

Outdoors

July 8, 2006

The Death Of A Trout Stream



The following is an account of events I witnessed following the chemical spill that occurred after the June 30th train wreck in Norwich Township, Mckean County.

At approximately 9 am on June 30th a Norfolk Southern train wrecked near Gardeau in Mckean County, just upstream from the Cameron County line. The train wrecked adjacent to the

Sinnemahoning Portage Creek near its headwaters spilling highly concentrated sodium hydroxide solution into the stream.

This portion of the Sinnemahoning Portage Creek is protected as an Exceptional Value (EV) stream by the state Department of Environmental Protection due to its extremely healthy biological community and water quality. The stream is designated as a Class A wild trout stream by the Pennsylvania Fish Commission and holds both wild brown and brook trout populations. Portage Creek had a reputation of producing large wild brown trout.

The pollution traveled downstream killing all fish in the Sinnemahoning Portage Creek. At the confluence with Cowley Run, Portage Creek is stocked with trout downstream approximately 6 miles to the confluence with the Driftwood Branch at Emporium. Fish kill along this section of stream also was 100%.

It took about eight hours for the sodium hydroxide pollution to reach the Driftwood Branch at Emporium. The Driftwood Branch is a stocked trout fishery and a favorite destination for both trout and smallmouth bass anglers. At 7 pm on June 30th I personally witnessed the pollution for the first time at the Rt 120 bridge over the Portage Creek in Emporium. The water was brown, but not a muddy brown, a tea-colored brown, and it was foaming.

I had hoped that things would be diluted by the time it was this far downstream. Dead fish lay on the banks under the bridge. The concentration of sodium hydroxide was still so strong that it could be smelled standing on the bridge. With this concentration, there was sure to be a heavy fish kill on the Driftwood Branch and farther downstream.

Eyewitness reports on the Driftwood Branch at the Mallery Hole below Emporium observed trout and other fish species dying at 7 pm on Friday evening.

By midnight the pollution had traveled below the village of Cameron. At this time I traveled to the Driftwood Branch just upstream from the mouth of Hunts Run in Cameron with a flashlight and observed fish dying underneath the railroad bridge. Various minnows were dying in the shallows. The stream was teabrown colored. Out in the dark in the main flow of the stream I could hear fish jumping, stressed and trying to get out of the pollution.

I returned to the Driftwood Branch in Cameron at dawn. Fish lay washed-up dead on the shore and collected at the bottom of the stream in the slow moving water-trout, smallmouth bass, rock bass, stone catfish, carp, suckers, darters, and various minnow species were all among the dead.

At 9 am I traveled downstream to Sterling Run and took a water sample. Then I traveled 10 miles farther downstream to the town of Driftwood, just upstream from the confluence with the Bennett Branch of the Sinnemahoning Creek and took another water sample.

Eyewitnesses claim the pollution first reached Driftwood at about 8 am Saturday morning, July 1st. Despite being about 30 miles downstream from the train wreck the stream still ran brown with pollution.

At Driftwood, the Driftwood Branch and Bennett Branch form the Sinnemahoning Creek. I traveled downstream to Sinnemahoning. Mayflies were hatching on the stream and the water just looked beautiful. All of that was soon to end. The pollution hit the upstream end of Sinnemahoning around 11 am.

By 2 pm I watched dead fish float past on the Sinnemahoning Creek underneath the Wykoff Run Road Bridge by the Willows Restaurant. Bass, stone catfish, and various minnows floated by. Many fish were still alive, but were slowly dying as the extreme basic conditions took their toll. I grabbed another water sample for later analysis.

At 4 pm I traveled back up to Emporium. Pollution was still coming down the Sinnemahoning Portage Creek from the wreck site even though it was almost 24 hours after the pollution first reached Emporium.

I returned to Sinnemahoning at 7 pm with friends. In the shallows we found dead brown and rainbow trout, smallmouth bass, catfish, and numerous minnows. It boggled my mind to see this mortality nearly 35 miles downstream from the wreck.

Sunday morning I woke early and walked down to the Driftwood Branch in Cameron. The pollution had mostly cleared up and the stream was basically clear. Dead fish lay up and down the bank. Every kind of fish imaginable was lying dead. They collected at the edge of the stream, on gravel bars, and in the slow moving sections as they settled out to the bottom. Everywhere I looked there were dead fish. As a sportsman it made me sick to the stomach.

The Driftwood Branch was dead. A stream that had been teeming with life two days earlier was dead. One of the healthiest streams in Pennsylvania had been killed. I walked past my favorite stretch of stream and thought that I should be swinging a pair of wetflies through the riffle. Instead I was counting dead fish.

Fish were killed from the spill site in Mckean County downstream 35 miles to below Sinnemahoning and possibly even farther downstream into Clinton County. It will take a while for the stream to recover. I'm sure in time it will. Even with this devastation, fish, insects, and populations of other aquatic organisms have survived in refuges at the mouth of tributaries and where springs enter the stream.

The final tolls are astounding. I've drawn the following conclusions. On about ten miles of the Portage Creek both the wild trout portion and stocked portion appear to have experienced an entire fish kill. Twenty miles of the Driftwood Branch from Emporium to Driftwood experienced nearly a 100 percent fish kill. About 5 miles of the Sinnemahoning

Creek experienced a significant fish kill with this fish kill potentially extending even farther downstream into Clinton County.

It's going to take a long time for the Driftwood Branch and the Portage Creek to recover from this environmental catastrophe. Entire aquatic biological communities were wiped out- fish, insect life, diatoms, everything. I expect that what we'll see is a slow recolonization of the effected stream reaches.

Next year we might have good hatches downstream from Emporium a half mile. The following year we may have good insect life downstream for a mile. The following year it might be good fishing downstream for two miles, etc. Although I doubt anything survived just downstream from the crash site, certain organisms did survive on the Driftwood Branch.

Sunday morning in Cameron there were hundreds of crayfish out in the Driftwood Branch scavenging on dead fish. Crayfish are very tolerant of pollution and can survive in a wide range of conditions. It's likely a few other pollution tolerant organisms survived in the Driftwood Branch, as well.

Isolated fish and aquatic organism populations also survived in small pockets of good water where tributaries or spring seeps entered the Driftwood Branch. These survivors will help repopulate the stream in the future.

Fish are the easiest organism to see affected. However, there were many amphibians, such as rare large prehistoric salamanders known hellbenders that inhabit the Driftwood Branch, that were likely wiped out. Also, frog tadpoles were lying dead in the waters at Cameron. It's likely an entire generation of American toads were wiped out, as well, since they breed in the Driftwood Branch.

Up the food chain, raccoons, king fishers, blue and green herons, bald eagles, mergansers, and many more will soon find themselves in an environment without any food. It has all been killed by the pollution.

It will take years for the Driftwood Branch to recover, but in time it will. As sportsmen and citizens of Cameron County it is our duty to make sure nothing like this ever happens again.

We need to contact our government representatives, the heads of our state agencies, the governor, national environmental groups, and anyone we can think of to try to get the word out about this disaster. We need to let them know what we have witnessed and let them know our displeasure. And we need to make sure that those parties responsible pay fairly for the fish kill and damage that they created.