80-30 GREAT LAKES SPORTSMAN
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SPORT FISHERMEN ORGANIZE TO PROTECT A GREAT FISHERY

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Poisoned Fish, Troubled Waters ... Restocking of Lakes Seen as Futile ... Study Finds Pollutants in Trout ... EPA Orders Crackdown on Use of PCBs ... DNR Imposes PCB Limits ... Legislature Urged to Ban PCB Sales - These are some of the headlines which have appeared in newspapers and magazines during the past two years to alert the public, in general, and sport fishermen, in particular, to the health hazards of water pollution in the nation's lakes and streams. The message has been especially alarming to fishermen in the Great Lakes area inasmuch as trout and salmon, particularly the trophy-size specimens, are found to have PCB contamination considerably above the level which has been established by the Federal Food and Drug Administration for safe consumption by humans.

Contamination of fish by PCB's and other toxic substances can now be detected and measured in extremely minute quantities in terms of parts per million and FDA has established a level of five parts per million for interstate shipment and sale of fish harvested in the Great Lakes. Laboratory tests on trout salmon larger than 24 inches in length have consistently produced levels of contamination in excess of the 5ppm guideline, a situation which has dealt an economic blow to commercial fishing while resulting in confusion and consternation among sport fishermen.

Having experienced the frightening episodes of DDT and mercury pollution of fish in the Great Lakes, sport fisherman were wondering if the PCB's were another act in the continuing drama of water pollution and, if so, what could be done about the matter. There was a flood of questions during meetings of sport fishing clubs around the Lakes, questions such as: Are PCB's really a health hazard? ... How do they get into the fish? ... Is it safe to eat trout and salmon from the Great Lakes? ... What are PCB's and how did they get into the environment? ... Can we stop further pollution from PCB's? ... If we curb PCB's, will this halt the problem of contamination of fish? ... and, What can we do to help resolve this problem?

To supply some answers to these questions, the Great Lakes Sport Fishing Council sponsored a meeting in Chicago last winter with the subject of PCB Pollution in the Great Lakes as a major topic for discussion. Representatives from Food and Drug Administration, U.S. Fish & Wildlife Service, Environmental Protection Agency, and from the departments of natural resources from Indiana, Illinois, Michigan and Wisconsin were key speakers and supplied much of the information sought by the sport fishermen.

PCB is an abbreviation for polychlorinated biphenyls, a family of chemical compounds that were first manufactured commercially in 1929. In the U.S., PCB's have been manufactured by a single producer, the Monsanto Chemical Company. In addition, PCB's are produced in Great Britain, France, Germany, the U.S.S.R., Spain, Italy and Czechoslovakia. Production of PCB's has been halted in Japan following an accidental contamination of rice oil by PCB's which resulted in serious physical debilities among more than 1,000 people who ingested the contaminated oil. The symptoms include eye discharges, severe acne, ulcers of the uterus and darkening of the skin. Pregnant women suffered miscarriages and stillbirths, and surviving infants had abnormal skin pigmentation.

The concentration of PCB's in the Japanese contaminated rice oil was relatively high—2,000 ppm, but studies done on primates at the University of Wisconsin Medical School produced strikingly similar symptoms from greatly reduced concentrations.

Previous studies in which cormorants, ospreys, and terns (all fish-eating birds) were involved, suggested that deformities and lack of reproduction resulted from high PCB concentrations - from 300 to 1,000 ppm in some instances. Reproduction failures and high kit mortality on Michigan mink ranches were attributed to a diet which included feed containing quantities of Lake Michigan salmon. Accordingly, it was no surprise to Wisconsin University researchers when the rhesus monkeys in the PCB test group had reproduction failures, abortions, and weak infants. Considering the evidance, it was the consensus of the meeting in Chicago that FDA was justified in setting the level of PCB contamination at 5 ppm for fish being sold in interstate commerce. And, particularly so, in view of

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the fact that the Canadian government has established the PCB level at 2.5 ppm.

Unlike DDT which breaks down or "degrades" fairly quickly in the environment, PCB's are extremely stable and resist deterioration, a characteristic which had great appeal to industry. They have remarkable resistance to heat, are not harmed by ordinary incineration and their durability has found them used in electrical transformers and capacitors, paints, inks, paper, plastics, adhesives, sealants, and hydraulic fluids.

"We estimate that over the past 45 years, some 700 million pounds of PCB's have been produced and used in the United States," Russell E. Train, EPA Administrator, declared in a statement before a national meeting on the problem. "Of that amount, more than half has already entered the environment through discharges to the air, water, and land. Unfortunately, there appears to be relatively little that we can do to remove PCB's from the environment. Practically speaking, this is beyond our reach through known cleanup techniques and may take many years to degrade to any substantial degree. This means it may be 10 or 20 years before some of our waters will be suitable commercial fisheries.

"Monsanto Company, the sole American producer of PCB's, voluntarily restricted sales of the product to closed electrical systems, according to EPA, prior to the task force report, and steps have been taken to limit discharges of industrial effluents of PCB's into rivers and lakes."

While PCB pollution was the spearhead for the Council's Chicago meeting, it became evident that PCB's were but one item in the control of toxic substances entering the environment. In a statement at an earlier meeting, Train had pointed out that in the five years since Toxic Substances legislation was first proposed, an estimated 600 chemical compounds are introduced into the commercial market each year without any systematic advance assessment of their potential impact upon public health. We find ourselves without the authority we need to cope with the problems posed by PCB's - the authority to limit selected uses and distribution of toxic chemicals as well as to require testing concerning the health and ecological effects of proposed substitutes, he explained.

"Enactment of a Toxic Substances Control Act would substantially strengthen my ability to achieve a phase-out and I will continue to press for passage of such as act," he said.

Recognizing the magnitude of the problem, member clubs of the Great Lakes Sport Fishing Council directed their efforts in support of legislation to curb PCB pollution and to enact a Toxic Substances Control Act.

In one letter to Congressmen from the Great Lakes Sport Fishing Council, it was pointed out that the revival of sport and commercial fishing in the Great Lakes is one of the few positive environmental trends in our times. More than one million anglers fish for trout and salmon in Lake Michigan annually and the economic value of the sport fishery alone is estimated at $350,000,000 ... The marine industry by itself generates $200,000,000 annually in Lake Michigan.

The letter continued by stating "that while these dollar values are important, we do not feel they represent adequately the human values involved. The Great Lakes are within easy reach of some 40 million people living in the Midwest. The availability of sport fishing on these inland seas offers tremendous recreation potential. But this potential cannot be realized if we permit the lakes to become polluted. We are relying on you and your colleagues to protect this vital natural resource."

The response from Congressmen to whom communications were addressed was encouraging as excerpts from this reply from Senator Gaylord Nelson indicates.



There are lunker salmon for all hands after a successful sport fishing expedition near Frankfort on Lake Michigan. Continuation of this great sport is an objective of the Great Lakes Sport Fishing Council.

"I share your concern that PCBs are one of the most serious pollution problems ever to affect the environment and threaten human health. On March 26, the Senate approved the Toxic Substances Act, which included an amendment that I introduced to ban PCBs except where the EPA finds there is no reasonable risk in their use."

The Toxic Substances Control Bill, with Senator Nelson's amendment to control PCB's included, was passed by Congress and signed into law by President Ford. Organizing the combined effort of sport fishermen to promote the enactment of legislation which will be beneficial to public recreation in the Great Lakes is one of the objectives of the Great Lakes Sport Fishing Council.

Should sport fishermen eat the trout and salmon they catch in the Great Lakes? You can get a variety of opinions on that subject but the weight of evidence from state and federal health authorities suggests caution. The word from Wisconsin's Division of Health is: "Sport fishermen be advised to refrain from eating more than one meal per week of such fish and that pregnant women and children be cautioned to limit their intake to one average size serving of such fish per week." Similar warning has been issued by the Michigan DNR along with suggestions on how to prepare the fish to reduce the intake of contaminated portions of the fish.

PCBs tend to accumulate in fat and fishermen are advised to remove as much fat as possible. Fat deposits along a fish's lateral line, along its back, and in its belly flap should be cut away before the fish is cooked. The larger and fatter the fish - the more likely higher contamination of PCBs. Bake, barbecue, or broil the fish after they have been cleaned to remove more fat in the flesh. Fish can be fried, but get rid of the drippings - don't use them for anything, and don't dump them down the drain. We don't want more PCBs in our lakes and streams.