

Tomahawk Tumble MTB-O Race

Lake Accotink Park, November 13, 2010



TOMAHAWK TUMBLE





Tomahawk Tumble MTB-O Race Lake Accotink Park (Wakefield Park)

Springfield, Virginia

November 13, 2010

1.1 Sport Overview

Mountain Bike Orienteering (MTB-O) is a well-known sport practiced primarily in Europe. It started in France in the early 1990's and soon spread throughout Europe and Asia with competitions now spanning four continents and over 20 countries worldwide. While currently only popular in the United States as an element of adventure racing or marathon off-road mountain biking events, MTB-O is starting to gain grass-root popularity as a unique combination of both complex foot orienteering and fast-paced mountain bike racing.

As with Foot Orienteering, MTB-O caters for all age groups. Competitors as young as 16 and over 70 years of age regularly compete in MTB-O events. The sport includes elite as well as novice and recreational riders looking for an enjoyable ride with a purpose. With a variety of route options available, MTB-O offers competitors the opportunity to enjoy the attractions of national and regional parks in an fun and environmentally friendly way.

The majority of proceeds from this event will be donated to the Orienteering USA MTB-O Team, to help develop and support a national mountain bike orienteering team.

1.2 Event Name History

The name "Tomahawk Tumble MTB-O Race", plays upon the Indian history of the Accotink region, which was named after the largest village near the lake by the first English settlers. The word "Accotink", derived from the Algonquian word root meaning "at the end of the hill", is much like how most people come to find this park -- they sort of just "tumble" into it. Meanwhile, the tomahawk was known to be a primary weapon and tool of the Algonquian people living around what is now the Lake Accotink area when John Smith surveyed it in the early 1600's. As with any great race name, the Tomahawk Tumble will live up to its namesake by having plenty of controls that are just "at the end of the hill" while requiring a competitor's wit to be sharp as a "tomahawk" so as not to "tumble" down the path at the end of hill and into the lake!

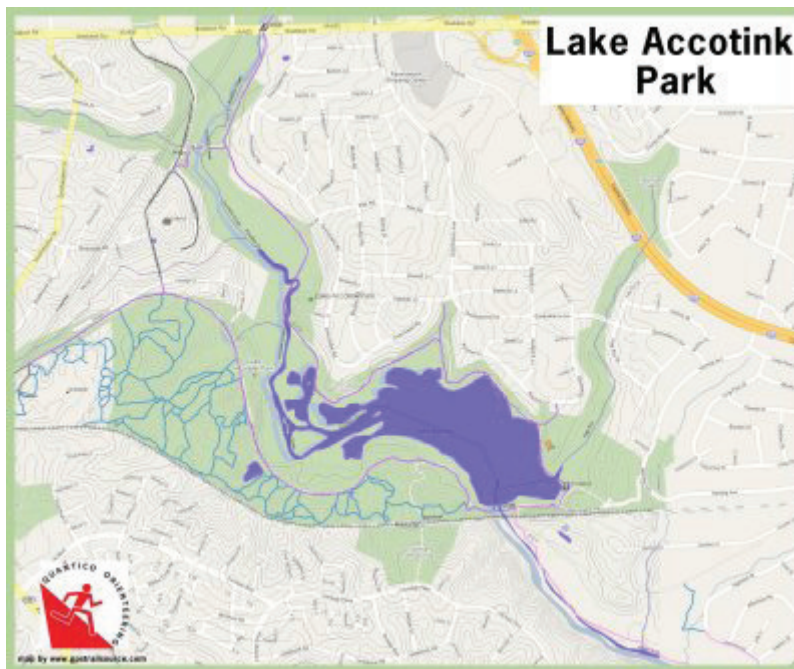
2.1 Venue Overview

Located in Springfield, Virginia, just south of Braddock Road and west of I-495, Lake Accotink Park is 493 acres, including a 55-acre lake, wetlands, and streams offering unique views of waterfowl and marsh life. Lake Accotink Park is also part of the Cross County Trail (CCT) network and has over 5-miles of the CCT cutting through the park to form the backbone to its trail network.

2.2 Venue Layout

Lake Accotink Park does not have color-coded blazed routes but does have "Lake Accotink Trail" markers posted every 1/2-miles to form a 3.5-mile loop. Additionally, the park does not have an official mountain bike course but does have 6-miles of singletrack trail formed from shortcuts and hiking trails that crisscross the south-west area of the park. Some of these trails are technical with steep grades and natural obstacles. Most of the CCT is fire or gravel roads and considered easy riding, while the mountain bike trails tend to be more technical and designed for more moderately skilled riders. Highlights of this trail system include:

Map.01 - Lake Accotink Park Layout



Cross County Trail (Purple)

The Cross County Trail cuts through Lake Accotink Park to forming the backbone to the trail network.

Mountain Bike Trail (Blue)

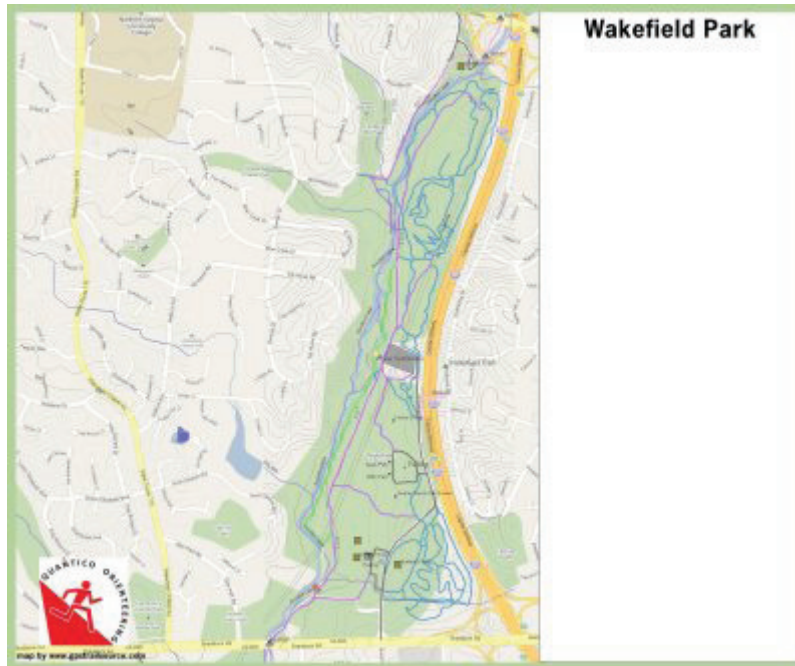
Lake Accotink does not have an official mountain bike course but does have several trails formed from shortcuts and hiking trails that crisscross the south-west area of the park. Some of these trails are technical with steep grades and natural obstacles.

Interactive Trail Map:

<http://www.gpstrailsources.com>

Map provided by GPS Trail Source (www.gpstrailsources.com)

Map.02 - Wakefield Park Layout*



Cross County Trail (Purple)

The Cross County Trail cuts through Wakefield Park to forming the backbone to the trail network.

Mountain Bike Trail (Blue)

Wakefield Park has an official 3.5 mile mountain bike course following the Blue Arrow blazed trail north of the power station. Some of these trails are technical with steep grades and natural obstacles.

Interactive Trail Map:

<http://www.gpstrailsource.com>

**Map provided by GPS Trail Source (www.gpstrailsource.com)*

2.3 Venue Accommodations

Lake Accotink Park is part of the Fairfax County Park Authority that includes multiple parking lots, paved road access, public bathrooms, picnic pavilions with tables. Additionally, there are several hotels/motels located in Springfield, VA, 3 to 6 miles away.

2.4 Venue Safety/Emergency Response

Lake Accotink Park is staffed by Fairfax County Park Authority personnel and has a limited emergency response. However, the park is served by two (2) local fire departments (Burke and Springfield), patrolled regularly by Fairfax County Police, and has a major trauma center located only 6 miles away at the INOVA hospital. In the event of a severe medical emergency, the following emergency services are located within 5 to 10 minutes of the venue:

- **Springfield Fire Station**
6140 Rolling Road
Springfield, VA 22152-1522
(703) 451-0453

- **Burke Fire Station**
9501 Old Burke Lake Rd
Burke, Virginia 22015
(703) 978-9200

- **Inova Health System**
8001 Braddock Road
Springfield, VA 22151-2115
(703) 204-3344 | (703) 289-2000

2.5 Venue Contact Information

- **Lake Accotink Park**
7500 Accotink Park Rd
Springfield, VA 22150
(703) 569-0285
- **Fairfax County Park Authority**
12055 Government Center Parkway, Suite 927
Fairfax, VA 22035
(703) 324-8702

2.6 Venue Parking and Directions

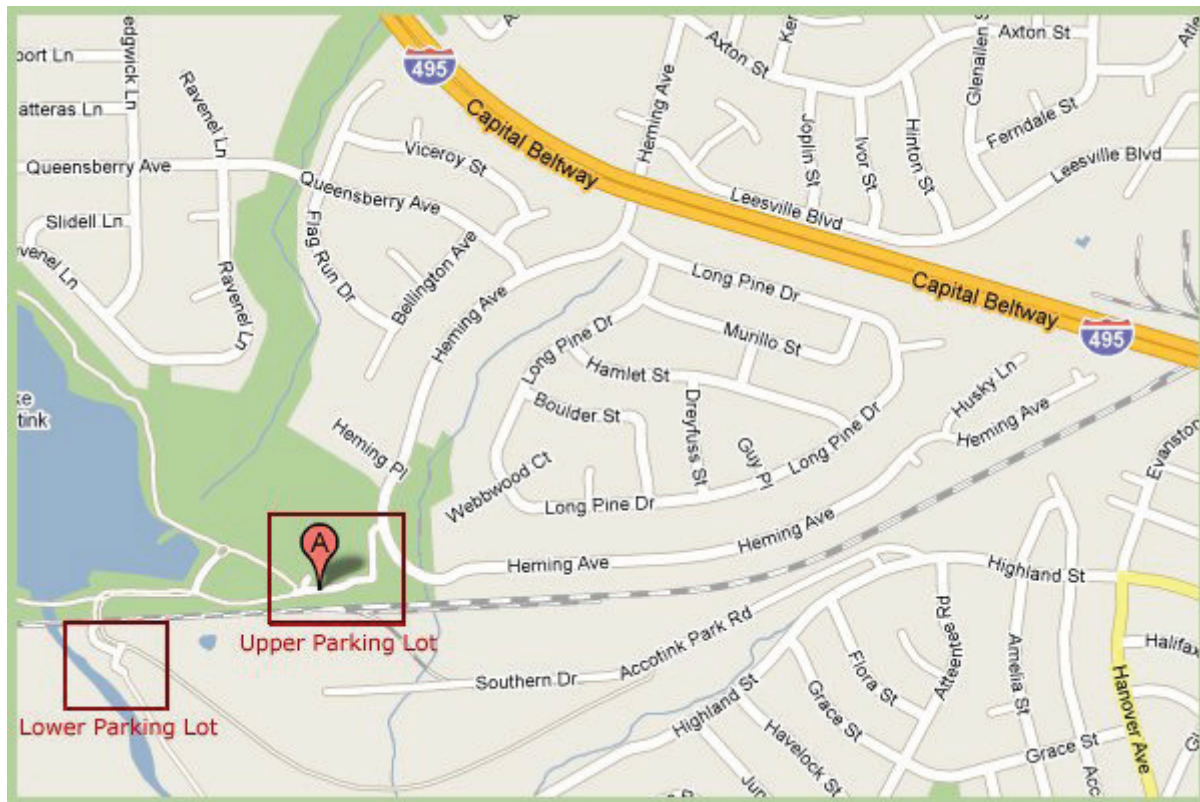
Lake Accotink Park has two main parking lots, one located above the marina near the picnic areas (97 slots/3 handicap slots), and one located below the marina near the dam.

Unfortunately, travel between parking lots within the park is restricted and the train tracks going through the park make traveling between lots from outside the park difficult. For this reason, Event parking and Race Start will both be in the upper parking lot, however competitors are free to use either parking lot since bike and foot traffic is not restricted between locations. Directions to event and alternate parking locations are as follows:

- **Event Parking from Locations North:** Take I-495 South toward Springfield, VA. Take exit 54A to merge onto Braddock Road/VA-620 East. Turn right at Heming Ave and travel 1.3-miles (going under I-495). Turn right into park entrance and upper parking lot.
- **Event Parking from Locations South:** Take I-95 North to I-395 Connector N/I-95 Connector North (signs for I-395 N/I-495 N/Washington/Tysons Corner) and take exit 170B to merge onto I-495 North toward Tysons Corner. Take exit 54A (first exit ramp) to merge onto Braddock Road/VA-620 East. Turn right at Heming Ave and travel 1.3-miles (going under I-495). Turn right into park entrance and upper parking lot.
- **Event Parking from Locations West:** Take I-66 East to Exit 55 for Fairfax County Pkwy/7100 South toward Springfield. Take Braddock Rd/VA-620 exit. Turn Left onto Braddock Rd/VA-620 East. Travel along Braddock Rd/VA-620 East for 8.5-miles. Turn Right at Queensberry Ave. Turn Right at Heming Ave after 1.5-miles. Turn right into park entrance and upper parking lot.

- **Alternate Parking from Locations North:** Take I-495 South toward Springfield, VA. Take exit 54A to merge onto Braddock Road/VA-620 East. Travel along Braddock Road/VA-620 East for 1.7-miles. Turn right at Backlick Rd/VA-617. Travel along Backlick Rd/VA-617 for 1.5-miles. Turn right at Highland Street then take Slight right at Accotink Park Road. Lower Parking Lot on left.
- **Alternate Parking from Locations South:** Take I-95 North to exit 169B VA-644 West/Franconia Rd toward Springfield. Follow VA-644 West for 2.0-miles then Turn Right at Hanover Ave. Turn left at Highland Street after 1.0-mile then take Slight Right at Accotink Park Road. Lower Parking Lot on left.
- **Alternate Parking from Locations West:** Take I-66 East to Exit 55 for Fairfax County Pkwy/7100 South toward Springfield. Take Braddock Rd/VA-620 exit. Turn Left onto Braddock Rd/VA-620 East. Travel along Braddock Rd/VA-620 East for 6.5-miles. Turn Right at Rolling Road. Turn Left at Old Keene Mill Rd after 2.5-miles. Turn left at Hanover Ave after 2.3-miles. Turn left at Highland Street after 1.0-mile then take Slight Right at Accotink Park Road. Lower Parking Lot on left.

Map.03 - Event Parking Locations



**Note: No parking will be available at Wakefield Park. Map provided by Google Maps (www.google.com/maps)*

3.1 Event Breakdown

The Tomahawk Tumble MTB-O Race will use the existing Lake Accotink Park trail network, an excellent venue for organizing Sprint Distance, Middle Distance, and possibly Relay Mountain Bike Orienteering competitions. Note that Middle Distance MTB-O races can only be achieved by linking Lake Accotink Park with Wakefield Park trails to the North.

3.2 Race Courses

Each race course type (Sprint or Middle, in this case) is sub-divided into three (3) distance categories labeled Short, Medium, and Long, designed to provide appropriate course lengths with respect to a racers competition class and/or fitness level. Courses and distance categories to be used for the event are as follows:

Table.01 - Competition Courses

Course/Distance	Course Length miles(kilometers)	# of Controls	Winning Time (min)	Maximum Cycle Time (min)
Sprint (Short)	3.89mi (6.27km)	6	20-25	60
Sprint (Medium)	4.75mi (7.65km)	10	20-30	60
Sprint (Long)	5.60mi (9.00km)	12	20-30	60
Middle (Short)	10.56mi (17.0km)	20	45-60	120

3.3 Competition Classes

The Tomahawk Tumble MTB-O Race will provide for seven MTB-O competition classes based on a competitors age on the event date and selected skill level. These classes are:

- **Expert (M21/W21):** These expert classes are designed for competitors age 21-and-above who desire the most competition possible.
- **Open (M21/W21):** These intermediate classes are designed for competitors ages 21-and-above who desire a moderate level of competition.
- **Beginner (M21/W21):** These beginner classes are designed for competitors ages 21-and-above who are new to the sport.
- **Juniors Expert (M18-20/W18-20):** These junior expert classes includes all competitors between the ages of 18-20 who desire the most competition possible.
- **Junior Open (M18-20/W18-20):** These intermediate classes are designed for competitors between the ages 18 to 20 who desire a moderate level of competition.
- **Junior Beginner (M18-20/W18-20):** These beginner classes are designed for competitors between the ages 18 to 20 who are new to the sport.

- **Junior (M14-17/W14-17):** The junior beginner to intermediate classes are designed for competitors ages of 14-17 who are new to the sport.

3.4 Competition Class Restrictions

Beginner and Junior 14-17 classes will not allowed to race the Middle Distance course. Each of the allowed courses per class is described as follows:

Table.02 - Competition Course Restrictions

Class	Allowed Courses
Expert M21 & Expert Junior M18-20	Middle (Short) or Sprint (Long)
Expert W21 & Expert Junior W18-20	Middle (Short) or Sprint (Long)
Open M21 & Open Junior M18-20	Middle (Short) or Sprint (Long)
Open W21 & Open Junior W18-20	Middle (Short) or Sprint (Long)
Beginner M21 and (beg) Junior M18-20	Sprint (Medium)
Beginner W21 and (beg) Junior W18-20	Sprint (Medium)
Junior M14-17	Sprint (Short) Only
Junior W14-17	Sprint (Short) Only

3.5 Event Schedule

The Race Director will start the first riders at 0900-hours and continue with a Staggered Start (1:00 to 2:00-minute intervals) until all riders are launched or the cut-off time has been reached (whichever comes first). Competitors will have the opportunity to participate in the race up to the cut-off time. The following is the proposed event schedule:

Table.03 - Event Schedule

Event	Start Time	Notes
Race Set-Up	0700 - 0900	Checkpoints/Check-In Set Up
Race Check-In Opens	0800	Staggered Rider Check-In
Race Start (All Distances)	0900	Staggered Rider Starts (2:00-min)
Race Cut-Off (Middle)	1030	Last Rider Launch (Middle Distance)
Race Cut-Off (Sprint)	1100	Last Rider Launch (Sprint Distance)
Race Finish	1200	Account for All Riders In
Race Results	1230	Post Results/Awards
Race Clean Up	1230 - 1300	Course Tear Down/Turn Over

3.6 Race Start Schedule

Each course has an estimated finish time and total cycle time (in minutes) based on test rides, course difficulty, and course length. These times are only an approximation of expected course times and may result in competitors finishing before or after the estimated times. Additionally, course difficulty is expected to increase with distance resulting in an expected clustering of more experienced racers in the longer courses. This should allow race officials to group starts (i.e. allowing more than one competitor to go at a time) depending on class and/or distance. This following is the proposed Tomahawk Tumble MTB-O Race schedule by course:

Table.04 - Race Start Schedule

Course/Distance	Start Type	Start Intervals (min)	Start Times	Finish Times (min)
Middle Distance (Short)	Single/1	1:00 - 2:00 minutes	0900	45:00 - 120:00
Sport Distance (Long)	Single/1	1:00 - 2:00 minutes	0900	20:00 - 60:00
Sprint Distance (Medium)	Group/2-3	1:00 minute	0900	15:00 - 45:00
Sprint Distance (Short)	Group/2-3	1:00 minute	0900	15:00 - 45:00

3.7 Race Results

Each course will have a Male and a Female winner from each class with awards going 3-deep (1st, 2nd, and 3rd places). This following is the proposed award totals by course:

Table.05 - Race Start Schedule

Course/Distance	Expert M/W	Jr Exp M/W	Open M/W	Jr Open M/W	Beg M/W	Junior M/W
Middle Distance (Short)	3/3	3/3	3/3	3/3	NA	NA
Sport Distance (Long)	3/3	3/3	3/3	3/3	NA	NA
Sprint Distance (Medium)	NA	NA	NA	NA	3/3	NA
Sprint Distance (Short)	NA	NA	NA	NA	NA	3/3
Totals	12	12	12	12	6	6

4.1 MTB-O Competition Rules

The Tomahawk Tumble MTB-O Race will use the *2010 USOF MTB-O Orienteering Competition Rules*. In the event that a judgment is required regarding a situation not

covered in this document, the Event Director will use the *2010 IOF MTB Orienteering Competition Rules* as an official supplemental to the MTB-O America rules.

4.2 MTB-O Special Rules

Please read these rules carefully. Failure to follow any of the rules set forth by the Tomahawk Tumble MTB-O Event Staff, QOC, or Fairfax County Park Authority officials, may be grounds for disqualification. The following Special Rules in effect for this event include:

- 4.2.1 - Sportsmanship is expected at all times. Any unsportsmanlike conduct, or reports of abuse to competitors, volunteers, or race officials, may result in disqualification, disciplinary action (if an Orienteering USA or QOC member), or legal action.
- 4.2.2 - Competitors must wear an approved helmet at all times while riding in this event to include warm-up rides, riding to/from their vehicle, and riding up to/from the start/finish line. Any competitor caught riding without a helmet will be subject to disqualification.
- 4.2.3 - This is not a closed course and all event trails will possible include other recreational bikers, hikers and trail runners. These obstacles will most likely create areas of two-way traffic throughout the race. As a precaution, competitors must yield to recreational traffic and travel on the RIGHT side of all roads/trails whenever possible. Any competitor reported to be "running down" recreational traffic may be subject to disqualification.
- 4.2.4 - When passing slower traffic, first request permission to pass then pass on the LEFT of the other rider when safely possible.
- 4.2.5 - Competitors must arrive at all controls/checkpoints on/with their mountain bike. Failure to arrive at a control/checkpoint without a mountain bike will result in immediate disqualification.
- 4.2.6 - Competition e-punch finger sticks should be with the competitor at all times. Competitors are responsible for any lost or stolen e-punch sticks (See Section 5.3 MTB-O Equipment Rental Fees for more information on replacement costs).
- 4.2.7 - Due to potential extremes in seasonal climate (e.g. heat, humidity) water will be available at the start/finish and at at least one of the controls during the event. It is recommended that competitors carry at least one 1-liter (34 ounces) of liquid with them during the race.
- 4.2.8 - It is forbidden to bushwhack, ride off-trail, ride on any restricted trails, ride on any trails/roads not designated on the map, or ride on the train tracks. Any competitor caught riding off-trail will be immediately disqualified.

- 4.2.9 - This is not a Score event. Competitors must visit all of the controls/ checkpoints on the map in numerical order (e.g. 1-2-3-4). Missing a control/ checkpoint or collecting controls/checkpoints in the wrong order will result in a time penalty and/or possible disqualification.
- 4.2.10 - A competitor's time starts only when they have e-punched the Start Control and ends only when they have -punched the Finish Control.
- 4.2.11 - Portable music players (e.g. iPods) and earphones are not permitted.
- 4.2.12 - Cyclocross bikes are allowed to compete in the Open- or Junior-Class competition categories only.

4.3 Required Equipment

The race requires the following equipment:

- 26"- or 29"-wheel Mountain Bike with at least a front suspension system
- CPSC, ANSI, or SNELL certified Bicycling Helmets
- Closed Toe Shoes

4.4 Recommended Equipment

The organizers recommend but does not require the following equipment:

- Compass
- Water via a Hydration System (i.e. Camelback or Water Bottle)
- Mountain Bike Map Holder or Map Carrying Case

5.1 Event Registration (TBD)

The Tomahawk Tumble MTB-O Race will have preregistration via Active.com and will only have "race day registration" if there are still openings (which will be announced on the QOC website). Race day registration will open at 0800-hours on November 13, 2010 and continue until the race cut-off time (1030 for Middle Distance, 1100 for Sprint Distance) or our permit limit is reached.

5.2 Event Registration Fees

The Tomahawk Tumble MTB-O Race entry fee includes a map, a new and exciting course design, professional event management, excellent volunteer support, epunch electronic timing finger stick loans if needed, and timely posting of results. The fees per Category are:

Table.06 - Entry Fees by Category

Category	Member*	Non-Member
Adult (21+)	\$12.00	\$20.00
Junior 18-20	\$10.00	\$16.00
Junior 14-17	\$8.00	\$12.00

**see Appendix B for information about becoming a QOC member*

5.2 Event Optional Fees

There will be extra maps available for competitors who would like to race a second course, or for those who like to race as a group (i.e. a group is defined as the set of people sharing one e-punch and all starting together as a "starting unit"). The following is a listing of optional extra map fees:

Table.07 - Other Fees

Category	Member	Non-Member
New Course Map after 1st Entry Fee	\$4.00/ea.	\$4.00/ea.
Additional Course Map (For Groups) after 1st Entry Fee	\$4.00/ea.	\$4.00/ea.

5.3 Event Equipment Rental Fees

There will be e-Punch and a limited supply of compasses available for rent at this event. Please indicate on the registration form if you will need to borrow either e-punch finger sticks or rent a compass. All competitors must have an e-punch (brought by them or borrowed), while compasses are recommended but optional. The following is a listing of rental fees and replacement costs by Equipment:

Table.08 - Equipment Rental Fees

Equipment	Fee	Replacement Fee (If Lost)
E-Punch Loan	No charge	\$40.00/ea.
Compass Rental	\$1.00/ea.	\$15.00/ea.

6.1 Organizing Committee

The following is a listing of all involved in producing the Tomahawk Tumble MTB-O Race:

- **Organizing Committee**
Event Director: Kyle M. Bondo
- **Controllers and Advisers**
QOC Event Adviser: Greg Lennon
Course Controller: Kyle M. Bondo
- **Planning Organization**
Map MTB-O, Sprint: Greg Lennon & Jon Torrance
Map MTB-O, Middle: Greg Lennon & Jon Torrance
Course Setter, Sprints: Kyle M. Bondo
Course Setter, Middle: Kyle M. Bondo

6.2 Organizing Committee Contact Information

- **Quantico Orienteering Club (QOC)**
Tomahawk Tumble MTB-O Race
QOC Website: <http://qoc.us.orienteering.org/>
Email contact: info@qocweb.org
- Kyle Bondo contact:
- 4969 Tibbitt Lane, Burke, VA 22015
(703) 426-1849
dauntless@MTB-O.us

Appendix A: MTB-O Common Definitions

- Beginner Class - Class for competitors ages 21-and-above new to the MTB-O.
- Checkpoint - location found using a map and compass; synonymous with Control.
- Control -location found using a map and compass; synonymous with Checkpoint.
- Distance - A short-hand unit of measure for MTB-O course length often separated by short, middle, or long.
- Junior Class - Class for competitors ages 14 to 17-year-old new to the MTB-O.
- M20 - Male Category for 18 to 20-year-old competitors.
- M21 - Male Category for 21-year-old (or older) competitors.
- Middle Distance - Mountain Bike Orienteering Race averaging 9 to 12-miles with approximately 12-20 controls.
- MTB-O - Mountain Bike Orienteering.
- Open Class - Intermediate class for competitors ages 21-and-above.
- Sprint Distance - Mountain Bike Orienteering Race averaging 3 to 6-miles with approximately 6-12 controls.
- W20 - Female Category for 18 to 20-year-old competitors.
- W21 - Female Category for 21-year-old (or older) competitors.

Appendix B: QOC Membership

The Quantico Orienteering Club (QOC) will be offering anyone attending the Tomahawk Tumble MTB-O Race the opportunity to become a member. The following is a listing of QOC individual and family membership dues:

Table.B1 - QOC Membership Fees

Membership Type	Fee
Individual Membership Dues (1-Year)*	\$20.00
Family Membership Dues (1-Year)*	\$30.00

**For more information on QOC members, visit <http://www.qoc.orienteering.org>*

QOC is proud to be the regional club representing Orienteering USA, the national governing body for orienteering overseeing all clubs (such as QOC). Information about Orienteering USA can be found online at <http://www.orienteeringusa.org/>. Orienteering USA and all regional clubs are 501c3 nonprofit organizations that welcome your support.