

BICENTENNIAL BULLETIN No. 42 —Sheffield Celebrates 200th Birthday

The Sheffield Bicentennial Commission will issue a *Bicentennial Bulletin* each Monday throughout 2015 that illustrates the rich heritage of our communities. *View them at—www.sheffieldbicentennial.org or sheffieldvillage.com*

FRENCH CREEK & SUGAR CREEK—scenic jewels of Sheffield

rench Creek is the largest tributary of the Black River. It has a drainage area of 38.3 square miles, a stream length 14.8 miles, and an average stream gradient of 14.4 feet/mile. The confluence of French Creek and the Black River is located southwest of the intersection of Colorado Avenue and East River Road in Sheffield Village, approximately 5 miles upstream from Lake Erie.

French Creek enters Sheffield from the City of Avon, a short distance west of Miller Road, and flows westerly just south of Colorado Avenue a distance of 3.9 miles to its mouth at the Black River, about 0.7 mile west of the East River Road bridge. The Lorain County Metro Parks' Steel Mill Trail provides an excellent vista of the confluence of these streams from a footbridge over French Creek. The valley of this stream is entrenched in shale bedrock [Ohio Shale Formation—Devonian Age] and has a width of approximately 600 feet throughout most of its course in Sheffield. The depth of the valley ranges from less than 15 feet at the Avon line to about 45 feet at the confluence, yielding a stream gradient of 10.8 feet/mile.

French Creek in winter



Sugar Creek at Avon-Sheffield Line



French Creek nature trail in autumn



Along with its tributaries, Sugar, Fish, and Day Creeks, the French Creek watershed comprises 5.5 square miles within the Village of Sheffield. The youthful floodplain of French Creek is narrow—rarely over 200 feet wide, except at the stream's mouth were it merges with the Black River floodplain. Pioneer settlers knew the floodplain south of this confluence as the "Big Bottom" and it was one of the most productive farming areas in Sheffield. Much of the original floodplain has been filled with waste slag from the steel mill, but it is also now home to a beaver colony. Beavers have constructed a dam across Day Creek forming a large pond that is also visible from the Metro Parks' Steel Mill Trail. In the early morning hours, it is possible to see beavers swimming and browsing in the lower reach of French Creek. Upstream, the natural character of French Creek rewards visitors to James Day Park and French Creek Reservation with remarkable scenery. Sugar Creek, the middle portion of which is known as Jungbluth Ditch, is the largest tributary to French Creek, which in turn is the largest tributary to the Black River.

The Ohio Geological Survey published the first known map containing the name Sugar Creek for this stream in 1874. Sugar Creek has its source within the City of North Ridgeville, flows through the western portion of the City of Avon, and passes through the center of the Village of Sheffield where it merges with French Creek at James Day Park near the intersection of East River Road and Colorado Avenue (SR 611). Under moderateto high-flow conditions, this stream becomes extremely turbid, carrying large quantities of suspended solids, excessive amounts of nutrients, and deleterious concentrations of organic compounds.

Heavy rainfall events have caused flooding of residential neighborhoods in the area bounded by I-90 on the west, Detroit Road on the south, and Abbe Road on the east—an area known locally as the "IDA triangle." Under these conditions the stream is very turbid as it flows under the

Map of Black River–French Creek confluence (USGS 1994)

Brookside High School French Creek Reservation

French Creek Reservation

French Creek Reservation

6.29 SHEFFIELD

Norfolk Southern Railroad bridge at the Avon-Sheffield Line and the chemical constituents of the water produce discernible amounts of foam. The degraded water then proceeds downstream, eventually entering the more populated portions of Sheffield Village.

Sugar Creek, within the Village of Sheffield, flows in a general westward direction along the crest of North Ridge from the Avon Line to just east of Abbe Road, where it turns northward and flows across the sandy beach ridge and down onto the clayey Lake Plain. At the ridge, a several hundred-foot-long reach of the stream passes through a tunnel constructed so that a service station could be built on top. During a storm, a decrease in the amount of water flowing in the creek bed can be seen from where it enters the Village to where it emerges from the tunnel, which be attributed to the percolation of water into the sandy streambed as the stream traverses some 3,000 feet through the beach ridge. This observation points out the importance of maintaining the natural integrity of the streambed, particularly in the vicinity of a beach ridge, as an infiltration gallery to absorb storm water runoff.

After passing under Abbe Road, the stream is channelized through the College Heights sub-division. This portion of the stream is known as Jungbluth Ditch. As the stream passes under French Creek Road, it again regains its natural character. As it flows through French Creek Reserve and James Day Park, the valley of Sugar Creek offers some the most scenic vistas in Sheffield.