Mystery River

The first weeks of school are always fun and exciting for the students of Hopewell Elementary School. Even though Capitol City is the largest city in the state, the students at Hopewell Elementary often imagine they live far away from the city in a different time and place. That is easy for them to do. Their school is on the southern edge of the city, and is surrounded on three sides by Hopewell Park, one of the city’s 12 metro parks. Across the road from the school is a neighborhood of large homes. Behind the school flows the Shawnee River. Many young students at Hopewell Elementary have looked across the river and imagined themselves to be one of the Native Americans who lived along this river centuries ago.

When the grandparents of Hopewell Elementary School students were children, the area around the school was considered to be “way out in the country.” Some of those grandparents now live in the new retirement center just south of Hopewell Park. As the city grew and incorporated more and more land, eventually this area also became part of Capitol City. That is when the land around the school became Hopewell Park, Capitol City’s largest metro park. Hopewell Park is home to many kinds of wildlife not seen in other areas of the city.

The Shawnee River flows to the south through Hopewell Park. At one point the river forms the eastern edge of Hopewell Elementary School’s property. Students whose rooms are on the east side of the building often see a deer or two drinking from the river early in the morning. Mrs. Peterson keeps several sets of binoculars near the window for her students to use when they see something special near the river. Each year Mrs. Peterson has her fifth-grade students make a chart of what they see near the river.

Most of the large industrial companies are located across the city on the northwest side of town. There are a few midsize companies here on the southeast side of town, but even they have buildings and landscaping that help them blend in to the rest of the community. Many of the students at Hopewell Elementary have parents who work at Compu-Systems and BioTech, two of Capitol City’s newer companies in this part of town.

One of the highlights of early autumn is the annual Adena/Hopewell School Festival. Adena Elementary School is another of Capitol City School’s elementary schools, and is located about 2 miles north of Hopewell Elementary. The two “sister schools” have held their combined festival for as many years as anyone can remember. On odd numbered years, the festival is held at Adena Elementary, and on even numbered years it is held at Hopewell Elementary. Mrs. Whitehead is the art teacher at Hopewell Elementary School. Every year she and Miss Smith (a first-grade teacher) take the first graders to the east edge of the school property to collect clam shells like the Native Americans used to do. The shells from several varieties of freshwater mussels are left scattered along the back of
the school property by muskrats and an occasional otter, for which the mussels are a major food source. Miss Smith uses the small shells to help students learn about grouping numbers and place value. She also shares a few shells with another class that creates a display depicting the local food web. Mrs. Whitehead uses the largest number of shells for her fourth-grade art classes.

In Mrs. Whitehead’s art class, students create jewelry that looks like the authentic Native American shell jewelry that can be seen in a local museum. Then they get to wear and display their jewelry at the Adena/Hopewell School Festival. Students look forward to the fourth-grade jewelry project for several years.

In previous years, a long undisturbed summer, the animals along the river have left enough shells on the bank of the river at the back of the school property, for everyone in the fourth grade to make two or three nice pieces of jewelry. This year, however, when the first graders went out to collect shells, they only found three shells. The teachers thought that something must be terribly wrong. Mrs. Whitehead immediately called her friend at the State Department of Streams and Wildlife (DSW) in Capitol City.

When questioned, Mrs. Whitehead recalled that over the last several years, there seemed to be somewhat fewer shells than before, but she didn’t think much of it. Now, she recalls that last year most of the fourth graders only made one piece of jewelry, but still she had been so busy with getting ready for the festival, she completely forgot about it until now.

Word of the disappearing clam shells spread quickly through the community, especially after a reporter from a community newspaper attended the school festival and reported the disappointment among fourth graders who had to make their jewelry out of paper and plastic this year. Now, community leaders throughout the city are becoming concerned. People are wondering whether this is a normal cyclical phenomenon or whether the mussels are gone forever. Are the mussels experiencing temporarily low populations, or have they become extinct?

You have been asked to be on a committee to investigate the problem. Your job is to determine what, if anything, is wrong, and what, if anything, needs to be done and can be done. Your committee is to make its report and recommendations, if any, to the State Department of Streams and Wildlife, 3 weeks from today.

I will serve as the liaison between your group and the DSW between now and the time of your presentation. You may contact me if you have any questions.

Mr. Stevens
DSW Community Liaison
October 9