

ALFRED T. KELLAR, called as a witness in behalf of the plaintiffs, being duly sworn, testified as follows:

* * *

THE WITNESS: Alfred T. Kellar, * * * (331)
18 Redwood Road, New Hyde Park, New York

DIRECT EXAMINATION by MR. YANNACONE:

Q. Mr. Kellar, what is your occupation?

A. I am a conservation biologist with the New York State Conservation Department.

Q. How long have you been so employed?

A. Since 1959 * * *
I have a bachelor's and master's degree.

Q. In what is your master's degree?

A. Biology. * * *
Hofstra University. * * *

Q. In the regular course of your duties with the Conservation Department, what geographic areas do you cover? (332)

A. Well, it would be region 9 that I work in, which would be Long Island, Staten Island, Manhattan and the Bronx.

Q. And in the course of your work, did you have occasion to examine the Yaphank Lake fish kill which we discussed before?

A. Yes, I did.

Q. And you heard the testimony before, and you have been sitting here under subpoena all day, haven't you?

A. Yes.

Q. Now, to save some time, will you tell us in your own words, what your part was in the investigation of that event?

A. Well, we received a phone call on April 29, 1964, that fish were dying in the Upper Yaphank Lake, I went out there about seven o'clock in the evening, and there were dead fish. They were dying, and we started counting them and seeing what species were dead. We then collected water samples from the outflow of the lake.

Q. Do you have a record of what species were present as dead and dying?

A. Yes, first on April 29th there were, the dead fish were yellow perch and that was the most abundant fish; the large mouth bass; pumpkin seed sunfish; red fin pickeral; and we also saw brook trout in distress but not dead, that is they were rolling over on their sides, but they were not dead yet. (333)

Q. Did you go back and take other observations?

A. Yes. We had received a phone call, I think it was the next day or two days later, and we went out on May 1st. The phone call was that somebody told us that the Suffolk County Mosquito Control Commission, whatever the proper name is, had a truck there and had dumped or poured DDT in this little pond off Longwood Road, and we went up there, myself and the fellow from the department, and we saw this sump or its not a sump actually, a small swamp that leads by an intermittent stream into the main stream of Carmans River. The Carmans River in turn flows down into the Upper Yaphank Lake and down into the Lower Yaphank Lake, instead of all the way. (334)

Q. Was there an intermittent stream at that time continuous with the Carmans River?

A. There was a very, very slight flow out of it, very slow, like a cup of water being slowly poured, at the time.

Q. Did you take samples of the water from the sump?

A. Yes, we did.

Q. Did you take samples below the sump and on into the lake? (334)
A. Yes, we did.

Q. Did you make this report in the regular course of your business in the department.
A. Yes.

Q. In a manner normal to the operation of your department?
A. Yes. (335)

Q. Did you have occasion to have these samples analyzed?
A. Yes, we sent them up to our laboratory.

* * *

Q. Is this a state agency?

A. Right. We have two different areas in which they are in, but anyway it was the pollution unit we sent it to. It was analyzed by the senior analytical chemist up there .

Q. And in the regular course of business, did you receive a report from him?
A. Yes, we did.

Q. What did that report show?

A. The report showed--I want to say this, and explain it first. The first day, which was the 29th, we took one sample of water at the dam, at the south end of the lake. That's right. That sample had a concentration of DDT of 0.13 parts per million. (336)

Q. And what about the next samples?

A. The highest sample was at station number 3, which was this little swampy area that I had mentioned.

Q. And what was that?

A. That was 15 parts per million.

Q. Now, did you have occasion to have any of the dead fish analyzed?

A. Yes, the fish samples were sent up too, but I have never seen the report of the fish samples.

Q. On the second, third, or fourth days, did the trout that were in distress ultimately die?

A. No, no.

* * *

THE COURT: In the usual course of business, did you make an investigation concerning the fish? (337)

THE WITNESS: Yes, sir.

THE COURT: And is it usual for your department to do this?

THE WITNESS: Yes, sir.

THE COURT: And was it done by your department? (338)

THE WITNESS: Yes.

THE COURT: In the usual course of its business?

THE WITNESS: Yes.

THE COURT: What were the findings? * * *

THE WITNESS: The findings are right here, Your Honor, what the amount of DDT in the water was.

THE COURT: It will be offered in evidence as a Court's exhibit.

MR. CORWIN: May I inquire with respect to this ?

THE COURT: On the voir dire, you have a perfect right to inquire.

VOIR DIRE EXAMINATION by MR. CORWIN:

Q. Mr. Witness, in answer to the question which the Judge asked you, you said that you performed an autopsy, so to speak, on some of these fish?

A. That's incorrect. The department did. (339)

Q. Your department?

A. I collected the water samples, and I collected the fish samples, which I in turn forwarded to our pollution unit, I am not a part of the pollution unit.

Q. How did you forward the fish?

A. We mailed them, as far as I know. I don't know. Maybe somebody took them up. I don't remember.

Q. Do you know whether or not you had them preserved in any way?

A. Yes, they were frozen. They were frozen, and after they were stiff--

Q. Do you know whether or not any of this stiffness came about as a result of the use of some formaldehyde upon them?

A. No, I don't remember using any formaldehyde on them.

Q. Do you know whether any other chemicals were used upon them to (340) preserve them before they went out of your possession?

A. No, I don't think we used anything but freezing.

Q. And do you know what steps were taken to identify these particular fish, and can you relate them to this particular report?

* * *

A. If the fish that I sent up did not get there, and they got it confused up in the laboratory with some other group of fish, I know nothing about this, if that is the case.

Q. Now, Mr. Yannacone said something which led me to believe-- (341) perhaps I am pursuing the wrong horse--but I understood him to say that they examined the fish, and that DDT was the cause of death of the fish. That is what I am examining on the voir dire. Is that the objective?

A. No, you misunderstood.

Q. All right. Can you clear me up, please?

A. All right. There were two samples. There were water samples and fish samples. The water samples were analyzed for DDT. The fish samples that we had, we forwarded up to the one unit who in turn forwarded the fish, that is, to another unit who is equipped to extract DDT from the fish, which the other unit isn't. They can measure the DDT in water. They are equipped to do that. We got the report back from them on the water samples, and how much DDT they contained. I have never seen any report on the DDT from the fish, if it was ever found in the fish or not. I don't know whether it was mailed down to my superior at the time or whether he has it in his possession. But I never saw it.

Q. Now was some of the fish that you sent up yellow perch? Did (342) you testify about yellow perch?

A. Yellow perch, yes.

Q. And large-mouth bass?

A. Yes.

Q. Red-fin pickerel?

A. Yes. I think we sent them all up, except I don't remember packing the eel away.

Q. What about that brown bullhead, did you find any?

A. The brown bullhead, yes, we found brown bullhead. They did not appear the first day. The first day of the fish kill when we were there, there were no brown bullheads. They were found later.

Q. Altogether how many dead fish did you find and send up to your laboratory?

A. I'd say we sent about a dozen.

Q. You sent a dozen. How many did you find?

A. Do you mean dead all told?

Q. Yes.

A. A few thousand.

Q. A few thousand. What size were they? (343)

A. It depends upon the species. The yellow perch were, I'd say, about eight or nine inches, if I remember correct.

Q. How many of them did you find dead in the lake?

A. The first day when we actually counted them by species, and that was a couple of hundred. Now, of course, they varied in size, but I'll say they averaged out to eight or nine inches probably and perhaps even bigger.

The large-mouth bass, and this is the first day where we did a count, it was 20. That was 20.

The pumpkin seed sunfish, five. Do you want the sizes on those?

Q. I would like to have the sizes and the number.

A. I can't give you it on the large-mouth bass. I don't remember how big. I think the biggest one was around three pounds, and they ran from probably a half-pound up.

The pumpkin seed I remember pretty much the size of those. They were pretty standard. They were about five inches. (344)

The red-fin pickerel probably ran about--Well, they don't get very big anyway. It was probably around eight inches, somewhere around there.

Q. Now, on April 29th did you see any very large active pickerel in the lake.

A. No.

Q. Did you see any active pickerel north of the entrance of the boy scout camp?

A. North of the boy scout camp, on that day we did not go up there.

Q. How about May 1st?

A. Yes, I believe there were red-fin pickerel up there.

Q. They were in fair condition, weren't they?

A. Yes.

Q. South of the Upper Yaphank Lake, you saw one trout in good condition, didn't you?

A. Yes, and we saw a trout below the dam also which had recovered and was in good condition. I think that was on the 1st.

Q. Do you know the actual cause of the death of any one of these several hundred fish? (345)

A. I do not know the actual cause.

Q. Do you know the cause of their death--just yes or no?

A. I can't answer that question with a yes or no. If you will let me make a statement, I will answer it.

MR. CORWIN: I will object to so much of this report as refers to the concentration of p, p'-DDT in parts per million found on these stations, and I will object to the rest of the report with reference to the fish kill.

THE COURT: Let me see it. * * * I will allow it. Let it be marked as Court's Exhibit 1.

MR. CORWIN: Do you wish the whole exhibit, Judge.

THE COURT: That is the report that he said he got. * * * That is what you got? (346)

THE WITNESS: That's it.

THE COURT: All right. That's it then. It is Court's Exhibit 1.

DIRECT EXAMINATION by MR. YANNACONE:

Q. Mr. Kellar, how long have you been in the Conservation Department?

A. Since 1959.

Q. And in the course of that time, have you had occasion to examine into the effects of concentrations of DDT on fresh-water fish? * * *

A. No. (347)

Q. Now, have you had occasion to investigate the death of fresh-water fish other than the one you described?

A. Yes.

Q. Is it part of your job?

A. Yes.

Q. In the regular course of your business?

A. Yes.

Q. As part of your job, are you required to form opinions as to the cause of death of the dead fish you find?

A. Only to--Yes, yes, I am. That's right.

* * *

Q. Are you aware from your own knowledge and study of the literature (348) and the work of your department as to the effect of varying concentrations of DDT in waters containing fish, upon the fish?

A. Yes.

Q. Now, looking at that exhibit 1 and looking at those concentrations, can you indicate which of those areas contained sufficient concentrations to be inimical to the native fish?

MR. CORWIN: Objection, Your Honor, There is no evidence at all that this man is qualified to make that kind of an opinion.

THE COURT: I am going to allow it. (349)

MR. CORWIN: Exception.

A. The amount of DDT that was found in the water, depending upon how much it is, will kill or won't kill a fish. Now, I have never done any research at all on this, but plenty of people have.

THE COURT: Hold it. You say you've done no research in that field at all?

THE WITNESS: No, sir.

THE COURT: We will strike out any testimony that he gave concerning this, and I will sustain the objection heretofore made.

* * *

Q. Mr. Kellar, in the course of your regular work with the department, (350) have you had occasion to study the literature with respect to the effects of DDT on fish?

* * *

THE WITNESS: Yes, and I keep getting new material. I write to the Federal Government who gets these publications, and I have my own little file on the concentration with various chemicals, aside from DDT, on the fish and the different species. What the dosage is that kills some many fish in a 24, 48, or 96 hour period.

THE COURT: You have made a study of this? (351)

THE WITNESS: I have collected this information. I have not gone out into the laboratory and put fish in an aquaria and then put in chemicals to see how long they would die.

THE COURT: Mr. Witness, I am asking you a simple question. My question is this: Did you personally make a study of the effect of DDT on these fish?

THE WITNESS: No, sir.

MR. YANNACONE: Literature.

THE COURT: Now, don't put words in his mouth. His answer is no. He did not make a study.

* * *

THE COURT: Mr. Witness, I will ask you this in general: Are you familiar (352) with the effect of DDT on fishlife, more specifically, large-mouth bass, red fin pickerel, yellow perch, and other sundry fish usually found in ponds on Long Island?

THE WITNESS: I have studied, and I have information.

THE COURT: The next question is what is the basis of that information (353)
you have?

THE WITNESS: The basis of the information is from researches in the field of the effects of the toxicant. I have not done research in the field of toxicants. My job is in management.

THE COURT: In other words, what you have done then, you get this information from a third person, is that right?

THE WITNESS: Usually from an agency, right.

THE COURT: I sustain the objection. It is hearsay.

* * *

Q. In the regular course of your business, you receive these reports from other agencies?

A. Yes.

Q. And do you study them? (354)

A. Yes.

Q. Do you make decisions based on them?

A. At times, yes.

Q. Have you had occasion to investigate whether or not these reports are accurate?

THE COURT: He said it is not his business. He is in management.

MR. YANNACONE: Yes, but he has got to rely on something. It is like Mr. Williamson saying he studied the literature.

THE COURT: All right.

A. When I receive a report or write for a report or it is mailed to me-- and sometimes they mail them without asking from a federal agency--or I may write to another state for some information. Now, you are asking me have I ever validated their data?

THE COURT: No, no. * * * He wants to know have you studied-- and you have been to college--did you study these works so that you are equipped to testify (355) concerning the effect of DDT on fish?

THE WITNESS: No, I won't say that.

THE COURT: All right.

MR. YANNACONE: I have no further questions.

CROSS EXAMINATION by MR. CORWIN:

Q. Mr. Kellar, is your supervisor Walter Dykstra?

A. My supervisor, no.

Q. Do you know of him? Do you recognize the name in any way in the chain of command in your department? The last name is spelled D-y-k-s-t-r-a.

A. No.

Q. Now, you referred to samples that you took up around the Upper Yaphank Lake back in April 29, May 1, 1964. How did you collect the samples of water?

A. In a glass Mason jar, and dipping it in.

Q. With respect to any given sump, the sample that you took, did you take more than one sample and on station three?

A. No, I think we just took one sample at each station. (356)

Q. Can you tell me how you collected the samples with which you filled the Mason jar at Station three?

A. By dipping it in.

Q. How deep down in did you dip it?

A. Well, the water was only that deep.

Q. Indicating about a foot, a foot and a half ?

A. No, I wouldn't even say that. I would say I took it from the first six inches.

Q. No, I was talking about the depth of the water. You just gestured about a foot and a half water deep, is that right?

A. At the time, well, let's see. We walked into it, and I'd say that was about it. Yes, about a foot and a half.

Q. Are you familiar with the climatological conditions that prevailed just before you made this test ?

A. Yes.

Q. Had it rained hard?

A. Yes.

Q. It had been raining?

A. Yes.

(357)

Q. Had it rained hard?

A. Hard.

Q. How many inches fell in the preceeding three or four days?

A. This of course, is now in retrospect, and you lose so much, but I remember making a note to myself, a mental note, that we had a considerable amount of rain. Now, if you had asked me a year ago how many inches fell three days or four days before, I would be better able to help you. I remember it was raining the day before. We had rain the day before. I am not sure. It seems to me though that when we were out there collecting the samples, it seems to me that it had just gotten through raining. I could be wrong, but it seems to me the ground was still all wet when we were out there.

Q. All right. Come back to station 3. How far was this foot and a half of water in the sump that you were talking about from the overflow?

A. I didn't pace it off.

(358)

Q. Was the sump full? Was the sump full to the extent of overflowing so that it went into the lake?

A. At the time that I was there, no. As I mentioned before, there was only a very very faint trickle. This was on May 1st.

Q. What about April 29th?

A. No, on April 29th we hadn't gone up there.

Q. Now, with respect to the telephone call that you got on May 1st, you say somebody told you that there was a Suffolk County Mosquito Control Commission truck dumping DDT in this particular sump ?

A. That's right.

Q. Is that what you said?

A. That's right. Dumping, spraying, I don't know the word exactly that they used.

Q. Did they tell you that they were dumping DDT there?

A. No, I don't remember whether they said they were dumping DDT or whether they were just dumping something.

Q. You don't know what they were dumping ?

(359)

A. I wasn't there.

Q. You don't even know whether the truck was there, do you?

* * *

A. I don't know. I wasn't there, so I don't know whether the truck was there. On May 1st while I was there, while we were taking the samples, I will say someone did come up and stopped in a truck, but I didn't say anything to the guy.

He came over and said, "What are you doing?" He said, "Is it about the fish kill?" I said, "Yes."

And he said, "I saw the mosquito commission's truck. I saw the mosquito control truck." I think that was the same person.

Q. Did you get the name of any of these people?

A. I may have the name of one person.

Q. Did you receive what you would call an anonymous telephone call?

A. I don't remember. I know we received -- I have the name of a person who first called in the fish kill. Now, I don't know whether it was an anonymous phone call. I don't remember. I think it might be the person who had originally called in.

(360)

Q. Do you normally inquire of people their name and their address?

A. Yes, yes. The person who had originally called in, I have his name. He lives in Yaphank.

THE COURT: Do you have his name?

THE WITNESS: Yes, I have just the name Andy Sweeney.

THE COURT: Counsel, the name is there. * * *

Q. Did you have any conversation with him subsequent to this time?

A. Before, no.

Q. After he called, did you talk to him again?

A. I don't remember. (361)

Q. Now, have you had any training in the proper method of taking water samples from sumps to determine whether or not the water that is tested is representative of all the water in the sump? Have you had any training?

A. It all depends on what you are going after. If you are going after a dissolved dosage, you must collect your sample in the sump. But to collect it from a sump, there is no special training involved. I mean, depending upon what you are looking for, there are different procedures.

Q. Then your answer to my question is that there are different ways to do this, is that correct?

A. Well, no.

* * *

Q. Now, I will renew my question. Have you had any training in the method and taking of water for samples for testing for DDT out of a sump? (362)

A. No.

Q. When you took this particular Mason jar full that became the basis for Mr. -- I can't pronounce his name, the senior analytical chemist for station number three--did you stir the sump with an oar or anything?

A. No.

Q. Did you make any further investigations to determine whether anybody had dumped any DDT into this sump?

A. No.

Q. Do you know of your own knowledge whether any DDT put in that sump by anybody ever went into the overflow and into the Upper Yaphank Lake? (363)

A. No.

Q. Do you know anything about the toxic effects on fish of DDT?

* * *

A. How it affects them physiologically?

Q. All right.

A. No, that I don't know.

Q. Do you know when a fish is being affected by it what symptoms the evidence is insofar as the manner in which he swims or floats --belly up or tail up or anything like that?

A. No.

Q. Do you know what effect it has on his respiration?

A. No.

Q. Now, do you know, sir, which of the fish that you have mentioned in connection with what has been referred to as the Yaphank Lake fish kill is more susceptible to DDT?

A. No.

* * *

Q. And I think you said that you don't know whether any of them were killed by DDT, isn't that so?

A. I didn't say that.

Q. Were they? * * *

A. You asked me before for a yes or no answer, and I couldn't answer it yes or no. I could only say that I assume, and that is all I say.

Q. You would assume?

A. I would assume from the concentrations in the water that they were lethal to the fish.

* * *

Q. Is there any connection between the sump and the lake? (366)

A. Yes, I refer to it as an intermittent stream.

Q. An intermittent stream?

A. Yes.

Q. And I'm asking you at the time you took the sample on May 1st, how far from the top of the overflow the water level was?

A. I don't remember whether it was going out over the top or coming around the side or over the bottom, because I don't remember what the outlet structure looks like any more.

Q. What was the inlet structure to the sump?

A. It doesn't have an inlet structure. It is just a depression.

Q. In the roadbed? On the north side of the road?

A. There was at one time, and I didn't see it, but at one time supposedly there was a intermittent stream connecting Artists Lake to that thing, but we saw it on the old topo map, but I have never seen it. Supposedly, at one time there was an intermittent stream there. (367)

Q. Probably there was. Do you know that this particular sump that you referred to at station three in the report was the one where the Suffolk County Mosquito Control Commission truck was seen by--

A. Two people. That is what I was told.

* * *

Q. The question is this: Down at station three, where you took the sample that resulted in the analysis of 15.0 parts per million DDT, that is p, p' DDT, do you know whether that was the one where Andy Sweeney said he saw the Suffolk County Mosquito Control Commission truck? Do you know? Do you know if that was the location where the truck was? * * *

A. No, I don't know whether the truck was there. This is where I was told the truck was. (368)

Q. That's where he said it was--at station three?

A. Right, That would be the sump, right, three.

Q. Is that the only sump anywhere around there?

A. Yes.

Q. Are you sure about that?

A. Yes, right around that area.

Q. Is there any sump nearby there that has a lower--and I'm talking in terms of elevation now--outfall than this particular sump into Upper Yaphank Lake? * * *

A. Not that I know of. There is some swampy area on the east side that has a sort of water coming in.

Q. Now, when did you first get a report of the fish kill? Was that on April 29th? (369)

A. April 29th.

Q. And the truck was seen there the next day, is that right?

A. No, the night., if my memory serves me right, when the call came in, were informed of the fish kill. I don't remember if this fellow had said-- No, I would have been up there right away. So on April the 29th I was not informed of any truck being up there; only that dead fish were in the lake. So that would let Sweeney out, because he was the guy who called me up. If he had said that he saw a mosquito control truck up there, I would have gone up there. So it couldn't have been him. It was an anonymous phone call, right.

Q. You don't know when the mosquito commission truck was there, do you?

A. The date, no.

Q. It could have been after the first report of the fish kill?

A. It could have been after the fish started to die off, yes.

Q. Your laboratory in which you say these fish were sent to for analysis, do you know whether they simultaneously sent any live fish and healthy samples of fish? (370)

A. No, they weren't. They were all dead fish.

Q. You say you are in the Conservation Department, is that right?

A. Right.

Q. Do you have any idea how many fish are taken by fishermen in the course of the year from the Upper Yaphank Lake?

A. No, we have never done a creel check on that, but it is fished fairly light. I wouldn't say it is a heavily-fished lake.

Q. But there is a lot of sport fishing in Suffolk County, isn't that so?

A. Yes.

Q. Is it a fair statement to say that thousands and thousands of fish are taken by fishermen?

THE COURT: I wish somebody would tell me the secret.

MR. CORWIN: I have no further questions, Your Honor.

* * * * *

CROSS EXAMINATION (continuing) by MR. CORWIN: (372)

Q. It was proper for the Suffolk County Mosquito Control Commission truck to be spraying in that area, isn't it? There is nothing wrong with that, is there?

A. To spray in that area, no, not so long as he put in an amount that is so small that it does the job of getting rid of the mosquitos and doesn't have an adverse effect on the fishlife.

Q. You think that is a proper use, isn't that so?

A. To the extent that it has no effect on the fish and gets rid of the mosquitos, I have no argument with that use.

Q. And even if it kills a few fish, would you say that this is a substantial, permanent, and irreparable injury to the natural life of Suffolk County? (373)

A. No, I would not.

Q. Now, isn't it a fact, are you familiar with the topography in your Yaphank area?

A. Yes, I am to an extent.

Q. There are a lot of farms bordering in that area, aren't there?

A. There are some farms, yes.

Q. And normally they would be sprayed with DDT for the aid of crops, isn't that so?

A. Yes, I would assume so.

Q. And DDT, because it doesn't break down fast, that could run off the farm and get into the Upper Yaphank Lake, couldn't it?

A. I would suppose it could.

Q. The area drains into the lake, doesn't it?

A. Yes, yes. There is drainage of some sort.

* * *

REDIRECT EXAMINATION by MR. YANNACONE:

(374)

Q. The only thing I want to understand, Mr. Kellar, in the regular course of your operation, you are required to take samples of water after receiving a report of a fish kill, is that right?

A. Right.

Q. And you took these samples?

A. Right.

Q. Are the methods that you used to take these samples in conformity with the regular methods of taking water samples to test for--

THE COURT: Counsel, nobody is quarrelling with that.

MR. CORWIN: I am, Your Honor.

MR. YANNACONE: He is.

THE COURT: Well, I overruled him, and I put the record in evidence.

MR. YANNACONE: All right.

THE COURT: He can object all he desires about that. We have got that point finished.

Q. And you gathered the fish, and you sent them away?

A. Yes.

(375)

Q. And that is the extent of your relationship with the investigation, is that right?

A. After the fish were gone, bang, the only thing I got back was the report on the water and nothing on the fish.

Q. And that report is in evidence?

THE COURT: The report as to the water samples is in evidence.

A. Right.

Q. And you went on to do other duties for the department, right?

A. Right.

Q. And that was your last contact with the fish kill?

A. Right.

MR. YANNACONE: All right. I have no further questions.

* * * * *