Hooks and Bullets

Acid Dumping Not Perilous to Fish

—by Ray Trullinger—

Yesterday in this space it was disclosed that scientific tests, supervised by Dr. Bostwick H. Ketchum, of the Woods Hole Oceanographic Institution, had revealed that disposal at sea of dilute sulphuric acid had an "infinitesimally small" effect on marine organisms in the dumping area.

This acid condition, checks disclosed, lasted for approximately three minutes, and there was no conclusive evidence that zooplankton in the area were harmed, much less destroyed. Obviously, if this brief, three-minute acid condition failed to destroy minute organisms in the dumping area off this harbor, it stands to reason that larger fish would not be affected.

Iron sulphate, Dr. Ketchum informed this reporter, can be detected in great dilutions in sea water and can, consequently, be traced for considerably longer than the acidity.

No Need to Worry About Zooplankton.

"The rate of dilution behind the dumping barge," the doctor stated, "was much more rapid than we anticipated. Iron is, of course, fairly common in polluted waters. Within the first hour or so, however, we found that the iron was completely oxidized to the ferric form which, in sea water, precipitates out as iron rust.

"The presence of this precipitate discolors the water and while it persists will affect the depth to which sunlight can penetrate and consequently the growth of plants. This is the turbidity effect which has been mentioned several times.

"It should be pointed out, however, that iron is not a highly toxic material and our preliminary tests with zooplankton indicate that they could survive in the water directly behind the dumping barge. Since the pollution is dissipated so rapidly, it is our conclusion, from this experiment, that the zooplankton of the area would not be adversely affected.

"The removal of oxygen from water by combination with the iron had been suggested as a possible detrimental effect of this operation," Dr. Ketchum continued. "To determine whether the oxygen removal could be serious or not, we presented data showing the total quantity of oxygen removed from the water by this chemical reaction. These data show that under the worst conditions about .2 of a milliliter of oxygen per liter of sea water was thus removed. This is only 4 per cent of the oxygen originally present in the water and we consequently concluded that the oxidization of the iron has only a brief and negligible effect on the oxygen content of the water."

All of which bears out a hunch this reporter had months ago, when the Mudhole acid-disposal controversy started, namely: that too many self-commissioned pollution experts were popping off about something they knew nothing about.

But let's keep the record straight. This reporter doesn't condone pollution in any form. So far, however, there is no conclusive proof that the dumping of chemical waste products in the Mudhole area has—or will—adversely affect local salt water fishing. According to Dr. Ketchum, we'll have the facts in two years. Meanwhile, let's go fishing.

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