

Dear Reader,

It's amazing to think that the Trails Division will be turning ten years old next year. When I arrived in the Spring of 2012, I was wide-eyed and fresh off two years as a backcountry technician for the Appalachian Trail. I had a hard time distinguishing the difference between "Cleveland Metroparks" and "The Valley." The highway system was confusing and I would sweat every time I would reach the 480/71 junction. Despite all of my experience navigating off trail in the Appalachians, it seemed like I got lost every time I took a hike in the park district on our poorly marked trails. Staff would look at me a bit curiously (perhaps they still do): how was a scruffy haired kid armed with a pickup truck full of garden tools going to fix trails that are under water half the year and restore land that has been trampled for as long as anyone could remember?

I'm not sure I totally realized what it would take to get this program off the ground, but to be honest, I don't think I've ever really spent too much time worrying about that. When you are a trails person, your eyes are constantly gazing ahead: anticipating the next turn or obstacle. That is why I have appreciated the chance to compile this yearbook the last two years. It has given me the chance to look back and reflect and see how far we have come. Running this program has been like completing a massive jigsaw puzzle. There are tons of pieces that need to fit together and although it is a huge task, the only way to really complete it is by working on small sections at a time. It is easy for me to look back and focus on the gaps, but the yearbook has allowed me the space to step back and honor some of the sections that are starting to come closer to completion.

I believe that trails serve as the heartbeat of Cleveland Metroparks. We are so fortunate to have such fantastic natural places right at our fingertips to explore and appreciate, especially during these unprecedented times. In my lifetime, trails have served as my personal trainer, psychiatrist, science teacher, and preferred place of worship. I consider it a deep honor to be tasked with the scope of my position: to reimagine our trail system as one that protects the surrounding ecosystem while being as accommodating to our community as possible. In a world that feels as it is growing ever divisive, it is refreshing to have a career that works towards creating balance between what may appear from the outside as two opposing forces.

I am grateful for all of the people who have helped support me and my team this past season and throughout the last nine years. Any person that steps foot on one of our trails is a piece of the beautiful puzzle we are trying to assemble. Thank you for taking the time to review this yearbook and on behalf of my team, we would like to wish you all the best in the coming year.

Onward,

Ralph Protano Trails Development Manger

Clockwise from top Left: Chris Knox, Daniel Dydek, Kirby Weldon, Toni Moore, Erica Hirsch, Ralph Protano, Jackson Wolf

"The Crew"



Left to Right: Chris Knox, Daniel Dydek, Erica Hirsch, Kirby Weldon, Jackson Wolf, Rebecca Grimke, Lou Mincek

## **2021 TRAILS DIVISION TIMELINE**

Work Category:
Planning & Design
Construction

CAPITAL PROJECTS

**TRAIL & LAND MANAGEMENT** 

#### SEP OCT NOV DEC **RESERVATION FEB** MAR APR MAY JUN **PROJECT** Center Pond Trail Improvements Acacia and Wetland Installation Brecksville Gorge Trail Expansion Brecksville Trail Wayfinding Re-Design **O&E Canal** Mountain Bike Trail Expansion **O&E Canal Paved Pumptrack Installation Lagoon Trail Improvements Rocky River** and Fishing Deck Installation South Henry Church Rock **Trail Improvements** Chagrin

#### **RESERVATION PROJECT** JUN JUL **AUG SEP** DEC JAN **FEB** MAR APR MAY OCT NOV Alexander Road Buckeye Trail **Bedford** Reroute & Decommissioning Misc. Trailwork on Singletrack Bedford Brecksville Buckeye Trail Log Bridge Repair Brecksville Salamander Trail Reroute Snowville Road Buckeye Trail Brecksville Boardwalk Installation & Drainage Brecksville Trail Decommissioning State Road Buckeye Trail Hinckley Reroute & Decommissioning Hinckley **Trail Sign Repairs** Mill Stream Royalview Trail Blazing Run & Sign Refurbishing Royalview Trail Armoring, Mill Stream Ditching and Drainage Run Sylvan Loop Trail North Chagrin Overlook Reconstruction N. Chagrin Trail Decommissioning N. Chagrin **Trail Sign Repairs Rocky River** Fort Hill Trail Drainage Repair Valley View Drive Connector **Rocky River** Trail Resurfacing West Creek Misc. Trailwork on Shared Trails West Creek Skyline Trail Reditching West Creek Trail Decommissioning

Milling & Fabrication

Herbicide Applicator Training

Relocation of Shop and Office

SCA Regional Crew Leader Training

Trail Conditions Twitter Management

Trail System Wayfinding Inventory

MAR

**APR** 

MAY

JUN

JUL

**AUG** 

**SEP** 

**OCT** 

NOV

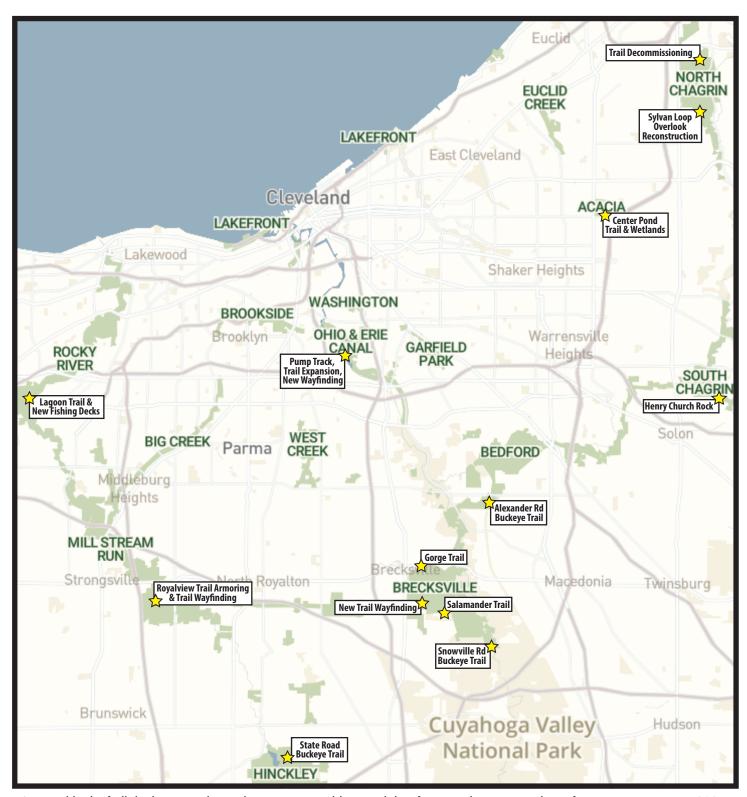
DEC

IAN

**FEB** 

OPERATIONS & OUTREACH **PROJECT** 

## **2021 TRAILS DIVISION WORK FOOTPRINT**



A spatial look of all the locations the Trails Division was able to mobilize for capital projects and significant improvements in 2021.

# CAPITAL PROJECTS - OVERVIEW

The primary focus of the Trails Division is to complete Capital Projects throughout the park district. These projects have generated a decade of legacy trails within each reservation, such as:

- Forbes Woods Trail, Bedford Reservation
- Royalview Trail System, Mill Stream Run Reservation
- Skyline Overlook Trail, West Creek Reservation
- Sylvan Loop, North Chagrin Reservation
- West Channel Pond Trail, Rocky River Reservation

In 2021, the crew was able to complete one of their most ambitious projects to date, the Gorge Trail, a technical trail construction that was made even more challenging by working through the pandemic. This centerpiece trail was complemented by a true variety of other projects scattered throughout the park district. I believe that stepping back and reviewing this assortment will allow the reader the opportunity to appreciate the identity of what our Trails Division is and a glimpse of the vision we hope to become.

### A FEW HIGHLIGHTS OF TRAILS DIVISION CAPITAL PROJECTS FROM PAST YEARS:



The view of downtown Cleveland from Skyline Overlook Trail.



A bridge crossing amidst the long boardwalk at Forbes Woods.





The rerouted West Channel Pond Trail rising above the wetland. The overlook deck nestled amongst old growth trees on Sylvan Loop.

# **CENTER POND - ACACIA RESERVATION**

The Acacia Pond Trail is a new accessible natural surface trail found along the south bank of Center Pond at Acacia Reservation. It was built at the beginning of the season entirely by the Cleveland Metroparks in-house crew. The trail was sculpted with a natural crushed stone base to improve drainage and features four boardwalk sections made from park-milled lumber. The trail and decks were designed with an aesthetic eye to create a feeling of serenity in nature. Additionally, the crew partnered with the Natural Resources Division to develop two new wetland sites that interact with the trail. The project was finished with the installation of four custom benches set along the trail to encourage users to stop and appreciate this unique scenic location within the park.

### Suggested Hike:

From the main parking area at Cedar Road head west on the Woodpecker Way Trail. You will see the natural surface trail after about 1/4 mile, where the trail junctions with Many Oaks Lane. Stay a while and bring a picnic lunch and your fishing rod.



This arcing locust crib took a great deal of patience and skill.





The trail reflects the natural shape of the pond.



The trail creates a natural experience with many places for rest and reflection.



Overcoming brutal wind at times, the boardwalks were constructed during the heart of winter.



In spring, the boardwalks were temporarily removed to create the wetlands underneath.

# GORGE LOOP - BRECKSVILLE RESERVATION

The Gorge Loop at Brecksville Reservation provides first-time managed access into the stunning Chippewa Creek Gorge. Built entirely by the Cleveland Metroparks in-house crew, the centerpiece of the trail is a 72 step y-shaped staircase built entirely out of natural stone that was shaped, moved and set in place by the crew. The new sustainable trail replaces a large network of eroding bootlegs that were created by trail users looking for access to the creek. Along with constructing the trail, the crew teamed up with our partner high school crew and volunteers to restore over 7 acres of land.

### **Suggested Hike:**

Park at the Harriet Keeler Nature Center and look for signs directing you toward the Gorge Loop Trail. Try to come right after sunrise to enjoy spectacular lighting in the ravine and have the viewing areas to

enjoy all to yourself.



The finished staircase included over 75 steps and 150 boulders.



A spectacular view of Chippewa Creek from the bottom of the trail.



Working in all weather conditions.



Youth Crews helped support restoration efforts around the site.



A temporary slide was assembled to help move the steps into place.



Each stone was set by hand and built entirely from natural materials.



Technical rigging applications were required to belay the rocks down the steep hillside.

# TRAIL WAYFINDING RE-DESIGN - BRECKSVILLE RESERVATION

Brecksville, like many of the park district's legacy reservations, features a patchwork of trails with many junctions that can be difficult to navigate for unfamiliar users. To address this issue, the trails division set out to implement a new, more inclusive wayfinding system for the reservation while also pulling out any old markers and posts. This project involved installing over 200 signs and 350 markers on 15 trails covering over 35 miles. The new signage matches the recent updates given to North Chagrin and Hinckley Reservation and will eventually set a consistent standard throughout the entire Cleveland Metroparks. The new sign posts are made from sustainable black locust logs that are harvested regionally. All of the sign and marker backers are made with cutoff pieces from our park-milled wood. The signs are produced in-house by Visual Communications and once installed, are inventoried regularly by our volunteers.

### Suggested Hike:

Park at the Deer Lick Cave Loop and utilize the new signage to make your way around the entire 4-mile loop. A perfect hike for early fall - wear good boots and expect a few ford crossings.



Workers donned a climbing harness to both add and remove markers. New markers are installed in a way that has negligible impact on the host tree.



The sign is notched into the top of the post as a nod to traditional trail work skills.



The new trail signage is designed to be functional and universally accessible while still blending into the surrounding environment.



Old sign posts were removed and are repurposed at our mill for blocking.

# PUMP TRACK - OHIO & ERIE CANAL RESERVATION & MOUNTAIN BIKE TRAIL EXPANSION

Ohio & Erie Canal Reservation features the oldest mountain bike trail in the entire region. Despite being a fun, interesting trail, it sees far less use then our other trails because it lacked distance; the entire loop was less then 2 miles in length. Through scouting efforts around the reservation, we were able to plan for an expanded trail system that would double the size of the trail system while introducing the first dedicated "flow trail" for mountain bikes in Northeast Ohio. To build the trails, the crew undertook a massive clearing effort to remove invasive honeysuckle and reveal the slope. The 2-mile corridor was cleared over a two week period in intense heat to meet a tight deadline for the expected contractor's arrival to excavate and grade the trail. After the contractors finished the rough construction of the two mile corridor, our in-house team returned to finish the trail, complete all the restoration work, and install all of the needed structures along the trail. To pair with the new trails, we were able to bring in a world-class pump track construction company to build a track in an empty lot adjacent to the trailhead. The paved course is the first of its kind in the area and serves as just the first phase of a future bike park that will become a centerpiece of the reservation.

### Suggested Hike:

Start at the Primitive Loop Trailhead near the pump track and head west to hike against the flow of bike traffic. Follow the trail/service road about a 1/4 mile until you reach the Canal Trail junction. Hop on the Canal Trail here and hike the entire trail back to the fire pit. From there, take the paved trail back to the Canalway Center. If you are a mountain biker, make sure to do a ride featuring all of the trails and the pump track!





Youth Crews provided support during the summer months.



Our in-house crews provided most of the heavy lifting and built all of the required structures.



Clearing the honeysuckle understory in summer heat was probably the most intense work we've ever done.

# GOON TRAIL - ROCKY RIVER RESERVATION

Despite great fishing and wildlife viewing opportunities, the Lagoon Trail has been an underutilized asset in part due to the condition of the existing trail. It was overgrown, muddy and featured an impassable crossing with water 3' deep. When the trail crew mobilized to the site this fall, they began by building a gorgeous elevated bridge using our own milled wood to make the crossing accessible. From there, the crew built out an improved trail using our natural crushed stone base to improve drainage, along with two new fishing decks on the north side of the trail. Moving into 2022, the crews will continue working in this area. Look out for an exciting, new trail experience in this area later this year!

### Suggested Hike:

Park on the north side of Lagoon Picnic area. Look for the trail heading back to Valley Parkway. Grab your tackle box and fishing rod and head out for one of the two new fishing decks. Look for the beaver lodge on your left before you cross the big bridge and plan to grab a deck not long after you cross the bridge 1/4 mile from the trailhead. The trail continues to Valley Parkway: you can cross the street and spend a bit of time casting in the river as well.



The new bridge turned a point of frustration into a spectacular viewing area.

The impassable crossing made it impossible to complete the trail.





The crew waded out into the lagoon to bring the fishing decks out into the water.

The fishing decks have already become popular with anglers.



Hazards such as deep holes in the trail were addressed and our native crushed stone mix was used to to create a fully accessible natural surface trail that can be accessed right from Valley Parkway.



A locust approach leads into the bridge.

# HENRY CHURCH ROCK TRAIL-SOUTH CHAGRIN RESERVATION

Built in the 1930s by the Works Progress Administration, Henry Church Rock is an iconic trail destination at Cleveland Metroparks, leading hikers to spectacular views of the Chagrin River and to the historic stone 1885 carving by Henry Church. This trail was in desperate need for repairs. Additionally, a major storm in the fall of 2020 caused further damage when over a half-dozen large trees tipped over and compromised sections of the trail. Partnering with National Conservation Corps programs, work on the trail began in the early summer when a crew constructed a 100' long natural stone retaining wall to reinforce an exceptionally eroded section of trail. Other primitive improvements made by both in-house and Conservation Corps crews continued sporadically through the year, adding steps, waterbars and armoring along the 1/4 mile river trail. Look for work to continue around this area in coming years, but for now, come out and appreciate some of the improvements to the most difficult sections to access within the whole trail.

### Suggested Hike:

Park at the Henry Church Rock Picnic Area and head right for the trail entrance on the north side. Head right down the stone steps and enjoy waterfall views at the river below. After you reach the bottom, continue hiking south and look for the new stone retaining wall about 500 feet into the trail. At the end of the trail you will see the historic carving. From there, take the stone steps and trail up to the top of the slope. Once you arrive up top, head back north along the gravel and paved trail back to your starting point.



This long retaining wall was built entirely by hand in just six weeks by Conservation Corps member with no prior stonework experience.



The Corps members were taught how to shape rocks using traditional stone chisels and tools.



This timber box crib was built in-house to ensure it is tied deeply into the slope.



This structure was created entirely from stone sourced within the ravine to fix a major drainage issue.

In addition to our Capital Projects, there is a continued effort to improve the management and maintenance of our existing trail system. This is being achieved through the addition of our new full-time Trails Coordinator positions by leveraging existing staff, tapping into our deep volunteer pool and forging new partnerships to meet our trailwork goals more efficiently. Some of our key efforts at this time are focused around:

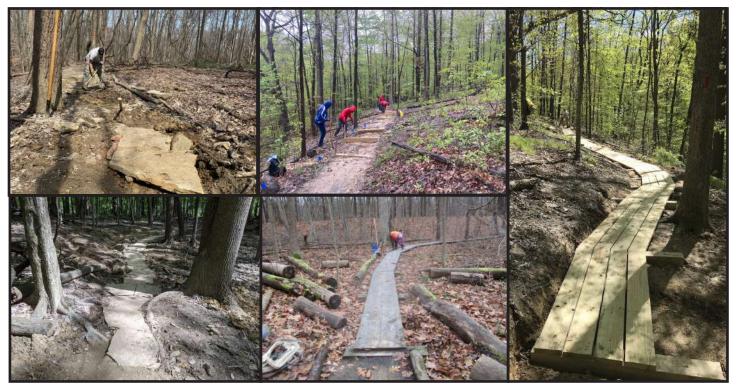
- Trail Restoration and Reforestation
- Oversight of an inner-city high school youth corps
- Cyclical and maintenance and daily monitoring (with public outreach) for conditions of four separate mountain bike trail systems
- Low-impact jobsite mobilization to primitive areas of the park district to support other crews and divisions on their projects
- Various intensive improvement projects on existing trails
- Partnership with the Buckeye Trail Association for management including a yearly keystone project
- Management and upkeep of the existing trail signs including a volunteer program of over 40 members to monitor inventory
- Partnerships with National Conservation Corps for project and maintenance support.
- Management of a general volunteer workforce to help support division goals



The inner-city youth corps was trained on all aspects of trail decommissioning, helping to complete four restoration projects at Brecksville Reservation.



Their capstone project involved rerouting a section of Buckeye Trail in Bedford Reservation, which included learning basic rockwork skills.



This past spring, our Trail Coordinators led a series of volunteer projects to repair problem areas around the Royalview Trails in Mill Stream Run.



Over the summer, they partnered with Natural Resources interns on a major restoration project off Squire's Lane Trail in North Chagrin Reservation.



In the fall, they led Conservation Corps members on a hand-cut reroute of the Salamander Trail in Brecksville Reservation.



In June, volunteers from throughout the state spent a week at Hinckley Reservation and helped reroute and restore a section of the Buckeye Trail.



Volunteer restoration work around West Creek was capped with a KeyBank project event, where over 2 acres of eroding bootleg trails were restored.



Our in-house team used our new mini excavator when feasible to help restore retired historical trails and carriage roads.



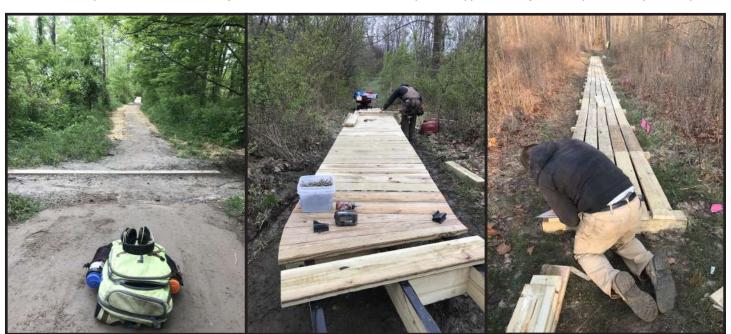
New trail signs were installed around Ohio & Erie Canal Reservation.



Old trail signs at Royalview were re-stained and painted by our intern.



We installed new piles and were able to bring out needed lumber with a small foot print to support Building Trades repair of the Sylvan Loop Deck.



A major improvement project was completed in-house on the Buckeye Trail near Snowville Road in Brecksville Reservation.



Handrails using our milled wood were installed on this remote section of Buckeye Trail.



A section of Hemlock Trail in Brecksville was completely renovated.

# **MILLING & FABRICATION**

At the start of the Trails Division, one of our first goals was setting a commitment to using native, natural materials and building in a way that nets the lowest impact on the planet as possible. We do this by creating as much as possible in-house from found materials within the park or local area. In this past year, our Trailworks crew has been able to expand their production capacity of such materials through the efficiency of our new Woodmizer mill. The crew also increased shop and yard space by moving our office and shop to the new management center at Ohio & Erie Canal Reservation, which allowed for an increased footprint of our mill yard at Brecksville. This also allowed us to increase the quality and quantity of materials we can produce and store.

### **2021 Produced Material List**

- Dried and stained milled wood from naturally fallen park hardwood trees
  - Typically turned into boards for decking, handrails, and posts
- Peeled locust for approaches and trail posts
- Trail sign backers made from scrap wood
- Welded and painted brackets and hardware for structures
- Refurbished and painted channel posts
- Cut stone outcroppings for steps
- Screened trail stone mix made from native bedrock materials



Our sawmill continues to be one of our most valuable pieces of equipment, creating an estimated \$60,000 worth of lumber over the last year. The boards are created from naturally fallen and hazard trees from within the park district. With supply chain shortages and a significant cost increase of commercial lumber, the investment has only become more valuable. Additionally, there is now a 60 week minimum lead time to buy a new mill.



In 2021, we began using our milled wood to create beautiful custom benches from black walnut lumber. The osage orange posts are a great way to utilize the rot-resistent species.



Our "rock benches" showcase our full arsenal of production: a milled seat is tied to shaped boulders with brackets that we produce in-house.

## **MILLING & FABRICATION**



Black Locust is one of the most rof-resistant wood species on the planef. Because it fends to stay small and does not grow straight, it is a more uncommon species to see as traditional lumber. However, it is readily available and a sustainably sourced material that we are able to obtain regionally. Raw sticks are debarked by our youth crews and turned into trail sign posts. Larger pieces are flattened on two sides by our mill and are often stacked to build

walls and approaches along the trail.



Natural sandstone outcroppings were shaped using traditional feather and wedge technique to create steps and retaining wall capstones.



Sign backer materials are cut and stained from mill scraps.



Boardwalk sill caps and other brackets are welded, cleaned, and painted in-house with Site Construction's support.



All of our trail stone is sourced locally from facilities that mine native bedrock that matches the geology of the park district. The mineral content is the perfect mix for bonding and drainage. Unlike limestone, it will not affect the pH of the surrounding soil. Our trail surface material is then screened in-house to create a finer material that improves compaction and stays in place and is durable under all weather conditions.

## **OUTREACH & TRAINING**



Partnering with Student Conservation (SCA), our first inner-city high school crew was a transformative experience for staff and members. In addition to learning real work skills, we developed five educational excursions around Cleveland Metroparks to enhance their baseline understanding of conservation and stimulate their growth.



Throughout the year, we utilized various Conservation Corps programs to bring in young adults both locally and nationally to support our work efforts. Though lacking in experience, their willingness to learn and eagerness to do hard work provided exactly the spark needed to help complete physically demanding work while still cultivating a positive environment.



In September, we welcomed SCA Crew Leaders from New York City, Chicago, Pittsburgh and Boston and offered our first external training. We trained them on installing drainages on existing mountain bike trails. Participants camped two nights and helped complete a small project at Bedford Reservation.

### LOOKING AHEAD: AN APPEAL FOR OUR OWN CONSERVATION CORPS

As the trails program at Cleveland Metroparks has continued to mature, we have emerged as one of the most knowledgeable and effective trail crews in the region. Our knowledge and experience has become sought after by both neighboring agencies and partners. My vision is to turn the patchwork of crews into a cohesive Conservation Corps program based right here in Cleveland Metroparks that one day will not only serve us, but the entire state. Crews would come and be based out here in Cleveland, an ideal location to bring in a national pool, blended with young adults from our local region, creating a vibrant community.

In the spring, we would train crews on various trail skill sets to prepare them to be able to lead and complete their own projects, eventually hitching on projects through our entire park district. I imagine a trail crew in every corner of the park district completing sustainable work, increasing our footprint and helping to develop the best trail system in the country.

I would like the program to be large enough so that once trained, crews could rotate not just within the Metroparks, but outsourced to partners around the entire state. Smaller agencies with less capacity would now have access to a trained labor force knowledgeable on trailwork skills that apply directly to our region. As a result, members would have a more holistic work experience, not only supporting our parks, but getting a chance to explore and see all of Ohio.

A complimentary component of this would be the expansion of our inner-city program, which would help further develop a talent pool for trailwork in this region while prioritizing diversity and the local community.

As we continue to receive support through our Trails Fund, I am hoping to prioritize our donations to fulfill this vision and transform our division into something that is truly sustainable for generations to come. Thank you again for your continued support; it is an honor to serve this community.



HAPPY TRAILS, Q.O.