

2018 Boulder Summer Camp "Camp Experience" Descriptions

This document contains descriptions for each unique "Camp Experience" offered by Thorne Nature Experience. Please use this document in conjunction with Thorne's Summer Camp Brochure, to determine dates, rates, and locations. You can also use Thorne's Online Catalog if you want to view all of this information in one place, plus determine current availability. The Brochure and Online Catalog as well as wealth of information including FAQ's and registration information are available online at www.thornenature.org.

Parent and Child "Camp Experiences" Ages 3-5

With Thorne's one-day, two-hour Parent and Child "Camp Experiences," you and your preschool-age child can enjoy the adventures of Thorne Summer Camp together. Thorne instructors experienced in early childhood education will be your guides to explore the diversity of Colorado's Foothills environments. These early experiences in a mini-camp setting are designed to instill awareness and wonder for the natural world and cultivate parents' and children's relationships with nature. Discovery happens through arts and crafts, free exploration, and age-appropriate stories and games. Be ready to get dirty, have fun, and safely explore the great outdoors with your child!

Busy Bugs

Campers and parents will creep along with the crawlies that live in Sombrero Marsh using a bug net and excitement for nature. Bug hunters will look for insects on land and in water, create insect crafts, and learn how important insects are to our world!

Creature Superheroes

Campers and parents will journey into nature and use their "superpowers" to see, hear, and track animals. Creature Superheroes will learn about and expand on their five senses while moving and hiding like the animals around them. Campers will hike, track animals, play games, and learn how to use their five senses to be a Superhero to the natural world.



Critter Search

Campers and parents will explore ponds, which are some of the best places to find animals that live in the water and along the shoreline. Search for water bugs, turtles, toads, and birds--all of which live in or near a pond!

Forest Fairies & Gnomes

Campers and parents will go on a delightful journey into the fantasy world of forest fairies and gnomes! Everyone will learn lessons from tiny friends about nature's special gifts, their love of animals, and the magic that exists outside. Come take a close look at the miniature land at our feet and make fairy houses out of sticks, leaves, and stones.

I Dig Dinos

Campers and parents will explore the same Colorado land where dinosaurs once roamed! This camp will learn their stories while searching for dinosaur bones hidden in the earth beneath our feet. Discover prehistoric fossils and dig into the ancient world of dinosaurs through games and exploration.

Parent and Child "Camp Experiences" Ages 3-5 (cont.)

Nature Builders

How do animals build in nature and what building materials does nature provide? Campers and parents will learn about and use natural building materials to expand upon nature's playground. Builders will explore animal homes and learn how to make dams, bridges, fairy houses.

Woodland Wonders

Campers and parents will venture into the woods and see who lives in the tall trees, in leafy shrubs, and along creeks. Together, parents and their kids will learn about some of the many animals that call Colorado home through hands-on activities and exploration.

First Time Campers "Camp Experiences" - Ages 5 & 6

Thorne's six-hour, week-long Eco-Explorers and Jeff & Paige Music Camp "Camp Experience" for First Time Campers is a great way for children to transition into Summer Camp and begin to find joy in nature! Throughout the week, campers will search for critters and play games, all designed around a weekly theme like insects, reptiles, water, and more! Weekly themes ensure that the "Camp Experiences" remain fun and exciting, no matter how many times your little one has attended in the past. These camps have a small 10:1 camper to adult ratio to ease the transition into camp for our youngest campers. Parents can drop-off at 8:30am and pick up at 2:30pm. For parents needing full-day care for their child, Extended Care is available until 5:30pm.

In Boulder, camp is held at the Sombrero Marsh Environmental Education Center, where trail, boardwalks, and a mini-wetland have been carefully designed to allow young campers to safely get close to nature. The Center also has indoor learning and play spaces, so that campers can escape heat or inclement weather, and still have plenty of room to play and explore amongst our interactive nature-themed exhibits! Twice a week after campers have acclimated to being away from parents in a camp environment with their new friends, we will venture out on field trips to new ecosystems via a BVSD school bus. On these field trips, campers will explore the nearby Open Space locations of Walden Ponds and Chautauqua Park.

Eco-Explorers

This "Camp Experience" is the perfect introduction for budding naturalists. Campers will become eco-explorers by tuning in to observations and using all five senses. It's a great introduction to exploration using scientific tools like dip nets to collect water creatures and magnifying glasses to observe the miniature world of insects. Each week will have a different nature theme, so kids can return for multiple weeks and learn new things each time! Twice during the week, campers will take a field trip via BVSD school bus to the nearby locations of Sawhill/Walden Ponds and Chautauqua. A 10:1 maximum camper-to-instructor ratio will ensure your child receives all the attention and care they need while they get used to attending camp and learning and playing in nature.



Jeff & Paige Music Camp

Oo-Ah-Ah, Oo-Oo-Ah-Ah it's Summer Camp! Jeff and Paige proudly unite with Thorne Nature Experience to present a unique day camp, available for two one-week Camps this summer. Thorne instructors team up with the dynamic duo for: nature explorations, music, field trips, science experiments, theater and concerts. Kids will spend time outdoors oo-ah-ah-ing their way through songs, skits, hikes, nature awareness activities and more, all connected through Jeff and Paige's original science and nature-based music. Campers will get the chance to dance with Paige, write songs with Jeff, and at the end of the week they'll have the opportunity to

perform with Jeff and Paige during our closing concert (participation in the performance is optional!). Jeff & Paige will visit camp throughout the week to engage in activities, a song-writing workshop, rehearsal, and more! Love Jeff and Paige? Love Thorne? You'll adore this week of camp. This "Camp Experience" is for campers ages 5-8.

Wanderers "Camp Experiences" Ages 6-8

Thorne's six-hour, week-long "Camp Experiences" for the Wanderers age group are packed with fun! These "Camp Experiences" are playful, experiential, and discovery-based. Experienced environmental educators will help your child foster a personal connection to the natural world through lively games, nature crafts, and exploration of different ecosystems each day. To accommodate the needs of some of our youngest campers, these "Camp Experiences" involve less than one mile of hiking per day and remain close to bathroom facilities, shade, and water. With a variety of themes for this age group, campers can focus on the aspect of nature that they love most, or spend an entire summer exploring diverse topics like bugs, amphibians, mammals, and more! The Wanderers age group even includes art-themed "Camp Experiences," as well as the ever-popular At Home in the Woods, which teaches campers how humans and other animals live safely in nature.

Wanderers "Camp Experiences" meet each day at Mapleton Early Childhood Center or Chautauqua Park in Boulder. Campers travel from Mapleton on a BVSD school bus to a different natural area each day including Chautauqua, South Mesa Trail, Heil Ranch, and Walden Ponds. Parents can drop-off at 8:30am and pick up is at 2:30pm. For parents needing full-day care for their child, Extended Care is available until 5:30pm at the Sombrero Marsh Environmental Education Center.

At Home in the Woods

Campers will learn how to comfortably survive in nature with respect for and awareness of animal friends. They will make mini debris shelters out of sticks, purify drinking water, cook with a solar oven, practice plant and wildlife identification skills, and more. Campers will focus on learning important safety and survival techniques as they go on wild adventures through the woods to practice and strengthen their skills.

Colorado Creatures

Attention all future wildlife biologists: this is the class for you! Campers will become nature detectives as we search



for signs of life using tools such as nets, magnifying glasses, and field guides to learn which animals call Colorado home! We'll study these masters of survival and learn about the adaptations that enable bears, snakes, birds, bugs, and many more creatures to hide in plain sight!

Wanderers "Camp Experiences" Ages 6-8 (cont.)

Girl Ecologists

Women scientists, both past and present, play a key role in studying the environment. Campers will learn about the animals they studied, discoveries they made, and how they worked to protect nature as we explore local ecosystems. As campers discover new things in the Boulder area, they will search for the magic that exists in nature, whether it's a pollinating insect, a secret spot in the woods, or a certain flower fairy that has been known to visit this camp!

Magical Images

Campers will sharpen their senses and use cameras to catch the magic of nature. Campers will take photos of whatever they may see...the birds in the branches, the petals of wildflowers, coyote tracks in the mud. They will learn some basic photography techniques and capture their creativity in a photo journal to share with family and friends. Please plan to provide a film or digital camera for your child to

use during the camp week. Parents may also be asked to print multiple photos throughout the week.

Mud Mucking

Campers will strap on their sturdy sandals as they venture into the wet-n-wild of Front Range ecosystems search for all the critters that live in the mud. As they find amphibians, reptiles, fish, insects, and birds, they will learn why such creatures live near water and how they survive all year long. Campers will explore, play, investigate tracks, and make crafts using mud. Campers should get ready to get MUDDY!

Nature Ninjas

Each day, campers will enter the ancient, secretive world of the Nature Ninja! As a master of stealth and invisibility, Nature Ninjas will activate their bodies and senses all while

embarking on secret missions and challenges to earn ninja badges. Campers will learn from our animal friends, like foxes and weasels, who are masters of the ninja way, so that they too can travel silently and fluidly through the forest undetected, all while exploring the magical trails at Chautauqua Park. This "camp experience" will be full of Wild Nature Play, imagination, creativity, games, storytelling, and exploration of the natural world, while focusing on the extraordinary ninja powers of nature's creatures.

Wanderers "Camp Experiences" Ages 6-8 (cont.)

Nature Play!

Unstructured play in nature is where the magic of nature connection really happens! During the Nature Play! "camp experience", we let our campers' curiosity, interests, and sense of wonder inspire our adventures. Experienced Instructors provide a loose framework for each day's nature explorations and seamlessly weave in activities like storytelling, scavenger hunts, and quests at the request of the campers. While it may sound simple, guiding unstructured and self-directed time in nature, requires an active mentorship model that is sensitive to each child's needs and interests and promotes skills like problem solving and appropriate risk-taking. This "camp experience" is all about discovery, imagination, and letting kids be kids!

Scrapbook of Summer

Stalking through the woods and sloshing through creeks, campers will use their senses as tools to interpret observations through drawings, crafts, music, and stories. In this "Camp Experience," campers will also learn how to use natural art techniques such as nature rubbings, painting with natural dyes, and sculpting out of clay. Campers will add their creations to our nature journals to make a collection of accomplishments and memories.

Talking Stones & Fossil Bones

Campers will look for old secrets locked in stone and find evidence of the ocean that once covered Colorado and the prehistoric animals that roamed this same land. Campers will get the chance to look at real fossils, study the dinosaurs of Colorado, and learn how mountains are made through the motion of tectonic plates. They will uncover the mystery of how our environment was shaped, learning basic geology and local natural history.



Pathfinders "Camp Experiences" Ages 9-11

For the Pathfinders age group, Thorne's six-hour, week-long "Camp Experiences" focus on skill-building. These "Camp Experiences" build upon campers' earlier experiences with the natural world to develop new tracking, identification, and observation skills in areas like biking, fly fishing, photography, and outdoor survival. Our Pathfinders campers venture further from trailheads, on foot or by bike, so that they can see and experience more of the natural world. Campers in the Pathfinders age group also have the opportunity to participate in Adventure Camps, where they spend a Thursday night away from home camping with Thorne's expert instructors!

Pathfinders meet each day at various locations best suited for the skill-based camp in which they are enrolled. In some instances the camp will have the same drop-off and pick-up location for an entire week, Mapleton Early Childhood Center or Chautauqua, while other camps may meet at a different location each day. Parents can drop-off at 8:30am and pick up at 2:30pm. For parents needing full-day care for their child for their child, Extended Care is available for select Pathfinders camps until 5:30pm at the Sombrero Marsh Environmental Education Center.

Aquatic Explorers

Campers will investigate the organisms that live along the banks of streams, rivers, ponds, and lakes as they explore the wet and wild riparian zones in Boulder County, visiting a variety of different ponds and streams throughout the week. They'll catch and examine water striders, follow stoneflies through their many life changes, and conduct pollution studies using water testing kits. They'll learn about the local watershed, search for and learn about the animals that live in these areas, and learn why it is so important to protect our waterways. Get your kids ready to get wet!



Beyond Wild Skills – Primitive Tool Building

Campers will delve deeper into Wild Skills through additional emphasis on advanced activities and projects. This is an ideal option for students who have already taken the Wild Skills camp in the past and want to explore making primitive tools and leather accessories similar to what aboriginal peoples made while living in nature. Students will learn to make a soft leather animal medicine pouch, digging/scraping and talking stick tools and a bow and arrow set (made from herbaceous plant stems). Safety will be emphasized as students design, create, and use their handmade tools. This camp is for 9-15 year olds.

Pathfinders "Camp Experiences" Ages 9-11 (cont.)

Beyond Wild Skills – Overnight Adventure

These campers have built their basic survival skills. Now it's time to practice fire-building with bow drills, identify life-saving plants, and build debris huts to sleep in! They will even learn how to track wildlife using the five senses and knowledge of native animals. The week will culminate in an overnight trip to Cal-Wood Education Center in Jamestown where campers will put their outdoor living skills to the test. They will build their own shelters at a mountain wilderness campsite. marshmallows on a fire they build, and bond over shared adventure. By the time they get back to Boulder on Friday afternoon, they will feel confident in their ability to brave the elements and excited to keep exploring! A list of suggested personal camping gear will be provided after registration.



Biking & Birding

Campers will use their bikes to cover more ground as they pedal around Boulder's bike paths. They will stop to identify the birds soaring overhead, nesting in trees and shrubs, and searching for worms in the dirt. They'll study adaptations unique to birds found in the area and learn how to identify them by their song and flight patterns. Along with keeping a journal of birds identified each day, campers will learn how to use binoculars and field guides so that they can continue their learning at home. The average distance traveled per day is 6 miles. For the safety and learning of all our campers, this "Camp Experience" has a maximum camper-instructor ratio of 6:1. This "Camp Experience" is not eligible for Extended Care.



Pathfinders "Camp Experiences" Ages 9-11 (cont.)

Fly Fishing

This "Camp Experience" is for all levels, including the camper who has little or no experience in fly fishing and those with many years as an angler. Campers will split into two groups based on skill level and will explore the Boulder Creek watershed and tackle the lakes. reservoirs, and streams of Boulder. Those newer to fly fishing will learn first how to assemble, use, and care for fly fishing gear and then learn the fundamentals of fly fishing: casting, knot tying, and reading the river, while experienced anglers will spend more time on the water and will be challenged with more advanced skills like new knots, different casting techniques, and selecting the proper flies. All campers will get plenty of time to fish, but will also learn about the ecology of fly fishing, such as understanding hatches, the life cycles of insects and fish, and ethical approaches to interacting with the natural world. This "Camp Experience" is not eligible for Extended Care.



Minecraft - Unplugged

In this "Camp Experience," campers will unplug from the virtual world of Minecraft and make the game a reality through imaginative role playing. Campers will work together in a self-directed quest for survival by collecting resources, crafting natural tools, and building mini shelters, all while using their imaginations to uncover the magic that hides along the trails of Boulder's Open Spaces. Campers will have opportunities to test their survival skills and micro-fortress against the elements and will work as a team to face the challenges of the natural world, including things like natural disasters and noxious creatures. Technology and video games will be left at home, but campers will come home with greater skills and knowledge of how to survive in a real life Minecraft world.

Nature Art & Photography

Nature is the inspiration of campers' art projects this week as they paint with natural dyes, sculpt in mud and clay, and learn photography techniques to capture the wild beauty that surrounds us. They will learn from native cultures of this region, tune in to nature's amazing patterns, and study nature artists such as Andy Goldsworthy to create nature journals and inspire masterpieces. Please plan to provide a film or digital camera for your child to use during the camp week. Parents may also be asked to print multiple photos throughout the week.

Pathfinders "Camp Experiences" Ages 9-11 (cont.)

Wild Skills

Campers will practice the expertise needed to live primitively in the wild as they learn the important and fun skills of survival. They will build debris shelters, locate and filter water, and practice safe fire-building outside with primitive tools. Campers will also learn wilderness navigation skills, tracking, and plant and wildlife identification. Through interacting with nature to find the things humans need to survive, campers will develop an appreciation for the bounty that the natural world provides.



Trailblazers "Camp Experiences" Ages 12-15

"Camp Experiences" for our Trailblazers age group enable campers to sharpen specific adventure and natural science skills. Beyond expanding knowledge and proficiency in activities like biking, fly fishing and bird banding, these "Camp Experiences" help campers deepen their connection to the natural world and learn how they can be stewards of nature. While these "Camp Experiences" offer no shortage of fun, we make sure that emphasis is placed on educating our most experiences campers to make informed decisions as stewards of the Earth. Campers in the Trailblazer age group have the opportunity to participate in Adventure Camps, where they spend a Thursday night away from home camping with Thorne's expert instructors!

Campers meet each day at a different location best suited for the skill-based camp in which they are enrolled.

Beyond Wild Skills – Primitive Tool Building

Campers will delve deeper into Wild Skills through additional emphasis on advanced activities and projects. This is an ideal option for students who have already taken the Wild Skills camp in the past and want to explore making primitive tools and leather accessories similar to what aboriginal peoples made while living in nature. Students will learn to make a soft leather animal medicine pouch, digging/scraping and talking stick tools and a bow and arrow set (made from herbaceous plant stems). Safety will be emphasized as students design, create, and use their handmade tools. This camp is for 9-15 year olds.

Birds and Bird Banding

Join Thorne's Founder and Master Bander, Dr. Oakleigh Thorne, II for a "Camp Experience" focused on one of his greatest passions - birds! Under the guidance of our founder and an additional Thorne educator, campers will develop knowledge of

Colorado birds and gain skills in bird banding research. Highlights include identifying birds, catching and handling live birds using a variety of techniques, banding birds, and determining data about new and returning birds. This "Camp Experience" is the prerequisite for Advanced Bird Banding. We will be sharing binoculars and field guides with other camps, so if your child has their own, please send them along. If your family is in the market for a field guide, Sibley's and Peterson's are great options.



Trailblazers "Camp Experiences" Ages 12-15 (cont.)

Advanced Bird Banding

After completing the prerequisite "Camp Experience" Birds & Bird Banding, campers are eligible for Advanced Bird Banding camp with Thorne's Founder and Master Bander, Dr. Oakleigh Thorne, II. The focus will be on banding and collecting data on as many Cliff Swallows as the group can catch before the birds migrate back to South America. We will visit a different culvert each day so that we can safely catch, research, and release many Cliff Swallows. Under the guidance of our founder and an additional Thorne educator, campers will hone in on their skills with the mist net, ensuring safe removal and handling of birds. They will develop a greater understanding of how to determine the age and sex of birds, as well as other important data points. Time handling and banding will be maximized as campers make predictions about new and returning birds.

Fly Fishing

This "Camp Experience" is for all levels, including the camper who has little or no experience in fly fishing and those with many years as an angler. Campers will split into two groups based on skill level and will explore the Boulder Creek watershed and tackle the lakes, reservoirs, and streams of Boulder. Those newer to fly fishing will learn first how to assemble, use, and care for fly fishing gear and then learn the fundamentals of fly fishing: casting, knot tying, and reading the river, while experienced anglers will spend more time on the water and will be challenged with more advanced skills like new knots, different casting techniques, and selecting the proper flies. All campers will get plenty of time to fish, but will also learn about the ecology of fly fishing, such as understanding hatches, the life cycles of insects and fish, and ethical approaches to interacting with the natural world. This "Camp Experience" is for campers ages 9-15 and is not eligible for Extended Care.



Trailblazers "Camp Experiences" Ages 12-15 (cont.)

Survival Skills - Overnight Adventure

Campers will gain a thorough understanding of what it takes to survive and be comfortable in the wilderness. They will learn to blend in with surroundings and move silently through the woods as they learn stalking and natural camouflage techniques.

Campers will learn fire safety and ecology, then learn how to build a fire without a match using fire-from-friction methods. Instructors will cover the necessity of shelters and build debris huts to sleep in. Water purification methods, edible plants, tracking, and natural navigation techniques will also be taught. Most importantly, campers will learn awareness in nature and their role as stewards of the earth. The week will culminate in an overnight trip to Cal-Wood Education Center in Jamestown where campers will practice the skills they have learned throughout the week. A list of suggested personal camping gear will be provided after you register for this camp.



Extended Care Ages 5-11

Thorne's flexible, low-cost Extended Care option allows campers to spend the whole day with Thorne in a safe, fun, and educational environmental Parents can pick up their kids any time between 3:15 and 5:30pm, leaving time to run errands, work, exercise, or simply relax knowing that their children are having fun with friends.

Campers participating in Extended Care spend the first six hours of their day at their morning "Camp Experience," then get a healthy snack before they continue their nature explorations. Extended Care offers camper-driven outdoor investigations as well as respite from the elements in one of our environmental education centers which are chocked full of interactive exhibits and nature books and games. Extended Care campers explore nature, play games, tell stories, sing eco-tunes, and make nature crafts, all under the guidance of an experienced Thorne instructor.



Extended Care takes place at Thorne's Sombrero Marsh Environmental Education Center. Campers are transported by a BVSD school bus each day following their morning "Camp Experience."