



MiSCA

Michigan Scholastic Cycling Association

presented by

STUDY GUIDE

COACHING ON THE TRAIL

ADAMS

SPORTS MEDICINE  PHYSICAL THERAPY

Introduction

In 1907, Baden-Powell, an English soldier, devised the Scout motto: Be Prepared. It was published in Scouting for Boys in 1908. Two years later, it was adopted by the Boy Scouts of America. After a century, preparedness has become the cornerstone of countless outdoor youth development organizations. The Michigan Scholastic Cycling Association provides this study guide and other materials to provide coaches the opportunity to be as prepared as possible for what they may encounter as a youth mountain bike coach.

Mountain biking may be the most unique of all scholastic sports. Although practices may begin and end at a recreation field with other sports, a mountain bike practice quickly evolves into something very different. We do not have a playing field or gymnasium. There are no boundary lines, fences, or bleachers. The equipment we use is far more expensive and complex. In this study guide, we will review common preparation and best practices for working with student-athletes on trails.

Coaching On The Trail

The beginning of team practices may include a team gathering, stretching, and bodyweight exercises. It may progress onto a grass field with skill development drills, short track efforts, and gameplay. Eventually, it will be time to form riding groups and head out onto trails. This is where mountain bike coaching is most different from other youth sports.

In the larger mountain bike community, group rides are often where like-minded people meet to enjoy our sport together in the outdoors. We reflect on all the great experiences with friends and acquaintances. As participants in group rides, we are primarily responsible for ourselves. The leader or organizer of the ride may introduce himself and suggest we will have a great time. What happens after that may be left to chance.

As a youth mountain bike coach, you are now responsible for someone else's children. Although there are endless lessons to be learned and rewards to be discovered, we must consider many potential hazards and consequences. This is NOT a community group ride or outing with *your* kids. This is coaching a youth mountain bike team.

Trail rides with student-athletes create significant challenges for coaches. The coaches have to play the role of risk manager, first responder, navigator, skills instructor, fitness trainer, and youth development counselor. These roles combine into what we call a Ride Leader. Below, we will look at how coaches can be best prepared.



Preparation For Trail Rides

Coach training is provided by Michigan Scholastic Cycling Association to ensure coaches have the essential skills and knowledge for mountain bike coaching. Coaches are encouraged to pursue additional training such as first aid & CPR, wilderness first aid, bicycle maintenance & repair, etc. When combined, these training opportunities set the coach up for success.

Assessing practice locations and pre-riding trails

Coaches should ride trails well before practice to become familiar with trail length, riding features, and difficulty. Plan routes of different difficulty and length to be ridden with varied student-athletes. Considerations should be made for student-athlete maturity, skill level, endurance, and riding interests.

Additional practice venue considerations:

- Permission to host practice activities
- Adequate parking
- Restrooms
- Shelter for inclement weather
- Open space for group activities
- Emergency access points and distance to medical facilities
- Cellular reception
- Community impact and other trail users

Develop Emergency Action Plans

An emergency action plan (EAP) should be created for each practice location. The EAP consists of emergency access points, venue and team personnel contact info, and emergency response contact information. Coaches should become familiar with the EAP for each location and carry the plan with them in case of an emergency. A blank emergency action plan form can be found in the appendix.

Emergency Contact List

All coaches should carry a list of emergency contacts and related medical info for each rider. This list should include coaches as well.

This list should include the following:

- Rider's full name & age
- Name and phone number of TWO emergency contacts (parents/guardians of student-athletes)
- Medical conditions/allergies
- Prescription medications, dose, & frequency

Optional additional items:

- Two additional emergency contacts
- Health insurance provider
- Health insurance group
- Health insurance number

Proper riding equipment and gear

Coaches lead by example by being properly equipped and dressed for practice and the situations they may encounter during a ride. Having a functional and appropriate mountain bike, wearing appropriate clothing, carrying basic first aid items, and having enough drink, food, and bike repair items and tools to adequately address most commonly encountered situations are essential.

Essential items for coaches:

- Mountain bike with functioning gears and brakes
- Helmet in good condition that fits properly
- Appropriate shirt/jersey and riding shorts/pants
- Shoes that completely cover the toes and heels
- Gloves
- Protective eyewear
- Hydration pack or similar for gear to be carried
- Cell phone

What's in your riding pack?

Coaches should expect to use a riding backpack or hydration pack to carry essential gear during trail rides. The exact contents will vary depending on numerous factors such as ride length, group size, distance from start/endpoint, mechanical expertise, etc.

Essentials:

- Water for yourself
- Snack/food
- Basic first aid kit
- Layers for weather variations
- Multi-tool and flat repair items
- Team radio

Optional extra items:

- Extra water bottle for others
- Extra food/snacks
- Assorted tools and common bike repair items that match your mechanical expertise
- Sunscreen
- Bug spray

Day Before Practice

Coordinate practice activities with other coaches on the team. Check the forecast to be prepared for varying weather conditions. Do a bike safety check on your own equipment. Also, check your pack and restock any supplies that may have been used previously.

As Practice Begins

Things may appear chaotic as team members arrive at practice. Great teams develop a pattern or routine to help practice begin in an orderly fashion and on time. Although the early portions of practice

may take many forms, it is likely that everyone will be riding bikes at some point. Make a thorough bike safety check part of that early practice routine. Likewise, check each of the riders. Are their clothing choices and gear appropriate for the activities planned?

Bike Safety Check (A, B, Cs)

Regular maintenance of bicycles is required. Although mechanical problems are bound to happen without warning, many can be prevented by doing a thorough bike inspection. A coach does not have to be a bike mechanic but will significantly benefit from at least a basic understanding of a bicycle's parts and function.

Below are the minimum items to inspect on each bicycle at regular intervals. Some problems may not be able to be repaired or resolved quickly or easily. Coaches should direct student-athletes and families to community bike shops for service and repairs that go beyond their expertise.



A = Air

Ensure that tires are properly inflated. Tires should have enough air to hold their shape effectively while providing some suspension and comfort for the rider. Here are four things to consider when trying to determine proper tire pressure:

- Size and volume of the tires. Smaller and narrower tires require more air pressure to hold their shape.
- Size of the rider. A larger rider may require more air pressure in the tires.
- The type of terrain being ridden. Trails that have sharp edges or involve abrupt impacts with rocks or roots may require more air pressure.
- The riding style of the rider. New riders with developing skills may hit trail features with greater force. More experienced riders may be able to better manage their weight and avoid larger impacts. Therefore, the inexperienced rider may benefit from having slightly higher air pressure in the tires.

B = Brakes

Pull each brake lever individually while pushing the bike forward. Is each brake working properly? Does the brake lever move appropriately and consistently? Is the position and reach of the brake lever appropriate for the rider's hands? A quick inspection of each brake caliper may reveal worn brake pads or loose bolts.

C = Chain

Is the chain lubed, with all links moving freely? Turn the cranks backward to identify squeaks and links that may be stuck. Applying lube is preferably done well before riding which allows the lube to penetrate and dry before riding. A wet chain tends to attract dirt and requires more frequent cleaning.

D = Derailleurs

Do a visual inspection of derailleurs. Have a partner hold the rear wheel off the ground while you turn the cranks and shift gears. If alone, take the bike for a quick ride to shift gears while riding. Do the gears shift quickly and consistently with each push of the shift levers?

E = Everything Else

There are many things to check on each bike. Although not expected to catch every problem, coaches should become aware of common things to be on the lookout for. A drop test is a great way to expose problems or concerns. Lift the handlebars a few inches and allow the bike to fall back to the ground. Listen for odd noises that may indicate a loose wheel, loose bolt, or other problem. The same drop test can be done on the back of the bike by lifting the seat a few inches.

Helmet Check

A properly fitting helmet is critical to rider safety in the event of a fall. Here are things for coaches to consider when checking helmets.

- Is the helmet the correct size for the rider's head?
- Is the helmet sitting level and protecting both the front and back of the head?
- Is the retention system on the back properly adjusted to hold the helmet in place?
- Do the straps form a "Y" under each ear lobe?
- Is the buckle secured and strap comfortably snug under the chin?



Rider Check

As practice begins, prompt a short conversation with each student-athlete. How are they doing? Are they ready/prepared for the planned activities? Did they eat appropriately leading up to practice? Is there anything that coaches should know before practice begins?



Rider Skill-level Assessment

New or younger riders may not have developed the necessary skills to ride on single-track mountain bike trails. Experienced or returning riders may need to refresh their skills after a long off-season. The coach is responsible for ensuring that riders have the appropriate skills for the trails they intend to ride.

Coaches should become familiar with each rider's skill level before any trail riding begins. Using a combination of skill-building lessons or drills, gameplay, and short course laps will allow coaches to assess riders and determine what trail difficulty level they are ready for. High-performing teams may have a checklist or grading sheet corresponding with each student-athlete to document that they are ready for trails of increasing difficulty.

Successful Trail Rides

Pre-Ride Safety Talk

Establish rules or working agreements with your group before riding begins. This will lead to a safe and fun ride for all. Confusion or misunderstandings on the trail can often be attributed to the lack of communication before the ride began. Although each scenario may vary, here is an example of a thorough safety talk to have with student-athletes:

The Coach is always in charge. Listen for feedback and input from the group. Ultimately, you, the coach, are responsible for the group.

Stopping as required. Stops should be used to monitor the group throughout the ride. This can happen at any point if required and tend to be needed most at intersections, tops of climbs, scenic spots, or before/after trail challenges.

If the group is riding relatively close together and everyone is within sight of each other, stops can be less frequent and allow the group to keep moving. As skill level and interests vary, more frequent stops may be required. Example: When turning at a trail intersection, coaches should slow or stop the group until all members are accounted for.

Ask all riders to pull to the same side of the trail when stopping. Avoid blocking the trail when stopped.

Spacing between riders on the trail allows each rider to see what they are about to encounter. Many mishaps are attributed to a rider following too close to the person ahead of them. As speed increases, the distance between riders should also increase.

Other Trail users should be greeted with care and consideration. Coaches lead by example and our groups represent the greater cycling community. Be sure to represent yourself and your organization with dignity and respect. Ringing a bike bell and a simple "Have a great day!" can significantly impact the impression given to others.

When encountering other riders on multi-directional trails, those riding downhill shall yield to those climbing uphill. It is easier for the descending rider to start again. Those going up may be forced to dismount and walk once they stop. "Yield to the uphill rider!"

If you get separated, stay where you are. Coaches shall monitor the group and do frequent headcounts. The entire group will backtrack to locate a rider who is missing. Therefore, it is important to remain where you are when you realize you are separated from the others.

Nature, wildlife, and plants should be left undisturbed. Let riders know of any concerning wildlife and plants such as poison ivy or bears. During a hazardous encounter, coaches should direct attention to themselves to provide instructions quickly.

Leave no trace. Riders should be aware of the trail conditions and not ride when trails surfaces are susceptible to damage. Ride dirt, not mud! Additionally, riders shall take any trash they create out with them. Also, consider removing trash you may encounter. Leave the trails better than you found them.

Describe the intended ride. Let the group know what you have planned. Notice their reaction and consider possible variations based on their feedback. Have a plan and share it with everyone as you begin.

Take a headcount as you begin your ride. Know how many riders you have with you. Immediately do a headcount when stopping during the ride.

During the Ride

Ride Leaders have a significant impact on the group's experience and enjoyment throughout the ride. The coach should lead the ride at the front as it begins in order to dictate the pace and overall behavior of the group.

Managing the group while riding at the front can be especially difficult. Although it allows you to lead by example, it is harder to monitor what is happening behind you. A shoulder check, looking behind you while riding, is great for general monitoring but may not allow you to see details. As the ride continues, coaches may elect to lead although not be in the front.

Leading from the middle can be very effective as it allows you to watch a portion of the group ahead of you. Meantime, you will be better able to communicate and assist those riders towards the back of the group.

Special care and risk management principles should be applied as coaches consider relinquishing the lead position to another rider. Only mature, experienced, and cooperative riders should be selected to ride at the front. Additional communication about expectations should be messaged to the entire group before continuing ahead.



First Stop

Always do a quick first stop as the ride begins. Certainly, within the first couple of minutes. Once riders begin moving, they quickly realize they have forgotten something. Things like unbuckled backpacks or helmets, untied shoelaces, or missing eyeglasses or water bottles quickly become apparent and can't be resolved while riding. They require a stop. Stopping early allows you to retrieve forgotten items quickly and easily. This first stop can be very quick. Just check and allow anyone to speak up if there is a problem. Otherwise, continue with the ride.

During stops

Stops in the ride should be done as required. At intersections to ensure everyone follows the intended route. To allow riders to catch up at the top of a climb. Stop to session, or quickly repeat, challenging features on the trail.

Professional mountain bike guides use stops to monitor their group. Check with each group member to see how they are doing. Body language or appearance also provides clues as to how a rider is feeling or thinking. Peer pressure may dictate what they say. Body language may be entirely different. A good ride leader may use this as an opportunity to talk and instruct. A great ride leader will use this time to prompt discussion with questions, listen, and connect.

When stopping, do not block the trail for other trail users. Ask riders in your group to follow the lead of the person in front of them and all move to one side.

Consider applying the acronym CODL for each stop in your ride

Count your riders to make sure all are present.

Observe body language to see how they are doing. You may have to change the ride plan.

Describe the route ahead and set expectations for the next portion of the ride.

Look both ways before restarting. Other trail users may be nearby. Let them go by.

Incident response

It is not a question of if, it is when. Mountain biking does have inherent risks. Even the most skilled and experienced riders take a fall occasionally. Although most result in scrapes and bruises, coaches need to have an awareness of how best to respond to all types of injuries.

This study guide is not a substitute for more comprehensive first-aid or wilderness medical training. Coaches are responsible to provide a Duty of Care to others during team activities. Duty of Care is defined simply as a legal obligation to:

- Always act in the best interest of individuals and others.
- Not act or fail to act in a way that results in harm to others.
- Act within your competence and not take on anything you do not believe you can safely do.



In the event of an incident causing injury to a rider, consider this protocol as you respond:

Remain calm. Remaining calm will help the injured person to relax. Others will be looking to you for direction and leadership. Your calm demeanor will be reflected towards the group.

Assess the scene. As you begin to formulate a plan, evaluate what has happened and what are the surrounding circumstances that you may need to consider. What was the mechanism of injury? Was it a high-speed or low-speed incident? Are multiple riders involved? Is there a continued danger in the area? Does the injured person have pre-existing medical concerns?

Secure the scene. As you quickly organize your response, provide direction to others and assign roles or tasks. This may be asking them to use the radio to notify the ride leader, move bikes from the trail, close the trail to avoid causing another incident, or ask them to help you with the injured person.

Administer first aid to your level of training.

Is evacuation required? Refer to the Emergency Action Plan for that practice location. If the rider is unable to continue on the intended ride, how will you alter the plan to return the injured person? Is a rapid evacuation required due to the threat of life or limb? In this event, emergency services such as '911' should be called to assist. Again refer to the emergency action plan for additional instructions.

Call the emergency contact number. If an injured person requires an altered plan or evacuation, call the emergency contact number to make them aware of the situation. In an emergency, '911' should be called first. The emergency contact is made aware of the situation, consulted, and notified where to meet.

Complete incident report form. An incident that requires a referral to a medical professional shall be documented using an incident report form. The league director shall also be notified in a timely manner. During the response in the field, consider assigning someone to take notes related to the incident. Who was present? Where did it occur? What circumstances were involved? A blank incident report form is in the appendix.

Even if the rider is able to continue riding after a mild incident, always perform a bike safety check to ensure the bike has not been damaged. Hastily getting back on the bike to continue may create another incident.

As the ride ends

Experiential education starts when we reflect on past experiences. Adolescents and teens do not reflect often as their attention quickly moves on to doing whatever is next. In youth development scenarios, leaders may have to prompt reflection. Doing so will reinforce our goals as a group, team, and community. This often leads to improved leadership development and character building in our team members.

Here are a few example questions to prompt reflection:

- Does anyone remember our goals as we began our practice (or ride) today?
- How did we accomplish those goals?
- Did anyone notice an improvement in one of their teammates today?
- What did you like most about today's practice or ride?
- What would you like to change for next time?
- How can I coach you better in the future?



Lead by Example

As a coach and ride leader of youth, you are modeling the behavior and actions of the next generation. Always model respect for the opportunities we have to ride and the cycling community we represent. A moment of poor judgment may require significant effort to correct.

Ride with respect. Develop a team culture that promotes a positive presence within the community.

- Respect the trails and nature. Significant effort is required to build and maintain trails. Often involving years of work by property managers, community advocates, and trail builders. Avoid riding trails when they are susceptible to increased damage and erosion. Ride dirt, not mud!
- Respect your surroundings and those that observe you. Poor sportsmanship, reckless or inappropriate riding may promote further poor behavior amongst your peers.
- Respect for each other. Without one another, there is no team or group to ride with. Be respectful and always encouraging. Always promote equity and inclusivity.
- Respect for other trail users and the greater community.
- Respect the consequences of our actions. Educate student-athletes to evaluate moments of elevated risk and the impact it may have on themselves and others.

Elementary Module (grades 5 and under)

This module is meant to consider the needs of the youngest and most beginner riders. While our youngest riders can be incredibly skilled and impressive riders, their needs are going to be different than their older teammates. Setting reasonable expectations and achievable goals with elementary riders will help them grow a lifelong love of the sport of mountain biking!

Basic considerations for elementary riders

- Numbers
 - Skills gaps can be very wide, and some riders may need more one on one attention. MiSCA's rider to coach ratio requires a minimum of 1 coach to every 6 riders – expect to reduce this ratio for elementary-aged riders, especially lower elementary.
 - Be prepared in case a rider fatigues and needs to exit the ride. It helps tremendously to have a couple extra coaches per group that can help guide and extract riders who may be struggling back to the parking lot.
 - Consider how many elementary riders your team can take on and support with these ratios in mind.
- Parental involvement
 - Consider asking parents to remain close to practice until the rider becomes more independent and you know they can regularly last for a full practice. If a rider consistently struggles to finish a practice, it may detract from the experience of the group who is able to complete the planned ride for the day. They may need more time to build up their endurance, so set up your group for success and have that exit strategy in place.
- Coaches
 - Coaching elementary riders can be one of the most rewarding experiences as a MiSCA coach. These riders often progress incredibly quick and can remind you to experience the pure joy of riding a bike. However, the attention that elementary riders may require can be taxing on a coach over time. Some coaches may truly want to only work with younger riders, which is a true gift for any team. Consider checking in and rotating your coaches through elementary groups to ensure they remain mentally engaged and are getting variety in their coaching experience.

Initial Bike checks and fit

- Seat Height
 - Ask rider if seat height is comfortable. Usually, the seat will be lower than an ideal height for the rider. Start with lower seat and gradually raise (suggested adjustment once per week, VERY MINOR)
 - Have them stand next to the bike. The saddle should eventually reach their hip bones while standing.
 - Drastic changes will reduce their confidence quickly – work up to that proper height!
- Bike to rider weight ratio
 - Consider that younger kids' bikes will be relatively heavier when compared to the weight ratio of an adult bike to a rider.
- Be prepared to be more hands-on with bike checks. Many younger riders may not understand what feels correct and incorrect with a bike check. Consistency with these checks at every practice will instill good future habits, but they may not yet have the skillset to check their own bikes properly

Basic skills progression

This progression mostly applies for all ages, and this can break down how to assess a younger rider's confidence. Demonstrate and assess the below skills to your riders in a grassy area prior to riding with them on the trail, if they are a newer rider or are new to your team.

- Balance
 - If a rider is very young and/or really struggling with a pedal bike, consider removing the pedals from the bike to convert to a temporary strider bike. Work on building up to spending as much time as possible with feet off the ground.
- Power position
 - Focus on a proper starting pedal position that allows the rider to get to push off and roll their bike. Encourage consistency with this. Remind the riders to start in their "power position" by putting the pedals in place before EVERY start. Remind them of this after regrouping during a ride in practice throughout the season.
- Braking
 - We encourage braking with one finger, but smaller hands will struggle with this and may not have the strength to brake with just one finger. Again, work through this gradually, more important that the rider is able to control their braking with confidence!
- Ready position
 - If a rider struggles to hover over their saddle, begin in an open field and consider spotting the rider (by holding their handlebar and seatpost – do not touch the rider)





Practice structure

- Stay closer to “home base” during a ride
 - More route planning is usually required – learn the shortcuts or stay on trails with loop systems that can be repeated as the riders’ endurance improves
- Consider shorter rides with skills games to mix up practices and grow confidence
- Work up to a “goal ride”



Appendix A - Sample Emergency Action Plan (EAP)

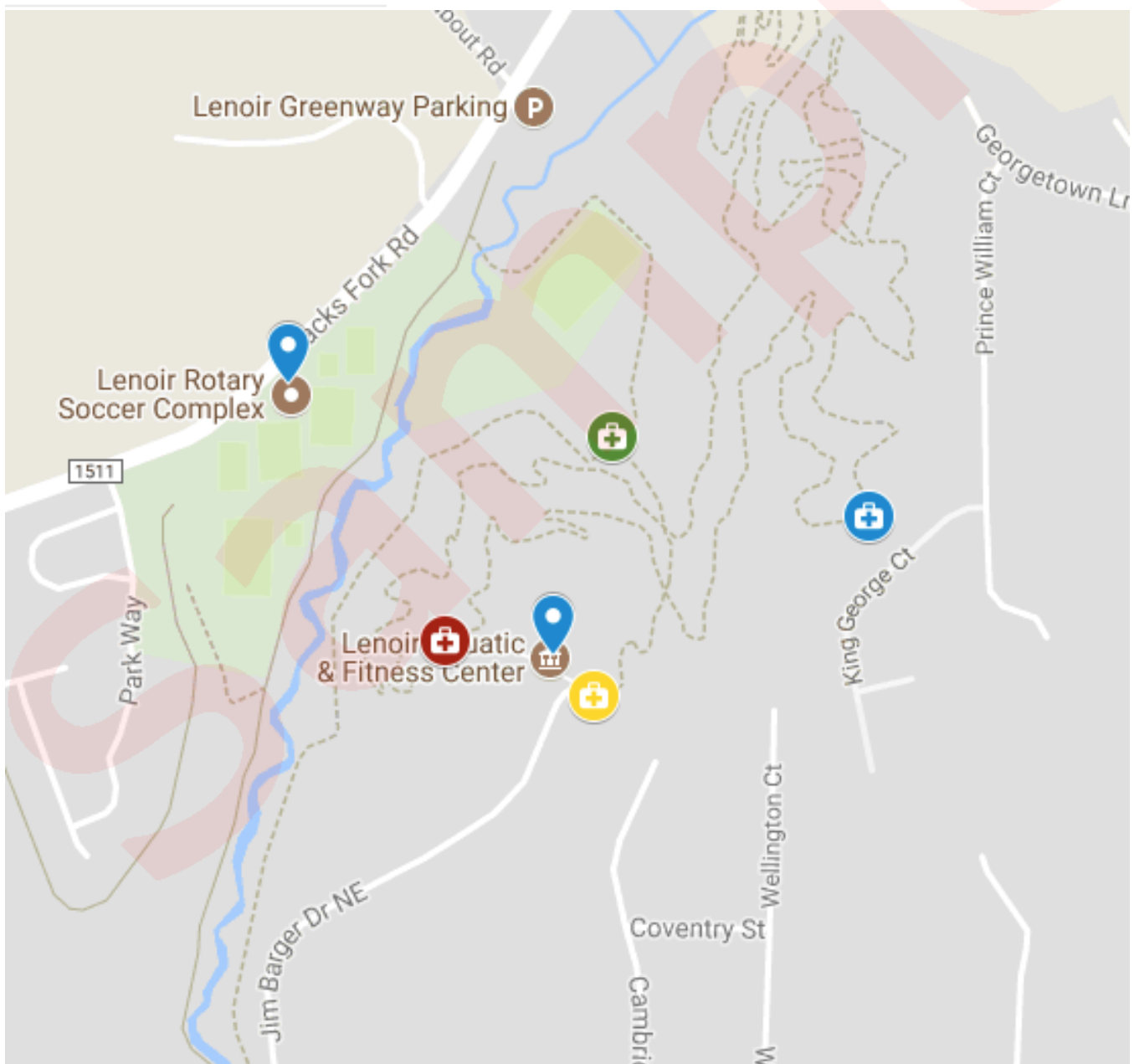
Location / Park Name	Zack's Fork Trail, 1050 Zacks Fork Rd Lenoir, New Jersey 28645
Team Name	Caldwell County Composite, Hibriten High School, & William Lenoir Middle School
Head Coach (name & cell#)	Sharon Morris XXX.446.8100
Team Director (name & cell #)	Shawn Morris XXX.446.8118
Closest Hospital(s) and anticipated time to each from least-accessible location	Caldwell Memorial Hospital, 20-30 minutes
Trails to be avoided by some or all ride groups (note concerns)	The trails are Green/Beginner when ridden in the clockwise direction. SA's should not ride across the wooden skinny at the beginning of the lap.
Location Emergency Responder Contact Info (park police, town police, etc.)	Franklin Police Dept.
Access Points for Emergency Access or Transport (describe and include on map)	see map
Water Refill and Shelter locations [describe and include on map]	A large concession building with bathrooms is at the main soccer field. Once on the trail, the closest shelter is the Aquatic Center.
Other Park-specific Info (ie areas without cell coverage, known plant/wildlife hazards, etc.)	Cell coverage can be spotty on lower sections of the trail but improves as you go to higher ground.
<ul style="list-style-type: none"> ✓ In the event of a serious injury, always call 911 first. ✓ Check the weather forecast before every practice. ✓ Coaches and student-athletes should have all appropriate equipment, clothing, food, and hydration at all times ✓ Carry with you a copy of the rider emergency contact list, which includes medical conditions, allergies, and medications for each student-athlete. ✓ After parents or family have been contacted, call your league director in the event of an injury that may result in an overnight hospital stay or you deem as very severe. 	

Emergency Access

-  Emergency Access Point 1
-  Emergency Access Point 2
-  Emergency Access Point 3
-  Emergency Access Point 4

Water and shelter

-  Lenoir Aquatic Center
-  Concession building





Team Emergency Action Plan

Location / Park Name	
Team Name	
Head Coach (name & cell#)	
Secondary team contact (name & cell #)	
Closest Hospital(s) and anticipated time to each from least-accessible location	
Trails to be avoided by some or all ride groups (note concerns)	
Location Emergency Responder Contact Info (park police, town police, etc.)	
Access Points for Emergency Access or Transport (describe and include on map)	
Water Refill and Shelter locations (describe and include on map)	
Other Park-specific Info (ie areas without cell coverage, known plant/wildlife hazards, etc.)	

- ✓ In the event of a serious injury, always call 911 first.
- ✓ Check the weather forecast before every practice.
- ✓ Become aware and identify coaches with CPR & First Aid training.
- ✓ Coaches and student-athletes should have all appropriate equipment, clothing, food, and hydration at all times
- ✓ Carry with you a copy of the rider emergency contact list, which includes medical conditions, allergies, and medications for each student-athlete.
- ✓ After parents or family have been contacted, call your league director in the event of an injury that may result in an overnight hospital stay or you deem as very severe.