



Toby's Creek

Our hidden resource

Editor's Note: In preparing this news package, I thought it would be informative to walk the entire length of Toby's Creek in the Back Mountain, from its source on a hillside in Dallas Township to its final highway crossing at the Luzerne line. To simplify the description, I've designated only an eastern and western side of the creek. For these purposes, the eastern side would be on the right to someone traveling into the Back Mountain from Wilkes-Barre.

By RONALD BARTIZEK
Post Staff

A walk along Toby's Creek is as much a journey through time as it is through space.

On the way from its source to the Susquehanna River the stream is alternately wild and controlled, neat and

sloppy, natural and artificial. Its modest beginning provides little indication of the powerful force it will become as it moves inexorably toward the Wyoming Valley.

Topographical maps show the stream starting on the northwest side of Country Club Road in Dallas Township, seemingly appearing out of nowhere. Unlike other waterways, this one is not born from a pond or swamp, but simply emerges from the side of a hill.

And sure enough, that's exactly what it does, bubbling up from the ground behind a stately colonial home at 420 Country Club Road. Judging by the old spring house built over it, and the attractive, stone-rimmed pool that is its first stop just a few feet below, inhabitants of the house have taken advantage of the cool flow for decades.

The baby creek tumbles off the hillside into a marshy area, some of which has been corralled into two small ponds, be-

fore resuming its plunge to the valley floor.

Once it leaves the ponds and crosses under Country Club Road, the flow passes alongside a swamp where in the spring spindly pines look down on fiddlehead ferns and wild violets.

Its first tributary emerges from another spring that has softened the ground beneath a tall oak, toppling it in the middle of a forest where the only evidence of human intervention is the remains of a children's fort.

The upturned roots of the massive tree now provide a foothold for wild bushes, and the water that flows from beneath them is thick with dark green algae.

At this stage Toby's Creek is a bucolic stream, maybe four feet across with low, gradually sloping banks.

It soon crosses under another roadway,

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The first small tributary into Toby's Creek emerges from beneath a fallen tree in woods between Country Club Road and Lake Street in Dallas Township.

Powerful forces shaped creek and the land around it

By M.B. GILLIGAN
Post Correspondent

From its geological foundations to its current condition, Toby's Creek is an integral part of the Back Mountain terrain.

The path Toby's Creek takes from its source near Irem Temple golf course to its final destination, the Susquehanna River, although random in appearance, was actually determined thousands of years ago and is the result of a series of episodes of alternating glacial and interglacial periods. The most recent glacial activity in our area occurred approximately 20,000 years ago during the late Wisconsin Glaciation stage.

Glaciers are sheets of moving ice, some hundreds or even thousands of feet deep. Whether they are advancing or retreating, the landscape is affected by the very dynamics of the glacier.

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Dr. Brian Mangan

Founder and director of The Susquehanna River Institute

el thus frozen onto the glacier abrade the landscape much like sandpaper works on wood. Boulders fixed in the ice cut deep gouges in the bedrock and loosen even more material, which is then picked up by the glacier.

"The bedrock for the area of Toby's Creek is in the Catskill Formation of the Devonian System," said Brian Oram, Dallas, a registered professional geologist who has served as director of the Center for Environmental Quality at Wilkes University since 1989. "This type of bedrock is characterized by shale, clay stone, siltstone, sandstone, and conglomerate. Groundwater runs through these bedrock planes."

Like most other small streams, Toby's Creek is created by springs and weeps of this underground water. Where the groundwater rises indiscriminately and flows over the land into a channel, it is said to weep, and springs result when the groundwater confined in aquifers comes to the surface at outcroppings in the bedrock.

"The water moves along what is called secondary porosity, which is formed by fissures and cracks in the bedrock," said Oram. "It gives the impression that there are underground rivers but that's not the case. It is that some of the fractures are more interconnected than others."

The geological characteristics of the soil composition in the Toby's Creek watershed have a direct impact on the water quality. There can be very rapid changes in water quality in our area. "Our streams are more vulnerable to the effects of acid mine drainage, general rainfall and storm water runoff," said Oram, who is also a partner in B.F. Environmental. The firm provides expert testimony on water quality, and consults on development of water supplies and the impact of well drilling.

The creek gains water during high water periods and loses water during dry spells. The area surrounding a creek has a great deal to do with how well the creek is able to handle those differences. The perennial vegetation that grows alongside a creek, called a riparian buffer, acts as a natural obstacle and filter to help control the water that flows downstream. Soil sediment, and lawn and agricultural chemicals, are trapped, changed or used by the vegetation for growth, reducing the volume of pollutants that make their way downstream.

"The largest pollutant we are putting into the river is probably soil sediment," said Dr. Brian Mangan, founder and director of The Susquehanna River Institute, and director of the environmental program at King's College. "Our topsoil is flowing down past us."

Increased development in the Back Mountain directly affects the flow of water in Toby's Creek. Impermeable surfaces like parking lots, rooftops, and even manicured lawns cause rain to just run off the land, rushing to creeks and rivers without benefit of soaking into the surface and recharging the underground aquifers.

"Something as simple as a roof and a driveway can have such a big effect if you put enough of them together," said Mangan. "People have to be mindful of the watershed."

The rise and fall of commerce

Once, mills of all types lined the banks of Toby's Creek.

By SANDY PEOPLES
Post Correspondent

As early as 1773, residents of Wyoming Valley recognized the potential afforded them by the rushing waters of Toby's Creek. The fall of the stream from Dallas to Luzerne exceeded 500 feet and showed that the water could provide a substantial source of power. Consequently several sawmills and gristmills were erected along its path.

Early dirt roads seemed to follow the mills from one place to another, as people needed them for early footpaths and horse and mule trails to haul raw materials to the mills and finished goods to market.

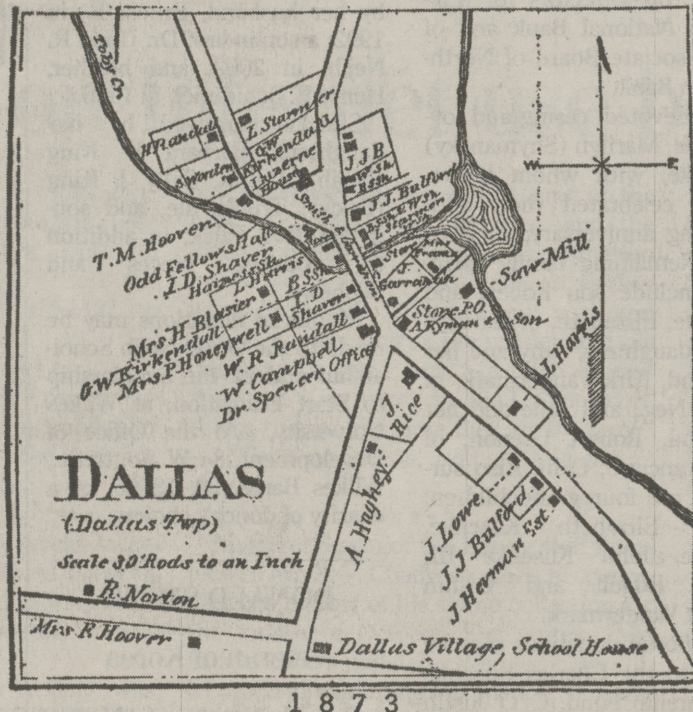
To operate the mills, small dams were made and located above where the mills were built, and the water was directed into water wheels by wooden flumes or sluices. The forests, rich in good timber, provided all of the raw materials necessary to construct the flumes and wheels. The wheels were 12 to 16 feet in diameter and three types were in general use.

The overshot wheel was a series of buckets on the circumference of the wheel. When the buckets were filled, the wheel revolved, moving the main shaft of the mill.

The breast wheel led the water into a gate controlled flume at the back of the wheel above the axle and was operated by the speed and weight of the water.

The turbine wheel had a series of openings where the water entered and left. It was also known as a flutter-box. Because it was so expensive to maintain, only one, the Rice sawmill at Shavertown, was used along Toby's Creek. The overshot wheel was the most common because of its efficiency.

When the early settlers arrived in the Back



This map, dated 1873, shows the location of a sawmill and mill pond in Dallas Borough. This would later be the site of the Hildebrandt-Frantz gristmill.

Mountain, or the country back of Kingston Mountain, items made within the household met most of their needs. Gradually, due in part to the water power of Toby's Creek, industries began to emerge in the form of local mills and factories to produce much-desired goods and jobs outside the home and off the farm. There were sawmills, gristmills, oil mills, plaster mills, carding mills, fulling mills, paper mills, foundries, tanneries, blacksmith shops and the like. (Carding is the process of combing or brushing textile fibers while fulling is the process of cleansing, shrinking and thickening the cloth.)

"The early prime movers and shakers of the Back Mountain were Jacob Rice and William Trucks, who ran mills along the creek in those early days," said Louise Hazeltine, a Trucksville resident who lives near the creek. "When the first post office was created in what

was then Branchville, the area was re-named Trucksville after William Trucks, a skilled carpenter and millwright." Along with his many mills, Jacob Rice also opened one of the earliest general stores in the Back Mountain.

Through the years, there were many mills along Toby's Creek. Although all of them cannot be listed, they include a gristmill and sawmill owned by Elisha Swift and put into operation as early as 1776 in Kingston Township. In the early 1790s, Zachariah Hartsouf purchased land along Toby's Creek and built an oil mill to manufacture linseed oil, and in 1805 Hartsouf erected a carding machine at his gristmill to break and card wool into rolls. For many years that area was known as Hartsouf's Hollow. Also in 1811, Henry Buckingham brought the first paper mill to the valley along Toby's Creek.

Toby's Creek afforded the residents of Wyoming Valley, and the Back Mountain in particular, a natural source of power and therefore a piece of the Industrial Revolution. By harnessing the water power, they were able to remove some of their daily chores from their homes and farms and into mills and factories that could produce goods in a less grueling manner. Mills of all kinds operated for decades, employing people and providing goods that were needed by the ever-increasing population.

Toby's Creek provided a very good supply of water to the early mills, but the very act of building the mills and felling the timber stripped much of the forestry and lessened the supply of consistently running water once held intact by the lush vegetation. The waters of the creek became undependable and the surrounding land became victim to floods and droughts. While other areas, not depending on water power, were becoming more prosperous, the area along Toby's Creek soon fell behind.

The remains of an early mill foundation loom over Toby's Creek just below the Harris Hill Road Bridge.



The Hildebrandt-Frantz mill, on Mill Street in Dallas Borough, 1916. The building was later turned into a roller skating rink.

Records, references abound, but little hard evidence remains

Various historical resources contain information about early mills along Toby's Creek and elsewhere in the Back Mountain.

According to the Internet web page, "Luzerne County, Pa Town Histories," The first sawmill in Kingston Township was James Sutton's, "on Toby creek, built 1778." In Dallas Township, "Judge Baldwin built on Toby creek, in 1813, his sawmill. In 1818 Christian Rice built his sawmill on the same creek. The place descended to his son, Capt. Jacob Rice. This mill was in use until 1875."

A town history donated by Sharon Freeman to the web page says that in Dallas Borough, "Albert Lewis, lumber king of this region, has here a saw and planing mill. Another large similar establishment is owned by A. Ryman & Co. There are in the place 3 general stores, 1 hardware store, an elegant hotel that is much patronized as a summer resort. Gregory & Heitsman's merchant mill is quite an institution of the place."

In his "History of Dallas," D.A. Waters writes that, "Probably before 1796, two broth-

ers, Benajah and Joshua Fuller built the first sawmill and the first gristmill on that branch of Toby's Creek now called Huntsville Creek ... The sawmill burned in 1805 and was immediately rebuilt."

Waters also writes, "Jared Baldwin, a Revolutionary veteran, built a sawmill in 1796 at Huntsville and was a family partner in a gristmill built in 1799-1800."

Stewart Pearce, who published Pearce's Annals of Luzerne County, said in 1866 there were eight sawmills in Dallas Township.

Ralph L. Hazeltine wrote a section titled, "Some Notes on the Use of Water Power Along Toby's Creek" in the Proceedings and Collections of the Wyoming Historical and Geological Society, 1970, Volume XXIII.

He describes a number of mills, the earliest having been constructed on the lower reaches of the creek, in what is now Luzerne and Courtdale. In the late 18th and early 19th century, that area was part of Kingston Township.

Often referring to prior written histories, Hazeltine writes that between 1804 and 1807,

William Trucks built a gristmill and sawmill "at the falls of the creek, where the water dropped some 15 feet from a rocky ledge." This location is just below the present Harris Hill Road bridge, and the remnants of a stone foundation are still evident on the western bank of the creek.

According to Hazeltine's account, in 1815 Philip Shaver built the first mill on the main branch of the creek above Trucks' mills. Writing in 1886, William P. Ryman placed Shaver's mill "on the site where the old mill now stands near the residence of Lewis R. Shaver.

Ryman mentions two sawmills, erected in the 1830s "on the northernmost branch of the north fork of Toby's Creek," which had to be abandoned because the creek was too small to provide sufficient power.

Hazeltine writes that in 1841-42, two brothers, Abram and Richard Ryman, built a water-powered sawmill on Toby's Creek one-half mile below Dallas village. They built a steam-powered mill near the water-powered mill in 1852 and ran both of them until 1870.