

Industrial Pollution Big Factor in 1964 Fish Kill

Dr. James Dewey, Chemicals-Pesticides Program Leader for New York State, recently released the following statement, "According to the Public Health Service (PHS-847 (Rev.)), they received 485 official reports of fish kills in 1964 in fresh and marine waters of the United States. This is the largest number of reports ever received and the number of fish killed was also the largest, an estimated 18,387,000. These figures are an increase over the 436 reports of an estimated 7,860,000 fish killed in 1963.

Industrial pollution (193 incidents) accounted for the largest number (12,715,000) of fish killed. Municipal wastes (122 reports) resulted in the death of 4,100,000 fish, while toxic substances from agricultural operations were responsible for the death of 1,522,000 fish (193 reports). Transportation and other operations were responsible for the remaining 43 reports (50,000 fish).

Over half the number of kills

and two-thirds of the fish killed were reported in the 3-month period July through September. Roughly 15 percent of the fish found dead were game fish and the rest were nongame fish. An estimated 6 million of the more than 18 million fish killed were of some commercial value.

The following chart indicates the number of fish killed by the various agricultural operations comprising the total for agricultural (1,522,000):

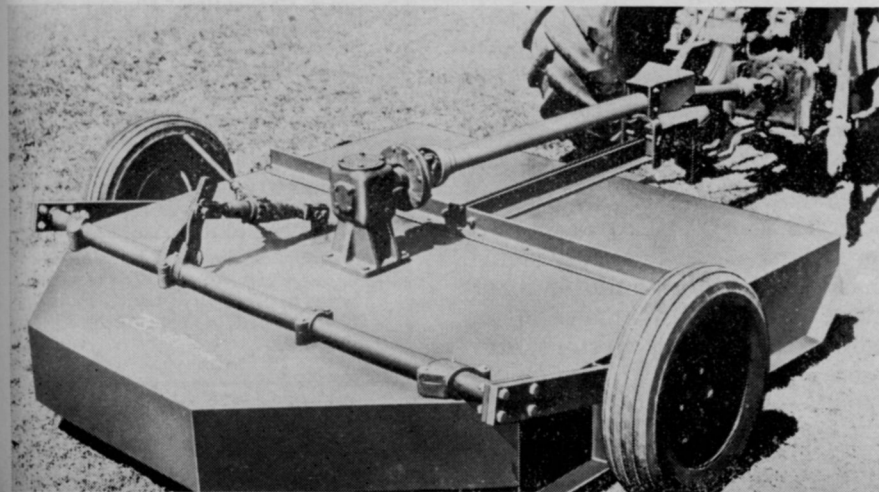
Thus, pesticides were associated with 75% of the agricultural incidents and 19 percent of the total number of incidents reported. However, this 19 percent of the reported incidents accounted for only about 1% of the total fish killed by all pollutants.

Combined industrial operations (e.g. steel and coke operations) were the largest reported cause of fish kills. Sewage was the most serious cause of fish deaths arising out of municipal operations and land drainage the most serious cause arising out of agricultural operations.

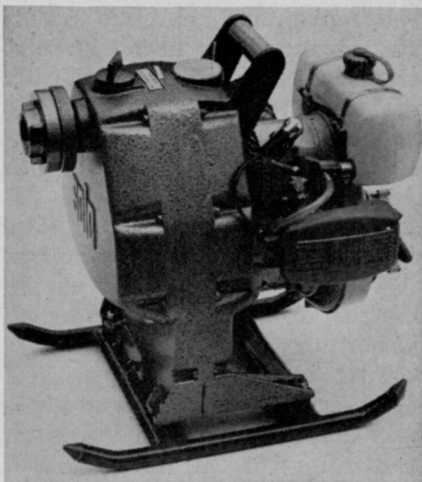
Source of Pollution	Total Number of Reports	Number of Verified Reports	Number of Fish Killed
Pesticides, poisons, etc.	93	74	191,167
Fertilizers	5	4	67,040
Manure-silage drainage	29	26	1,156,885
TOTAL.....	127*	104*	1,415,092*

* The other reports totaled an estimated 106,908 fish.

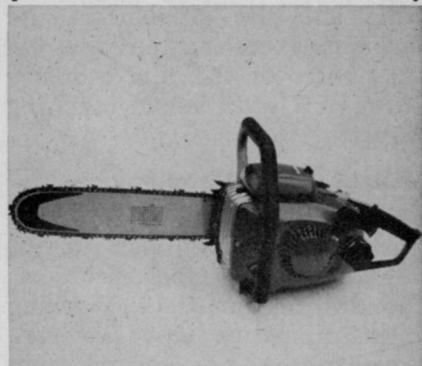
Rugged construction to match today's more powerful tractor is built into the Model R-84, 7-ft. rotary shredder, says Brillion Iron Works, Inc. Shredder housing, with 12½-inch skirts, is made of ¾-inch steel plate. Welded angles underneath provide added strength, act as baffles for finer shredding. Two blades of ½ by 4 in. heat-treated spring steel are shaped for high clearance under the center of the machine, and are tilted on the back for better suction and cleaner pickup of knockdowns. Three-knuckle shielded PTO with shear yoke, full-skid shoes, heavy-duty gear box, and reversible wheels are other features. The machine is available either at 540 or 1,000 rpm speeds. Hydraulic control of cutting and transport height ranges from 1 to 14 inches. Additional information on the new R-84 can be had by writing Brillion Iron Works, Inc., Brillion, Wis. 54110.



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