

Fertilizers Are Polluting U.S. Rivers

New York — The nation's cities and industry are pouring millions of dollars into construction of sewage plants to control water pollution.

But all this may be for nought, says a leading environmental scientist, unless equal attention is given to pollution stemming from agricultural fertilizers.

As much pollutant material seeps into the nation's rivers and lakes from inorganic fertilizers as comes from municipal and industrial sewers, says Barry Commoner, chairman of the botany department at Washington University in St. Louis.

Because of economics and politics, Commoner told an environmental conference here, fertilizer pollution "is not really being looked at."

As a result he says, "we're heading for a crisis."

The problem has been too hot to handle at the federal level, he implies, because of the strong farm lobby.

Fertilizer is one of the farmer's cheapest tools, and he spreads it indiscriminately across the nation's farmlands, Commoner says.

The U.S. Agriculture Department, he says, is "only interested in increasing crop yields and reducing costs."

The U.S. Interior Department, which is in command of the clean water fight, has not tackled the question, he indicates, because of its political explosiveness.

A \$3.5 billion water pollution bill pushed through congress last year, he says, provides no funds for research into the fertilizer problem.

But as pressure mounts for complete cleanup of the nation's waterways, he says, "there is going to be a political and economic explosion."

The cost of inorganic nitrogen fertilizer has dipped since World War II, says the botanist, and its use has grown four-fold—to 8 billion pounds a year. About 1.2 billion pounds leaches out of the soil into surface waters in the form of nitrates, he estimates.

This is equivalent to the amount of nitrogen being poured into U.S. waters from municipal sewers.

Nitrates act as food for algae, a form of plant life that robs water of oxygen and kills stream life.

Nitrates, he says, can be harmful to health—especially among young children. Once in the system they can inhibit the supply of oxygen in the blood stream.

Because of nitrate-rich drinking water in some California communities, he says, pediatricians are warning mothers not to give their children tap water.

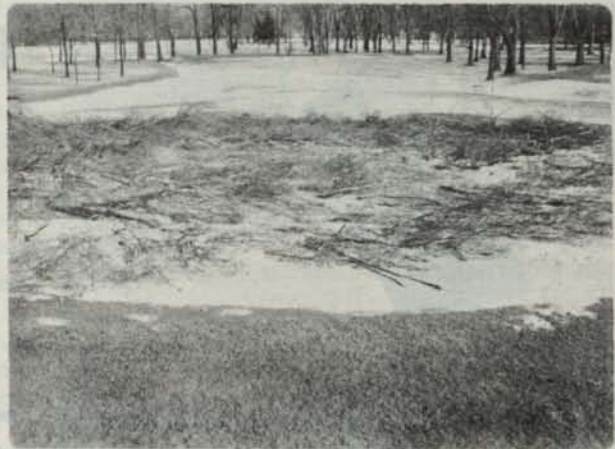
"We might undertake a huge program of controlling sewage and industrial waste," he told the sponsored conference, "only to find that rivers and lakes were dying from over-feeding by farmland fertilizer runoff."

The problem, Commoner says, is just beginning to receive attention and solution won't be easy.

Advance treatment methods can remove nitrogen from industrial and municipal effluent "but a corresponding control of nutrients from farmland runoff would require treatment of the total mass of surface water—a forbidding task," he says.

One suggestion, Commoner proposes, is to replace inorganic fertilizer on the farm with organic effluent obtained from sewerage plants.

A pilot study of this process is currently under way at the University of Pennsylvania, he says.



Two greens highly elevated at Evanston Country Club are covered with brush each winter to prevent "Desiccation." Bruce Sering, Superintendent.

SOME OF THE WORLD'S LARGEST FINANCIERS MET IN CHICAGO IN 1923.

- President of the largest independent steel company.
- President of the largest gas company.
- President of the New York Stock Exchange.
- Greatest wheat speculator.
- One of the President's Cabinet.
- Head of the world's greatest monopoly.
- President of the Bank of International Settlement.

NOW SOME 40 YEARS LATER, WHERE ARE THESE MEN?

1. The President of the largest independent steel company, Charles Schwab, died a pauper. The last few years of his life he lived on borrowed money.
2. The President of the largest gas company, Howard Hopson, is now insane.
3. The greatest wheat speculator, Arthur Gutten, died abroad — insolvent.
4. The President of the New York Stock Exchange, Richard Whitney, was released from Sing Sing Prison.
5. The member of the President's Cabinet, Albert Fall, was pardoned and released to die at home.
6. The greatest bear in Wall Street, Jesse Livermore, died a suicide.
7. The head of the world's greatest monopoly, Ivan Kruger, The Match King, died a suicide.
8. The President of the Bank of International Settlement shot himself.

The same year, 1923, the winner of several of the most important golf championships, including the U.S. Open and the P. G. A. Tournament was Gene Sarazen. Today he is still strong, still playing an excellent game of golf, and is solvent.

CONCLUSION — STOP WORRYING ABOUT YOUR BUSINESS AND GET OUT AND PLAY GOLF.