

Dr. SPRULES: It is the material cost, to all intents and purposes, and if you need more material because the stream is wider you increase the capital cost. These barriers average about \$10,000. That is the figure we have been working on as an average cost of the capital structure for the electrical barrier.

Then, the operating cost each year after is very much the same as the original capital cost, but a little bit less.

The poison, which to some of you would seem to be a very easy way of effecting this control, would cost something like \$100,000 for a small stream.

Mr. MURPHY: What is that, again?

Dr. SPRULES: The poison, the cost of the poison, to poison a small stream, will run about \$100,000 per application. The reason for this is—

Mr. MURPHY: You would be killing lamprey up to five years old, though, wouldn't you?

Dr. SPRULES: That is right, yes.

One of the major difficulties with the chemical at the moment is that it is a shelf chemical as yet; it has not been put into commercial production for us. Companies, certainly Dow, will put it into commercial production, and once we can indicate the requirement for many thousands of pounds, I expect the cost per pound will be reduced. At the moment it is very expensive, since it is only a small bottle of compound which some chemist has evolved. It was just a chemical which had no use, just a synthesized organic chemical which a chemist found and put on the shelf.

Mr. MURPHY: Are the results of the experiments as good, so far, as you expected?

Dr. SPRULES: Yes, the kill on the recent field tests I would say were spectacular. The kill, I think, can be made complete.

Mr. MURPHY: I think at the last committee meeting something was said about some light rays or electrical rays being experimented with to kill the lamprey as they are going up to spawn. What is the story on that?

Dr. SPRULES: Well, that did not prove workable in the field. There were experiments carried on in the laboratories for some time following our original hearing, but at the present time nothing is being done experimentally in the field; it is still a laboratory toy.

Mr. MURPHY: Are there lampreys spawning in Lake Erie?

Dr. SPRULES: Yes, there are.

Mr. MURPHY: You discovered that the last three or four years?

Dr. SPRULES: Yes, that is right.

Mr. MURPHY: Have you any idea of the number of streams?

Dr. SPRULES: They are limited in number. There is one stream in the Delhi area and one or two small streams in the Niagara Falls area, in the area down at the eastern end of the lake. As yet there is nothing showing in the large muddy tributaries, like the Grand and Thames, in that section.

Mr. MURPHY: You are not operating any mechanical weirs in Lake Huron?

Dr. SPRULES: There has been a mechanical weir on the river which flows through Delhi.

I am sorry, you said in Lake Huron. No, there are no mechanical weirs in Lake Huron. There was an electrical weir at Thessalon and several other electrical weirs in that north shore area.

Mr. MURPHY: Doctor, if the commission had more money, I think that is the contention of the former minister, a joint attack could be made. After all,