
Nature Journaling + Distance Learning

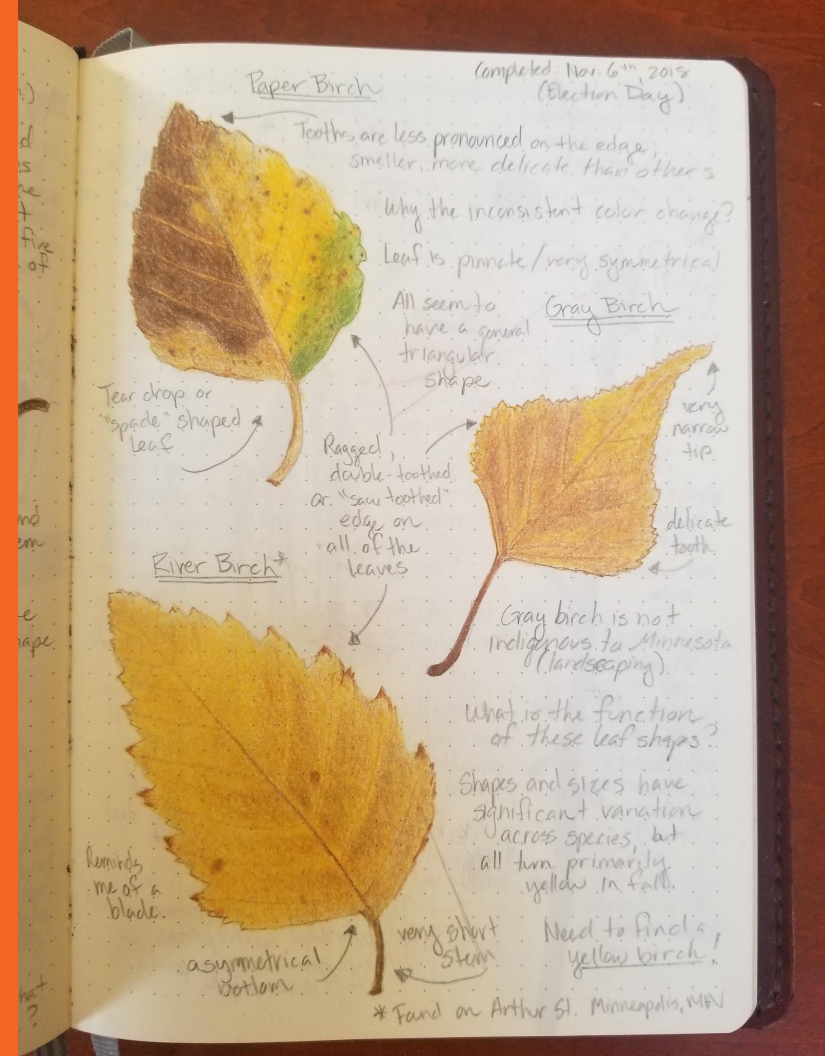
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Osprey Wilds Environmental Learning Center

Workshop Agenda

1. What is a Nature Journal?
 2. Teaching students how to journal effectively
 3. Application and lesson planning ideas
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What is a Nature Journal?

What key features do you notice in this nature journal page?



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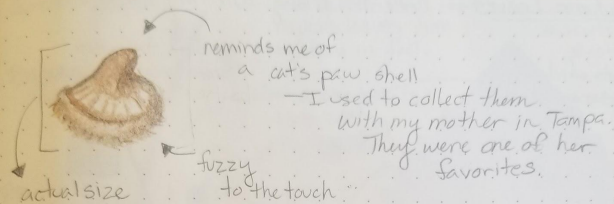
**Purpose = To record
information about the
natural world for later
use.**

Primary Features

A good entry will have...

- Date, Location & Weather
- Detailed written observations
- Visual representation
- Purpose
- Questions!

Saturday 9/15 10:45 AM - St. Croix State Park
Humid and Hot
At the junction of the Kettle and the St. Croix Rivers



On the log:



fungus!
bodies hang over
the edge, like
a shelf fungus.

row of fungus growing along a log

They are all fuzzy with
visible striping

Soft surface, but the mushroom
itself is somewhat leathery

It's not growing out of the ironwoods.
is it species-specific?

- Date, Location & Weather
- Detailed written observations
- Visual representation
- Purpose **
- Questions!

This Isn't Instagram...

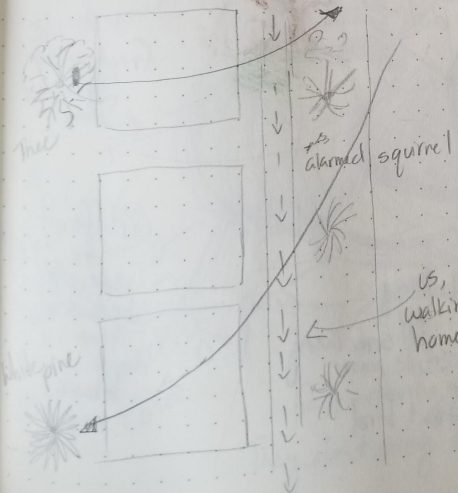
Nature Journals can look lots of
different ways. Pretty drawings
are not the purpose.

Red-Tailed Hawk - Minneapolis, MN - Arthur St. NE
25°F, cloudy Dec 23, 2018 near Windom Park

We saw a Red-tailed Hawk hunting around the houses
in our neighborhood today. I didn't have time
to get a drawing of it, but it was fairly small -
might have been a juvenile.

White on the underside with
a faint but distinctive
speckled belly-band.
The Red Tail wasn't obvious -
so maybe a juvenile.

It perched in a tree behind a house, then swooped
over the street. Then it came back around
and terrorized a squirrel - which chirped in
alarm + alerted me that the hawk was nearly
following us up the street. It came to rest
in a tall white pine where it was nearly
invisible.



I've never seen
a Red-Tailed
in our area
before - it
was incredible
to see one
hunting
so close
in the city.
They are
incredibly
adaptable
creatures.

How to Teach Students to Journal

1. Develop a Curiosity Mindset
 2. Show models/examples
 3. Purposeful Practice
 4. Repeated Application + Student Autonomy
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Practice Curiosity

Good Journaling comes from
Good Questioning

- What do you notice?
- What do you wonder?
- What does it remind you of?



Differentiation

Frontloading to consider...

- Describing words/Adjectives
 - Fact vs. opinion
 - Pattern recognition
 - Broad vs. Narrow questions
 - Hypothesis/scientific method
-

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What is the benefit of looking at model texts for students?



- 10/22/07 Stehaka/Chelan WA
- (34) Hooded Merganser
(40) Eurasian Wigeon
Big influx of ducks
30 Pintail heads
120 NW 1 gloms
100 mallards
10 Ringnecked Ducks
- (41) Sharp birds - Spotted Sandpipers
in Drift wood
- Oct 23, 2007 (6K)
- (42) Loon - call & observed
(43) Pine Siskin (flocking) (Buckner)
8 mile deer at Buckner orchard
Cider trees
- Oct 24, 2007
- (44) Pileated Woodpecker (The Heron)
(45) Gull (The Heron)
Common Loon (Flocks) (Lyon)
3 Ravens & 1 Dipper
- Oct 25, 2007
- (46) Canes Back
hangy with Flotilla
of Ringneck Ducks
very windy outside all day
- Oct 26, 2007
- Great Horned Owl calling
as we left Holloway Park
at night... under 1.000...

from RJ 206

OCTOBER 28, 2007

Clark's Nutcracker pair
Knight at Landing
Pine Siskin at orchard
great horned owl at night
visiting land to home
Dark-eyed Juncos
company of
Song Sparrows at
sandy riparian
Dipper at landing
intermediate
Canada goose
W & H grebes

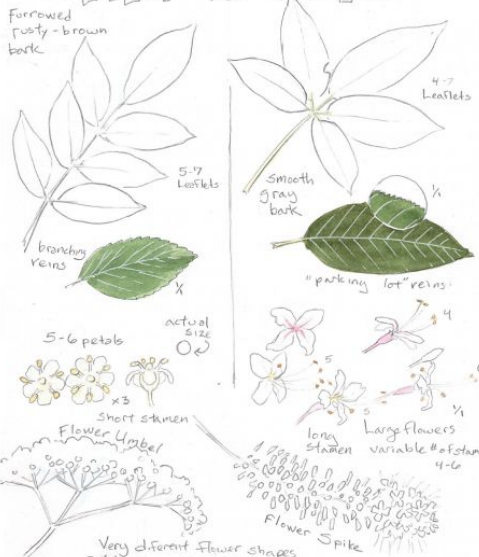
Oct 28, 2007

Clark's Nutcrackers
at landing
W. grebes
H. grebes

(c) Heather Murphey

Field Journaling with Students-BEETLES PL Session Materials

ELDERBERRY VS. BUCKEYE



Very different flower shapes
Q Who are the pollinators?
Q How do pollinators interact with each flower type

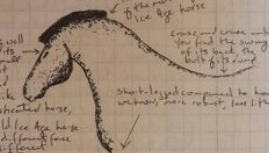
Field Journaling with Students-BEETLES PL Session Materials (c) John Muir Laws

Who were they?
Where did they come from?
How did they get here?
What did they find?

The last question most deeply skirts my imagination, an entire hemisphere uncharted. While elephants in the world burned were painting caves, spearing woolly rhinos and carving the earliest Ice Age Venus figurine, the Americas were largely uncharted. Blocked in by the world's oldest oceans and sealed off by ice sheets, there was no easy way of getting here. For most of its history, this side of the planet remained unpeopled. The first to arrive were probably unknown, died out leaving no genetic signature, while others lived long enough to leave their genes into modern Native Americans.

The first to arrive would have stepped into landscapes ruled entirely by animals. It was the last time humans were such a minority in worldwide geography. The land extended 9,000 miles from the Arctic coast to the tip of Patagonia across plains, desert, lakes and mountain ranges.

Tversky and Barak, 1985:
Are caricatures better than photographs? The study found caricatures more identifiable than actual images; more recall, face recognition, and reaction time for recalling "Caricature line drawings include stable features and emphasize distinctive ones. This may explain the enhanced distinguishing features of early cave illustrations. We are hardwired to react to deliberative distortions of stimuli even more than the actual stimuli. The early animals conveyed some useful information and may have been the first to use of faces. The phenomenon is not human alone. It is animal. Nobel Prize-winning Niko Tinbergen found that songbirds pecked more vigorously at three red dots instead of one. It is not just a fascination, but a driver of evolution.



Field Journaling with Students-BEETLES PL Session Materials

(c) Craig Childs

Kihei, Maui - in the grass Tuesday, January 21st
Land Snail Species Unknown

About life size Maybe bigger
Found in the grass outside the condo near Kamaole III Beach Park



Always in the same spot?

We see it every day as we come + go.

Not sure what eats it. Birds? Found some empty shells nearby, so something must...

The shell is variegated and seems random in pattern. Perhaps camouflage. Seems odd as the snail is always in the grass - maybe it is evolved to live elsewhere - in the trees?

Is this a tree snail? Seems very common.

Left to Right: © John Muir Laws, © Craig Childs, © Emily Porter

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**What do you notice
about the model
texts?**

Purposeful Practice

Clear purpose will improve product

Recording for Identification

1. Each student creates a page about a natural object
 2. Other students must be able to identify that specific object out of a group of similar objects
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In the Field...

1. Select a leaf
 2. Direct students:
 - a. Find a leaf that is this same shape
 - b. Create a journal entry for your leaf so that your classmates can tell which leaf is yours
 - c. When finished, put the leaf in the center with the other leaves.
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Distance Adaptations

Nature Journaling at Home

Students can use household or backyard items to complete this activity

The items must be organic, so that they have natural variation!

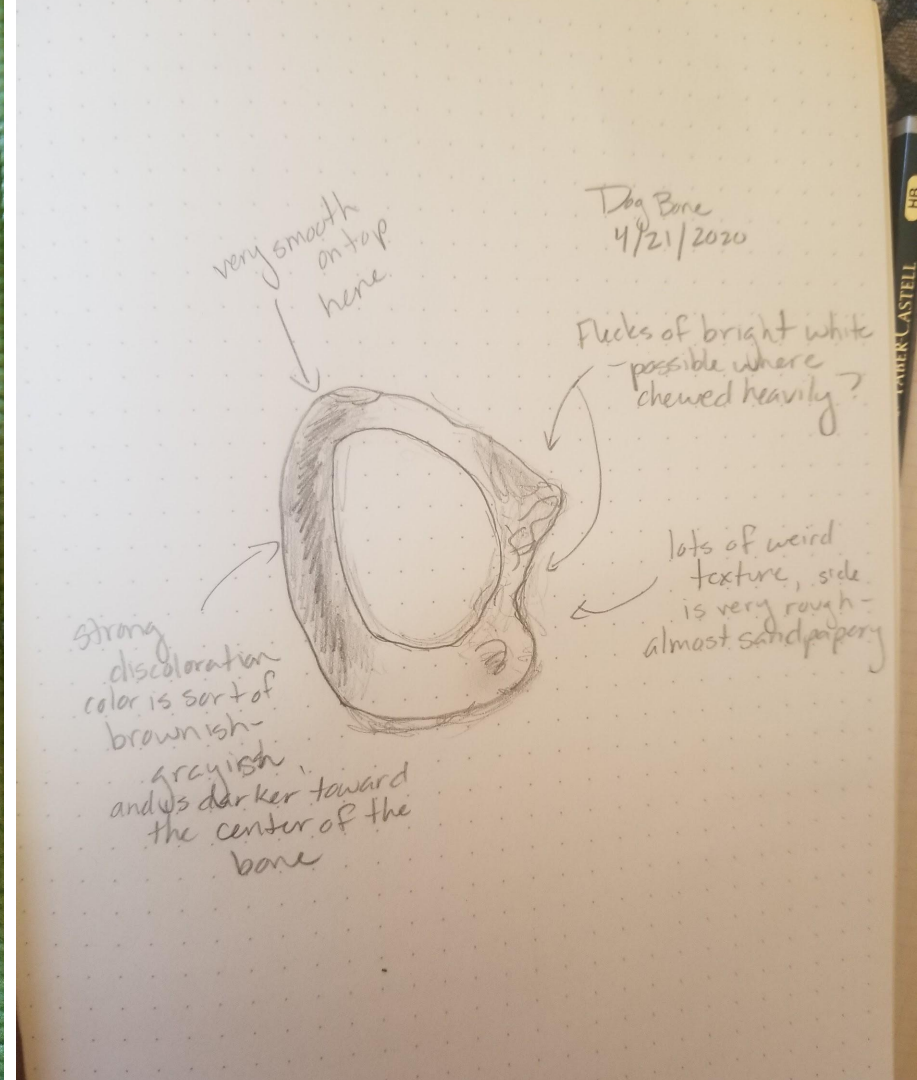
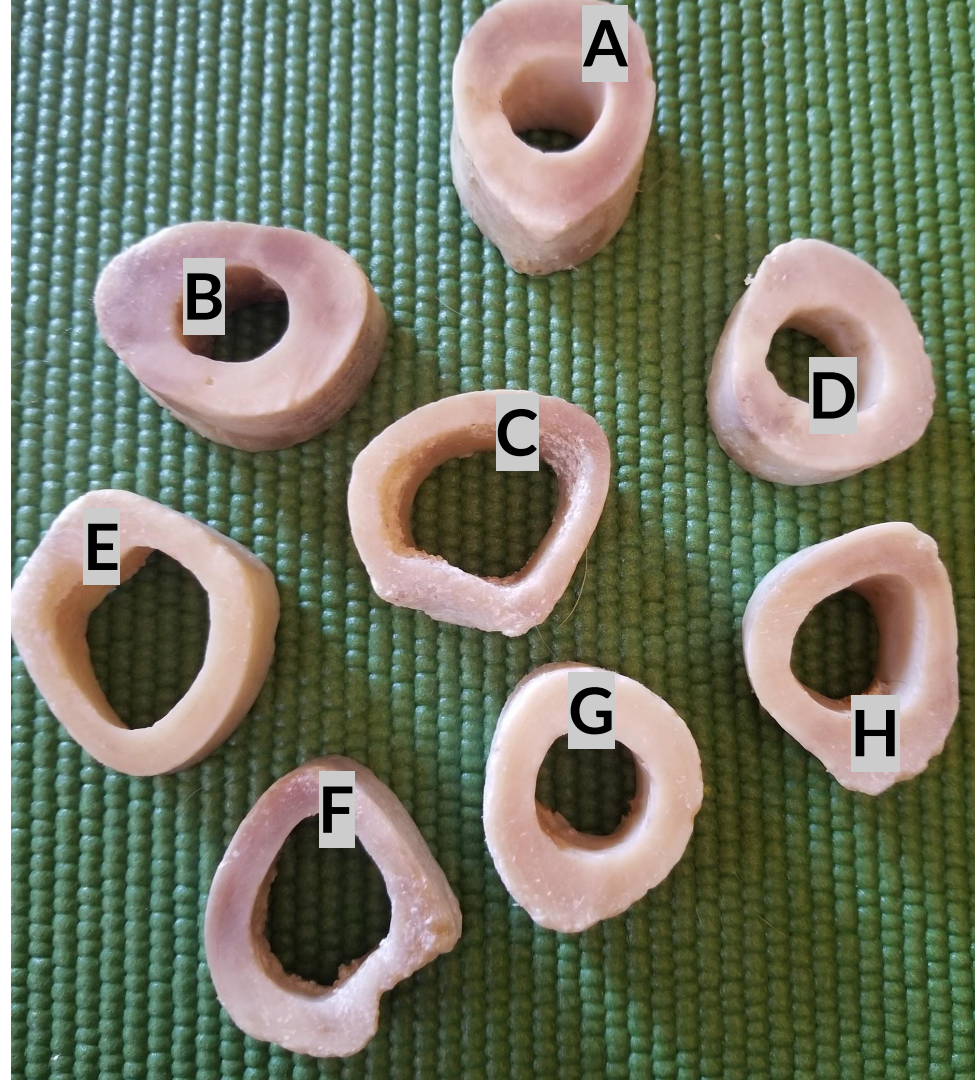
Share pages digitally by posting photos



Left: Garlic cloves; Right: clementines

A collection of dog bones





Now What?

Distance Learning Applications

- Mental health/wellness
 - Longitudinal data
 - Experimental design
 - Cross-Disciplinary skills
 - Independent study
 - etc...
-

Unit/Lesson Design

1. Determine your purpose
 2. Build in student autonomy
 3. Set a journaling schedule or time limit
 4. Focus student attention
 - a. Subject matter
 - b. Prompt (“I notice, I wonder...”)
 5. Display, Debrief & Discuss
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Issues of Access

What is “Nature”?

- Backyards & gardens
 - Boulevards
 - Local parks
 - Pets!
 - Houseplants
 - Window-Watching
 - Live Webcams
 - Pictures
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Middle Grades: Independent Study

Purpose:

Research paper on
a MN organism

Must observe the
organism every
day for 15 minutes

Student post
pages daily &
include them in
their final papers

Students choose
an organism that
lives in their
backyard

Daily prompts
focus on body
paragraph
topics

Secondary: Cross-disciplinary Skills

Purpose:

Improve observation skills by creating a field guide

Observe a different organism each day for 30-40 minutes

Student publish their field guide. Other students use the guide to attempt to ID organisms in their own neighborhood & share photos of positive IDs.

Students choose a category of organism that they can observe (e.g. "flowers")

Same prompt daily: create a field guide entry for identification

4th grade + : Longitudinal Data

Purpose:

Collect wildlife data
in order to draw
conclusions as a class

Record
observations of a
live webcam for 20
minutes a day

Students share data
and then use the
information to draw
conclusions about
the animal's
behavior,
adaptations, etc.

Students choose a
time of day that
they are in charge
of observing a
webcam

List of key
behaviors to
watch for with
times: eating,
preening, etc.

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Share your expertise:
What other
applications can you
think of?

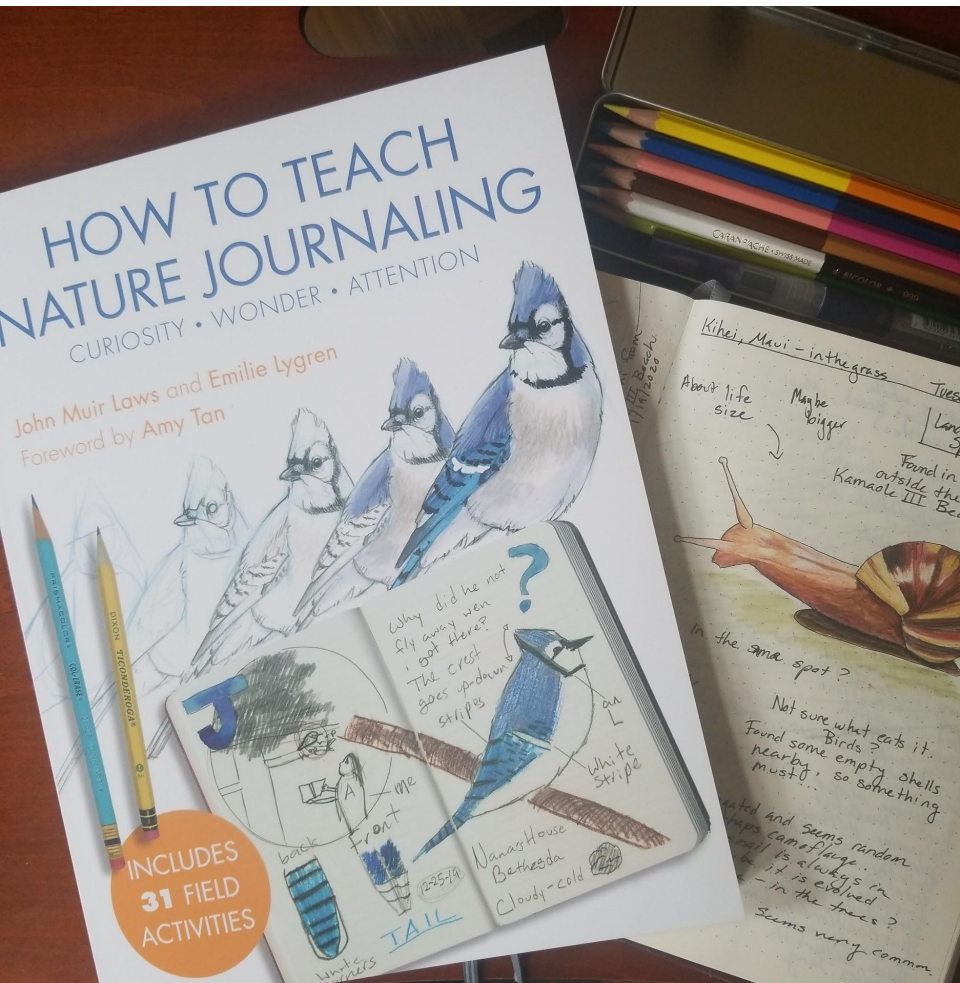
Frequently Asked Questions

- I'm not an artist! How do I get kids to engage with drawing in a meaningful way?
 - Students always tell me they are “done” after 3 minutes! How can I get them to engage for longer?
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Implementation

Set reasonable goals for yourself
and your students

1. Start by engaging curiosity
 2. Consider frontloading activities
 3. Look at models
 4. Purposeful practice (be ready to do this more than once)
 5. Meaningful application
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More Resources:

- *How to Teach Nature Journaling* by Emilie Lygren & John Muir Laws (Free PDF online)
- BEETLES Project “Field Journaling with Students” (Free online)