

Humboldt County Office of Education

Advancing Learning Landscapes : Environmental Literacy Grant 2018-2021

Goal : Guide teachers in developing outdoor curriculum while engaging students in the environment surrounding their schools and their community.

Create a Resource Guide for Parents, Students, and Teachers during the pandemic and the hybrid educational models for 2020-2021 school year

The following information, outdoor curriculum lessons, and web sites are provided by our Team consisting of Dr. Rosie Slentz, Olivia Kernan, Sal Steinberg, Allison Poklemba, Michael Kauffman, Denise Newman, Marisa Formosa, and Jennifer Ortega.

My Word Journaling at Home during the Pandemic Times: an article by Sal Steinberg from the Times Standard March 2020.

As a special ed teacher, an administrator, and a watershed educator, I have spent 40 years working with kids in the Van Duzen/Eel River area. Today with the Corona virus, we are in uncharted territory with restrictions on group assembly and the modification/closure of our schools for an unknown period of time.

Here are some suggestions for engaging your children in nature while they are out of school and in your home. It is based on a concept of Nurturing Nature, of connecting your inner spirit with the diversity of the natural world.

Go to the Dollar Store and purchase one notebook for writing, one sketch pad for drawing, one set of colored pencils, and crayons. Cost \$4 plus tax.

Each day have your child go out and conduct a scientific observation of the world around them. For example, today I took a walk with my dog and observed 17 trillium and 12 robins. If they are young, you can write for them. If they are older, they can take their own notes and even can take pictures of what they see. Have them take their notebooks, date the page, and write their observations. What did you notice? How many daffodils did you see? What kinds of trees and bushes did you find. What was the day like? How did it make you feel?

Life and nature are full of wonder. What did you wonder about while exploring? Write it down in words. Does something you see remind you of anything else? Use your memory and imagination.

Part 2 is sketching and drawing. My good friend and colleague from Friends of the Van Duzen River, Barabara Domanchuk coined the term Ecology and the Arts. Let's use the artistic medium to draw the leaf, plant, or tree. Study it closely. How many lines on each leaf? How many leaves on the branch. Does the leaf have a smell. (Make sure you know what poison oak looks like and avoid it) Now you have 3 choices. Choice 1 is to take out your sketchbook, draw the plant and color it. Put in as much detail as you can. Choice 2 is to take a plant sample or samples, cut them, and take them back to your house for more observation and design. Choice 3 is to then take a colored crayon and make a leaf rubbing. Take off the paper on the crayon and use the whole crayon sideways. Place the leaf/branch between two pieces of paper in your sketch book with the leaf upside down to get the best results.

Last but not least, I am a big advocate of poetry and have worked very closely with Daniel Zev Levinson, Poet in the Schools, to publish two books of poetry by local students, Van Duzen Voice and Eel River Expressions. Students can use free form to narrate their observations in poetic form, or they can do an acrostic writing the word in up and down and inserting a word for each letter. One of my favorite poetry topics is I Am poetry. I Am the Tree. I Am the Bee. I Am the Butterfly. Take it from there. It is unlimited. Become Nature.

Last but not least, I am a big advocate of learning in the classroom/home and learning in the field. Recently while working on Botany curriculum for a project through the Humboldt County Office of Education emphasizing the environmental literacy, I came upon several wonderful YouTube sites for middle to older kids to share with you. The first two dealt with William Wordsworth famous poem Daffodils. Go to Wordsworth Daffodil Poem (I wandered lonely as a cloud) by the Wordsworth Trust, the story of the poem, and a second on which is a beautiful rendition of the poem by a child <https://www.youtube.com/watch?v=B2sdzDInf2c>

I came upon an amazing 14 part series by botanist Stewart McPherson called the World's Most Spectacular Plants. Episodes are between 5 and 12 minutes. One a day would be wonderful for middle school kids and older. Hope parents find this article useful in these extraordinary times!

Nature Journaling by Allison Poklemba, Greenwood Schoolhouse

https://www.youtube.com/playlist?list=PLpRIwBHnshVj6oUHju9ZQ6Iz_v9IT560J



Grab your Nature Journal, step outside, and make some incredible discoveries in your own yard in neighborhood! Let these activities inspire your (distance) learning adventure.

Tiny Adventures by Allison Poklemba, Greenwood Schoolhouse

https://www.youtube.com/playlist?list=PLpRIwBHnshVi3xXYtFXrzmUQ_GSCH2I72

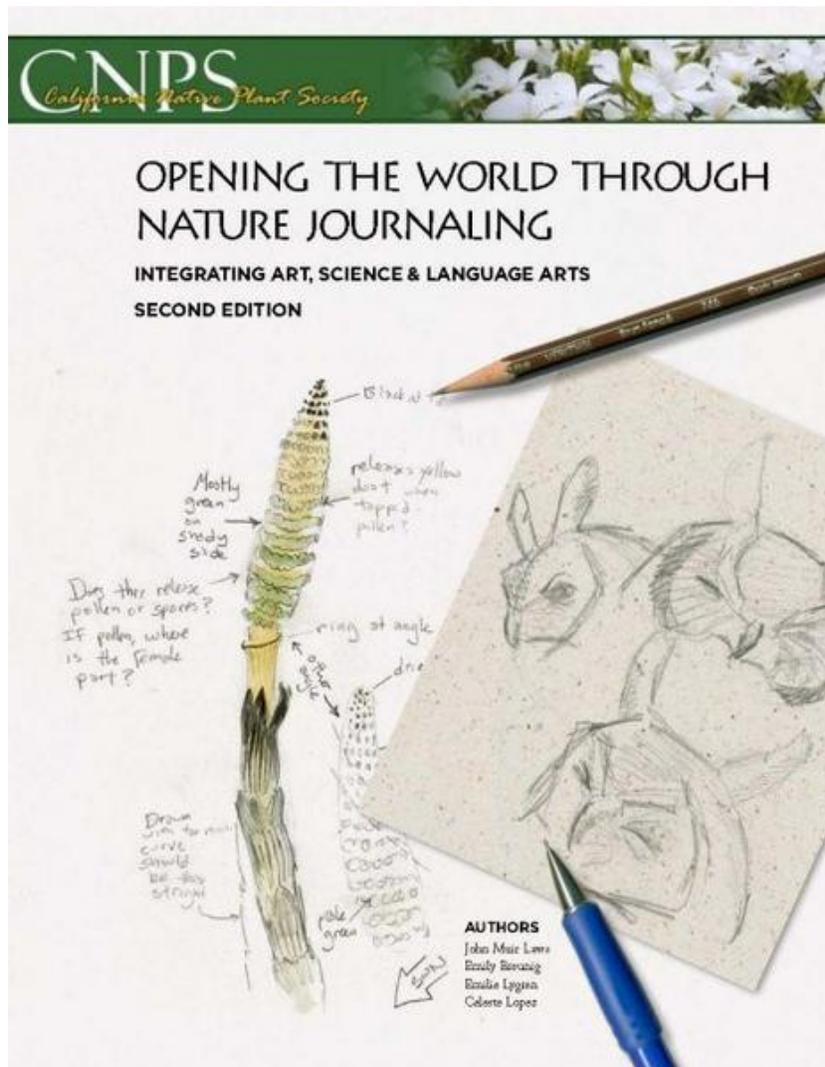


A whole other world opens up when you zoom in with a magnifying glass. Grab yours, head outdoors, and join me for a Tiny Adventure!

For all of Allison's Videos got to Greenwood Schoolhouse Web Site

https://www.youtube.com/channel/UCN4L56E0XEIp6_3RBGRBR4g

For Teachers: Opening the World Through Journaling



Integrating Arts, Science, and Language Arts

California Native Plant Society

A Comprehensive Guide

<https://documentcloud.adobe.com/link/review?uri=urn:aaid:scds:US:8edb221e-4189-422a-86cc-1a31598d41ab>

For Parents, Teachers, and Students

My Field Guide by Michael Kauffman

An excellent journaling resource to

Observe, Draw, Collect Data, Name/Identify

<https://documentcloud.adobe.com/link/review?uri=urn:aaid:scds:US:4477286b-cb85-4eae-834b-384b6885aba4>



iNaturalist is a citizen science project and online social network of naturalists, citizen scientists, and biologists built on the concept of mapping and sharing observations of biodiversity across the globe. iNaturalist may be accessed via its website or from its mobile applications.

Download the iNaturalist Program on your IPAD, telephone, and/or computer.

Complete Complete Scientific Research In Your Own Back Yard With iNaturalist!

www.inaturalist

<https://www.youtube.com/watch?v=yJS63hdWGvs>

<https://www.youtube.com/watch?v=xENz1xRu0wI>

<https://www.inaturalist.org/pages/getting+started>

<https://collectioneducation.org/inaturalist/student-inaturalist/>

Journaling Lessons by Denise Newman

1. SENSORY MAPS

Where: Outdoors in quiet space

Materials: Journal open so two facing pages are both available

Time: Up to 10 minutes

Who: YOU, solo time!

What: Create a 'map' with drawings and labels (optional) of all the things in nature you sense surrounding you; in their approximate location from where you are sitting.

How: Draw yourself (of something that represents yourself like an X) in the middle of the two pages, label if you'd like. Fill the pages up with drawings (and labels if you'd like) of everything you see, hear, smell, feel surrounding you. How might you add the bird or bee that flies overhead? How might you add the neighbor's rooster? The butterfly that lands on a flower in front of you? The wind that comes from behind you? The sun that shines down on you?

(Extension: Repeat with new locations around your house or yard for new perspectives.)

Journal Reflection: What evidence can you observe that shows spring has arrived to your yard? What plant and insect/animal interactions do you observe?

Reflection: NGSS and Content Standards Connections? Diversity of Life. Habitat.

2. CLUE CARD TRAIL WALK

Where: An outdoor path around your house or a trail. You choose the begin and end points.

Materials: A series of index cards or scrap paper cut into index card size. Crayons, colored pencils or markers. You can use a journal page for the trail plan. Like a treasure map, show the start and stop points in your yard or around your house with X's (or other) along the 'trail' showing the clue card stops and the topic at each clue card stop.

Time: Between one half-hour and one hour to create between 10 to 20 cards (or more!).

Who: You are the creator, but you need family members to follow your clue card trail.

What: Create a series of 'clues' that highlight the many natural points of interest around your house.

How: Write out one 'clue' boldly and clearly on each index card. You can add a simple drawing of what you are giving a clue about. Clues can be questions or directions, for example: "Look for a flower bud that is just about to open" or "Are any pollinators visiting flowers?" and "Look up this tree to find a nest in the branches," "Gently flip over this rock to see if anything is living under it," "try to find every color of the rainbow in nature," and "what do you think caused this?" Challenge yourself to look for spring cycles happening in nature, flowers in bloom, pollinators buzzing about, shades of colors, patterns, unusual growth formations, beauty, curiosities. You may need to make a few cards with just arrows on them if the path curves around a corner!

Journal Reflection: What evidence can you find that plants and critters are waking up in spring time? What connections can you make or observe about plants and pollination?

Reflection: NGSS and Content Standards Connections? Diversity of life. Life cycles. Habitat.

3. ZOOM OUT ZOOM IN

Where: Outside in the yard/nature

Materials: Journal open so two facing pages are both available, magnifying glass or hand lens.

Time: About 15 minutes

Who: You!

What: Look at a natural object at actual size and then with a magnifying glass to take a closer look. Draw your observations.

How: Find something in nature that interests you. It could be the underside of a leaf, a snail shell, lichen/moss, a small critter (be gentle!), a flower bud. Label the left page 'Zoom Out' and the right page 'Zoom In.' On the 'Zoom Out' side, trace the actual size of the item you are observing, like a maple leaf. Then fill in the details (like the vein patterns on the leaf you traced). On the 'Zoom In' side draw a big circle that takes up as much of the page as it can. This represents what you see under your magnifying glass. Look at your leaf under the magnifying glass and draw the zoomed in details that fill up your lens. It won't be the whole leaf, but a blown up smaller section with more detail.

Journal Reflection: (Can be written, if preferred, or just thought about) What new observations did you make when you zoomed in? Do you observe any repeating patterns? How is this natural item designed for survival?

(Extension: Repeat with new items)

NGSS and Content Standards Connections? Survival characteristics.

4. "I AM" POEM

Where: Outside in the yard/nature

Materials: One journal page

Time: About 15 minutes

Who: You!

What: Become things in nature that you observe (or sense) by imagining their role in the great web of life and recording this in your journal.

How: Choose things in nature around you that grab your attention or curiosity. It could be the blooming tree in your yard, the moving clouds in the sky, the stillness of a rock. Begin each line with "I am" and pick a natural feature to become. For example: "I am a blooming tree..." Then complete the sentence with what that natural feature is experiencing or doing at that moment in nature. In our example, your line will look like this:

"I am a blooming tree. I offer my blossoms to my pollinators, the bees."

Choose up to 5 different natural things you observe around you. You will have 5 'I Am' statements. Finish the poem with this final statement (add your name): "I am all these things, and I am (Your Name), making observations and connecting with nature."

Reflection: NGSS and Content Standards Connections? Diversity of life. Life cycles. Survival characteristics.

5. 100 INCH POLLINATOR HIKE: National Micro-Park!

(Adapted from http://www.bugs.org/Activities/Activity_M-11%20Insect%20Nature%20Park.pdf)

Where: Outdoors in the yard/nature

Materials: One journal page. One shoelace or string cut to 100 inches and up to a dozen toothpicks with numbered tags taped to them.

Time: About 15-20 minutes to plan and set up micro-trail, drawing it and labeling it in your journal. About 5 minutes to lead 'tour.'

Who: You as the creator/tour guide and your family at the tour group.

What: Look at the world from a tiny critter's point of view; specifically a potential pollinator. Focus attractions on spring life cycles, habitat and ecosystem. Don't forget to note any obstacles or hazards along the way!

How: Select an area for a micro-trail for an animal of your choice (ants, spiders, and slugs might not all like the same attractions!). Use the string to mark your trail, it can be curvy or straight or both. Mark special attractions with toothpicks so your visitors will see them. You can use your journal notes as your 'script,' noting all the special habitat and ecosystem 'attractions' for this pollinating critter. Offer family tours through your trail. Acting as a tour guide and explain the natural wonders of your new micro-park.

6. PAINT COLOR-CARD MATCH

Where: Outdoors in the yard/nature

Materials: An assortment of different colored paint color cards

Time: 5 minutes

Who: You and family members

What: Try to match as many paint color cards to things found in nature, living or non-living.

How: Select an area to explore color matching. Pass out a random assortment of color cards to each participant. Spend a few moments finding the perfect color match between your card and something in nature. You may be surprised by how many shades of green and brown there are or that you can find blue in nature by just looking up to the blue sky.

Journal Reflection: How do colors help plants and animals survive? Why are they important? What role does color play in plant pollination success?

Reflection: NGSS and Content Standards Connections? Habitat and Ecosystem.

7. PREDATOR-PREY CAMOUFLAGE GAME

Where: Outdoors in the yard/nature

Materials: None

Time: 5 minutes a round

Who: You and family members

What: A hide and seek game to role-play the importance of camouflage in predator prey interactions.

How: Create a boundary area to play the game. One person is the predator and other players are prey. You can imagine the combination: coyote and rabbit, hawk and field mouse, etc. The predator covers eyes and counts to 10. The prey scatter to the *closest* hiding spot and freeze, keeping their eyes on the predator at all times as is possible. The predator announces 'camouflage' and then tries to find the hiding prey from where they are standing by calling them out (I see you Mom behind the tree!). If not all prey are found, predator can then close eyes and yell 'tag me' and the first person to tag the predator can be predator next.

Journal Reflection: Who was 'hunted' by the predator? Why were they found (jacket color, movement, too big for their hiding spot). Who 'survived' the game? Why? Talk about characteristics that help animals survive. Color camouflage, body size, speed, eyesight, hearing, etc. How might plants and flowers WANT to be 'hunted' or pollinated? What would they do to ATTRACT spring visitors?

NGSS and Content Standards Connections? Habitat and Ecosystem.

8. HOW DOES IT MEASURE UP?

Where: Outdoors in the yard/nature

Materials: Measuring tape and one journal page

Time: As long as you wish

Who: You and family members

What: An exploration to find the range of heights (or other characteristic such as length of leaf) for a particular plant or flower.

How: Choose a plant that grows in abundance in your yard or in a natural area. Try to find samples in different micro-habitats, out in the open, under a shade tree, closer to where water drains in your yard, etc. Using the measuring tape, make up to a dozen measurements and chart them in your journal. Put the plant name at the top and then number 1-12 for each measurement you take. When done, note or circle the smallest and largest number and which one occurs the most frequently.

Journal Reflection: What might influence the different heights or lengths you measured? Sun? Shade? Abundance of water? Rocky soil? What do you observe that makes you think certain plants are prepared for pollinator success?

NGSS and Content Standards Connections? Habitat and Ecosystem.

SALMAN'S NATURE LESSON #1 A Paragraph: Talking to Nature

Greetings. Hope everyone is safe and sound in your homes. We share our planet with the plants and animals surrounding us. This is our natural habitat. The word Ecology is based on the Greek eco and logy or the study of our house. Extend yourself outdoors into Nature. Merge!

For the past month, I have been taking walks with my dog Wiley in the backtrails behind my house in Carlotta, CA and in the old growth Redwood Parks close by.

I have been talking to the trees and to the trillium and to the blossoms and they have been talking back.

I found this picture to share with you on the Internet.



What is nature saying to you? Take out a journal/notebook and a pencil. Look at a tree. What does it say to you. Look at a flower. What does it say to you. Choose 3-5 objects in your yard or your forest. Write a paragraph about your observations and your conversation.

SALMAN'S Nature Lesson #2: A Picture: Inside the Tree of Life

Wednesday April 22 is the 50th anniversary of Earth Day. I found this poster honoring the event. Take out some crayons or paints and brushes. Discuss the picture with an adult or sibling. Then draw your own tree.



Use your imagination: What do you see inside this tree of life? Why are trees so important to our lives? What other animals depend on trees? Make your own drawing of a tree of life. Be creative!!!

SALMAN'S Nature Lesson #3 I Am Poetry

Can you see a tree outside your window? Can you find a tree in your yard or forest that you love? Become the tree!

A tree is made up of five major components: roots, trunk, branches, leaves, and flowers.



Be the Tree : Write an I Am the Tree poem becoming the tree.

Start with the roots and work your way up. Use the pronoun my

I Am a Tree

My roots

Write one or several sentences for each part

My trunk.....

Shared by Jennifer Ortega

eeGuidance for Opening Schools

Environmental and outdoor education: key to equitably reopening schools

North American Association for Environmental Education June 2020

<https://documentcloud.adobe.com/link/review?uri=urn:aaid:scds:US:f2ddb725-73bb-4548-8140-2e0738aa0456>

