Nature Connection Activities, Games, & Resources

"The Earth is the mother of all people, and all people should have equal rights upon it." ~White Elk

Developed by Emily Sheppard, in collaboration with Heather Mitchell and Samantha Swor. We continue to edit this to keep it manageable and current. Please share any activities you've done at camp that we could add!

For staff: Come to camp ready to lead 2 or more Nature Connection activities. Bring new activities we don't know yet and teach us some new ones!

For youth leaders: Come to camp ready with 1 Nature activity that you can co-lead.

After getting your Nature Activities ready, check out our Games and Activities Handbook and Songs and Chants Handbook.

Nature Connection Handbook Table of Contents

"In nature, nothing is perfect and everything is perfect. Trees can be contorted, bent in weird ways, and they're still beautiful."

–Alice Walker

Tips for Supporting Kids with Nature Discoveries and Nature Conversations

It's not about what you know, it's about the questions you ask

- Making guesses will lead you to the answer!

Use "I notice, I wonder, It reminds me of" to talk about nature

- Give kids time to struggle & participate in scientific practices before giving facts
- If you are going to give facts, it's usually at the end of the lesson/game

Better for kids to share ideas or concept they already know and engage in a learner-centered dialogue than listen to an adult lecture

- Help learners feel empowered to share and build on their peers' ideas by supporting them in sharing ideas
- Lift kids up by saying ***"Thank you for asking that question, I bet other people were wondering the same thing"***

Use language of uncertainty

- Science is about coming up with the best explanation with the available evidence, AND about being open-minded about other explanations that might be better
- Theory: opens possibilities and allows you to show wonder
- Don't assume you know anything
- E.g., you see burned logs - ***"I think there was a fire here because there are burned logs, but I'm not certain"***

Examples of sentence starters that use the language of uncertainty are: **"Maybe....", "I wonder…", "It reminds me of…" "The evidence that makes me think…" "The evidence seems to show…" "Possibly" "Likely"**

[From BEETLES' About our Teaching Approach]

Teaching kids how to share ideas

- Set the tone - Use **an argument** to support ideas & challenge others
    - **we are arguing for and against ideas, not people**
    - **it's okay to change your mind** during an argument
- Kids raise hands and wait to be called on
- Teach the "same" ASL symbol to use if someone shares the same idea
- It's okay if another kid said what you wanted to say, that means that your ideas connect with someone else's ideas. How cool!

Teaching kids how to respectfully disagree

- Engage in argument by asking ***"What's your evidence?"*** or ***"What makes you think that?"***
- *"I can see why you'd think the tree was a ____ tree, but I think it's a _____ tree. Here's why……"*
- Encourage students to begin sentences with ***"I think," "I notice" "I wonder"* or *"It reminds me of"***
- Shut down sentences that begin with *"No…"* or *"You're wrong"* or *"I know"*
- Be open to kids sharing their ideas about nature, even if you know they aren't scientifically "correct."
    - ***"Wow! What a creative idea about what the bird could be doing!"***
    - ***"I didn't think of it that way, thanks for sharing your observations!"***
    - ***"Cool! I didn't think it was bamboo, but now I'm looking at it closer and noticing details I hadn't noticed before. Thanks!"***
- When kids are making guesses about names or processes, **keep it open ended**
    - Respond with **"Great idea, I wonder…"** instead of "you're correct!" Or "you're wrong"
    - Let the kids' ideas flow & at the end you can reveal the "correct" answer

Redirecting if kids go off topic

- "The sooner we finish sharing our ideas, the sooner we can start the fun game!"
- If kid shares off topic, try to connect their ideas to nature
    - ***"Thanks for sharing about you hiding your tooth from the tooth fairy. This might be a stretch, but do you think you were using camouflage to hide your tooth?"***

Poison/Protector Oak

Help campers recognize before going out exploring!

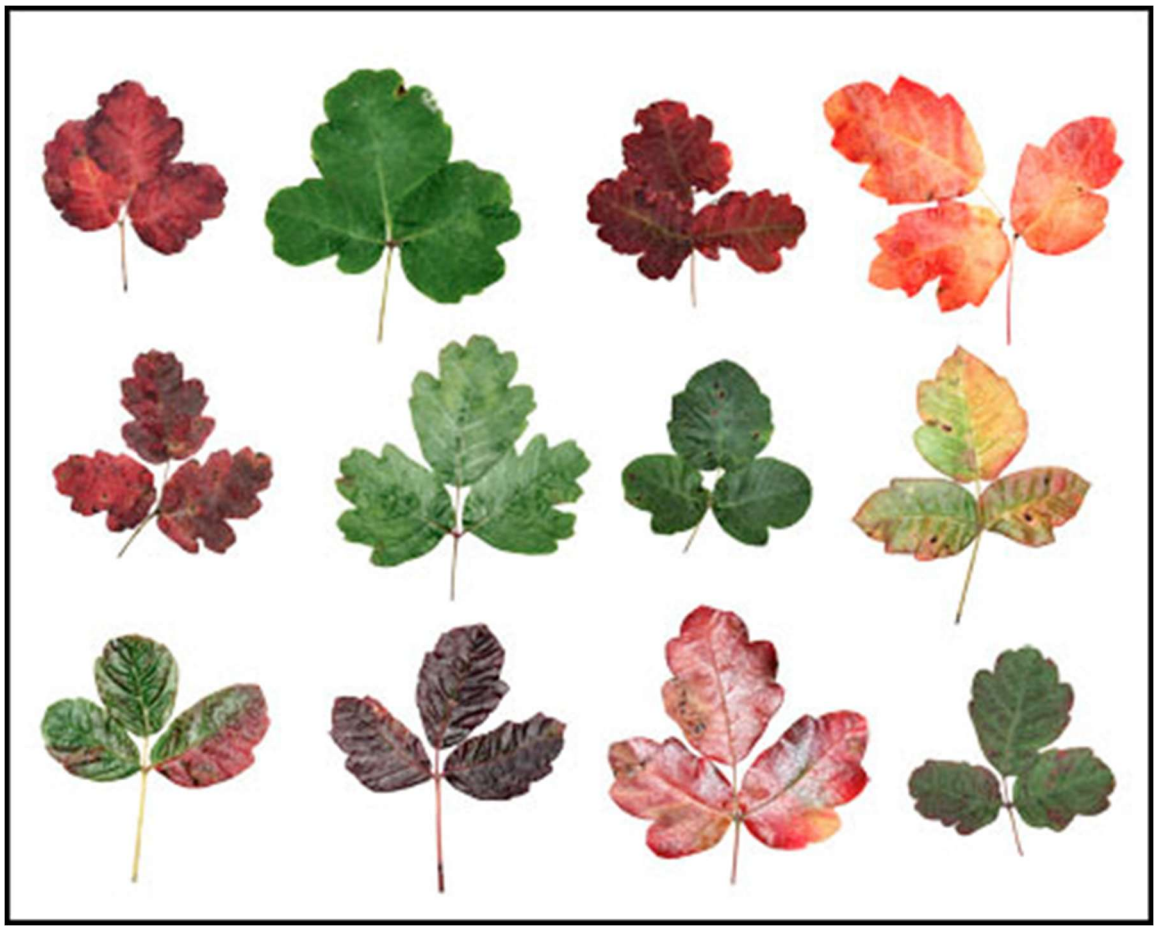
Leaves of 3, let them be.

If it's shiny, watch your hiny, if it's hairy, it's a berry.

"While we have little use for the plant (other than the aesthetic beauty of the fall foliage), **poison oak has many benefits to other animal species.** Poison oak shrubs offer shelter to fox squirrels while also providing food — the plant's berries — in the spring. The California towhee builds its nests in the shrub and also feeds on the white berries. Large herbivores, such as deer (and even domestic goats), feed on the leaves and stems of the plant as well. These examples are just a few of the many. While it is easy to dismiss this plant as a nuisance — and trust me, after one or two exposures, it's easy to do just that **— it is important to step back and appreciate its benefits to our forest ecosystems.** " ~Sonoma Land Trust

If someone says they aren't allergic and want to touch it, please explain why no one touches it at camp.

"Thanks for bringing that up. It's important at camp for everyone to avoid touch poison oak, since oils that get on your skin can spread to other people. So, at camp, please don't touch the Poison/Protector Oak. When you're out with your family you can talk with them to decide what is best. "



Tree Climbing at MBC
Talk with campers before climbing –

- **Ask counselor for permission first**
  - **Consider based on the numbers of kids there, as you need to have your attention on it. Let campers know if it is a good time or not.**
- **Find out what type of tree it is**
- **Look to make sure it's alive/safe to climb on**
  - **Visually inspect the tree and the area around it. Make sure it's strong enough and look for branches and roots that may be rotten.** Cracks and splits in the trunk, large areas where bark is missing, and mushrooms or fungus growing on or near the trunk could be other signs that the tree isn't healthy. Tree Climbers International, an organization for people who climb trees with ropes and harnesses, has a helpful guide for tree inspection with a lot of tips that apply to children climbing as well.
- **3 points of contact**
  - **Always keep "three on the tree," meaning that children should always have either two hands and one foot or two feet and one hand in contact with the tree.**

- **Step on branches at least as big as your own thigh**
- **Grab onto branches at least as wide as your bicep**
- **Stay low enough the Staff nearby can reach you**
  - **Don't help children to get up in the tree**. They will get up on their own when their body is ready for it, and helping them will only encourage them to take on more difficult challenges than they can handle.
  - **Let children lead the way.** Neither push children to climb nor try to dictate their every move – this increases the risk of a misstep. Instead, try to trust children's ability to negotiate risk and only intervene if you think the child is in danger.
  - **Avoid the phrase "Be careful!"** Instead, offer hints that can help children judge the situation, such as "Does that branch feel sturdy?", "Are you able to get a good grip?" " and "How are you planning to get up there?"

Excerpts from https://rainorshinemamma.com/9-safety-tips-for-kids-climbing-trees/, author Linda McGurk

Visit the Nature Center by the Little Farm

Each group will visit the Little Farm once most sessions with celery & lettuce to feed the animals.

Next door is the Nature Center. It's open Tuesday – Friday. Not Monday.

- Bring your group inside and look around at the displays once each session. Spread out staff/YLs so all campers are in view at all times.
- Great for any hike time, on a chilly day, or if it's raining.
- Ask the desk staff Naturalists if they have any animals or materials they can share with a group. They usually have some animals and most of the time can sit down with your group and share some info and show some cool creatures. Spitting cockroaches have been popular over the years.

Observation activities

Silent Hike

Tell the group you are going have a chance to walk silently on the Never Ending Bridge at Jewel Lake.

- Get in touch with our sense of hearing, and bring a calmer presence so more animals feel comfortable to speak up & come out
- 1 Staff at the beginning of the walk, 1 in the middle, 1 and at the end. Yls along the way as well so kids are observed along the path.
- Kids walk either alone, or in groups of 2 or 3. Silently.
- Staff at the beginning set them off with space between so they can have some moments alone along the bridge.
- At the end, when all are back together make a time kids can share
    - something they heard or saw on the walk
    - something that felt different about walking quietly
    - anything new they noticed if they have done this walk another time, not silently
    - how it felt to be alone or in a smaller group by Jewel Lake

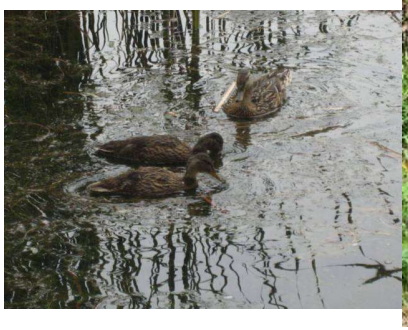
“Let the rain kiss you.

Let the rain beat upon

your head with silver liquid drops.

Let the rain sing you a lullaby.”

—Langston Hughes



Meet a Tree

A sensory activity - kids get to be blindfolded, led by a partner, & meet a tree

Materials Blindfolds- 1 per camper, get washed after

Where- Plenty of trees (at least 5) that would be safe to touch (no sap, or Poison Oak)

Introduce the Activity - Think, Pair, Share

- Sit in circle, ask kids to turn and talk to another camper for 20-30 secs and answer this question: **"What makes a tree, a tree?"**
- Come back to group share, kids raise hands to say what they discussed
- **Facilitate a convo about trees**, their superpowers, and even if you don't know much, play off the kids' knowledge (they will know a lot!)
  - roots, trunks, limbs vs branches, chlorophyll, leaves, seeds, they are habitats (trees support all living life), deciduous vs evergreen
- **We are going to meet some new friends now – TREES!**

BEFORE they start - Discuss rules, boundaries, and do a demo of how to meet a tree with staff partner with one person blindfolded.

- In pairs of 2, 1 partner is blindfolded and the other isn't. The blindfolded partner will be led by the partner who isn't on a short walk to a tree.
- Show kids how to lead the blindfolded partner to a tree & stop once their partner can touch the tree with arms straight out. This way, the blindfolded partner can show how close they want to get to the tree.
- Tell kids to tune into their senses when "meeting trees". We don't have sight now, what do we have? Encourage kids to hug the tree to get an idea of how wide it is, to smell it, and to touch it all over. Are there branches, knots, bumps? How many trunks are there?
- The blindfolded partner will say ***"I'm ready"*** once they feel they had enough time to "meet" the tree. The partner who is leading will guide the blindfolded partner back to the original area. Then the blindfolded partner will take off the blindfold and guess which tree they just met.

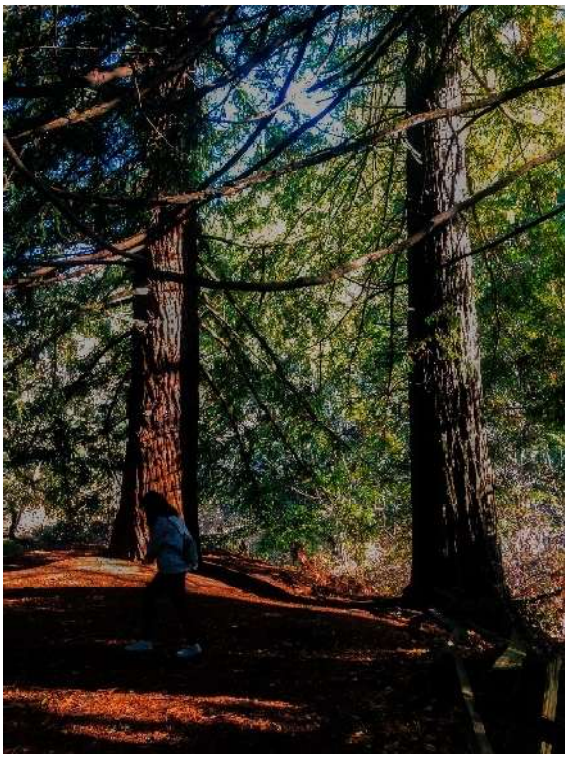
MORE ↷

READY TO START - Kids choose a partner, or choose for them

Lots of supervision needed for this activity – watch well!

- If kids choosing their own partners, let them know that they will want to chose someone they can rely on/feel comfortable with
- Once kids in partners, have them spend a minute discussing how they would like to be led
    - For safety, partners need to have some touching to guide (holding hands, hand on shoulder, hand on backpack, linking arms, etc)
- Explain that if someone does something unsafe, or doesn't lead their partner in a safe manner, they will not be able to play
- Explain that kids need to be talking to the blindfolded partner
    - Ex: "We're about to go up a hill - pick up your feet a bit more!"
- Make sure to switch partners so both kids have at least one chance to lead and be led
- This can be extended to lead into an I Notice, I wonder, It Reminds me of nature sketching activity. Ask students to draw their trees and include the features they noticed while they were blindfolded.

When-When kids need to explore and lead their own adventure-30-40 minutes
Who-All ages, but make sure many staff/YL supervising, especially for SB



Disco Walk - Discovery Walk

- **Introduce what a "discovery" is by asking kids what they think it means**
- Let them know that we will be trying to discover new or exciting things
    - Nature/exploration doesn't have to be about what we already know, it can be about the questions we have!
- **Come up with a "discovery" word like "BOO-YA" or "guacamole"** (or even "Disco" for the groups that have hard time with group decisions) to say when you or a kid finds a discovery
- **Set the tone! Be excited when you use the discovery word**
- Once you begin your walk, anyone can make discoveries and yell out the discovery word.
    - For example: let's say someone discovered a leaf that smells peppery, but you don't know what it is
    - Write down on whiteboard description, draw picture, and model nature journaling to children so if they were really curious, they can research further
- Write down/take mental note of the discoveries kids are most excited/wondering about so you can weave into enviro-ed curriculum for the rest of the session
    - Ex: if they were really curious about banana slugs and you can play a game of camouflage later, or build a banana slug later

Materials - Helpful (not needed) - a whiteboard, marker, & eraser to write down discoveries
When - First or Second day of camp to Orient with space & Gauge what kids are interested in
Time: about an hour
Where - Tilden prime spot for this, or at a park during break camps
All ages

Nature Connection Journals

Materials: paper, sticks, rubber bands, pens/pencils

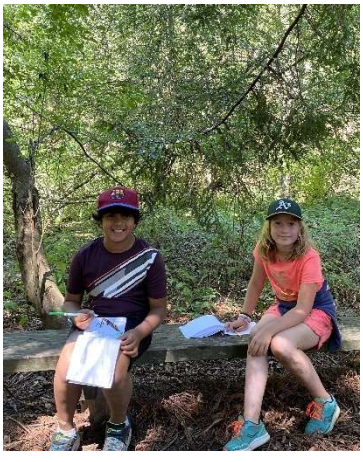
1. Campers make a Nature Journal with supplies in the Nature Bin,
2. Go on a discovery wander for a minute.
3. Tell them to pick up a piece of nature that's already down on the ground & dead.
4. Have kids come back to circle and give them the instructions below
    - Draw a quick sketch of it & Label 3 features
    - Name 2 ways you are connected to the item
        - Ex: acorn - 1. It is breaking out of its shell, like I am when I come to camp and meet new people. 2. It is soft, just like my skin.
    - Name 2 things that the item does for you
        - It grows new trees that 1. Provide me with shade and 2. Provide me with furniture made from oak wood.
    - Have kids turn and talk to the kid next to them and talk about what they chose.
    - Come back as a group and go around in the circle and have students share out what we chose, and 1 way we are connected and 1 way it does something for us.
    - You can also have the kids walk around and try to find another person who chose the same thing as them and share why they chose it

There are a lot more Nature Journal activities, some in the nature bin. Ask if you want to know more about what we have learned or look it up for many more ideas!

Where - Where there are plenty of natural items on the ground

When - When kids need balance of exploring and sitting/listening

Who - All ages



Hummingbird Walk- this link takes you to a document to help kids (and you!) to investigate whether the park is a good habitat for hummingbirds

Leaf rubbing lesson plan, Leaf rubbing worksheet

Nature Walk Scavenger Hunt

Nature Walk BINGO: Tilden edition

- 3 different BINGO boards
- Each student gets BINGO board
  - put them in the plastic sheets/laminate them and give kids expo markers for nature bingo walk
- Lead kids in nature walk and start trying to identify BINGO board nature items

Nature Scavenger Hunt (some may be added to journal worksheets)

Vertical Poems

Hummingbird Craft

Insect label and color

Earth - Nature Mandala

- Choose an area that is visible, but might actually be somewhere that it will stay for a while and future campers/public can appreciate after camp is over.
- Mark the circle and lines going out from the center in the dirt or with sticks or just start designing and look for ways to make it symmetrical
- Use Found items from nature - Go for a nature walk and collect lots of interesting items that are already on the ground and not growing
    - pinecones, moss, sticks, bark, sand, leaves, rocks, berries, grass, etc.
    - Be aware of and avoid Poison/protector Oak
- **Leave all the nature items in the park. Ask kids why we do that.**

Fairy/Troll Houses in Froggy Flats or Woodsy Area

Show pics in Nature bin, Poison Oak pics, too!

- In Froggy Flats - show kids the hill up to the top table and show around the trees. We'll stay between the lowest and upper table and not go down into the creek past the middle table. Lots of poison oak on the green side, opposite the middle table.

The redwood trees are perfect for building around, so encourage campers to find a spot and think about what they want to build.

- People who don't want to build can help find materials, it's a hunt
- It's a lot of problem solving, since you rarely find exactly what you want

Extension 1 – Do a museum walk where each building team describes (1) who this house is for, (2) the materials they used, (3) design ideas, (4) problems and how they corrected them

Extension 2- has been fun with older campers, started a lot of conversations

- After building a house, builders can ask other kids if they want to be included in the judging, and then rate each fairy house according to their 1 Criteria
- No one house is the best bc they are all different and will get higher ratings in different categories
- Examples of categories –
  - Would be good for rats (big and also cozy)
  - is fire safe (lots of exits)
  - is super cozy and warm (closed in)
  - would be perfect for a large fairy family,
  - would be good for a single fairy,
  - has many levels,
  - is all in one level,
  - would be good for a toad (high ceilings)
  - earthquake safe (ask before wiggling)
  - lots of different colors
  - all the same color/camouflage


FunInTheMaking.net


tom ciriello photography

Pack Rat/Dusky-footed Woodrats Nest Making

Fun nature extension for fairy houses is to build pack rats nests (relevant to Tilden; kids get so excited when they start to recognize difference between fallen widow maker twigs and actual pack rat nests)

- Introduce wood rats, how they build their nests, their daily lives
- Link to dusky-footed woodrats facts (common in Tilden and East Bay) here - Summary of most relevant/cool facts below
  - Dusky-footed woodrats average **about 16 inches in length**. This includes their long tails, which account for nearly half their body length.
  - Dusky-footed woodrats in the United States are found in **California and western Oregon**. Forests of coast live oak and native willow trees with thick underbrush and cover are the ideal homes for dusky-footed woodrats.
  - These rodents are known for building stick houses that reach up to **five feet in height and eight feet in diameter.** Terrestrial houses (on the ground) are built around logs or near trees in areas that are shaded and cool.
  - Dusky-footed woodrats are **generally solitary**, but their home territories tend to overlap. They live in a matriarchal social system where females choose mates. After mating, **males retreat to tree nests** constructed in cavities or branches. **Females stay in their terrestrial (on the ground) homes** to raise one to four offspring. Their exact lifespan is unknown, but other members of the genus **typically live fewer than two to three years**.
  - Dusky-footed woodrats are known to line their nests with nibbled-on leaves of **the California bay laurel**. It's thought that these leaves have fumigating properties that clear nests of parasites such as ticks and mites.
  - The abandoned homes of dusky-footed woodrats provide habitat for a number of other species.
  - **Predators include owls, hawks, bobcats, & coyotes.**

- These **voracious rodents** eat fungi and many kinds of plant materials, including seeds, fruits, greens, and inner bark.
- They are **nocturnal** and retrieve food at night, sometimes bringing it back to the nest for storage.
- They are also called pack rats because they often hoard things, especially shiny objects left out by humans. **We have found many of our wiffle balls, bats, and other objects up high in the shed where they have dragged them.**
- Woodrats are also called "**trade rats,"** because when they come across a new treasure, they'll drop whatever they're carrying in order to pick up the new item, effectively trading one token for the other.
    - Have kids share what they think a pack rat would need to survive - shade, shelter, food, etc
    - Have kids work individually or in teams **to build pack rats nests**
    - **Rules**
        - **Do not pick up sticks longer/bigger than your arm**
        - **Set boundaries to avoid protector/poison oak**
        - **Only use sticks already on ground**
        - **Work as team, make space for all voices**
- **"museum walk"** at end so students can see everyone's nests and talk about what features they added—social/emotional learning!!
- Extension: introduce **a "nature disaster"** and put kids pack rat nests to the test to see if they will survive an "earthquake" (light shaking of nest), a "Landslide" (toss rock onto it), a "Tsunami" dump a little water onto it, a "wildfire" imagine what a fire would do to it (if all sticks - it would burn and cause fire to spread, if grass it would burn and have less potential to spread)

To see a world in a grain of sand,
And a heaven in a wild flower.
Hold infinity in the palm of your hand,
And eternity in an hour.
- William Blake

Games that MBC staff/YLs already know but can be evolved to incorporate nature concepts

Evolve “Medic” game into “Decomposers”

- “Decomposer” is the (medic) and plants/animals (team members)
- Use as an opportunity to discuss decomposition and how they recycle nutrients back into soil, and eventually start a new life cycle for plants to grow
    - What are decomposers? Fungus, bacteria, invertebrate
    - What would happen if we didn’t have decomposers?
    - Can we think of an example of decomposition that most of us are familiar with? (compost and how we create a new life cycle with our food waste)
- Instead of calling the “medic” for help, you call the “decomposer” and they will bring the plants/animals back to life
- Adapted from “Decomposer Tag”
    - Writeup linked here for separate tagging game
    - Might want to play the separate game instead of trying to make switch from “medic” to “decomposer” since such a loved classic at MBC

Animal Charades as adaptation of Lemonade

- Play Lemonade and introduce the challenge of doing all animal charades!

Sharks & Minnows

- Opportunity here to adapt name to more Bay area specific wildlife (Hawks & Snakes)
- Also to get into predator prey relationships

Evolve Capture the Flag into Predator/Prey game

- Turn the game into a predator/prey game and discuss with kids what kind of predator/prey we will be, what habitat does the “flag” live in, and what does the flag represent.. Prey? Food? Water? Shelter?

Fire in the Forest (a re-theming of Sharks & Minnows/Octopus Tag) (a nature connection game, brought by Devon O'Rourke)

A big, tag-based game, an intro to a few local animals and to the idea of wildfire.

- Age: Everyone! Concepts might be harder for 5-7 yrs, and competition, tagging might be tricky for SBs, but it's worth a try! Great game for 7+
- # of Players: Best with 10 and more, Equipment: cones/rope for boundaries

Time per Round: Each round can take only 10 minutes or so. Nice to do a few times. Before beginning again, chose a new set of animals and consider changing the field size to change the games dynamics.

Before You Start:

- Find a big field, blacktop, enough space to run around
- **Mark boundaries** for a long rectangle – narrower the space, the harder the game
- Have students **stand in a circle** to learn the rules.
- Start by asking if anyone knows about a common natural disaster California has been getting the last few years? Has anyone noticed its effects?
  - **Wildfires!** - Talk a bit, how they are increased by climate change, & how they are also a natural part of California's **ecosystem**, regenerative forests and how our plants & animals have evolved to "adapt" & survive, even in extreme conditions - these features are all called "adaptations" - plant & animal superpowers that help them survive!
- **Prescribed burns** are an important part of managing wildfires
- Talk about how some **Trees** have fire resistant properties
  - **Redwood** bark has insulation and holds fog to retain water
  - Deciduous trees like **Oak** trees drop their leaves/branches in the winter so they can save/retain water & provides fire resistant properties
  - **Manzanita and madrone** (bark is thin, you can feel how cold it is and how much water it holds on to. Also has waxy/smaller leaves that don't need as much water (**California Buckeye** also has waxy leaves and is deciduous)
  - **Coniferous trees (sequoia, pine, cypress, redwood**) have conifer seeds that drop and can sprout under extreme heat
  - **Fungi** - Just like trees, fungi have connections that communicate to each other and send nutrients that we don't even see until the rain comes

- **Animals** have also adapted to drought
  - **Deer** conserve water by their scat changing from wet to dry season, more human like poop in winter than in summer more dry and rabbit like
  - **Birds & lizards** excrete semi-uric acid (not all liquid pee) for water retention
  - **Salamanders & Banana slugs** hide until the rainy season ends
  - **Mosquito**s lay eggs for up to 7 years that don't hatch until enough water is there, at the end of the dry period there are so many mosquitos

What happens to the animals in a fire? (they run away!)

- What kinds of animals live around here that might run away in a fire?
  - This is a great opportunity to start learning about some local animals. (Don't forget birds, frogs, snakes, lizards...)
- **Narrow the list of animals to 3** and have students raise their hand to choose which animal they each want to be.
- Finally, chose someone to be a raging "wildfire"
  - Have a staff/YL do this job first to set the tone

START THE GAME

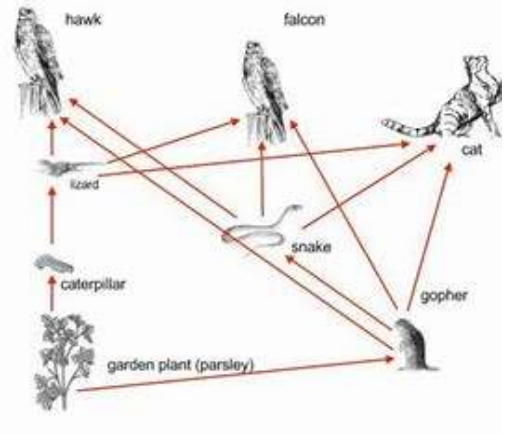
- The **"Wildfire"** player is set loose in the playing space, while the other animals line up at the start line.
- The wildfire then gets to call out any one of the three animals by beginning the call with **"Forest on fire if you're (one of the 3 animals)…."** and all the students who have chosen to be that animal must run across the field, trying to get to the opposite edge
  - Instead of saying "Forest on fire if you're an owl" get creative and say "Forest on fire if you have feathers" or if you hoot, or if you have fur, or if your call sounds like _____ (helps kids **make connections to animals they chose)**
- The wildfire tries to tag animals as they run across the field,
- once an animal is tagged, they become **"a tree on fire"** and have to **stay "rooted"** to their spot (they can chose a foot to pivot on) but otherwise can't move locations, but they can also "spread the fire" with their burning branches, by tagging runners that pass near them.
  - Once tagged by a tree on fire, a runner must stop at the spot where they were tagged and become a tree on fire also

- The game continues with students running back and forth across the field each time their animal is called out, while the wildfire and the trees on fire try to tag them frozen
    - At any point, the wildfire can call out “the whole forest is on fire!” and ALL the animals must run to the opposite side at the same time
- When the final camper is tagged, they are offered to start a new round as the wildfire
    - Before beginning again, chose a new set of animals and consider changing the field size to change the games dynamics

Debrief questions

- What happens to animals when their homes burn in a fire? Where do they go? What happens then?
- How does a burned area repopulate?
- Do some animals benefit from fire? (if this draws a blank stare, ask them to think about the food sources different animals depend on… fresh grass might help one, while more easily spotted rodents might help another)

Web of Life Games

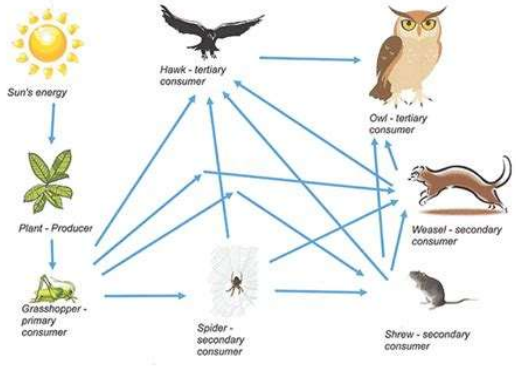


Web of Life

Materials - Ball of yarn

What

- Have everyone stand in a circle with the leader standing in the center with a ball of yarn
- Ask the campers to decide what animal, plant or another part of nature they would like to bed
- Give the end of the yarn to the first camper who shares what part of nature they are
- Now as other animals and plants are named, ask the campers if they can draw connections between them
- Illustrate these connections by crossing the yarn from one camper to another
    - Many things will be connected many times-if one camper is the sun, for example, they will be connected to everything
- Keep the discussion and the web going at a quick pace. Then ask if it really matters if we removed one item from the web
    - For example, is a boulder really that important? Have the camper who is the boulder slightly tug the yarn they are holding onto and then see how many others felt the tug
    - Did an ant or insect feel the tug?
- As your are dismantling the yarn, have a conversation about what conditions would cause different animals, plants or other natural objects to disappear (hunting, development, pollution, etc)
- When Group needs more chill team activity
- Who 5-10 ideally, might not be as engaging for older kids
- Where Anywhere!!



Balance of Nature



Materials: none

This game demos the concept that nature is said to be in a state of balance when the populations of animals and plants are in such proportions that everyone has food without damaging the well-being of another species

Divide the group evenly into three groups

- These groups represent grass, mice, and bobcats and each group has a specific sign to distinguish them from others (decide with group what the distinguishable signs are (ex: grass - keep pointer finger up in air, mice - bend both arms and tuck elbows into sides with hands bent down like a sniffing mouse, bobcats - kitty ears)
- Make sure to talk up grass and mice and their importance, as most will want to be bobcats

SET BOUNDARIES

When the game begins, the bobcats try to catch the mice, the mice try to catch the grass, and the grass try to catch the bobcats

- The reasoning is that when bobcats die, their bodies fertilize the soil and provide nourishment for the grass

If the chaser succeeds in tagging their victim, the victim then changes species and becomes whatever he was tagged by

- After a few minutes of play, call them all back and count how many of each species there are, then let them start tagging again
    - After a few more minutes call them back again and count off
    - Often, the dying species will have made a comeback
    - The students can see the population is important and establishes a balance
    - If there are only a few mice, there will be plenty of grass for them to eat, and their predators, the bobcats, will have a harder time finding them
    - Therefore, it is likely that the mice will make a comeback

This can be repeated as often as you like and different scenarios will play out.
It can also be great discussion if you introduce one hunter who can tag anyone in the game


Observation games

Deer Stalker –

Materials-Blindfolds (wash after each use)
A game that introduces predators common “Stalking” strategy to hunt prey

- Introduce the Black Tailed Deer - a common deer found in the Bay Area
    - Talk about what it does for our habitat, why it likes our habitat, any cool adaptations (they change their scat from summer to winter from dry to wet to hold onto water in drier, hotter months - drought resistant species - talk about why this makes them resilient)
    - Brainstorm it’s predators.. Lean toward answers that are realistically found in Bay area like mountain lions, coyotes, human hunters (can talk about impacts of hunting, overpopulation, etc),
        - Talk about impacts of predators, hunters, and how that might affect the ecosystem
    - Introduce the game and that there will be a circle of students and staff that are serving as “trees”, and two students chosen to be the deer and the stalker, they are both blindfolded and in the center of the circle
    - Within the circle, the stalker/predator tries to tag the deer by listening to footsteps, breathing and other deer noises, while the deer tries to keep away the stalker
    - The outside circle must be absolutely quiet, for any noise will be distracting
    - UNLESS… the deer or stalker accidentally approach someone or the “trees” in the circle boundary, the “trees” will silently say “Tree, tree” to let the deer/stalker know that there are close to out of boundaries
        - If the stalker doesn't catch the deer within 2 minutes, the deer wins the round and two new participants are chosen

Bath & Moth

Need – Bandanas for players (washed after), open space

- Get the group in a big circle
- Talk about how Bats catch Moths – ask campers what they know, find your way to **echolocation.** Bats make a sound, it bounces off the surroundings and helps the bat know what's ahead of it.
- In this game the bat will make a sound or a click and the moth will do that same sounds back, can be quieter
- The circle of campers will be the cave that the bat and moth are flying in
- Pick 1 camper to be the Bat and another to be the Moth, put bandanas on each of them so neither can see

Start the game

- The bat and moth move around the circle, the bat making the sound and the moth repeating it back. The bat tries to catch the moth.
- When the moth gets caught, have kids take off the bananas and describe what it felt like to (1) try to catch something you can't see and (2) try to get away without being able to see and having to give a clue.

The cave walls can whisper "cave" when the bat or moth get too close. Does that give the bat more clues? Talk about strategy.

Might be fun to play in the fungee bungee where you can feel the wall gently and keep moving.



Clippy

Materials - Binder clip, carabiner, hair clip… anything small that clips onto things!

- Extensions
    - Clippy is a great game to get kids “hooked” for observation activities like Nature Journaling, BINGO Walk, or Silent Hike

Make a circle with everyone in it

- Introduce what skills are needed to make great observations
- Steer answers toward eyesight, paying attention to details, looking in unexpected places
- Introduce Clippy and say you are going to place it on someone in the circle (and only that person who has clippy will know that they have it)
    - For first round, place clippy somewhere easy to see like collar or back of shirt
    - Once everyone opens their eyes, begin to walk around folks in the circle looking for clippy
    - Once you have found clippy, stay silent, walk away from the person who has it for three seconds, then silently kneel down without giving away who has clippy.
    - The last person standing should be the person with clippy
    - Note - person with clippy should act nonchalant and walk around the whole time like everyone is as if they were looking to find clippy
    - Good to do 3 rounds, one easy/practice round, one round with clippy in a different place than expected (on shoelace, on hat)
    - Leave time at end of game to reflect
    - Put your hand on your head if clippy was harder to find than you were expecting?
    - Put your hand on your head if you found clippy in an unexpected place?
    - These are the skills that will help you make observations in nature!

Good intro game for discovery walks, nature journaling, creek exploration to flex observation eyes

All ages, but might be more tricky for SBs to follow rules (staying quiet when they found it, not touching each other)

Camouflage (Predator/Prey)

*Adaptation of Eagle Eye

- Area with trees, bushes, rocks, to hide behind
- Set boundaries with kids, where they can and can't hide
- Avoid areas where there is a lot of P.O. or brambles
- Good areas for school break camps at Washington park in the forested back area

Introduce concept of camouflaging: this is the most popular adaptation animals and plants have evolved to have to survive!

- Ask kids what is camouflaging?
- Can we think of any animals/plants that camouflage?
- Ask kids why animals/plants do it?
- Can extend to talk about examples of prey and predators

How to play

- Pick someone to be IT (the Predator). They also get to choose what predator they are (like a Hawk), then ask the group what kind of prey Hawks eat (snakes, mice)
- The Predator must choose a location to stand for the duration of the game. The Predator can lunge and pivot in their spot but they cannot walk away in any direction.
- The Predator closes their eyes and counts loudly to 30. The prey (the players) run and find a hiding spot.

***Important - The Predator tells the prey that they need to find a hiding spot where the predator can't see the prey, but the prey can see the predator.**

- After counting for 30 seconds, The Predator opens their eyes and immediately searches for prey (remember The Predator cannot move from their spot).
- Players/prey are out if The Predator visually spots them or their clothing. Spotted prey are out for th e duration of the game and can wait with the predator, but may not help with predator search for more prey.
- When The Predator cannot find any other players move to the next step. ↷

The Predator will do a secret animal move (ex: bird wings flapping, diving like a dolphin) without announcing to the hiding prey that they are doing the secret animal move

- Once finished with the secret move, The Predator yells "**CAMOUFLAGE!!"** and the prey who have not yet been found comes out of hiding
- Circle up as an entire group (even prey that were caught) and have the prey who survived perform the secret animal move with their eyes closed (so no cheating). People who were found or didn't see the dance move can watch and giggle.

Talk at the end about how it went

- If kid complains about other kids hiding in their spot, connect to nature and how often, groups of animals have to work together to protect each other (ground birds stay in flocks)
- If kid complains that they were spotted by the predator when there were other prey hiding in the same spot that didn't get spotted, connect to nature and how often groups of animals sacrifice for each other, or take turns hunting for prey

Barnyard Animals – find your family
Can be done with any animals

(game Devin Berry used to play to help campers connect)

- Each person is given the name of an animal with approximately three-five people having the same animal.
- Spread the group across a field, court, classroom, etc.
- No one is allowed to tell another which animal they are.
- At the signal each person makes the noise of the animal that they have been given.
- Time how long it takes for all the groups to find each other, can you do it faster next time w new animals?

Team Building & Social Emotional Learning

Where's my Egg?

Materials - medic ball, something small to be the egg for kids to grab/toss/hide
Start with Staff/YL being the BIRD to model how to do it a few times before a camper has a turn.

Nature concept: how birds protect their chicks, and their nests

- Campers are trying to cross a big field towards the BIRD who's not facing the kids and has the "egg" at its feet (the "nest")
- Any time the BIRD yells "Where's my Egg??" the kids must freeze and the BIRD turns around to see if anyone is moving.
- If anyone is moving the whole team goes back to starting line (remind them of being a good team player when this happens)
- Once someone retrieves the egg from the nest, the BIRD is still turning around on every countdown of "Where's my Egg?!" and has one guess as to who might have the egg.
- If guesses are incorrect, turn back around and let kids keep carrying it back to the finish line, **Each kid on the team must touch it at least once on the trip back to the finish line.**
- Continue turning around to make more guesses
    - If guess is correct all students return the egg to the nest and must go back to the very start and try again
    - At this point, it's nice to give option of team huddles to discuss different strategies and make spaces for new ideas, voices, play into team building
  - Continue until successful
  - Debrief with what makes a good team, what was challenging, and do some appreciations

Partner Interviews

On a hike from one place to another, campers can ask someone walking with them these questions. And then each take turns sharing.
Can you think of other questions related to nature to ask?

1. If you could become an animal or plant, what would you choose?
2. Have you ever been lost in the outdoors?
3. Did you ever see an uncommon wild animal?
4. Have you helped an injured animal or plant?
5. Have you ever grown any vegetables? Fruit trees?
6. What is one of your favorite nature places?

Links to common Tilden Flora and Fauna

- Wild Plants of Tilden
- Tilden Wildflowers
- Tilden Trees

Parts of a Tree

Parts of an Insect

Can you Spot in Tilden?

- Blue jay
- Crow
- Turkey vulture
- Robin
- Hawk
- Hummingbird
- Swallowtail Butterfly
- Bay Checkerspot Butterfly
- Ladybug
- Dragonfly
- Fox Squirrel
- Himalayan Blackberry
- California Native Blackberry
- Protector/Poison Oak
- Poison hemlock
- Bay laurel tree
- Coast Live Oak Tree
- Big leaf Maple Tree
- Redwood Tree
- Buckeye Tree
- Black Walnut Tree
- Eucalyptus Tree
- Acorn
- Fern

Intro to Forest Bathing

https://www.youtube.com/watch?v=y-wHq6yY2CI- It is explaining why spending time in nature is good for us, but not much about forest bathing itself.

https://www.youtube.com/watch?v=mxLbmMwlI4U- Introduction to Forest Therapy Shinrin-yoku

https://www.youtube.com/watch?v=W0MEFNyLPag- At the beginning of this video shows some tips for forest bathing.

Ticks in Tilden Park:

- The most common ticks in Tilden are deer and dog ticks.
- We suggest checking daily for ticks, either brushing them off before getting into the car or bathing and washing clothes after getting home
- according to the CDC, transmission of Lyme disease usually takes 36-48 hours.
    - It is the commonly named deer tick that is main carrier (more orange and black), not the wood or dog ticks (brown).
- You may find these helpful:
    - East Bay Regional Parks District Tick Info
    - Farmer's Almanac 7 Natural Tick Remedies and Ways to Remove Ticks.