

Emilie Lygren

Author. Educator. Facilitator. Poet

Curriculum and Professional Learning Specialist, Lawrence Hall of Science, UC Berkeley

Expertise and experience in science education, outdoor learning, curriculum design, nature journaling, neuroscience, learning theory, culturally responsive teaching, life coaching, & personal growth work.

PROFESSIONAL EXPERIENCE

- 2014-present **Curriculum and Professional Learning Specialist**, BEETLES project, Berkeley, CA
- 2012-'13; 2014-'15 **Field Instructor**, Exploring New Horizons Outdoor Schools, Pescadero, CA
- 2011-'12; 2013-'14 **Educator Mentor; Field Instructor**; San Mateo Outdoor Education, La Honda, CA
- Spring 2010 **Poetry Workshop Facilitator**, Classical High School, Providence, RI. Spring 2010.
- Summers 2009-'12 **Kitchen Manager, Staff Member, Instructor**, San Francisco State University
Sierra Nevada Field Campus; Sattley, CA
- 2009-present **Nature Journaling Educator and Author**, independent contractor, Bay Area, CA
- 2009-present **Instructor; Program Designer; Outdoor Guide**, Carmel High School Desert Trip,
Carmel, CA & Joshua Tree National Park, CA,
- 2008-2010 **Program Manager, Mentor, Leader**, Brown Outdoor Leadership Training,
Providence, RI
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EDUCATION

- 2010 Bachelor of Arts in Geology-Biology, Brown University
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HONORS & AWARDS

- 2017 Excellence in Environmental Education Award, awarded to the BEETLES Project, by the California Environmental Education Foundation.
- 2014 Northern California Environmental Educator of the Year, awarded by the Association for Environmental and Outdoor Education (AEOE)
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PROFESSIONAL AFFILIATIONS

Member of the following organizations: Association of Nature Center Administrators; North American Association of Environmental Education; California Association for Environmental Education, Residential Environmental Learning Centers.

Member of Residential Environmental Education Programs (REEP) Collaborative examining Social and Emotional Learning in Outdoor Education.

PUBLICATIONS

Nature Journaling Publications:

Laws, J.M., Lygren, E., (forthcoming 2020) *How to Teach Nature Journaling*, forthcoming from Heyday Books.

Laws, J.M. with collaboration from Lygren, E. (2015) *The Laws Guide to Nature Drawing and Journaling*, Heyday Books.

Lygren, E. Foreman, J., Beals, K. *Model Field Journal Pages*. (2015) Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Lygren, E., Beals, K., Barakos, L. (2015). *Field Journaling With Students*, Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Lygren, E. (2014) *Exploring New Horizons at Pigeon Point Student Journal*, Pescadero, CA.

Lygren, E. Chung, C. (2013) *Exploring New Horizons at Loma Mar Student Journal*, Loma Mar, CA

Laws, J.M., Lygren, E., Breunig, E., Lopez, C. (2011) *Opening the World Through Nature Journaling*, California Native Plant Society, San Francisco, CA. Accessed at <https://www.cnps.org/education/students/parents-teachers/nature-journaling-curriculum-request>

BEETLES Project Outdoor Science Publications

Note: all BEETLES publications are copyright to Regents of the University of California.

BEETLES Student Activities:

Beals, K., Lygren, E., and Foreman, J. (2019). *Evaluating Sources*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., and Foreman, J. (2019). *Evaluating Evidence*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., and Foreman, J. (2019). *Tracking*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., and Foreman, J. (2018). *Whacky Adapty*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Strang, C., and Foreman, J. (2018). *Related & Different*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Strang, C., and Foreman, J. (2018). *Interview an Organism*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Lygren, E., Beals, K., and Foreman, J. (2018). *Spider Exploration*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K. and Lygren, E. (2017). *Stream Detectives*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E. (2017) *Argumentation Routine*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E. (2017) *Bird Language Exploration*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Lygren, E., Beals, K. (2017) *Fire Management Discussion*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., (2017). *Fungi Exploration*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., and Lygren, E. (2017). *Blending In & Standing Out* Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., (2017). *Most Successful Organism Discussion*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., and Foreman, J. (2017). *Spider Investigation*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., and Foreman, J. (2017). *What Lives Here?* Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Lygren, E. Weiss, E. Rodriguez, M., Beals, K. (2017). *What Can Live Here?* Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Barakos, L., Strang, C., and Foreman, J. (2017). *Exploratory Investigation*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Strang, C., and Foreman, J. (2017). *How Big, How Far?*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Lygren, E. Beals, K Strang, C., and Foreman, J. (2015). *Bark Beetle Exploration*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Barakos, L., Rosenman A., (2015). *Adaptation Intro Live!* Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Rosenman A., Foreman, J. (2015). *Case of the Disappearing Log!* Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., (2015). *Decomposition Mission*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Foreman , J., Barakos, L., Lygren, E., Strang, C. (2015). *NSI: Nature Scene Investigators*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., and Foreman, J. (2015). *I Notice, I Wonder, It Reminds Me Of*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

BEETLES Professional Learning Sessions:

Lygren, E., Beals, K., Barakos, L. (2015). *Field Journaling With Students*, Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Foreman, J., Beals, K., Lygren, E. Barakos, L., and Strang, C. (republished 2018). *Questioning Strategies*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

BEETLES Instructor Support Resources:

Beals, K., Foreman, J., Lygren, E. *What's in Our Backpack?* Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Foreman, J., and Strang, C. (2017). *Engaging and Managing Students in Outdoor Science*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Foreman, J., Lygren, E., Barakos, L. Encouraging Student Discussion and Productive Talk Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Foreman, J., and Strang, C. (2017). *Encouraging Student Discussion and Productive Talk*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

BEETLES Program Leader Support Resources:

Lygren, E., Foreman, J., Beals, K. (2019) *Integrating Territorial Acknowledgments Into Outdoor Science Programs*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Lygren E. (2019) *Ask the BEETLES: Nature Exploration with Young Students*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E. (2017) *Preparing Chaperones for Outdoor Science*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Foreman, J., Beals, K., Barakos, L., Lygren, E., and Strang, C. (2017). *Guide for Program Leaders in Outdoor Science*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Beals, K., Lygren, E., Foreman, J., and Strang, C. (2017). *Creating Effective Outdoor Science Activities*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

Lygren, E. Foreman, J., Beals. K. *Model Field Journal Pages*. Lawrence Hall of Science, Berkeley, CA. Accessed at: <http://beetlesproject.org>.

BEETLES Video Publications:

Second author on writing, editing, contributor to production, and post-production of the following professional development videos for BEETLES project:

Beals K., Strang, C., Barakos, L., Foreman, J. Lygren, E. *Meet the BEETLES. (2017)* Lawrence Hall of Science, Berkeley, CA. Accessed at: <https://www.youtube.com/watch?v=VRzpjDNuMsA>

Student Activity How-to Videos:

Beals K., Lygren, E., Foreman, J. Strang, C., Barakos, L. (2015)

Case of the Disappearing Log. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=vFQ9n-7sUyc>

Bark Beetle Exploration. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=PGnehuKmvPE>

Discovery Swap. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=hu6Vf3mo940>

I Notice, I Wonder, It Reminds Me Of. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=ekBP9bsc3KM>

Decomposition Mission. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=D1HOdRuHxuE>

Hand Lens Introduction. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=kx5QUcFshAg>

NSI: Nature Scene Investigators Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=hSrQbrYwuvA>

What Scientists Do Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=8ejplUW9BV8>

Discussion Strategy Videos:

Beals K., Lygren, E., Foreman, J. Strang, C., Barakos, L. (2017):

Building a Culture of Science Talk & Curiosity. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=OcsePIU0cnQ>

Diversity, Equity, & Inclusion. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=Szo0zn8Xn8k>

Supporting English Language Learners. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=EJudbws3HPA>

Building Discussion Skills. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=90vEVMVsmxl>

Responding to Students. Lawrence Hall of Science, Berkeley, CA.
Accessed at: <https://www.youtube.com/watch?v=S4KJ-DpkJR4>

Constructing Explanations & Engaging in Argumentation Regents of UC, 2017
Accessed at: <https://www.youtube.com/watch?v=WfkCVpm4Ljg>

Poetry:

Lygren, E. *for the grandmother teaching children how to plant seeds in the community garden*, (2020) Thimble Literary Magazine, Vol. 4 No. 2.

Lygren, E. *For the Students*, (2015) The English Language Quarterly.

Lygren, E. *Spring Hatch*. (2015) Askew, Issue 16

Lygren, E. *On the Evolution of Shadows*. (2014) New South. Vol. 7, No. 2

PRESENTATIONS AND APPEARANCES

Outdoor Science, Environmental Education, & Nature Journaling Workshops & Presentations:

BEETLES Project Leadership Institutes: 5 day and evening institute focused on outdoor science teaching for selected leadership teams of 2 from 200 programs across the United States, Canada,

Costa Rica, Argentina, Chile, Mexico, Slovenia, and Ecuador. August 2014, December 2014, August 2015, August 2017, December 2017, August 2018, December 2018, March 2019, August 2019.

Building Organizational Capacity for Improvement, presentation at North American Association of Environmental Education Annual Conference (co-presented with Emilie Lygren), Lexington, Kentucky, October 17, 2019.

Equitable and Inclusive Teaching in Practice, presentation at North American Association of Environmental Education Annual Conference (co-presented with Emilie Lygren), Lexington, Kentucky, October 17, 2019.

Spider Exploration: Equitable and Inclusive Teaching in Practice, presentation at California Association for Environmental Education Annual Conference (co-presented with Michelle Peres), Occidental, California, March 29th, 2019.

Nature Journaling For Educators, presentation at California Association for Environmental Education Annual Conference. Occidental, California, March 29th, 2019.

NGSS and Outdoor Science: Activities and Approaches, presentation at California Association for Environmental Education Annual Conference, (co-presented with Emeric Bisbee) Occidental, California, March 29th, 2019.

Nature Journaling For Educators, presentation at the Wild Wonder Nature Journaling Conference, Pacific Grove, California.

Spider Exploration: Equitable and Inclusive Teaching in Practice presentation at Pescadero Valley Conference (co-presented with Michelle Peres) Loma Mar, CA February 23rd, 2019

Engaging and Managing Students in Outdoor Science presentation at California Association for Environmental Education Annual Conference (co-presented with Kevin Beals) Malibu, CA, April 27th, 2018.

Engaging and Managing Students in Outdoor Science presentation at the Pescadero Valley Conference (co-presented with Kevin Beals). Loma Mar, CA, March 3rd, 2018.

Structures & Behaviors, presentation at California Association for Environmental Education Annual Conference (co-presented with Kevin Beals). Malibu, CA, April 27th, 2018.

NSI: Nature Scene Investigators, presentation at California Association for Environmental Education Annual Conference (co-presented with Kevin Beals). Malibu, CA, April 28th, 2018.

Fungi Exploration, presentation at California Association for Environmental Education Annual Conference (co-presented with Kevin Beals). La Honda, CA, March 25th, 2017.

Stream Detectives. presentation at the Pescadero Valley Conference (co-presented with Kevin Beals). Loma Mar, CA, February 25th, 2017.

Best Practices in Nature Journaling, presentation at the California Association for Environmental Education Annual Conference (co-presented with John Muir Laws). La Honda, CA, March 25th, 2017.

Using NGSS to Promote Critical Thinking. Presentation at the California Association for Environmental Education Annual Conference (co-presented with Kevin Beals). La Honda, CA, March 25th, 2017.

Using NGSS to Promote Critical Thinking. Presentation at the California Association for Environmental Education Annual Conference (co-presented with Kevin Beals). La Honda, CA, March 25th, 2017.

Exploratory Investigation. presentation at the Pescadero Valley Conference (co-presented with Kevin Beals). Loma Mar, CA, March 19th, 2016.

Discovery Swap . Presentation at the California Association for Environmental Education Annual Conference (co-presented with Kevin Beals). Malibu, CA. April 30th, 2016.

Phenomenological Instruction Presentation at the California Association for Environmental Education Annual Conference (co-presented with Kevin Beals). Malibu, CA. April 30th, 2016.

Exploratory Investigation. Presentation at the California Association for Environmental Education Annual Conference (co-presented with Kevin Beals). Malibu, CA. April 30th, 2016.

Nature Journaling for Naturalists. Presentation at the California Association for Environmental Education Annual Conference. Petaluma, CA. April 17th, 2015.

Case of the Disappearing Log. Presentation at the California Association for Environmental Education Annual Conference. (co-presented with Kevin Beals). Petaluma, CA. April 17th, 2015.

Bark Beetle Exploration. presentation at the Pescadero Valley Conference (co-presented with Kevin Beals). Loma Mar, CA, March 8th, 2014.

Questioning Strategies, Constructing Understanding, Making Observations, presented for the JOFFE Fellows at Hazon, (co-presented with Jedda Foreman), Isabella Freidman Retreat Center, June 2016.

Questioning Strategies, Constructing Understanding, Making Observation,. presented for the JOFFE Fellows at Hazon, (co-presented with Jedda Foreman), Isabella Freidman Retreat Center, March 2017.

Questioning Strategies, Constructing Understanding, Making Observations, presented for the JOFFE Fellows at Hazon, (co-presented with Jedda Foreman), Isabella Freidman Retreat Center, March, 2018.

Thinking Like a Naturalist, class at the San Francisco State Sierra Nevada Field Campus, (co-presented with John Muir Laws), Calpine, California, July 2016

Student-Centered Outdoor Science Teaching Practices. 1-day workshop presented to the Youth Outside OEI (Outdoor Educators Institute), (co-presented with Kevin Beals) Berkeley, June 2016.

Outdoor Science in the Schoolyard. 2-day workshop presented to Petaluma classroom teachers (co-presented with Kevin Beals), June 2016.

Thinking Like a Naturalist, class at the San Francisco State Sierra Nevada Field Campus, (co-presented with John Muir Laws), Calpine, California, July 2014

Nature Journaling With Students, presentation for the Berkeley Unified School District garden education staff, Berkeley, CA, March 2014.

Integrating the Next Generation Science Standards into Outdoor Science Programs, 2-day educator workshop hosted by the Sonoma Environmental Education Collaborative (SEEC), (co-presented with Kevin Beals), Bay Area, CA

Nature Journaling With Students, presentation for the Alameda Science Program, (co-presented with John Muir Laws), Alameda, CA, June 2018.

Nature Journaling With Students, one-day short course presented at the California Science Teacher's Association annual conference (co-presented with John Muir Laws), Sacramento, CA.

Nature Journaling With Students, teacher workshop hosted by the California Institute of Biodiversity, (co-presented with John Muir Laws), Bay Area, CA, June 2014.

Nature Journaling With Students, teacher workshop hosted by the California Institute of Biodiversity, (co-presented with John Muir Laws), Bay Area, CA, June 2013.

Poetry & Self Growth Workshops

The Desert Trip, weeklong program in community building, connection, and self-growth. Instructor April 2010, 2011, 2013, 2014, 2015, 2016, 2017, 2018, 2019.

Tools for Meaningful Conversations, presentation at the Stone Soup Festival (co-presented with Kevin Beals), Camp Navarro, California, June 19th, 2019.

Lone Glen: Seedstarters, poetry reading at The Bindery (co-presented with Bidisha Banerjee and Lauren Shufan), San Francisco, CA, August 8th, 2018.

Tools For Meaningful Conversations. Presentation on the Carmel High School Desert Trip, 2016, 2017, 2018, 2019.

Giving and Receiving Support. Presentation on the Carmel High School Desert Trip, 2016, 2017.

Poetry, Memory, and Mindfulness. Presentation on the Carmel High School Desert Trip, 2014, 2015, 2016, 2017, 2018, 2019.