

Chimacum gardens cultivate growth for students and plants

s students in Chimacum grow, their education grows with them.

Growth is especially evident in the district gardens, where lessons "like all else in the garden, are cyclical: revisiting and layering knowledge and application with repetition over the years," say Garden Educators Valerie Randall and Katie Miller.

Randall and Miller are responsible for the Primary and Elementary gardens, about 18,000 square feet. Students come to the garden classroom once a week for a guided lesson, where the Next Generation Science Standards aligned curriculum delivers place- and project-based lessons based on their grade. Each lesson builds on cycles and skills learned in their core subjects or previous visits to the gardens.

caring for "The Worm Hotels", part of the district's compost system.

The gardens are available throughout the week for students and staff for mindful relaxation, resets, or breaks, as well as direct applications in engineering, writing, math, or art lessons.

Community volunteers regularly assist with garden maintenance, and there's an open invitation for students and their families to attend monthly work parties on early release Wednesdays. For more information about the School Garden Program, please email Valerie_Randall@csd49.org.



"Whereas 1st graders are meeting worms and learning what they like to eat, in 3rd grade we learn about worm anatomy and nutrient cycling. By the time they reach 5th and 6th grade, they're primed for the miracle of photosynthesis, all the while practicing body mechanics with long and short-handled tools!" shared Randall, when explaining about the shared responsibility of

Photo courtesy of the Port Townsend/ Jefferson County Leader.

Place-based learning and the Salmon Olympics

In June, elementary students closed out the school year with the Olympic Salmon Salmon Olympics, a series of challenges that follow the life cycle of an Olympic Salmon. It was an exciting day that was the culmination of a year of place-based learning focused on their local ecosystem and was highlighted in the Port Townsend Leader.

Place-based learning immerses students in their local heritage, culture, and landscapes and uses these as the foundation to build their core subject curriculum. During the games, students designed and encountered obstacles similar to those that face local salmon every year and can impact the livelihood of the community as a whole.

Mitch Brennan, fifth-grade teacher, and lead event organizer was quoted in the article, saying "This sort of place-based learning helps learners develop deeper and more diverse understandings of the impact of our actions over different contexts."



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In Chimacum School District, our students are combining Science, Technology, Engineering, Arts and Mathematics (STEAM) to learn, explore and problem solve in creative and innovative ways. Follow all of our STEAM learning at www.csd49.org.



Rare plant discovery in Chimacum leads to lessons for students

n talking with a Master Gardener friend, science teacher Brett Thomsen made an exciting discovery that he is bringing back to Chimacum classrooms. Thomsen learned that Chimacum may be home to a rare, propagating, American Chestnut tree.

"While scattered trees do exist, they are not producing new offspring – the trees require both a male and female variety close enough to share pollen in order to propagate new seedlings," says Thomsen, who is a former National Park Ranger and nature-enthusiast.

With a little research, Thomsen connected with Dr. Sara Fitzsimmons, a professor at Pennsylvania State University and lead researcher for the American Chestnut Foundation. With her support, it was determined that Chimacum has an American Chestnut and Chinese Chestnut



The blooms of Chimacum's unique Chestnut tree

that seem to have mated and are producing saplings.

In the early 1900s, a fungal blight (plant disease) killed approximately one billion chestnut trees across the eastern seaboard, almost entirely eliminating the American Chestnut variety. The Chinese Chestnut is a different variety that has been resistant to blight.

"If a seed is produced from our tree in Chimacum, it may be a catalyst to getting American Chestnut seed stock that is resistant to the blight," says Thomsen.

Thomsen is bringing other staff members and his students in on this unique process. Science teachers will be collecting seeds from the tree this fall. Secondary science students will be propagating their own seedlings from extra nuts in the high school greenhouse. And Thomsen's technology STEAM class will be researching how to make a cloning table setup to clone cuttings from the tree, along with other local plants.

When asked about his teaching style, Thomsen said he "focuses on hands-on experiences, exploration, and discovery. Doing relevant research and working with students is how we develop life-long learners with compassion for our planet."

While it may be a few years before we know the outcome of the cross-pollination, bringing students into the process will allow them to potentially be a part of changing American Chestnut history.



Behind the Program: Brett Thomsen

Brett Thomsen is the Secondary
Science Teacher Chair. A familiar
face to CSD families, Mr. Thomsen
returned to Chimacum in the
summer of 2020 after teaching
abroad for 12 years. Now in his 9th
year at the district, he wears many
hats: teaching secondary science
along with Geology for College in the
High School, the Science Olympiad/
STEAM elective teacher and Science
Olympiad Coach, and the middle
school outdoor education program
liaison.

To learn about chestnut trees in America, visit your local library to read "The Overstory" by Richard Power, 2019.