



Water Pollution in Missouri: A Fact Sheet Series

Animal Waste Pollution

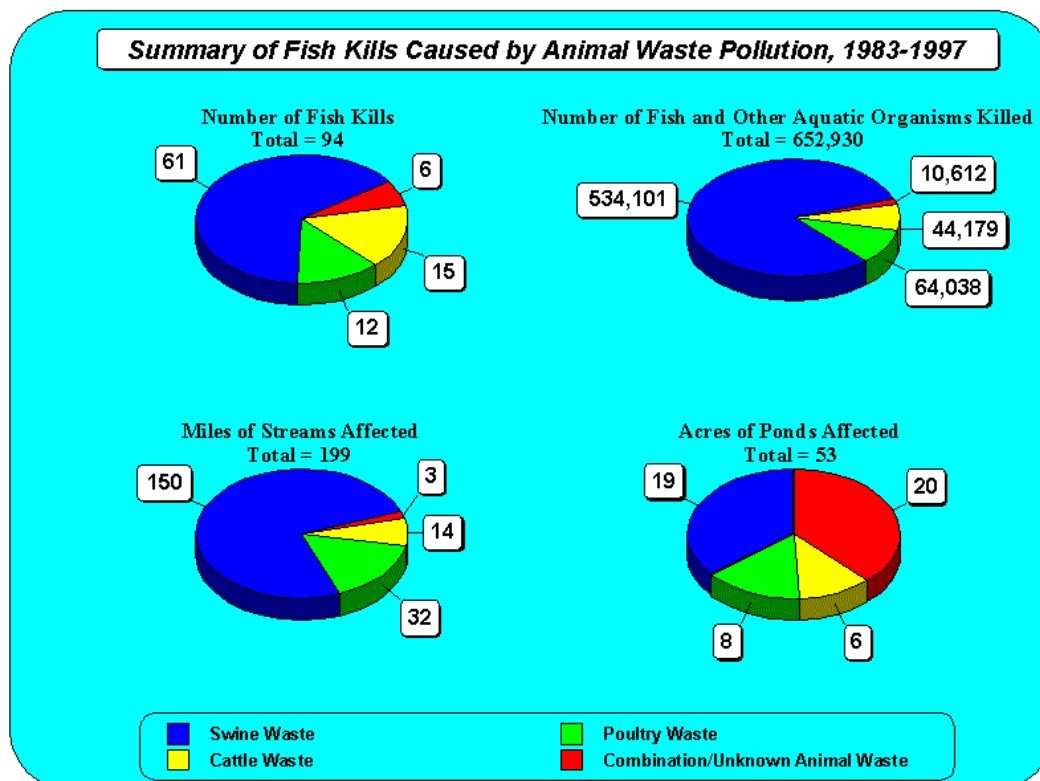
Introduction:

Missouri is among the nation's leaders in livestock production. This production helps feed the people of the state and the world. However, incidents of animal waste pollution can be devastating to our economically and recreationally important waterways. This Fact Sheet provides general information about animal waste pollution in Missouri's rivers and lakes, and guidance to those interested in obtaining more information.

Pollution History:

From 1983 to 1997, 343 Agricultural Pollution Incidents affecting Missouri waters were investigated by the Missouri Department of Natural Resources and the Missouri Department of Conservation. The incidents caused 144 known fish kills. Data from the investigations show:

- Animal waste caused 234 (68%) of the 343 agricultural pollution incidents.
- **Animal waste pollution caused 94 fish kills in 199 miles of streams.**



In 1996, 36 Agricultural Pollution Incidents were investigated and 9 fish kills were verified.

- Swine manure caused 26 of the 36 pollution incidents.
- Fish kills occurred in 5 of the 26 incidents of swine manure pollution.
- **Animal waste killed 55,000 fish in 35 miles of streams.**

Specific Concerns For Missouri's Aquatic Resource:

- Animal waste contaminates streams and lakes with ammonia and other toxic substances, resulting in fish kills and loss of aquatic resources which may take years to recover.
- Animal waste pollution increases nutrient loading in streams and lakes, causing algae buildup and fluctuating oxygen levels that can stress or kill fish and other aquatic life.
- Increased bacterial loads produced by animal waste pollution in streams and lakes can cause diseases in fish and wildlife.

What Can You Do About Animal Waste Pollution in Missouri?

- Report fish kills and water pollution problems to:
 - Department of Natural Resources Emergency Response Office at 573-634-2436 (24 hours/day)
 - Department of Conservation Environmental Services Unit at 573-882-9880
 - Or, your local conservation official
- Be informed--learn about the problems and solutions.
- Express your concerns to your elected officials.
- Join a STREAM TEAM and participate in volunteer water quality monitoring.

For More Information:

- STREAM TEAM and volunteer water quality monitoring:
Conservation Federation of Missouri
728 West Main, Jefferson City, MO 65102
800-575-2322
- Fish Kill and water pollution investigations, stream management, stream disturbance:
Missouri Department of Conservation
Fisheries Division, P.O. Box 180
Jefferson City, MO 65102
573-751-4115
- Water Quality Regulations:
Missouri Department of Natural Resources
Water Pollution Control Program
P.O. Box 176, Jefferson City, MO 65102
573-751-1300

- Effects of Agricultural Pollution on Fish and Wildlife Resources:

U.S. Fish and Wildlife Service
Ecological Services, 608 Cherry
Columbia, MO 65201
573 876-1911

U.S. Geological Survey
Environmental and Contaminants Research Center
4200 New Haven Road
Columbia, MO 65201
573-875-5399

- Human Health Concerns:
Missouri Department of Health
P.O. Box 570
Jefferson City, MO 65102
573-751-6400

This fact sheet was prepared in March 1998 by the Rivers & Streams Committee, Missouri Chapter of the American Fisheries Society, P.O. Box 10267, Columbia, Missouri 65205-4005. Please write to this address to request additional copies. Data for this fact sheet were obtained from the Missouri Department of Conservation.