



Kids in Parks



*Self-guided Trails that
Get Kids in Parks*

Founding Partners



**BlueCross BlueShield
of North Carolina**

Foundation

An independent licensee of the Blue Cross and Blue Shield Association

In 2008, the Blue Ridge Parkway (NPS), the Blue Ridge Parkway Foundation, and the Blue Cross and Blue Shield of North Carolina Foundation partnered to form the Kids in Parks program, a program designed to get kids and families to utilize the trails on the Parkway for both their health and the health of our park.

TRACK Trails



Kids in Parks provides a network of self-guided, brochure-led hiking trails designed for kids and their families called TRACK Trails.

Brochure-Led Discoveries



Each TRACK Trail trailhead has 4 different self-guided, brochure-led adventures. Brochures are used because they're cost effective per visitor contact, available 24 hours per day, provide take-home value, and are the most preferred and used form of visitor information.

Provides Incentives for Participation



Kids earn prizes for registering their adventures through the Kids in Parks website. In order to earn their prizes, kids answer 12-15 questions about their experience, providing Kids in Parks and their TRACK Trail partners with valuable data.

Network of Trail Opportunities



www.KidsInParks.com



TRACK Trail locations are networked through the Kids in Parks program's website. Various social media outlets are used to connect users with trails and the program.

Linking Public Lands



Kids in Parks has been able to cross state and agency boundaries, linking various types of parks and public lands together into a national network of opportunities for kids and families to get unplugged and outdoors.

Various Types of Trails



Biking



Paddling



Citizen Science



Disc Golfing

In an attempt to reach people of varying ages and interests, Kids in Parks has installed several types of TRACK Trails that utilize various forms of outdoor recreation.

FUN!



Kids just want to have FUN!

Brief History

1st TRACK Trail – August, 2009



The first TRACK Trail opened on the Blue Ridge Parkway at the Asheville Visitor Center on August 29th, 2009.

Gateway Trails



In 2010, Kids in Parks began installing “Gateway Trails” in communities along the Blue Ridge Parkway, creating a network of trail opportunities for kids and families in the region. The first gateway trails were installed at Chimney Rock State Park and Pisgah National Forest.

Building The Network of Partners



**US Army Corps
of Engineers®**

The Kids in Parks program continued to expand their network of “Gateway Trails” into communities along the Parkway by installing TRACK Trails in City/County Parks, Virginia State Parks, an Army Corps site, and on schools and private property.

Proof of Concept

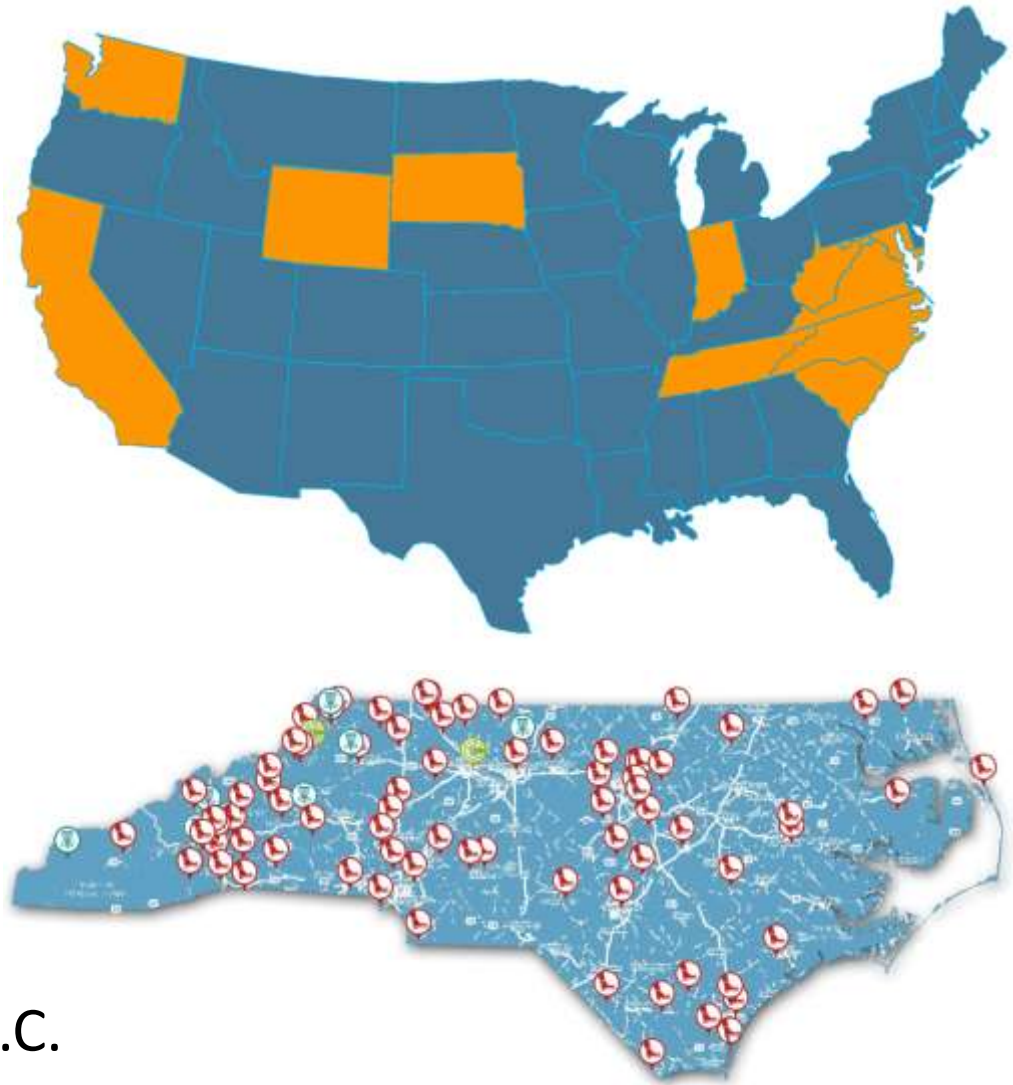


In 2011, KIP tested the program's "Proof of Concept" to determine if TRACK Trails could be easily replicated in any park in the United States.



TRACK Trail Growth by Year

2009 – 1 TRACK Trail
2010 – 5 TRACK Trails
2011 – 11 TRACK Trails
2012 – 40 TRACK Trails
2013 – 80 TRACK Trails
2014 – 106 TRACK Trails
2015 – 135 TRACK Trails
2016 – 148 TRACK Trails
2017 – 165 TRACK Trails
2018 – 178 TRACK Trails
2019 – 186 TRACK Trails



In 11 States and Washington, D.C.

(NC, VA, SD, MD, WV, CA, SC, TN, WY, IN, WA)

There's a TRACK Trail at the White House!



Hiking TRACK Trails

Hide and Seek



This brochure was designed for younger kids using a familiar game to look for items they can find in nature.

Animal Athletes

Hummingbird Hand-swings

Look for ruby-throated hummingbirds feeding on flowers around woodland edges and fields. Hummingbirds flap their wings over 50 times per second! 50 wing-beats per second equals 1500 wing-beats in 30 seconds.



How many times can you flap your "wings" in 30 seconds?

Ant Strength Training

Ants are very strong insects, able to lift objects much heavier than their own bodies. Can you lift your own body weight? An easy way to find out is by doing push-ups.



Find a clear, safe spot on the trail and see how many push-ups you can do!

White-tailed High Jump

Keep your eyes and ears open for white-tailed deer in the woods and meadows. In order to move quickly through the tall grasses and shrubs, white-tailed deer leap very high —sometimes over 6 feet in the air!



How high can you leap straight up in the air?

Green Frog Hop

Listen for the "gunk!" sound of the green frog around ponds and streams. Green frogs make a tasty snack for predators such as snakes and herons. To escape quickly, frogs use their strong back legs to hop away.



Pretend you're being chased by a predator and hop like a frog down the trail.

Hawk Stance

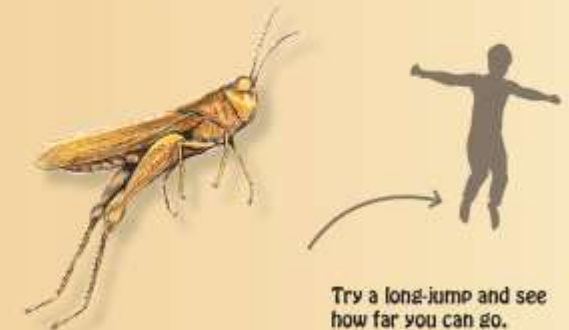
To conserve heat and energy, birds of prey such as sharp-shinned hawks often perch on one leg. Locking tendons in their feet allow birds to balance on one leg for hours at a time.



Stand on the edge of the trail and see how long you can balance on one leg.

Grasshopper Long Jump

You may glimpse grasshoppers in areas with short grass or gravel. Grasshoppers can jump 20 times the length of their own body. If you could do that, you would be able to jump almost 100 feet!



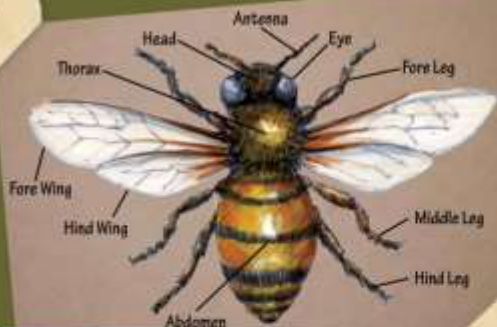
Try a long-jump and see how far you can go.

This brochure encourages kids to mimic animal movements and exercise on their hike.

Bug Out

Insects

With over a million different species, insects are an extremely diverse group of animals. All insects, no matter how different their size or shape, have a three-part body with six legs.



The body of a honeybee is like that of most insects.

All insects have...

... a **head** with two antennae, compound eyes and mouth parts

... a **thorax** with six jointed legs and, if present, 2 or 4 wings

... an **abdomen** with respiratory, reproductive and digestive organs

... a hard, external skeleton called an **exoskeleton**



Exoskeleton

What is an Exoskeleton?

Instead of having a skeleton on the inside of their bodies, insects have their skeleton on the outside. A hard exoskeleton protects an insect like a knight's suit of armor.



How many of these different insects can you find today?



Butterfly

Dragonfly

Ant

Grasshopper

Other Arthropods

Insects, spiders and crustaceans are all arthropods. Arthropods are a group of creatures that make up about 85% of all living things on Earth. They can be identified by their exoskeleton, segmented bodies, and jointed legs.

Millipedes, centipedes, pillbugs (rolly-polies), and harvestmen are commonly considered bugs. However, unlike their insect and spider cousins, they can have more body segments, legs, or even extra features like claws. Some are harmless critters like millipedes, pillbugs and harvestmen, while others can cause harm, like venomous centipedes and scorpions.



Millipede

Centipede

Pillbug

Harvestman

Spiders

look similar to insects, but they are actually different.



Spiders have a hard exoskeleton, but instead of a three-part body, they have a two-part body made up of the cephalothorax and abdomen. Spiders also have eight legs, pedipalps, venom injecting fangs, and web-making spinnerets.

Can you spot any of these bug homes?

Bugs have different ways of sheltering themselves from predators or weather. Or they can even use their homes as traps for food. CAUTION: Many bugs will defend their homes by biting and stinging. Look from a distance and DO NOT disturb them.



Spider web

Wasp nest

Ant hill

Cocoons

This brochure teaches kids about insects, spiders and other "bugs".

Music of the Mountains

Songs from the Wood Check the box next to each tree you find on your hike.

the Face (front)

The face of the instrument vibrates and transmits sound like a speaker. For the best sound, a soft wood needs to be used. In the Blue Ridge Mountains, red spruce is the best choice. If red spruce cannot be found, white pine can be used instead.

Red Spruce

Red spruce is an evergreen that grows at higher elevations. Red spruce trees have short needles with sharp points that branch out from all sides of the twig. Look for round cones that are a little larger than an egg.



White Pine

White pine is an evergreen tree with long needles in bundles (fascicles) of five. The cones are long and thin. The tree trunk is straight.



Mandolin

the Fingerboard

The fingerboard is a thin piece of hard wood that is glued to the front of the neck. Because the metal strings would dig into a softer wood over time, an extremely hardwood, like dogwood, needs to be used.



Dogwood

Dogwood bark looks like a worn checkerboard with crooked squares. In spring, dogwoods have yellow flowers with four white modified leaves, called bracts.



the Sides and Back

When a string is plucked, sound waves travel down inside the instrument. For the best sound, a hard wood is needed to reflect the sound back out through the face of the instrument.



Sugar Maple

Sugar maple has been the favorite hard wood for the back and sides of stringed instruments in the Blue Ridge Mountains for years.

The sugar maple leaf looks like a hand with five fingers. They have winged seeds, called *samaras*, that spin as they fall from the tree.

the Neck

The strings on an instrument need to be strung very tightly. Because of this, a sturdy wood is used for the neck. Wild cherry has been used because of its strength and rich color.

Wild Cherry

A young cherry tree has smooth dark bark, with horizontal stripes called *lenticels*. A lot of trees have thick cracked bark when older.



Mountain Banjo

This brochure teaches kids how trees found along the trail are used to make instruments.

Birds of the Piedmont

What kind of bird is that...

When trying to identify a bird, the first things to look for are location and behavior. Is the bird up high making noise, or on the ground digging in leaves? Next, think about size and shape. Is it big like a crow, or small like a sparrow? Does it have pointy wings, or a long tail? Finally, you can use field marks to identify birds— flip to the back panel to discover how.

Circle the birds you find on your hike today!

in the trees?

Almost all the birds of the Piedmont use trees and shrubs for food, shelter, or nesting. Woodpeckers and chickadees make their nests in the cavities of trees and pick insects from the bark. Trees can provide seeds and berries for birds such as waxwings and goldfinches to eat. **Look into the trees. How many different birds can you find? _____ What parts of the tree are the birds using? _____**



Downy Woodpecker
Picoides pubescens
"Pik.....pik...pik"



Carolina Chickadee
Parus carolinensis
"chickadeedeedee"



Cedar Waxwing
Bombicilla cedrorum
high-pitched trill, "bzeeee"

American Goldfinch
Carduelis tristis
"per-chik-o-ry"
in flight



on the ground?

Birds that feed on the ground usually specialize in catching bugs or finding seeds. American Robins use their beaks to pull earthworms from the ground. Towhees and cardinals scratch through leaves to uncover fallen seeds and berries. Mourning doves peck insects and seeds from gravelly areas. **Check the ground near trail, stream and field edges. How many different birds can you find? _____ Can you tell what they are eating? _____**



American Robin
Turdus migratorius
"plurri, kleei,
plurri, kleei"



Eastern Towhee
Pipilo erythrophthalmus
"drink your teeeee"



Northern Cardinal
Cardinalis cardinalis
whistles "woit woit
chew chew chew"



Mourning Dove
Zenaidura macroura
mournful "ooOOH
cooo coo coo"



Carolina Wren
Thryothorus ludovicianus
varied "pidaro pidaro pidaro"



Northern Mockingbird
Mimus polyglottos
varied phrases "krrDEE krrDEE
krrDEE, wikwikwik"

in the air?

Birds that spend a lot of time in the air use their strong eyesight to find food. Hawks, crows and vultures can usually be found perched or circling up high as they search for their next meal. **Scan the sky over fields and through openings in the trees. Are there any large birds flying overhead? _____ Are they flapping or gliding? _____**



Turkey Vulture
Cathartes aura
warning "hsssss"



Red-tailed Hawk
Buteo jamaicensis
"keeee-arr" raspy scream



American Crow
Corvus brachyrhynchos
"caww caww"

making noise?

Birds make all kinds of noises – some sing to attract a mate, while others will call attention to food, danger or territory. Carolina wrens are known for their loud, cheerful song and chattering sounds. Northern mockingbirds can imitate hundreds of different sounds, and will sometimes sing at night! **Close your eyes and listen for one minute. How many different birds can you hear around you? _____**

Illustrations by David Wilkins,
Wings & Works

This brochure helps people identify common birds from the region and gives them tools they can use to identify other birds not listed in the brochure.

Pond Life

Producers and Consumers

Check off any Producers or Consumers you may find at the Pond.

Producers make their own food using the Sun for energy. They include Plants, Algae, and Phytoplankton. Look around to see if you can find these six Producers.



Algae



Duckweed



Lily pad



Cattail



Sedge



Arrowhead

Consumers depend on other organisms for their food. They include animals and insects. Some consumers will eat the Producers, while some will eat other consumers. Look around the Pond and see if you can find these six consumers.



Dragonfly



Water Strider



Turtle



Fish



Frog



Bird

Who's at the Pond?

THE ECOSYSTEM OF A POND PROVIDES FOOD AND SHELTER FOR THE CONSUMERS THAT DEPEND ON THE POND TO SURVIVE.

MANY MAMMALS

Mammals like raccoons, opossums, and beavers frequently visit ponds. Ponds make good homes for mammals that can swim, or like to hunt and forage in wet areas. Look for animal tracks around the pond.



INTERESTING INSECTS

Ponds are teeming with insects of all kinds. Mosquitoes, dragonflies, and water striders can be found living near ponds. They provide food for fish, frogs, and other small carnivores. Can you spot three different insects? Write down which ones you find.



BUOYANT BIRDS

Bird life is very abundant at ponds. Ducks can be spotted floating on the surface, while herons wade close to the shore to hunt for small fish or reptiles. As you explore, listen for different bird calls.



ACTIVE AMPHIBIANS AND REPTILES

Keep an eye out for frogs, salamanders, turtles, and snakes. You can find them swimming through the water or basking in the sun. Reptiles and amphibians use the pond as a place to hunt, hide, and lay eggs. Keep count of how many you can find and fill in number.

FLASHY FISH

A variety of fish call the pond home. Freshwater fish such as minnows, catfish, sunfish, and bass can be found in ponds. What types of food do you think fish eat?



This brochure will help kids explore the shoreline of Indian Lake. As they walk around the lake they will be encouraged to discover various components of the pond ecosystem.

Nature Trail
Disc Golf Course
TRACK Trails

Nature Trail Disc Golf Courses



Since disc golf is essentially a “hike with a frisbee”, Kids in Parks uses the sport to reach the teenage / young adult population. Their Nature Trail Disc Golf Courses are provide interpretive information on the tee-signs and scorecards, allowing the player to learn about nature while the play.

Interpretive Tee-Signs

Fort Hamby Nature Trail Disc Golf Course

1

BLUE
PAR 3
A – 290'
B – 350'
Road and Beyond – OB

Out of Bounds

Hole 2

WARNING:
Do not throw until cars and pedestrians are clear!

Tulip Poplar

Also known as yellow poplar, **Tulip Poplars** (*Liriodendron tulipifera*) are some of the largest and fastest-growing trees in the region. They grow straight and tall with a light gray bark and a large broad leaf that looks like the tip has been bitten off.

Tulip poplars are important trees for honey production. In the spring, honeybees collect pollen and nectar from their abundant tulip-shaped flowers.

Due to their large size and straight growth, tulip poplar trees are also important in the timber industry. The sturdy wood is used to make clapboard siding, furniture, pianos, organs and many other things.

PRO TIP: OVERHAND THROW

Overhand throws are primarily used to get out of trouble, but they can also be used from the middle of the fairway or off the tee-pad. To throw an overhand, grip the disc with your thumb on the inside rim ("thumb"), or with a sidearm grip ("tomahawk"). Throw the disc like you would a baseball or football, releasing the disc at 1:00-1:30 with the "thumb" grip, or at 10:30-11:00 with the "tomahawk" grip. The flight path of an overhand is like a corkscrew, twisting toward the direction of the top of the disc. With practice, overhands can be extremely accurate, allowing players to precisely spike their discs in particular locations.

The tee-signs have traditional rules and hole information on the left side. *An interpretive message and "pro-tip" are included on the right side.*

(Greenway)
Bike Riding
TRACK Trails

Salem Lake Greenway

WELCOME TO THE SALEM LAKE BIKE TRACK TRAIL

The Salem Lake Bike TRACK Trail features nine stations around the seven mile lake loop. Each station has a sign with interpretive information about the plants and animals that make Salem Lake their home, as well as some information about the value of the lake and why it's important to keep it clean. You will also find tips to improve your biking skills. In addition, each sign contains a secret code letter at the bottom right corner. Kids can register their rides on the trail at kidsinparks.com to earn free bicycle gear. *Remember the code letters and un-scramble them to enter the code word on the website and win a special prize!*



Cycling Tips: Pre-flight Check

Doing a quick equipment check before every ride can help save you time and injury. Be sure to check yourself, your gear and your bike to make sure you're ready to ride the trail.

HELMET

Be Smart. Protect your brain by wearing a properly fitted helmet. NC state law requires cyclists under age 16 to wear a helmet.

BRIGHT COLORS

Wearing bright clothing will make you more visible to others using the trail.

PADS AND GLOVES

Spills and crashes are a part of biking. Pads and gloves can help save your skin.

BRAKES AND BARS

Make sure your handlebars and headset are tight and that your brakes work!



WHEELS AND TIRES

Make sure your wheels are bolted on tight and that your tires are properly inflated (within the inflation range shown on the tire).

APPROPRIATE FOOTWEAR

Wear sturdy shoes that cover your toes.

Salem Lake and the surrounding lands and streams draining into the lake are part of the Salem Lake **Watershed**. This watershed provides habitat for wildlife, recreation opportunities for people, and a water supply for the city of Winston-Salem.



kidsinparks.com

The Salem Lake Bike TRACK Trail was made possible through partnerships formed between the Winston-Salem Recreation and Parks Department, the Blue Ridge Parkway Foundation's Kids in Parks program, and the generous support of the following private donors and businesses:

Kids in Parks founding partners



The Tossien Family

Ken's Bike Shop
Mock Orange Bikes



Blue Cross BlueShield of North Carolina
Founding Partner



Look for code letters **HERE**

The Salem Lake Greenway has 9 interpretive panels along the 7-mile long trail.

Interpretive Stops

TRIBUTARY TRAILS

A **tributary** is a small river or stream flowing into a larger river or lake. This stream is one of nine tributaries that drain into Salem Lake. Try to find them all as you ride around the trail!



A TRAIL TO THE OCEAN

Did you know the water flowing over the dam at Salem Lake could eventually wash up on the beaches of South Carolina? Here's how: Salem Lake drains into Salem Creek (A), which is a tributary of the Yadkin River (B). The Yadkin River flows into the Pee Dee River in Uwharrie National Forest (C). The Pee Dee River flows into the Great Pee Dee River in South Carolina (D), which drains into the Atlantic Ocean about 30 miles South of Myrtle Beach (E).

If you were a drop of water flowing over the dam at Salem Lake, you could travel 18 miles along Salem Creek, 82 miles along the Yadkin River, 30 miles along the Pee Dee River, and 140 miles along The Great Pee Dee River to reach the ocean. How many total river miles would it be to the ocean?*

$$18 + 82 + 30 + 140 = \underline{\hspace{2cm}} \text{ total river miles.}$$

*numbers are approximate



kidsinparks.com

Cycling Tips: Ups and Downs



RIDING UPHILL
When approaching an uphill section of trail, gear down and pedal hard to pick up speed. Keep your back straight and elbows bent. Try to avoid lifting yourself off of the seat or changing gear while riding uphill.



RIDING DOWNHILL
When approaching a downhill section of trail, move back on the seat, keep your elbows bent and your body low. Your legs should be relaxed and ready to absorb bumps. Use only the rear brake on downhills until you are comfortable enough with your balance to apply front and rear brakes evenly.



Code Letter T

To encourage kids to stop and read the signs, we put a “code letter” in the bottom corner. Kids can collect all the code letters, to unscramble the code word and earn a special prize.

(Pump Track)
Bike Riding
TRACK Trails

Rocky Knob Bike Park



A pump track is a BMX style course with rollers, berms and other obstacles. The goal is to ride around the entire track without pedaling.

Rocky Knob Bike Park



Educational signs are placed around the pump track, teaching bike handling skills. By learning proper bike skills, kids will be more successful and have more fun!

Skills Signs

MANUAL A ROLLER

"**MANUALLING A ROLLER**" is a technique used to create forward motion over rollers without pedaling and gain forward momentum.

1 Drive into the base of the roller by weighting your pedals.



2 Approach front of roller in good riding position. Unweight front wheel at top of roller.



3 Extend legs and lean back at the top of the roller with back tire on ground.



4 Continue through the roller in a wheelie, or manual, position.



5 Place your front tire on the downside of the second roller. Use your legs to soak up the top of the roller with your rear wheel.



ROLLER



kidsinparks.com

SCAN QR CODE
TO WATCH VIDEO



QR Codes link to YouTube video featuring a pro rider teaching the skill.

Technology-Based TRACK Trails

GPS / Geocache Brochures

Geocaching on the Emily B. Taylor Greenway

Are you ready for a geocache scavenger hunt? Plug in coordinates and discover just a few of the stories the greenway has to tell. Check each box when you find the cache and make an "x" on the map at your approximate location.

Toast of the Town

 **N 36° 30.433, W 080° 37.190**

Hint: Near the fence, 2 pins or more a quarter

In the late 1950's, Proctor Electric Company built what was then the largest toaster factory in the country! While digging the land for the building, a Native American burial ground was uncovered. Unlike today, there weren't any regulations for protecting Native American grave sites so treasure seekers collected everything from pottery to beads. Since the artifacts were from about 1400 AD, how old are they now?

20__ (current year)
- 1400
=

Look for the historic toaster factory across the river. It is the white building with blue letters!

Chair Rail

 **N 36° 29.701, W 080° 37.161**

Hint: Don't get TRIPed at searching

Because the railroad made it easier to transport goods, the areas lumber and woodworking industry evolved into several large furniture factories. Chairs, tables, pie safes and much more were built here. Look for sugar maple on the greenway, a tree that is used to make furniture because of its durable and fine-grained wood.

Sugar Maple



Veterans Memorial Park

 **N 36° 30.861, W 080° 36.971**

Hint: Don't forget to SIGN the log

In 1946, the American Legion and the Veterans of Foreign Wars purchased the 36 acre Taylor Farm to create Veterans Memorial Park. For over 65 years the annual county fair continues to be held here. What are your favorite things to do at a fair?

If you wander a little farther away from the geocache, you can find an army tank. What was the tank's nickname? _____



All Aboard!

 **N 36° 29.887 W 080° 37.052**

Hint: Have you seen the Thomas the Tank Engine MOVIE?



Mount Airy was a small town of about 300-400 people until the railroad came in 1888. The railroad made shipping goods a lot easier. Within a year, cotton factories, woolen mills, tobacco factories and much more were built here.

There was even a passenger train which made the train depot one of the most important buildings in town. Today, a different train track is used through town to transport various goods. Passenger train service ended when automobiles (cars) became popular. What is your favorite way to travel? _____



This brochure encourages the use of a GPS or smart phone to find specific locations on the trail. Use color-coded "sections" to associate the text blocks with regions of the trail.

GPS / Geocache Brochures

Geocaching on the Rockfish Valley TRACK Trail

Are you ready for a geocache scavenger hunt? Plug in the coordinates and discover just a few of the stories this trail has to tell. Check each box when you find the cache and make an "x" on the map at your approximate location. Then, use the information in each cache to answer the questions. **BONUS: Cache #5 has a take-home prize!**

2. The Rockfish River

 N 37° 52.790, W 78° 54.475

Hint: This cache is near (where the birds live?)

If you were a drop of water that fell into this river, you could travel 25 miles to the James River, drain into the Chesapeake Bay and eventually end up in the Atlantic Ocean. The gravel in this river makes that same trip, eroding along the way to form the sand at Virginia Beach! **Pick up a piece of gravel. Can you name one of the minerals in this rock that will form the sand at Virginia Beach?**



3. Basswood

 N 37° 52.785, W 78° 54.318

Hint: This cache is near the (basswood trees?)

Can you spot the basswood trees here? They have heart-shaped leaves and gray bark with furrows and flat ridges. In the spring, these trees bloom with beautiful and fragrant clusters of yellow-white flowers. **What are some things that humans use basswood trees for?**



1. Early Settlers

 N 37° 52.778, W 78° 54.502

Hint: This cache is near (the trailhead sign?)


One of the first known settlers of this area was Samuel Reid, for whom Reid's Creek is named. In 1805, Samuel sold the land to Hawes Coleman. Six generations of Hawes's families lived and farmed on this land for over 100 years.

Imagine it is 1805 and you just bought all the land you see around you. Where would you build your house?

What crops would you grow?



5. Lay of the Land

 Use clues from the previous geocaches to reveal these coordinates!

This bottomland was originally used for growing tobacco. Around 1880 the area was turned into an apple orchard containing over 10,000 apple trees. After that, it was a cattle farm and a vineyard. Now the land is used as pasture for various livestock, and as a place for people like you to visit, hike and make discoveries! **What was your favorite discovery today?**



4. Sassafras

 N 37° 52.793, W 78° 54.185

Hint: This cache is near the (sassafras trees? picnic table?)

Look for sassafras trees along the trail. Sassafras trees are easy to identify because they have 3 different leaf shapes: entire, mittened, and three-lobed.




What are some things that humans use sassafras trees for?




This brochure encourages the use of a GPS or smart phone to find specific locations on the trail. *Users have to find the first four caches in order to get the coordinated for the 5th cache.*

EcoExplore Program













Botany is the study of plants. Plants are living organisms that create their own energy using sunlight, water and carbon dioxide. Plants include towering trees, breathtakingly beautiful flowers and curious insect-eaters such as the Venus flytrap (native only to North Carolina).

Our friends at ecoEXPLORE love to get kids exploring outside just like us. Use this brochure and a camera to help you earn your first badge!



Photography Pro-tips
Here are some things to focus on to make your photos more helpful to scientists.

Leaf	Bark	Bud	Flower	Fruit
				
				

Explorer Checklist
Remember to record info about your discoveries.


Take a photo! check the box

Species: _____


Date: _____

Time: _____


Location: _____



Ornithology is the study of birds. Birds are covered with feathers, are warm-blooded and lay hard-shelled eggs. Many North Carolina birds migrate to warmer, southern climates in the winter. The state bird of North Carolina is the northern cardinal.



Field Marks



Blue Jay (*Cyanocitta cristata*) harsh "tjerr"

Labels: wing bars, rump, crown, eyestripe, eyebrow, tail bars, tail markings, belly, side, breast, throat, beak or bill.

Note any significant field mark sizes, shapes, and colors.

Explorer Checklist
Remember to record info about your discoveries.


Take a photo! check the box

Species: _____


Date: _____

Time: _____


Location: _____



Entomology is the study of insects. Insects are arthropods, a type of animal without a backbone but with jointed legs and a segmented body. With six legs and three main body parts, insects are different than other arthropods like centipedes and spiders. The state insect of North Carolina is the honeybee, and the state butterfly is the tiger swallowtail.




What Makes an Insect an Insect?



1. Head, 2. Thorax, 3. Abdomen, 4. Leg, 5. Antenna, 6. Wing.

NOT Insects



Explorer Checklist
Remember to record info about your discoveries.


Take a photo! check the box

Species: _____

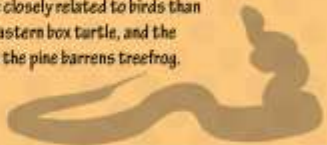
Date: _____

Time: _____



Location: _____



Herpetology is the study of amphibians and reptiles. These are all cold-blooded, but there are many important differences between amphibians and reptiles – in fact reptiles are more closely related to birds than amphibians. North Carolina's state reptile is the eastern box turtle, and the state amphibians are the marbled salamander and the pine barrens treefrog.



Reptile or Amphibian?

Reptiles are covered with scales and do not go through metamorphosis	Amphibians have soft skin and usually go through a metamorphosis
 <p>lizard, turtle, snake, alligator</p>	 <p>salamander, frog</p>

Explorer Checklist
Remember to record info about your discoveries.

Take a photo! check the box

Species: _____

Date: _____

Time: _____

Location: _____

Created in partnership with a Citizen Science app to enhance education and participation. Encourages kids to take pictures of nature and upload them to the App to win prizes.

Padding TRACK Trails

Price Lake Canoe Trail

Discover Treasures on Price Lake

Paddle around the perimeter of Price Lake and visit these colored zones to discover just a few of the stories the lake has to tell.

Wild Waters

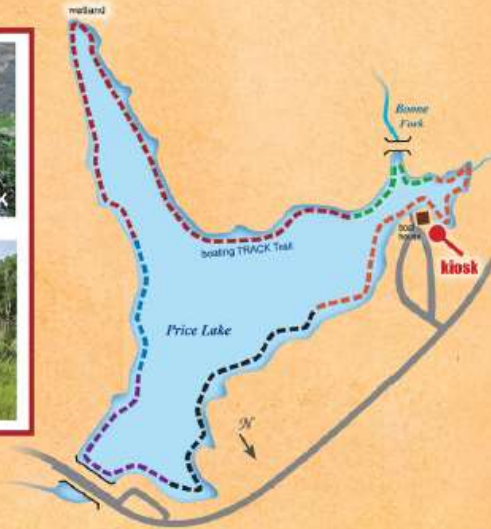
Rain and snow from the surrounding peaks flow into Boone Fork and other small creeks that drain into Price Lake. The flowing water from these streams brings valuable nutrients and oxygen to the lake, making these areas abundant with aquatic wildlife. Carefully paddle around the mouth of Boone Fork and the other creeks. Look for insects on the surface of the water and schools of fish swimming below. What was the coolest thing you found? _____

Boone Fork Creek



Active Beavers

Beavers here at the lake are always busy gnawing and cutting down trees. The wetland on the south end of the lake was created by beavers. They used logs and mud to block the stream to raise the water level so they could build their dome-like homes, called lodges, in the water. Can you find any signs of beavers?

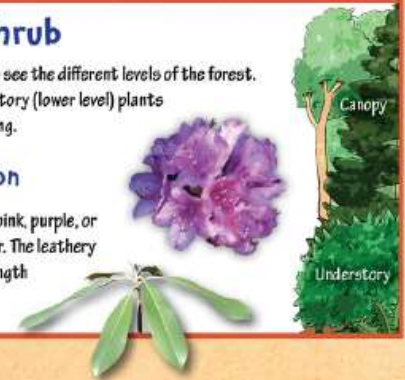


Evergreen Shrub

From a boat, you are able to see the different levels of the forest. Rhododendron is an understory (lower level) plants that stays green all year long.

Rhododendron

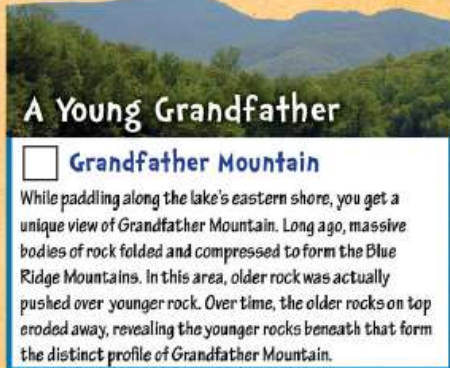
Rhododendron have bright pink, purple, or white flowers in the summer. The leathery oval leaves are about the length of an adult hand.



A Young Grandfather

Grandfather Mountain

While paddling along the lake's eastern shore, you get a unique view of Grandfather Mountain. Long ago, massive bodies of rock folded and compressed to form the Blue Ridge Mountains. In this area, older rock was actually pushed over younger rock. Over time, the older rocks on top eroded away, revealing the younger rocks beneath that form the distinct profile of Grandfather Mountain.



The Man behind the Park

Julian Price Dam

Julian Price was a nationally known insurance executive and civic leader. He originally bought this land (now called Julian Price Memorial Park) so that his employees would have a place to vacation. After Price's death in 1946, the estate was given to the National Park Service with an agreement that a lake would be made. Years later, the dam was built which created the 47-acre lake. From your boat you can get an excellent view of the dam at the northern end of the lake. What road goes over the dam? _____



Who's Swimming Underneath?

Fish

The lake is stocked with fish including all three trout species - brook, rainbow and brown. Brook trout is a large fish native to North Carolina. Brook trout only live in cool water and are powerful predators.



Fish Food

Fish in Price Lake eat algae, zooplankton (microscopic creatures), insects and... other fish! The most common fish in the lake are golden shiners. These small fish were introduced to the lake to provide food for the bigger fish.



Similar to the GPS / Geocache brochure, the paddling brochure uses colored zones to connect content with specific regions around the lake.

Citizen Science TRACK Trails

Carl Sandburg NHS

West Side

What are the humidity and water & air temperatures here?
Are they different than from your measurements at the bridge?
Think about why it would be different. Is there sun, shade, fresh stream water, slow moving water?

Water: _____ °F
Air: _____ °F
Humidity: _____ %

Canopy Cover

The canopy is made up of the leaves and branches of trees that block your view of the sky. By measuring canopy density, we learn how differences in sunlight affect the ecosystem. **Look up!** Roll your brochure into a tube and look through. Which of these pictures looks most like what you see?

50%
 25%
 10%

Tree Rings

Trees grow from the inside out and get wider and taller each year. You can measure the age of a tree by counting its rings. **How old was this tree?**
_____ Years Old

Compare the diameter of this stump to the size of a living tree of the same species (pine). **Guess the age of the living tree!**

pH (power of Hydrogen)

pH is a measure of hydrogen ion concentration. Low concentrations are acidic while high concentration are alkaline. A pH of '7' is considered balanced or neutral. A balanced pH level is very important for lake animals to live happy, healthy lives. **What is the pH of the lake?**
_____ pH

Water Quality

Water is great at dissolving things (think how much salt is dissolved in the ocean!). A water quality reading, measuring TDS (Total Dissolved Solids) shows how many particles are dissolved in the water. Anything lower than 300 is healthy. **What is the TDS level of the lake?**
_____ TDS

East Side

Take a few minutes to look for wildlife near the bridge. You might find fish, turtles, snakes, butterflies, or birds nearby. If they are out, perhaps they like the temperature today! Stop here to measure humidity, and water & air temperature:

Water: _____ °F
Air: _____ °F
Humidity: _____ %

Sit and Spy

A big part of being a scientist is making observations. Use your senses to spy on the lake ecosystem. What do you see? What do you hear? What do you smell?
Pretend you are Carl Sandburg and write a short poem based on your observations.

SEE: _____ TITLE: _____
HEAR: _____
SMELL: _____

Whatever the Weather

Knowing when the data was collected and what the weather was like during collection helps give your findings meaning.

Date: _____ Time: _____
Weather:

Remember to report your findings by registering on www.kidsinParks.com! Your data will help the park and you will earn free prizes!

The Carl Sandburg Citizen Science brochure encourages visitors to walk the trail and visit experiment stations to use science equipment to collect and record data.


Carl Sandburg



Kids gather data at the West Side, pH, and Sit and Spy experiment stations.





Haw Creek Elementary – Insects

Crawly Critter Collecting



Today's date: _____

What is the weather like today? Circle one.

Once you've collected your data on the right, add up the total number of critters found at each station you visited.

At which station did you find the most bugs?

Which critter did you find the most of?

If you find any bugs that are not on the list
If you know their names, write them here.

Record the data you collect at each station you visit in the spaces below. You can use numbers or tally marks to keep track of the critters you find.

Blue Station

Look around your square, check the features below that best fit the area.

● Sunny	● Shady
● Dry	● Damp
● Many leaves	● Few leaves
● Pine straw	● Grassy
● Sandy	● Rocky
● Live tree	● Dead tree
● Deciduous tree	● Evergreen
● Shrubs	● Flowers

Ants	_____
Beetles	_____
Centipedes	_____
Crickets	_____
Earthworms	_____
Grasshoppers	_____
Millipedes	_____
Pillbugs	_____
Spiders	_____

Buggy Numbers

Scientists can use data collected from a small area and estimate numbers for a larger area. Pick an insect from one of the stations you visited and complete the calculations below to predict how many of that creature you might find in a larger area.

If you found _____ in a one-meter square.

Number Insect

How many might you find in a 7-meter square?

_____ x 7 = _____


What about a 16-meter square?

_____ x 16 = _____

Or a 120-meter square?

_____ x 120 = _____

Look at your data. Were there similarities between the stations, or were they each different? Think about what made them different and how those differences could have affected the amount and types of insects you found. Write your thoughts below.



Red Station

Look around your square, check the features below that best fit the area.

● Sunny	● Shady
● Dry	● Damp
● Many leaves	● Few leaves
● Pine straw	● Grassy
● Sandy	● Rocky
● Live tree	● Dead tree
● Deciduous tree	● Evergreen
● Shrubs	● Flowers

Ants	_____
Beetles	_____
Centipedes	_____
Crickets	_____
Earthworms	_____
Grasshoppers	_____
Millipedes	_____
Pillbugs	_____
Spiders	_____

Purple Station

Look around your square, check the features below that best fit the area.

● Sunny	● Shady
● Dry	● Damp
● Many leaves	● Few leaves
● Pine straw	● Grassy
● Sandy	● Rocky
● Live tree	● Dead tree
● Deciduous tree	● Evergreen
● Shrubs	● Flowers

Ants	_____
Beetles	_____
Centipedes	_____
Crickets	_____
Earthworms	_____
Grasshoppers	_____
Millipedes	_____
Pillbugs	_____
Spiders	_____

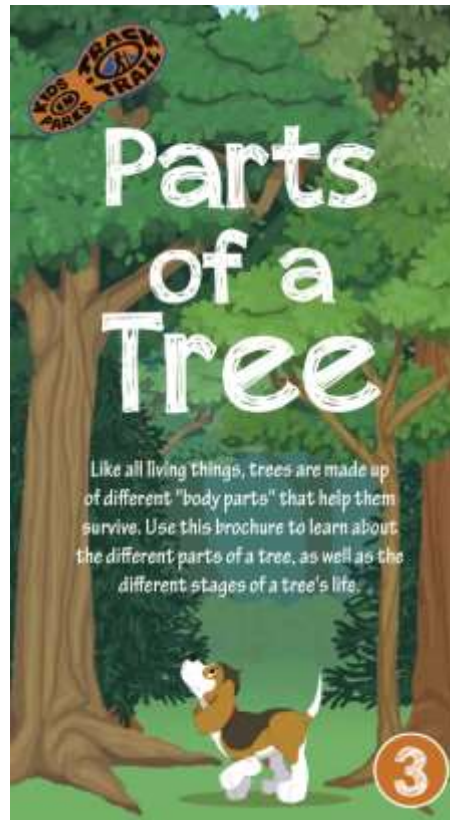
The Unearthing Arthropods brochure aligns with curriculum standards for 5th grade. The brochure encourages students to systematically collect and count insects at three stations.

Haw Creek Elementary – Insects



At each station, student's find equipment needed to create a sample grid, sift leaf litter, and safely collect, view, and count arthropods, entering their data in their brochures.

Other Citizen Science Brochures



Kids in Parks has created a series of Citizen Science brochures that align with curriculum standards for students in grades K-5. The brochures cover four topic areas: weather, soil, trees, and insects. Two topics are covered in each grade level, and each topic is covered three times between grades K-5 (for example: Weather is covered in K, 2nd, and 5th grades).

Bilingual
TRACK Trail
Brochures

Bilingual Brochures



KIDS TRACK TRAIL
PARIS

Animales Atletas Animal Athletes

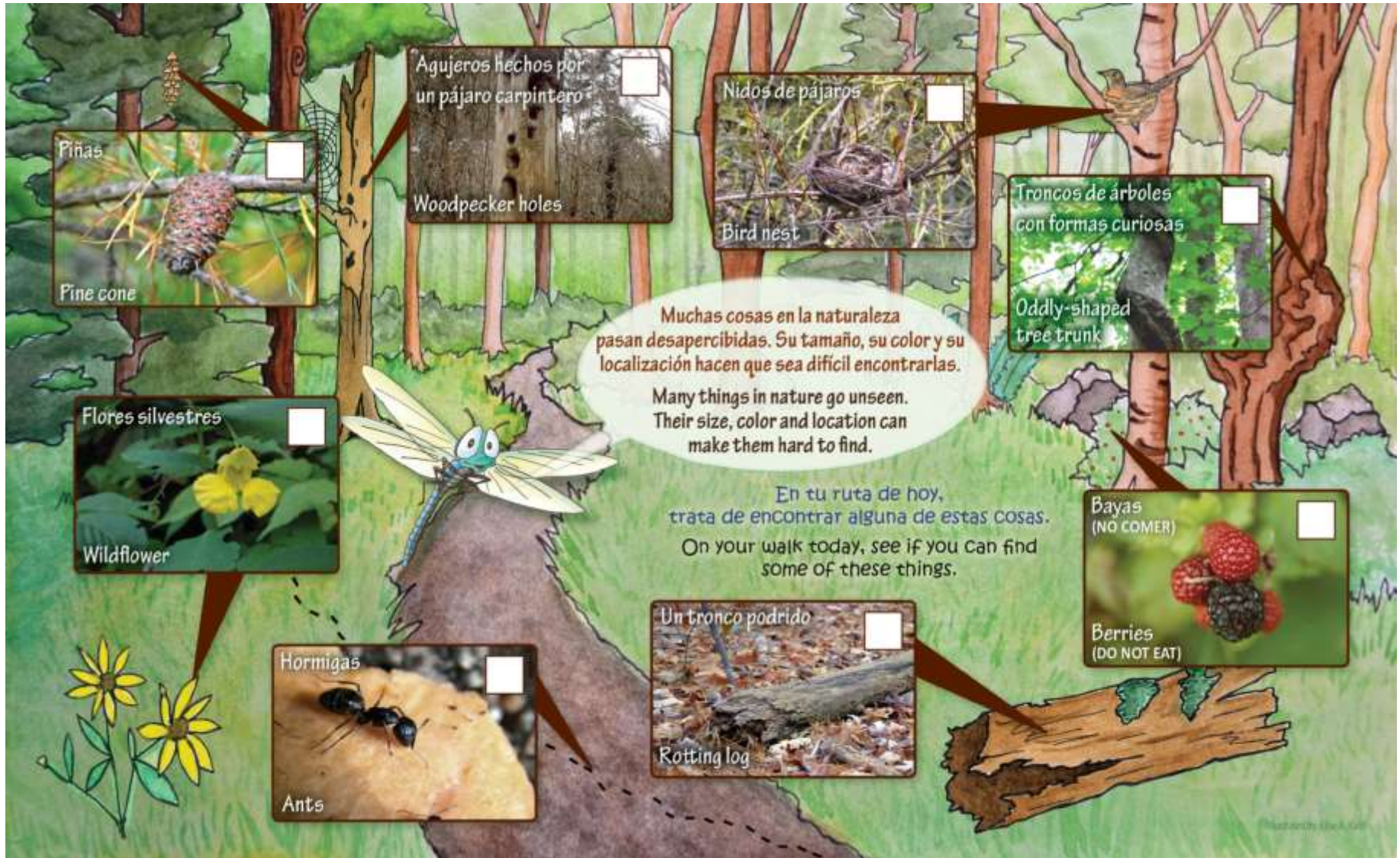
¿Estás preparado para hacer ejercicio como un animal?
Este folleto te mostrará cómo se mueven algunos animales para que puedas imitarlos a lo largo de la ruta.

Are you ready to exercise like an animal?
This brochure will show you different animal exercises you can do along the trail.

ATENCIÓN: Estos ejercicios deben realizarse únicamente bajo la supervisión de una persona adulta.

CAUTION: These exercises should only be performed with adult supervision.

Hide and Seek



This brochure allows users of either language to learn words in English and Spanish. *Keep the English and Spanish text in consistent locations for ease of use.*

Animal Athletes

Hummingbird Wing-flaps Los Aleteos del Colibri

Hummingbirds flap their wings over 50 times per second, or 1500 times every 30 seconds.

Los colibríes mueven sus alas alrededor de 50 veces por segundo, es decir, 1500 veces en 30 segundos.



How many wing-flaps can you do in 30 seconds?
¿Cuántas veces eres capaz de mover tus brazos como si fueran alas durante 30 segundos?

Ant Strength Training La Fuerza de una Hormiga

Ants can lift objects much heavier than their own bodies. Can you lift your own body weight?

Las hormigas son capaces de levantar objetos mucho más pesados que sus propios cuerpos. ¿Puedes levantar el peso de tu propio cuerpo?



Find a safe spot and see how many push-ups you can do!
¡Busca un lugar seguro y comprueba cuántas flexiones puedes hacer!

Deer High-jump El Salto de Altura del Ciervo

In order to move quickly through tall grass and shrubs, deer leap very high. They can jump up to 6 feet in the air!

Para moverse rápidamente en la maleza y entre los arbustos, los ciervos pegan brinco muy altos, a veces hasta 6 pies de altura.



How high can you jump?
¿Qué altura puedes alcanzar dando un salto?

Frog Hop El Salto de la Rana

Frogs use their strong back legs to hop away from predators such as snakes and herons.

Las ranas utilizan sus fuertes ancas traseras para saltar y escaparse de depredadores como las serpientes o las garzas.



Hop like a frog down the trail to escape a predator!
¡Salta como una rana a lo largo del camino para escaparte de un depredador!

Hawk Stance La Postura del Gavilán

To conserve heat and energy, hawks sometimes perch on one leg for hours at a time.

Para conservar el calor y la energía, los gavilanes a menudo se posan sobre una pata durante horas.



How long can you balance on one leg?
¿Cuánto tiempo puedes mantenerte en equilibrio sobre una pierna?

Grasshopper Long-jump El Salto de Longitud del Saltamontes

Grasshoppers can jump 20 times the length of their own body. If you could do that, you'd be able to jump 100 feet!

Los saltamontes pueden saltar 20 veces la longitud de su propio cuerpo. ¡Si tú pudieras hacer esto, podrías saltar una distancia de 100 pies!



Try a long-jump and see how far you can go!
¡Salta hacia delante y comprueba la distancia que alcanzas!

Designed and Illustrated by Tony Geiger

This brochure allows users of either language to learn words in English and Spanish.
If using both English and Spanish text, reduce the size of the word count to avoid overcrowding.

TRACK Rx

(Our Version of Park Rx)

Materials for Doctors

American Academy of Pediatrics



In 2011, Kids in Parks staff presented the program to the American Academy of Pediatrics. The program was endorsed by the AAP as a program pediatricians could prescribe to their patients as part of the Park Rx initiative, and was encouraged to work with local pediatricians to promote the program.

TRACK Rx – Pediatrician Displays



Kids in Parks has installed “pediatrician office trailheads” in the lobbies of doctor offices as part of the Park Rx movement.

TRACK Rx Brochure



Rx _____

- Play in your backyard
- Explore a trail or green space near home
- Go for a run or ride a bike
- Play a sport or other game outside
- Go for a hike on a TRACK Trail

 **TRACK**

Rx Code: TRACKRX

After you complete your adventure, log in to www.KidsInParks.com and register the Rx code above to earn a free prize in the mail. Then, visit other TRACK Trail locations and log your adventures online to earn even more free prizes!

TRACK your hike at
kidsinparks.com
and get **FREE** prizes!



Thanks for joining us on the trail today! Visit our website to find more TRACK Trail™ adventures near you!

The next generation of stewards will help preserve the world's plants, animals, natural lands and our heritage. What will you do to make a difference?

Kids in Parks...
Providing a network of fun-filled adventures that get kids and families active outdoors and connected to nature.



Kids in Parks Founding Partners:



TRACK Rx
Hiking Toward Health

Spending time outdoors is good for you. When you go for a walk, ride a bike, or simply play in the yard, you get a lot of health benefits. That's why doctors all over the country have begun prescribing nature to kids... it's Better than medicine!

Hi kids. I'm Dr. TRACK... this is my pal, KIP.

KIP and I created a network of trails designed for kids and families called TRACK Trails. Each trail has self-guided adventures you can do to make discoveries and have fun! This is our TRACK Rx Adventure. You can do it in your backyard, schoolyard, park, or along an official TRACK Trail. It combines several of our trail brochures into one.

We created a TRACK Rx brochure that is housed in the Pediatrician Display.

TRACK Rx Brochure

Cognitive Health: Train Your Brain
When you spend time outside, you see, hear and smell things. You make discoveries: a waterfall, a bird singing a song, or wildflowers blooming... and you improve your cognitive health! (you become smarter!)

Let's make some discoveries about flowers!
 Find a flower... Smell it. Look at it closely. Can you find the different parts of the flower?

Doctors know that spending time in nature can help your muscles grow stronger, your brain become smarter, and make you feel better about yourself. This brochure has activities to strengthen all three and show you how all three areas of health are connected!

Emotional Health: Serene Green
Studies show that simply viewing pictures of nature can reduce stress levels and improve emotional health... Imagine what spending time outdoors can do!

White Oak

Red Maple

White Pine

In this activity, take fifteen minutes to relax and observe the trees around you. Can you find these types of trees? How many other shades of green make up the scene?

Physical Health: Active Lifestyle
When you go for a walk, hike, bike ride, or run around, your heart beats faster, your muscles work, and your body sweats... and you improve your physical health!
 During your adventure, discover how athletic animals train by doing a few of their exercises:

Hummingbird Hand-swings

Look for ruby-throated hummingbirds feeding on flowers around woodland edges and fields. Hummingbirds flap their wings over 50 times per second!
 How fast can you flap your arms?

Cottontail Dash

Watch for cottontail rabbits feeding in grassy areas. Rabbits are a favorite food of coyotes, foxes and hawks. When being chased, rabbits sprint in a fast zig-zag pattern until they find cover.
 Sprint down the trail in a zig-zag until you find a large tree to hide behind.

The brochure provides fun activities that teach kids how spending time in nature improves their overall health.

Park Rx – Prescription Pads

TRACK Rx *Outdoor Activity in Nature*

Patient's name: _____

Today's Date: _____ Recommended Dosage: _____

Play outside

Play in a park

Go for a walk, run or bike ride

Play an active game or sport with friends

Go for a hike on a TRACK Trail

Other: _____

Health professional's signature: _____

Parent/child signature: _____

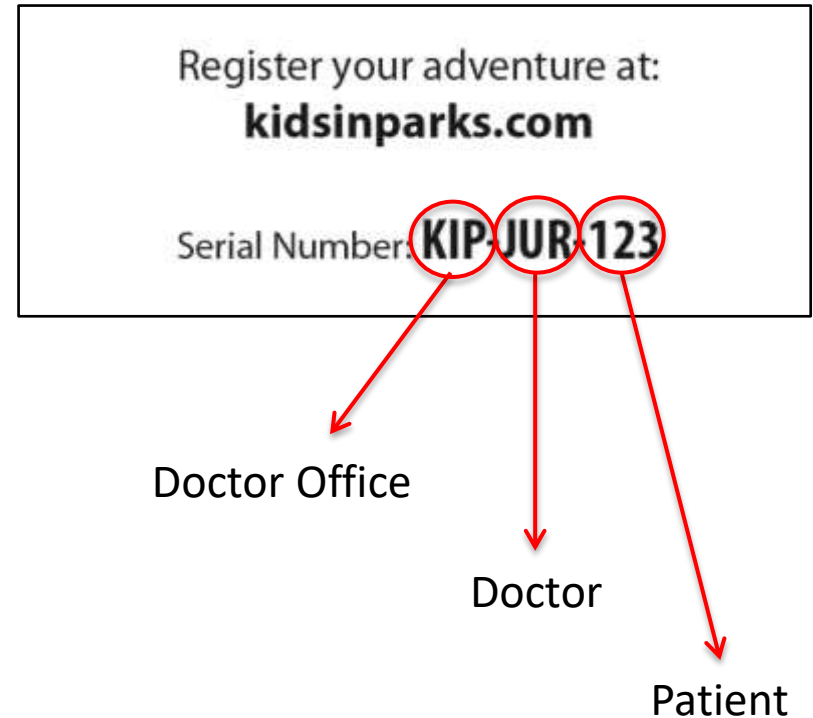
Unlimited refills!

KIDS IN PARKS TRACK TRAIL

Jason Urroz, Director
Kids in Parks
322 Gashes Creek Rd.
Asheville, NC 28803
Ph: (828)505-8495

Register your adventure at:
kidsinparks.com

Serial Number: **KIP-JUR-123**



Our prescription pad allows doctors to prescribe outdoor activity and TRACK Trails to their patients. The unique 9-digit serial number allows us to track the fulfillment of the Rx by the patients, and report back to the doctor regarding their patient's fulfillment.

Does ALL of this
Get Kids in Parks?

Health of Kids and Families

2009	2010	2011	2012	2013	2014	2015	2016	2017	2018	Total
53	217	259	278	568	1,501	2,312	2,808	4,140	3,330	15,466

as of 09/01/2018

Online registration data collected since 2009, in conjunction with several on-site observation studies conducted with local universities, suggests that:

475,000 kids have hiked TRACK Trails

475,000 miles have been hiked by kids on TRACK Trails

235,000 hours active outdoors by kids on TRACK Trails

67 million calories have been burned by kids on TRACK Trails

Kids don't come alone! The average group size is 3.37 people. When we add in the family members and friends who also hiked TRACK Trails, the overall health-based outcomes are even greater:

1,000,000 people / 1,000,000 miles / 500,000 hours / 150 million calories

Health of Parks and Public Lands

The health of our parks and public lands are improving as well:

11% of KIP registrants were first-time hikers

53% of KIP registrants were first-time visitors to the park

51% intentionally visited the park to hike the TRACK Trail

47% returned for a second adventure (Return Rate)

88% of returnees visited more than one TRACK Trail



Endorsements and Awards



“Let’s Move! Champions of Change” Award
Endorsed by the American Academy of Pediatrics
Mentioned in the U.S. Surgeon General’s Report

Our Parks Need (Healthy) Future Stewards



If we don't get the kids of today connected to the value of our parks and public lands, we won't have parks and public lands tomorrow!

Questions?



Contact Information



Blue Ridge Parkway Foundation
Kids in Parks
322 Gashes Creek Rd.
Asheville, NC 28803

(866) 308-2773

Jason Urroz – jurroz@brpfoundation.org x 384

Adam Rodes – arodes@brpfoundation.org x410