perfectly intelligent man, and I assume that he must have learned something, because I got out of college in '29, and I hope I learned something too. You see we both did. He does not count these larvae. He takes them, and he observes them. He sees. (191)

Now I understand that the effectiveness is one of the bases of your case.

MR. YANNACONE: Right.

THE COURT: I am going to allow you proof of that.

\* \* \*

MR. YANNACONE: Your Honor, all I want to know from this witness is how, what scientific method he uses to determine whether or not his DDT works or whether there is a need for it. That's all I want to know.

THE COURT: But you are presupposing that he uses a scientific method as against observation. Why don't you first ask this gentleman: Do you use a scientific method to determine this? (192)

MR. CORWIN: Your Honor, I will object to this.

THE COURT: You are overruled.

MR. CORWIN: I submit that observation is a scientific method.

MR. YANNACONE: Right, Your Honor, and I agree with him. It is the most scientific of all methods.

THE COURT: Well, all right. Go ahead and ask him.

Q. Now, I just want to know what you observed, how often you observed it, and what conclusions you form from it?

A. Well, we observed the mosquito larvae present in the waters, the material is applied, the toxicant is applied, and the larvae are killed. No larvae are present so the spray is effective.

(193)

THE COURT: It is just as easy as that.

Q. That is the method you used?

A. Yes.

Q. Now, how do you determine whether or not it is the larvicide that kills them or ordinary climatological conditions?

A. Common Sense.

Q. That is another very scientific criteria. What method of common sense do you use?

A. Observation.

THE COURT: Counsel, I assume by that question you mean if they put a guard out around every pool of water to see whether it dries up in the meantime?

MR. YANNACONE: No, Your Honor. But we are going to have evidence from a large number of ecologists who are going to testify substantially with a little bit more scientific veracity than Mr. Williamson, but substantially the same way--on observation and direct causal relation by observation. This testimony has already been ridiculed, laughed at, pooh-poohed in the minutes. The whole thing I want to draw out of Mr. Williamson is that we are not talking about apples on behalf of the mosquito commission and oranges on behalf of the plaintiff's ecologists. We are using the same methods in each set of observations. (194)

THE COURT: Counsel, it wasn't pooh-poohed, and it wasn't laughed at. What was laughed at was the colloquy between the two of you, and this constant friction that is between you. I have to set both of you down.

Now I am trying to shorten this as much as I can. I don't propose to have this case go on until next January, if I can help it. What he did say, he said that he did a certain thing. He looks at it.

He also testified to the fact, and this was pursuant to your question of will it be affected by a drying out of the area, and his answer was yes. You also asked him if submersion affected it, and his answer was yes. (195)

He also said that the eggs are laid on a branch or a blade of grass; that when the water is right as to heat or climatological conditions, the eggs will hatch. He will then see larvae swimming around.

Now, he takes two specimens. He looks at one, and assuming one specimen contains half as many as the other, he says, "This place must be worse, because I have twice as many larvae here." So he assumes this, which I think is pretty good common sense, and he does something about it.

Now, what he does, and this is your point, is it wrong?

Do you follow me? I repeat, and I tell you that nobody is laughing at the case at all, son, and I can let you in on a little secret. I have got some awfully important work to do here. I am sitting and listening to this case because I think it is important, very important. (196)

However, I will hear everything you have to say that is within the issues, and I beg you to stay within the issues so that we don't stay here forever. We have so much work in this courthouse, that we can't keep up with it.

Now, go ahead.

\* \* \*

Q. Mr. Williamson, the measurements that you make or the observation that you make with respect to the other species of mosquitos, are they substantially the same? (197)

A. Yes.

Q. And do you make most of them?

A. No.

Q. Who does?

A. Our field crew, foreman, equipment operators, entomologists.

Q. The same entomologist?

A. Yes.

Q. Now, by observation, when you notice a crop of mosquitos, you go out and you spray them, is that right?

A. That's right. (198)

Q. With the exception of those sprayed operations that you do on a regular basis?

A. That's correct.

Q. . . . The salt marsh and the fresh-water marsh have been free of your commissions applications of DDT for the past year, you say.

A. Yes.

Q. Now, all that is left are the catch basins, the sewers and the sumps?

A. Yes.

Q. Are you aware of the outlets of these catch basins?

A. Not all of them, no.

\* \* \*

Q. Do you know of your own knowledge that some of (199)  
these catch basins, especially those on the South Shore com-  
municate with the Moriches Bay, the Great South Bay?

A. They are connected with these various bodies of  
water. Some of them are, yes.

Q. And you still spray them with DDT?

A. Yes.

\* \* \*

Q. Are you aware of the relationship between those (200)  
catch basins with no outlets and the sumps with no outlets to  
another body of water and their relation to the groundwater supply?

A. Yes.

Q. And of your own knowledge, can you tell us what this  
relation with the ground water supply is?

THE COURT: I will take judicial notice of that. \* \* \*

I think we can agree that we have  
some evaporation, and some of it goes into the ground.

Q. And that some of these catch basins fill up with  
the rise of the ground water?

A. That's right.

Q. Have you ever conducted experiments with (201)  
biological control of mosquitos? Have you ever conducted  
experiments with biologic controls of mosquitos while you have  
been the director of this commission?

A. No.

Q. Have you ever conducted experiments with other  
insecticides that DDT while you have been commissioner?

\* \* \*

A. Yes.

Q. Will you tell us what other substances you have  
experimented with?

A. Malathion, abate, the pyrethrins.

Q. Will you tell us when you started experimenting  
with abate?

A. We started in 1964 or 1965 rather.

Q. Did you experiment with it as a larvicide, an  
adulticide, or some other kind of cide?

A. Larvicide.

Q. When did you experiment with malathion? (202)  
 A. Oh, in the early '50;s, I would say if I remember correctly.

Q. And what do you use malathion for?  
 A. We use it for a larvicide and an adulticide.

Q. Have you ever used DDT as an adulticide?  
 A. Not since 1948, if I recollect.

Q. In other words then, the only use of DDT is that of a larvicide?

A. That's been our use of it.

Q. And the pyrethins, you have been using pyrethins, haven't you?

A. Yes

Q. And you used them as larvicides too?

A. Yes.

Q. And do you use them as an adulticide?

A. No.

MR. CORWIN: I am going to object to this line of interrogation as being irrelevant.

THE COURT: I will allow it. (203)

\* \* \*

Q. The only one that it used then as an adulticide is malathion?

A. That's right.

Q. And it is used to some extent as a larvicide?

A. Yes.

Q. Have you made measurements of the comparable effectiveness of DDT and malathion as larvicides?

A. I have

Q. Do you have records of this?

A. No.

Q. Did you have records of this?

A. I did.

Q. Have you made any tests since the fire?

A. No.

Q. Have you ever been asked prior to the fire to submit these records or show these records to representatives of the conservation department?

A. No.

Q. With respect to abate and DDT \* \* \* (204)  
Have you made tests of the comparable effectiveness of each as a larvicide?

A. I have.

\* \* \*

Q. During what year?

A. '65 and '66.

Q. Do you have records of the '66 tests?

A. Yes.

\* \* \*

Q. Can you summarize for us the results of these tests?

A. Yes, I can. The results of the use of abate versus DDT indicates that abate lasts only about, it has an effectiveness of only about two days. So that at the end of a seven day period, mosquito larvae will be present, and they will be hatching and present in a sprayed area. In the same area that was sprayed with DDT, the effectiveness will hold for about three weeks or a little over.

\* \* \*

Q. Do you know of your own knowledge or by reading what causes the DDT to lose its effect after that period of time?

A. No.

Q. Are you aware of any studies as to the biological effects of DDT in Suffolk County?

A. I have read some reports.

Q. Can you tell us who made these reports?

A. No, I don't remember off hand whose reports they were.

Q. Do you have copies of these reports?

A. Not at this time, no.

Q. Were they lost in the fire?

A. Yes.

Q. Do you have knowledge of whether or not there are any reports as to the biological effect of abate or malathion or the pyrethrins on the environment in the county? (206)

A. No, I have not seen any such report.

Q. Do you have any knowledge as to whether or not there were any measurements of the biological effect of dieldrin on the wildlife in the county?

A. Not in the county as such.

Q. Are you sure of that?

A. I haven't seen any in the county as such. You are referring to reports specifically in Suffolk County?

Q. You were the commissioner in 1958 and '59 ?

A. No, I have never been a commissioner.

Q. Pardon me, the executive director of the Suffolk County Mosquito Control Commission?

A. Yes.

Q. You were aware, of course, that you did spray or apply dieldrin to the salt marshes in 1957 and '58 ?

A. Yes.

(207)

Q. And you are not aware of the measure of the biological effect of this spray ?

A. On what ?

Q. When I said biological effect, I mean the effect on anything alive.

THE COURT: You are covering an awful lot of territory. You have an amoeba, and I don't know whether it is alive or not, but it moves. Can't we narrow it down a little bit ?

MR. YANNACONE: The question calls for a yes or no answer, Your Honor.

THE COURT: All right. Go ahead.

Q. Are you aware of any reports on the biological effect of that application of dieldrin in the County of Suffolk ?

A. Oh, yes.

Q. Can you summarize the effect ?

MR. CORWIN: I will object to this now. He is asking for a summarization based on the witness' hearsay knowledge.

(208)

THE COURT: I wonder whether that isn't more in the field of medicine.

MR. YANNACONE: No, Your Honor, although it may be veterinary medicine.

THE COURT: For one thing, counsel, you have made this man your witness.

MR. YANNACONE: I don't mind.

THE COURT: But the idea is this: When you walk into the realm of the question that you are asking of this witness, I don't think that he was ever qualified by you or anybody else as being a person so familiar with the field of biology that he is capable of testifying. The fact is that he said his education had been limited to a particular college back in 1929. Now, I would first like to see you lay the foundation. Find out what he knows about biology and its effect on tissue.

MR. YANNACONE: I will lay the foundation.

THE COURT: You have histology and several other things that have a bearing on this. There are histological techniques that are involved. (209)

Q. Mr. Williamson, in the course of your work as executive director of the Suffolk County Mosquito Commission, have you had occasion to see the biological effects of the application of insecticides?

A. Well, I would answer yes to that. The answer is yes.

Q. What methods did you use to study these?

A. Reading.

MR. CORWIN: I want to know whether he is talking about you individually, Mr. Williamson, or you the commission?

MR. YANNACONE: Now, I am referring to the executive director. I said as executive director.

THE COURT: All right. Go ahead.

Q. Your answer was reading?

A. Yes.

Q. You have read reports of other scientists?

A. Yes, I have read articles and others. (210)

MR. CORWIN: Now, Your Honor, he is trying to qualify him as a scientist by that expression, and I object to it.

MR. YANNACONE: I have no intention, and I respect the man's mechanical engineering degree. It involves a lot of work, and Pratt is a good school. He is not a scientist.

THE COURT: All right counsel. The objection is overruled. Go ahead.

Q. Now, Mr. Williamson, you have read other people's scientific work, is that right?

A. Yes.

Q. And is this what you base the general policy decisions of your commission's activities on?

A. Partially so, yes.

Q. In other words, you read the literature with respect to mosquito control?

A. Yes.

Q. And you use the knowledge in this literature, and you make it your own, don't you? (211)

A. Yes, that's right.

Q. And you couple this with observation of how it works or doesn't work in the country, is that right?

A. That's right.

Q. This is the method you use to study the control and determine what method you will use to control mosquitos in the County of Suffolk, isn't that right?

A. That's right

MR. YANNACONE: I have no further questions.

\* \* \* \* \*

The witness was then cross-examined by MR. CORWIN.