

RESOURCE LIST FOR EDUCATORS

Discoveries at the Edge of the Pacific

August 8, 2019 - Newport, OR

Ellie and Ricky series

Four books, four Oregon ecoregions, four seasons: <http://ellieslog.osupress.oregonstate.edu/>

Book Title	Location	Topics	Season
<i>Ellie's Log</i>	Cascade Forests	Biodiversity	Winter
<i>Ricky's Atlas</i>	Eastern Oregon	Wildfire	Summer
<i>Ellie's Strand</i>	Oregon Coast	Marine Debris	Spring
<i>Ricky in the City</i>	Portland	Urban wildlife	Fall

Helpful resources: <http://ellieslog.osupress.oregonstate.edu/about>

Curriculum

- [Marine Debris STEAMSS](#)

This **curriculum** integrates the subject areas of Science, Technology, Engineering, Art, Math, and Social Studies (STEAMSS), and focuses on experiential hands-on activities for students in grades 4 through 12. Lessons from a variety of agencies and non-profit organizations provide opportunities for students to: Address problems through engineering design; use technology and art to effectively convey stewardship messages; contribute to clean up efforts, and work with community partners. Collected lessons are grouped in four categories: Composition and Abundance; Sources and Transport; Impacts; Solutions.

<https://oregoncoaststem.oregonstate.edu/marine-debris-steamss/>

- [C-MORE lesson materials](#)

This three-lesson curriculum focuses primarily on plastic marine debris. Students critically examine data and samples and take part in activities that explore the causes, geographical distribution, and biological impacts of marine debris. All lessons available for download online. In addition, a physical C-MORE Marine Debris kit of materials is available for checkout to educators in the Oregon Coast STEM Hub.

<https://stempreacademy.hawaii.edu/c-more/marine-debris>

- [The Private Eye](#)

Built around using a jeweler's loupe to examine everyday objects, The Private Eye is a program about the drama and wonder of looking closely at the world, thinking by analogy, changing scale and theorizing. <http://www.the-private-eye.com>

Beach field trip planning resources

- [Oregon Tidepools](#)

This comprehensive website from Oregon State Parks includes tidepool locations, species guide, trip tips and etiquette, and more. <http://oregontidepools.org/>

- [Oregon Tsunami Clearinghouse](#)

Heading to the beach? Familiarize yourself with the location of high ground and evacuation routes before you go. <http://oregontsunami.org/>

- [Oregon Coast STEM Hub](#)

Explore this collection of STEM learning sites on the Oregon Coast. <https://oregoncoaststem.oregonstate.edu/field-sites>

Organizations

- [Surfrider Foundation](#)

A network of grassroots chapters who take volunteer action to protect oceans and beaches through campaigns, programs and educational initiatives in their communities. <https://oregon.surfrider.org/>

- [SOLVE](#)

Find a beach clean up near you. <https://www.solveoregon.org/>

- [Oregon CoastWatch](#)

Community members adopt mile-long segments of coastal beaches to monitor and report natural changes and human impacts. <https://oregonshores.org/coastwatch>

Materials

- [Oregon Coast STEM Hub trailers](#)

Educators who serve students in the Oregon Coast STEM Hub region can access materials found in one of four STEM resource trailers located in different counties along the coast. <https://oregoncoaststem.oregonstate.edu/educators/kits>

- [The Diack Ecology Education Program](#)

Oregon educators may apply for funds to purchase equipment needed for student-directed ecology research projects, up to \$2000.

Articles

Brenna, S. (2006) *Take a hike: How to make being outdoors in. Edutopia.*

<https://www.edutopia.org/outdoor-education-nature-deficit-disorder>

Keel, S. (2018) *Deepening students' connection to nature. Edutopia.*

<https://www.edutopia.org/article/deepening-students-connection-nature>

Knapp, J. (2018) *Nature journals: Science, design, calculations and curiosity. Ten Strands.*

<https://tenstrands.org/environmental-literacy/nature-journals-science-design-calculations-and-curiosity/>

Larson, L.R., R. Szczytko, E.P. Bowers, L.E. Stephens, K.T. Stevenson, and M.F. Floyd (2018) *Outdoor time, screen time, and connection to nature: Troubling trends among rural youth?*

Environment and Behavior. doi: <http://dx.doi.org/10.1177/0013916518806686>

Louv, Richard. (2005) *Last child in the woods :saving our children from nature-deficit disorder*

Chapel Hill, NC : Algonquin Books of Chapel Hill. <http://richardlouv.com/books/last-child/>

Rebar B.M., Enochs L.G. (2010) *Research-Based Recommendations for Teachers Leading Field Trips.*

http://pacname.org/archive/OCEP/module_2/resources/FT+Challenges+Recommendations.pdf

Adapted from: Rebar B.M., Enochs L.G. (2010) *Integrating Environmental Education Field Trip Pedagogy into Science Teacher Preparation.* In: Bodzin A., Shiner Klein B., Weaver S. (eds) *The Inclusion of Environmental Education in Science Teacher Education.* Springer, Dordrecht https://link.springer.com/chapter/10.1007/978-90-481-9222-9_8