Tammany Creek Restoration and Living Classroom Project

Tammany Creek is a stream that runs through part of Hells Gate State Park in Lewiston, Idaho that has operated as a living classroom location since 2014. The creek, while beautiful, has suffered ecological damage, mostly due to improper upstream land uses like removal of riparian vegetation, and natural factors like long-term changes in rain/snowfall patterns. Like many parts of Idaho, Tammany Creek became overrun by blackberry bushes, which pushes at the edges of the stream, altering habitats, and contributing to erosion, and reducing ecosystem function.

But the ongoing restoration efforts at Tammany Creek are something that we can all be proud of. The work at this area of Hells Gate State Park encompasses what it means to be a recreation and resource steward: leaving things better than when you found them. And thanks to the students, teachers, volunteers, and staff at Hells Gate State Park, Tammany Creek has become an educational hub for what is often referred to as ‘place-based learning’ in which students are able to do their studies on site.

Place-based learning—also known as outdoor or living classrooms—help students get a real-time perspective on their areas of study. For Tammany Creek, many of these students work in the fields of science and design and range in age from elementary to master’s level.

University of Idaho Assistant Professor, Daniel Cronan, says that Tammany Creek has truly become a living classroom for his students. “It gives [my students] a new canvas to learn,” says Cronan. Throughout Fall 2018, Cronan’s students worked on a four-week long service-learning project, mapping out Tammany Creek and the surrounding area. For university-level students, this is the ideal place for...
Landscape Architecture 340/440 to come alive. At Tammany Creek, there are various issues for students to work through. For Cronan’s students, they often work on what is called Stormwater Intervention. Stormwater runoff can often cause huge surges of water to flow through smaller bodies of water like Tammany Creek, causing significant erosion. This project allows them to identify the problem at-hand and how to work through the problem using the natural landscape and design elements. This project functions as one of the larger components of Cronan’s class and seems to have positive feedback from the students.

Jim Ekins, the Area Water Educator for University of Idaho Extension, is also a huge proponent for the Tammany Creek Restoration Project. “This is exactly the kind of hands-on, problem-based experience that gives students a reason to learn,” Ekins praises.

Ekins runs the IDAH2O Master Water Stewards citizen science volunteer water quality program, and their work at Tammany Creek has been integral.

When asked what Ekins would like to see from Tammany Creek moving forward, he said, “Students need more room to do their work. We need more trail development and interpretive signs.”

The 3 Main Components of the Tammany Creek Project:

1. **Stream restoration/resource stewardship**
2. **Education/Living Classroom** providing for place-based learning activities for all levels of education
3. **Interpretation** (of the above). As part of this project, develop a nature trail along Tammany Creek, or at least portions of it, where there will be interpretive signs that interpret not only stream ecology and stream restoration, but also the living classroom. Park visitors could walk the trail, observe on-going restoration efforts, and observe students from all levels doing field science!

**Student Testimonials:**

"This was a fantastic hands-on project that will help serve our community, and increase my skills using an actual project. My goal was to achieve a full ADA accessibility circuit and an extension hike loop all the way around with educational platforms connecting them."

"The Tammany Creek Restoration project was a great experience! It was an interesting way to learn and apply the skills from the class to an actual project."

"It was a fun way to develop our understanding of the course material and the site. We are thankful for the opportunity to work with organizations like Idaho State Parks for these engaging design opportunities."

**So why Tammany Creek?**

Jeff Smith, Hells Gate State Park Assistant Manager, explains that the issues at Tammany Creek are likely ones that they will see reoccur, meaning there will always be something for students to study. From the difficulties of stormwater management and erosion to the encumbrance of invasive species to water testing and maintenance, the restoration efforts at Tammany will likely take time.

“There is a value to working with schools—from K-12 to graduate level—and it shows that our Idaho state parks provide more than just recreation opportunities,” Smith advocates. “Our desire is to create a venue that works as a place-based learning
location. So not only are we doing restorative work, but also creating an Outdoor Classroom within Tammany Creek.”

Hells Gate is not the only park that has become an educational hub. Ponderosa State Park is the site of one of Idaho’s only outdoor preschools. Roots Forest School teaches the important of ecological sustainability and educational curriculum, while simultaneously getting children outside in nature.

State parks are a great location for place-based learning projects and each have their own benefits as an outdoor classroom. But the first step is expanding our definition of the traditional classroom experience. Getting students out into the field is one of the best ways to elicit engagement and increase their retention.

Other student-involvement at Tammany Creek

- Jeff Karlin from the Lewiston High School conducts field trips and projects with his students.

- Jeanette Gara brings Geology 120 students from LCSC (Lewis Clark State College) several times a year.

- Jamie Morton brings her Ecology students from Lewiston High School through a partnership with The Confluence Project (TCP)

- Michael Edgehouse from LCSC has some of his students conducting research in Tammany Creek, as well as a student who received an Idaho EPSCoR grant to complete the research project *Ecology of Tammany Creek: A Preliminary Study for Watershed Restoration.*

- Jim Ekins from the University of Idaho Extension has used Tammany Creek for IDAH2O workshops and led the Idaho Department of Parks and Recreation 2018 Teacher Workshop Series with Jeff Smith and Keith Jones, IDPR Natural Resource Manager.

- In the Fall of 2018, students from U of I completed work that was built into Daniel Cronan’s Landscape Architecture service-learning course. Over time, the outcome of the college students work will be incorporated into improvements at the site.

- The Idaho Youth ChalleNGe Academy has contributed several Saturdays over the past few years by providing motivated manpower for blackberry removal.

- Another work-based learning experience was a short (300 hour) AmeriCorps contract with a student from U of I who also worked on blackberry removal.

“It shows that our Idaho state parks provide more than just recreational opportunities.”
If you are interested in being a part of the Tammany Creek Restoration Project, reach out to Hells Gate State Park at HEL@idpr.idaho.gov or visit them online at parksandrecreation.idaho.gov. And you don’t have to be a student or research professional to get involved. Anyone is welcome!