Sun and Moon Yoga 200-hour Foundations Program

Final Project: Yoga Teaching Product

Incorporating Yoga and Mindfulness for Kids into Outdoor Programs:

Resource for Environmental Educators

By Alison Zak

June 2020

My goal for teaching and sharing yoga is to use it to help students of all ages connect to

nature in mindful and meaningful ways. This resource is for environmental educators teaching Pre-

K-12 programs in an informal, outdoor context. Educators can use the ideas within this guide to

create new environmentally themed programs focused on yoga and mindfulness or incorporate

select activities into existing nature-based programs.

Multiple studies show the benefits of yoga and outdoor play for kids. For example, physical

therapists have used yoga successfully as part of healing musculoskeletal, neuromuscular, and

cardiopulmonary conditions (Galantino & Galbavy 2008). One program in an urban elementary

school demonstrated that regular yoga practice, even in very short amounts of time known as 'yoga

snacks,' strengthened teacher-student relationships, increased test performance, eased transitions,

and reduced the need for disciplinary action (Finnan & Rose 2013). Nature yoga in outdoor,

informal education programs then is sure to have a positive impact on the physical, emotional, and

mental health of children, although studies are yet to directly address these benefits.

Nature yoga, as I define it, uses animal and nature-related poses to share information about

the natural world and to reinforce concepts of connectedness and interdependence with all beings

and the earth. In Coyote's Guide to Connecting with Nature Young, Hass, and McGown write,

"The practice of imitating animal movement, which includes its mood and strategy, creates a

meaningful relationship with the animal." (2010). Ideally, it is practiced outside in a natural area, but this is not a requirement. Additional mindfulness practices complement yoga sessions of age-appropriate length encourage storytelling, wandering, mapping, gratitude, using all the senses, and mimicking animal forms, behaviors, and vocalizations out in nature. For example, a hiker with a warmed-up body and mindful attitude discovers more out on the trail, learns more, and has more fun doing it!

Introducing a program

Begin each program with an introduction that grounds you and the group in place and time. I introduce myself, share a favorite nature memory or recent nature sighting, and ask children to do the same. Define yoga and mindfulness in simple terms. Example: We practice yoga when we move our bodies and breathe to learn more about ourselves, life, and the world around us. Mindfulness is when we pay attention to where we are and what we are doing *right now*. I asked my pre-K students recently "What is yoga?" and they responded: "When you do work out." "Gotta do quiet." "Exercise." At such a young age, kids already have a perception of yoga that is mostly related to physical exercise, or that it somehow restricts their ability to be kids- to be loud and playful!

Explain that yoga is a tradition that comes from India, and that yogis have been practicing outside in nature for a long time. For reference, I explain that the Himalayas are a landscape important to yogis, people who practice yoga. The Himalayas are the newest and highest mountains in the world, located thousands of miles away. We live near the Appalachian Mountains which are some of the oldest and shortest in the world. Although the two mountain ranges are very

different, they are both beautiful and important for the people, plants, and animals who live nearby.

No matter where in the world you practice yoga, it should always be safe and fun!

Finally, I share 'Ms. Alison's 3 C's for Nature Yogis.' In easy pose, with hands in Anjali mudra and eyes closed, we say the following intentions aloud:

- "I am curious." (We are curious about our bodies, our minds, and the world around us.

 This is how we explore and discover new things.)
- ず "I am compassionate." (We treat ourselves, all beings, and the earth with kindness and respect.)
- "I am connected." (We recognize our valuable friendships with other beings and the earth.

 We all depend on each other. We are more similar than we are different.)

Then, we are ready to practice! The following sections include various ideas that educators can mix and match to meet their needs. The activities are suitable for all ages unless otherwise noted.

Pranayama/Chanting

- Inhale through the nose, exhale through the mouth. Cue with "Smell a flower, blow a dandelion."
- Leaf breathing: Each child collects a fallen leaf. They lay on their back with the leaf on their face, covering their mouth. Inhale through the nose and exhale with the mouth to blow the leaf up into the air. Catch leaf and repeat.
- Humming bee breath: Explain that in yoga we usually breathe in and out through our noses.
 Practice taking a few breaths. Then demonstrate the hum which of course, sounds like a bee. Bees are important pollinators and the sound of their buzzing makes us feel calm and

happy. The first round, kids can close their ears with their hands so they don't hear anyone else buzzing. The second round I like to have kids place a hand on their throat to feel the vibration. It's also fun to listen to the collective hum!

- Buddy Breathing: Place a small stuffed animal (could also use a pebble or other natural object, for older children) on each child's belly. The animal should rise and fall as the child breathes, surfing on their tummy as they get used to the way their body moves as the air goes in and out. Practice at first having children watch the object, then try with eyes closed, instructing children to simply feel the weight and movement of the object as they breathe.
- Chant the names of local plants and wildlife from a field guide, elongating each sound/syllable. Emphasize vowel sounds and the shape of the mouth to make each sound.

Asana

Many yoga poses are already named after animals, some of which your students will never encounter in the wild. By renaming poses to highlight regional species and habitats, you help make yoga a little more relevant and encourage nature connection on a personal level. Instructions for safe alignment are in italics.

English/	Nature	Special notes	Picture
Sanskrit	name		
Easy/ Sukhasana	Flower	Visualize yourself as a certain type or color of flower. Imagine pollinators landing on your head and tickling you with their hairy feet. Try lotus mudra, too.	
Extended arms childs/ Utthita balasana	Snail	Sway arms from side-to- side to make a slime trail	

Arms-in childs/ Balasana	Rock	Stay quiet and still like a rock for 5 whole breaths	
Staff/ Dandasana	Stick		
Seated forward bend/ Paschimottanas ana	River	Your legs are the riverbed- is it rocky or sandy? Who lives there? Vocab: benthic, macroinvertebrate	
Mountain/ Tadasana	Mountain	Mountains stand strong and tall. No one should be able to push you over!	
Wide-legged forward bend/ Prasarita Padottanasana	Beaver lodge	The space in between your arms is the underwater door where the beavers swim in and out of their home called a lodge.	
Tree/ Vrksasana	Tree	Pick a local species and visualize branches in current season. Be a tree on a still day vs a windy day. Wiggle your finger leaves in spring or summer. Make sure the foot is above or below the knee to protect the knee joint.	
Downward facing dog/ Adho mukha svanasana	Downward facing coyote	Wag tail and howl. Play bow like your pet dog!	

Cat/ Marjaryasana	Bobcat	"Meow"	
Cow/ Bitilasana	Cow	"Moo"	
Warrior 3/ Virabhadrasana 3	Osprey	Imagine you are soaring over a pond looking for lunch. Stare intently at an imaginary fish to keep your balance!	
Cobra/ Bhujangasana	Hognose snake	If flattening their head like a venomous snake doesn't deter a predator, hognose snakes play dead- roll over and try it!	
Bow/ Dhanurasana	Fairy cup mushroom	These actual mushrooms are the size of your fingernail! To introduce this shape, have kids make a cup with their hands first. Try rocking forward and backward. Don't forget to breathe!	
Side plank/ Vasisthasana	Fallen tree	Explain how important fallen trees are in an ecosystem. Vocab: decomposers	
Bridge/ Setu bandhasana	Box turtle	Make the shape of the turtle's shell with your body. Vocab: carapace, plastron. Make sure kids look straight up the sky and not to the sides to protect their neck.	

Shoulder stand/ Sarvangasana	Sleepy bat	Bats are special- they are nocturnal mammals that can fly and sleep hanging upside down. They also eat lots of mosquitoes so next time you see a bat, say thank you! Make sure kids look straight up at their toes and not to the sides to protect their neck. Also be sure to practice this pose only on firm ground.	
Bound angle/ Badha konasana	Butterfly	Choose a local species. Gently flap legs like wings. Use fingers to give yourself antennae, which in butterflies always have knobs on the tips.	
Corpse/ Savasana	Piedmont prairie	Imagine you are part of the grassland. Feel the wind blow over you. All is quiet and peaceful. For younger kids it is helpful to sprinkle 'sunshine' or 'raindrops' (mist with spray bottle) on kids who stay very still.	
Five-pointed star/ Utthita tadasana	Shooting star	Hug yourself tight. Count down from 3 together and then jump open, limbs out.	A SHOWN
Star	Flying squirrel	Flying squirrels don't really flap their wings and fly- they just spread their arms and soar from branch to branch.	

Dynamic seated side stretch/ Parsva upavistasana	Rainbows	Make 7 rainbows and visualize all of the colors, ROYGBIV. Think of something in nature that represents each color. Can also reference the chakras.	
Eagle/ Garudasana	Eagle	What part of the eagle do your hands make?	
Chair/ Utkatasana	Kingfisher	Imagine your arms are a long, spear-like beak. What do you think kingfishers like to eat? The more still you are, the more likely you are to catch a fish!	
Inhale, arms overhead	Sunrise	On an inhale, reach up toward the sky.	
Forward fold/ Uttanasana	Sunset	On an exhale reach toward the earth.	

Warrior 1/ Virabhadrasana 1	Buck	Make antlers with your hands. How many 'points' does your set of antlers have? What do bucks use their antlers for?	
Warrior 2/ Virabhadrasana 2	Doe	Do does have antlers? Why or why not?	
Triangle/ Trikonasana	Black bear	Reach for the honey in the tree!	
Side angle/ Parsvakonasana	Virginia creeper vine	Start with top arm at hip and grow it out slowly like how a vine grows up a tree. What is another native vine that we want to be very mindful of? (Poison ivy)	
Lotus/ Padmasana	Lotus	Can do half lotus with one foot at a time. Move slowly to protect knees.	
Dancer/ Natarajasana	Turkey Tom	Gobble like male turkeys!	

Lion/ Simhasana	Snapping turtle	With mouth open, wiggle the tip of your tongue like a worm, just like a snapping turtle does to lure fish into its mouth.	
Head to knee/ Janu sirsasana	Salamander	Hide like a salamander hiding under the leaf litter. Vocab: amphibian	
Hero/ Virasana	Owl	Turn your head as far to both sides as you can without hurting yourself. Hoot like a barred owl that says, "Who cooks for you?"	→ → →
Heron/ Krounchasana	Great blue heron	Which part of the heron do you think your raised leg represents?	
Gate/ Parighasana	Sapling	Discuss life cycle of a tree from seed to seedling/sprout to sapling to tall tree	
Seated wide leg/ Upavista konasana	Lichen	Lichens need something to grow on like a rock or a tree. Imagine that you are stuck to a rock for your whole life- how does the world around you change over time? Vocab: substrate	
Squat/ Malasana	Frog	Hop from lily pad to lily pad and make frog sounds- ribbit!	

Plank/ Kumbhakasana	Branch		
Monkey/ Hanumanasana	Monkey	Tell a Hanuman story! About how he leapt over the ocean, carried a mountain, tried to eat the sun (they're all great)	
Turtle/ Kurmasana	Painted turtle	Painted turtles are aquatic and bask in the sun on logs. Do you prefer to be in the water or on land when it's sunny outside?	
Boat/ Navasana	Bird's nest		
Fish/ Matsyasana	Sunfish		
Locust/ Salabhasana	Flying cicada		
Upward facing dog/ Urdhva mukha svanasana	Upward facing coyote	Howl and bark.	
Crocodile/ Nakrasana	Crocodile	Do this pose at the very edge of your mat and take a close look at what's happening in the grass/on the ground right in front of you.	
Camel/ Ustrasana	Camel	Instruct kids not to let their head drop all the way behind them but to have a strong neck and look up at the sky.	

Reverse plank/ Purvottanasana	Damselfly	Instruct kids not to let their head drop all the way behind them but to have a strong neck and look up at the sky.	
Wheel/ Urdhva dhanurasana	Full moon		
Pigeon/ Eka pada rajakapotasana	Pigeon		
Hare/ Sasankasana	Cottontail		
Plow/ Halasana	Bigfoot	Make sure kids don't look side to side during this pose, but straight up at their own legs to protect their neck.	
Half moon/ Ardha chandrasana	Half moon		
Crow/Bakasana	Crow		
High lunge/ Ashta chandrasana	Mantis	Look from side to side the way a mantis does- so unique for an insect!	

Nature Mudras

You can teach mudras and integrate them into other activities. Use them out on the trail to get the group's attention. Incorporate practice with left vs right.

English/Sanskrit	Picture	Instructions
name (if applicable) Earth plug-in/ Bhu mudra		Give electrical socket analogy. Let's plug our bodies into the earth so our minds can be recharged by nature.
Lotus/Padma mudra		Imagine that your flower is your favorite color. What does it smell like? Breathe in through your nose and out through your mouth. Use your imagination!
Turtle/ Kurma mudra		Sit with turtle hands at your belly button. Let your hands turn you into a turtle with your imagination. Close your eyes and think about what it feels like to BE a turtle. What do they see? What do they hear? What do they taste? What does home feel like? What is it like having a shell? What do they want to eat? Who are their friends?
Elephant/ Ganesh mudra		What qualities and characteristics do elephants have? How would being an elephant make your life easy? In what ways would being an elephant be difficult? Tell Ganesh stories.
Snake friends/ Bhuja mudra		Discuss recent research that snakes have 'friends' and prefer the company over certain individuals over others. We don't often think of snakes in ways that we can relate their behavior to our own! Remember to switch sides and put the other hand 'on top.'
Snake head/ Sarpashirsha mudra		Opportunity to discuss how some non- venomous snakes can flatten their heads to appeal more threatening and why it can be tricky, in general, to ID snakes! (Ex: Hognose snake)
Paw		Think of animals that have paws. What do they all have in common? How many legs do they have? Vocab: mammal, quadruped, canine/canid, feline/felid]

Claw		Do humans have claws? Why or why not?
Web		What animals make webs and how do they work? How do webs help certain animals survive and why are they dangerous for other animals? Vocab: arachnid, predator, prey, habitat, adaptation
Beak		Can integrate into a lesson on bird beak diversity. Encourage children to invent new mudras that represent beaks/bills with different shapes and functions. Ex: duck vs finch vs raptor
Anisodactyl bird feet	No.	3 fingers up, 1 finger down Ex: robins, jays, chickadees
Zygodactyl & Heterodactyl bird feet		2 fingers up, 2 fingers down Ex: woodpeckers
Syndactyl bird feet		2 fingers + thumb up, one finger down Ex: kingfishers
Pamprodactyl bird feet		4 finger up → 2 fingers up, 2 fingers down Ex: swifts
Whitetail deer		This gesture demonstrates the tail-flagging behavior that whitetail deer use when they sense danger and prepare to flee. It's often the last thing a person sees before the deer disappears.

- 20-minute example sequence: Flower → rock → river → mountain → shooting star → beaver lodge → tree → coyote → osprey → hognose snake → fairy cup fungi → fallen tree → box turtle → sleeping bat → bigfoot → butterfly → piedmont prairie
- Sun salutations for kids: Discuss how without the sun, the earth would be cold and dark. The sun gives us light and warmth. Tell the story of Hanuman: A monkey got so hungry that he went to the sun and tried to eat it! He thought it looked like a big juicy orange. The sun taught the monkey everything he knew about the whole world, and the monkey used sun salutations to thank the sun for teaching him. 'Salutation' means greeting, so before we start, let's greet the sun. On the count of 3, look up into the sky (but not directly at the sun) and yell "GOOD MORNING SUN!"
 - Example sun salute sequence: mountain → sunrise → sunset → mantis on right →
 downward-facing coyote → snail → downward-facing coyote → mantis on right →
 sunset → sunrise → mountain. Repeat on left side.

When you finish sun salutations, thank the sun for giving you warmth and light and life. Find the sun again and on the count of three say "Thank you, sun!" If the sun is behind a cloud you can say it loud, but if the sun is shining bright, try just whispering. When your students are familiar with a sun salute sequence, try doing them entirely in silence

• Sun Circle/Active Mandala: Explain that a mandala is a design, in the shape of a circle, that has patterns inside it. Stand in the middle and have everyone to put their feet so they are touching in the center. Give kids numbers and ask them to move certain parts of their body to create different patterns. Incorporate seated yoga poses. Alternate sunrise/sunset breath. Do the wave. Conclude by having everyone lay down, take deep breaths, and watch the sky. Take pictures, if you have permission, and share them with the students.

• Savasana: Tell them before you begin final relaxation, that a bell (or another sound) will ring three times when it is time to SLOWLY sit back up. It should be (much) shorter than typical savasana for adults, but generally the older the children the longer the savasana. Early learners may struggle to keep their eyes closed for any length of time, so don't emphasize this.

Concluding a Program

A perfect way to end a program is the Ecosystem Mandala/Web of Life activity. Use a ball of yarn to have each child share something they learned or observed during the program. It can be about themselves or about the environment. At the end, when there is a large web connecting everyone, explain: "We are all connected by our experiences. We could even use this yarn to include the plants, animals, and features of the landscape we encountered today. We create webs like this one everywhere we go, with every interaction with have with others and with nature, so let's make those connections positive!"

Tips for Teaching Yoga to Children

- Include accurate vocalizations and dynamic movement to accompany animal poses and make them more 'realistic'.
- Let kids venture away from their mats.
- Use rhymes for certain poses to cue specific adjustments, assist with sequencing memory,
 or simply to evoke a feeling as the kids embody a certain creature or feature of the
 landscape. Example: "I am a mountain, straight and tall. The strongest wind can't make
 me fall."

- If you practice with children who are already familiar with yoga, be aware that they may have been exposed to more traditional pose names and may share that with the group. You can address this potential distraction by prefacing your teaching with, "These are the names that I use for the poses, but you may have heard different ones!"
- Don't let limited access to nature impede your ability to practice nature yoga. Many of
 these activities can be practiced indoors or in cities and will still facilitate learning and
 connection to nature.
- Be silly! Laugh often!

Resources

- Yoga Frog by Nora Carpenter, illustrated by Mark Chambers. I have led many, successful story times using this book and the bendy frog figurine that comes with it. Meant to be read aloud as the poses are practiced. Very charming for all ages.
- *Just Breathe: Meditation, Mindfulness, Movement, and More* by Mallika Chopra, illustrated by Brenna Vaughan. Aimed at ages 8-12, book includes mindful walking, a cloud meditation, and a meditation for the planet. Unique resource for a somewhatneglected age group as far as mindfulness resources go.
- You are a Lion! And Other Fun Yoga Poses by Taeeun Yoo is meant to be read aloud as the yoga is practiced and is appropriate for pre-K students.
- Imagine That! A Child's Guide to Yoga by Kenneth K. Cohen, illustrated by Joan Hyme.

 Includes sun salutation sequence and in-depth instructions for a variety of poses, but you can also just read the short rhyme on each page.

- Good Morning Yoga: A Pose-By-Pose Wake Up Story by Mariam Gates, illustrated by Sarah Jane Hinder. Great start to a day outside, for ages 4-8. There are two text options depending on the level of detail the reader prefers. Poses are nature-related with an 'explorer' theme.
- Yoga Friends: A Pose-By Pose Partner Adventure for Kids by Mariam Gates & Rolf Gates, illustrated by Sarah Jane Hinder. Like *Good Morning Yoga* but for partners. Less nature-related content, but would be fun to adapt for environmental programs.
- Planting Seeds: Practicing Mindfulness with Children by Thich Nhat Hanh and the Plum
 Village Community. Includes a whole section on connecting with nature including nature
 mandalas and web-of-life activity. Comes with a CD with the song 'I Love Nature' by Joe
 Reilly.
- Meditation for Children: Pathways to Happiness, Harmony, Creativity & Fun for the Family by Deborah Rozman, Ph.D. Meant more for families than classrooms, but has useful sections on how to meditate with children and chapters with yoga and meditation exercises for different age groups, including a 'grass meditation' to experience oneness with life.
- Mindfulness Practices: Cultivating Heart Centered Communities Where Students Focus
 and Flourish by Christine Mason, Michele M. Rivers Murphy, and Yvette Jackson. Lead
 author is my Kundalini yoga teacher and founder/CEO of the Center for Educational
 Improvement.
- Forest Bathing by Dr. Cyndi Gilbert includes a great exercise called 'tree breathing' that could be adapted for practice with children.

- Yoga Games for Children: Fun and Fitness with Postures, Movements, and Breath by Danielle Bersma & Marjoke Visscher, illustrated by Alex Kooistra. Includes multiple nature-related activities such as 'blowing leaves,' 'animal sounds,' and a sun salutation diagram with a cute rhyme. For ages 3-12.
- 'Imagine You Are A Frog' is a free, guided meditation for children from Fragrant Heart, an all free meditation website offering over 100 guided audios as well as simple step by step instructions to learn to meditate. https://www.fragrantheart.com/cms/free-audio-meditations/children/imagine-you-are-a-frog
- Classroom Meditation- For All Ages! on the Yoga With Adriene YouTube channel includes a great example of a short and simple breath-focused meditation that can be practiced with children. https://www.youtube.com/watch?v=vYQy8-7Ut1E&t=247s
- The Kid's Yoga Deck: 50 Poses and Games by Annie Buckley is a favorite with my summer campers who LOVED the chance to 'pick a card' and instruct peers on the next pose.
- Mindful Kids: 50 Mindfulness Activities for Kindness, Focus, and Calm by Whitney Stewart and Mina Brown
- Mindful Games: Activity Cards by Susan Kaiser Greenland with Annaka Harris
- Fly Like a Butterfly: Yoga for Children by Shakta Kaur Khalsa has lots of animal poses and approaches kid yoga in the Kundalini teaching style.
- Sitting Still Life a Frog: Mindfulness Exercises for Kids (and Their Parents) by Eline Snel is not focused on nature but has great activities like paying attention like a frog, and personal weather reports.

Breathe Like a Bear: 30 Mindful Moments for Kids to Feel Calm and Focused Anytime,
 Anywhere by Kira Willey, illustrated by Anni Betts is written as if to be read aloud straight from the book. Although focused on emotional development, many activities are nature-themed.

References

- Bazdarick, L. (2016). Eco-arts Education: Developing a Connection with the Natural World through Yoga and Mindfulness (Doctoral dissertation).
- Berman, M. G., Jonides, J., & Kaplan, S. (2008). *The cognitive benefits of interacting with nature*. Psychological science, 19(12), 1207-1212.
- Birdee, G. S., & Gardiner, P. (2009). A pediatric perspective on yoga. T. Culbert & K. Olness.
- Durland, J. (2008). Into the jungle: Kids yoga story time. Colorado Libraries, 34(3), 6-8.
- Finnan, C., and Rose, L. (2013). *Learning, Sense of Self, and Yoga in a High-Poverty Urban Elementary School.* In Learning In and Out of School, edited by Susan D. Blum.

 Conference proceedings. http://kellogg.nd.edu/learning/Finnan.pdf.
- Frauman, E. (2010). *Incorporating the Concept of Mindfulness in Informal Outdoor Education*Settings. Journal of Experimental Education, 33(3), 225-238.
- Galantino, M. L., Galbavy, R., & Quinn, L. (2008). Therapeutic effects of yoga for children: a systematic review of the literature. Pediatric Physical Therapy, 20(1), 66-80.
- Hagen, I., & Nayar, U. S. (2014). Yoga for children and young people's mental health and well-being: research review and reflections on the mental health potentials of yoga. Frontiers in psychiatry, 5, 35.
- Kim, K. J., Wee, S. J., Gilbert, B. B., & Choi, J. (2016). Young children's physical and

- psychological well-being through yoga. Childhood Education, 92(6), 437-445.
- Kulas, K. A. (2019). Developing An Outdoor Mindful Activity-Based Curriculum For English Language Learners.
- Wang, X., Geng, L., Zhou, K., Ye, L., Ma, Y., Zhang, S. (2016). *Mindful Learning Can Promote Connectedness to Nature: Implicit and Explicit Evidence*. Consciousness and Cognition, 44, 1-7.
- Young, J., Haas, E., McGown, E., & Louv, R. (2016). Coyote's guide to connecting with nature.