

of the birds had migrated, but the insects were still alive. The workers came to the conclusion that there was no significant impact on bird life in these particular areas following the spraying.

I have with me also a publication from the Pennsylvania department of agriculture by Dr. Nicholas. I can lend it to you. I would be glad to leave this copy with you. This is the only one I have, but I think I have some more at home. I think I could easily get them for the committee. I recommend this to you. I think it is the most complete analysis of the gypsy moth control program in the state of Pennsylvania that I have seen. As you know, there is control of the gypsy moth in the New England states. Far be it from me to speak against the federal government. I understand there has been agitation respecting whether or not it has been wisely undertaken. But here under the effects on wildlife Dr. Nicholas makes clear what the impact is, and points out intensive experiments carried out by the department of agriculture in Scranton, and shows there was no impact on bird life. A count was carried on by the Scranton bird club of the Audubon bird society, and these officials were satisfied that there was no damage done to the bird life, including the nesting birds. This publication has been available for quite some time. It was published in 1962, and it was available, I know, to Miss Carson.

I also draw to your attention the writings of Dr. Hayes of the United States public health service. He has published a large volume on D.D.T., discussing its effects on wildlife, and only in certain cases were they able to establish any given impact on wildlife. There had been a feeling among those in the field that there had been. Yet the amount of damage to wildlife in North America has been less than in Africa where animals have been slaughtered with reckless abandonment. We feel that the agriculture of the American farmer, and of the American forest operators, such as Weirhauser and so on has paid close attention to wildlife, and that they are as much interested in maintaining it as they are in growing crops and lumber.

Mr. McDONALD: If I might interject something: I read the current issue of "Sports Illustrated" for November 18. This is one of my favourite reading pieces. I noticed in it a story on the roundup, and what the hunting conditions are in the United States this year. I would like to read two sentences from it, to you:

Wildlife populations all over the nation are bigger and healthier than ever, not in spite of pesticides, but in many cases *because* of them.

A great many pesticide disasters and portents of disaster, reported in newspapers and elsewhere, turned out to be exaggerations, in one case amounting to two dead pheasants.

Those wildlife poisonings that did occur were invariably the result of misuse or negligence, not the inevitable result of prescribed application.

Pesticide usage is under tight control—growing tighter every day—not only by federal, state and municipal authorities but within the pesticide industry itself.

Mr. GELBER: The World Health Organization has I believe carried on very extensive D.D.T. spraying projects in its battle against malaria not only in Italy but also in Greece where it has had remarkable success. I wonder if the results in terms of these side effects we are discussing have been measured and interpreted by your people. We have had quoted American experience. I think European experience might be very revealing because of the widespread campaign carried on and of the brilliant results of bringing down