

Updated

January 2011



EASTERN FAT TIRE ASSOCIATION

Member Handbook and Rules of Racing



MISSION STATEMENT

Eastern Fat Tire Association (EFTA) is a non-profit organization of off-road cyclists dedicated to:

- promoting safe, fun and high quality events for both recreational and competitive cyclists
- promoting responsible riding through education.
- and assuring continued regional trail access.

BOARD OF DIRECTORS AND COMMITTEE CHAIRS

President
Denis Laliberte

Competition Chairperson
Denis Laliberte

Vice President
Kurt Johnson

Recreational Rides Chairperson
(open)

Treasurer
Mark Fleischer

Media Director
(open)

Secretary
Randi Whitney

Webmaster
Paul Lemieux

Racer Advocate
Dave Mazalauski

PayDirt Program
Len Earnshaw

Board Members at Large
George Gagnon
Mary Longhofer
Michael Good
Brian Currier

Newsletter
Kelly Von Ruden

Contact Information
EFTA Hotline: (603) 529-3800
Fax: (603) 529-0670
www.efta.com

Memberships/ Administrative Assistant
Sarah Hunewill



OVERVIEW

In January of 1992, a group of long-time New England racers, promoters and enthusiasts set about to change the direction of New England Mountain biking. Instead of a national body focused on elite racers, EFTA would create a new organization for local and regional riders with a diverse agenda including trail access, racing, and recreational riding. Instead of an organization concentrating on ski areas for race venues, EFTA would focus on better utilization of local race venues that had already been established. A new organization that would welcome new formats such as trials, scot trials and enduros. A new organization that promoted consistent high quality events, tracked points to rank riders throughout the season, and had a real system for promoting racers to new categories.

EFTA pioneered the first ever Fun Ride Series format, where riders of all skill levels could ride at their own pace on self-guided courses. It's still the only sanctioned and promoted fun ride series in the country.

In 1993, EFTA created the first race format that allowed sport class riders, both men and women, to be tracked for points directly against expert class riders. This format was called the New England Championship Series (NECS) and is the oldest race series in the region. Nearly two decades old, the series still sets the standard by promoting high quality, laid back riding. And to top it off, at our annual awards banquet, a big end-of-year party celebrates and rewards the best riders in our corner of the world.

GUIDE TO EFTA EVENTS

Cross Country (CC)

Cross Country is an individual or mass start competition which is held on a course comprised of dirt roads, forest or field trails, and unpaved dirt or gravel roads (a minimum amount of paved roads may be required). Types of cross-country events are:

Circuit Race (CR)

A cross-country race held on a continuous course that is raced in laps. Usually as a mass start.

Point to Point (PP)

A mass start race from point A to point B. May be a one lap race.

Enduro (EN)

An individual cross-country race from Point A to Point B. Enduros may also feature staggered starts of approximately 10 riders every minute.



Dual Slalom (DS)

Dual Slalom is an event where two competitors race head to head down two parallel slalom courses. The two courses are as close to identical as possible. The competitor with the best time advances to the next round.

Fun Ride (FR)

Fun Rides are non-competitive events for individuals and/or groups. They are frequently self-guided, with arrowed loops available for all skill levels. Some fun rides utilize the poker run type of event.

Observed Trials (OT)

Observed Trails is an event conducted on an obstacle course which includes natural hazards such as mud, water, rocks, etc., that can have any number of sections. The riders attempt to negotiate each section without putting a foot down. Each touch or dab adds a point to the rider's score. The rider with the lowest score wins.

Scot Trials (SC)

Scot Trials is a trials event over a closed course against the clock. All trials rules are in effect. A time penalty is added to each rider's overall time for every dab. The lowest overall time wins.

Downhill (DH)

Downhill is an individually timed event.

Hill Climb (HC)

Hill Climb is an individually timed event.



EFTA FUN RIDE SERIES

- An **EFTA Fun Ride** is a route-sheeted and/or arrowed trail ride with an optional game of chance thrown in for fun. (At each of a series of checkpoints, riders will receive a chip that will be turned in at the conclusion of the ride. The riders will then draw playing cards, one for each checkpoint reached. The drawn cards are arranged in poker hands with prizes given out based on the best hands). Sometimes prizes are given out by a prize drawing following the event.
- A **Route Sheet** may be used as an aid in following the Fun Ride route. An accurate route sheet should be provided to each entrant. The loops shall be arrowed according to EFTA guidelines. Mileage markers are optional. Route sheets, if used, are to be returned to the promoter at the end of the event. This is done to protect the promoter, especially if the route uses private property and special permission was obtained for use.
- **Checkpoints** (optional) may be located anywhere along the route. The locations of the checkpoints are not to be indicated on the route sheet. A minimum of five checkpoints is required because of the size of a poker hand (the start and finish can be used as checkpoints to reduce the number of remote checkpoints). Each checkpoint shall be obvious and clearly marked to the riders.
- **Entries:** Each participant must submit an entry on a standard entry form which shall be signed as required. In addition, all riders are required to complete and sign a release form for insurance purposes. Tandem teams must complete the required forms for each rider. Entry fees can be charged, but should generally remain between \$4 and \$10. The actual amount is determined by the promoter and is dependent on event costs, prizes, etc.
- **Scoring** will be based on the relative values of poker hands as contained in the latest edition of *Hoyle's Rules of Games*. In scoring, a rider with five cards takes precedence over a rider with only four cards, and so on. Tandem riders shall draw two hands. However, only one poker hand will be used.
- **Awards:** If the promoter includes the optional game of chance, a minimum of five awards for both men and women are required. Additional awards are optional and should depend on level of sponsorship and number of riders per class
- **Rider Rules:** A Fun Ride is a non-competitive event and riders are expected to conduct themselves accordingly. Unsportsmanlike conduct will not be tolerated and is punishable by disqualification. Any rider or riders so implicated may have their names reported to organizers of future events. All riders must wear an approved helmet and bikes must be in good working order



- **Water Stations** should be located somewhere along the route, approximately at the halfway point. This location shall be identified on the route sheet.
- **Sweepers:** The organizers shall sweep the route to ensure that all riders have returned safely, course markers are removed, and all stray trash has been cleaned up.
- **Alternative Fun Rides:** Some Fun Rides will follow a different format in which checkpoints and poker hands are not used. In this case, awards will be done by raffle. The actual format is at the promoter's discretion.



EFTA RULES OF RACING

1.0 Racer License And Classification

- 1.1 A valid EFTA license is required for participation in all basic EFTA sanctioned events, including, but not limited to, time trials, cross-country, dual slalom, trials, scot trials, downhill, hill climb, and fun rides.
- 1.2 A rider must present his/her annual license at registration in order to compete. Alternatively, riders registering may purchase a one-day license.
- 1.3 Class: Each rider is classified according to their actual age. The age class to which a rider belongs is identified on the EFTA license and is based on their age as of December 31st of the current year.

| | | | |
|------------|-------|---------|-------|
| Male: | | Female: | |
| Junior | 12-18 | Junior | 12-18 |
| Senior | 19-29 | Senior | 19-39 |
| Veteran I | 30-39 | Veteran | 40+ |
| Veteran II | 40-49 | | |
| Master | 50+ | | |

EFTA may also give special recognition at each event to Novice ability level "junior-juniors"---those racing in the regular Novice junior age class, but who have a race age of 14 or under.

- 1.4 A race organizer may further divide a class into smaller age groups, if necessary. Organizers are encouraged to conduct races for younger age classes whenever possible.
- 1.5 Category: Each rider is categorized according to ability. The category to which a rider belongs is identified on the EFTA license:

Novice - entry level or first time competitor
Sport - intermediate competitor
Expert - very advanced competitor
- 1.6 If fewer than five riders register for an age class, they may be required to compete in the senior class or that class closest to the senior class.
- 1.7 Women will not be combined with men. Promoters are encouraged to present a prize to at least the first place women if combining is necessary.



- 1.8 Starting procedures for classes are at the discretion of the race official or race director.
- 1.9 Instead of racing in the standard age and category classes, a racer may elect to enter one of the specialty classes that are frequently offered. Those currently include an open male elite, open female elite, open male singlespeed, open female singlespeed, tandem, open clydesdale (clydesdales must weigh-in on race day at + 200 lbs), and open racer/cruiser. Specialty classes being offered may be modified from season to season.

2.0 Category Upgrading

- 2.1 A rider may advance as quickly as he/she wishes. Once you choose to upgrade (self-promote) you will not be permitted to downgrade to a less difficult category. The upgrading of a category will be noted on your EFTA racing license.

3.0 Types of Competition

- 3.1 *Cross Country* is an individual or mass start competition which is held on a circuit course comprised of forest roads, forest or field trails, and unpaved dirt or gravel roads (a minimum amount of paved road may be necessary at times).
- 3.2 *Point to Point* or *Enduro* is an individual or mass start competition held on a course from Point A to point B comprised of a course similar to that stated for cross country.
- 3.3 *Observed Trials* is an event conducted over an obstacle course including natural hazards such as mud, rocks, logs, etc. and can have any number of sections. The riders attempt to negotiate each section without putting down a foot. Each dab (foot or hand) adds a point to the rider's score. The rider with the lowest score wins the event. In case of a tie in the top positions, the following tiebreaker shall be used:

- 3.3.1 The rider with the most cleans.
- 3.3.2 The rider with the most ones, twos, etc.
- 3.3.3 The rider winning a run-off or winning an unused section or re-run.

- 3.3.4 Observed Trials Scoring:
 - First dab 1 point
 - Second dab 2 points
 - Third dab 3 points
 - Fourth dab 3 points
 - Five or more dabs 5 points



| | |
|--|------------|
| 2 dabs at same time | 5 points |
| Leaning handlebar on ground (incidental touching okay) | 1 point |
| Sliding foot on the ground | 3 points |
| Outside section limits with bike | 5 points |
| Section modified by rider | 10 points |
| Losing scorecard | DQ |
| Foul language | DQ |
| Unsportsmanlike conduct | DQ |
| Dabbing outside section limits | 1 point |
| Gate foul | 5 points |
| Pre-riding the section | 100 points |
| Not completing all sections | DQ |
| OK to rest pedal or skid-plate on obstacle for 5 seconds, after that- | 1 point |

3.3.5 Trials Classes:

Stock Bike

Trials/Modified Bike

For all riders on traditional unmodified mountain bikes with a minimum 40" wheelbase, functional rear derailleur with two or more gears, no skid plate, no more than 10 ½" chain wheel clearance and chain rings on one side of bottom bracket only: A typical stock bike section might require a rider to negotiate tight turns on level ground, logs under 8 inches, and hills with questionable traction. Stock bike sections are designed for riders with beginner to sport skill levels and they are to serve as an introduction to the sport

For competitors with modified bikes or bikes designed specifically for trials riding, minimum 20" wheels, brakes on each wheel, propelled by pedal crank system: Trials bike sections can have turns that are tighter than the turning radius of most bikes, 30" logs and/or rocks, with vertical faces, drop-offs, double logs plus all combinations of any type of surface traction. Stock bikes are permitted to compete in this class.

3.3.6 Trials Categories:

- Novice - First time competitor
- Sport - Intermediate level riding ability
- Expert - Highest level of ability

3.3.7 Observed Trials Definitions:

Clean Section - No error or dabs

Course - The entire loop including all sections



Dab - Any contact that provides support for the rider (other than the pedal or skid plate)

Outside the section - Any part of the bike outside the ribbon

Gate foul - Entering the section without the checker's permission

Section - A single segment of the competition. There can be any number of sections in a competition; however there are usually 5 to 10. Riders may start at any section as long as they then continue to complete the sections in order. The right boundary of each section will be marked in red and the left will be in blue.

4.0 Scot Trials

4.1 All trials rules will be in effect.

4.2 Riders will be timed from start to finish

4.3 Any points incurred according to trials rules will be used to calculate a time penalty (i.e. add ten seconds to the rider's overall time for each dab or point incurred). This time penalty will be either five or ten seconds per dab, to be determined by the race director.

4.4 Each rider will be allowed one or two runs, to be determined by the race director.

4.5 The start procedure will be either one rider on the course at a time, or riders will leave at predetermined intervals, to be determined by the race director.

5.0 Equipment Requirements

5.1 Every rider, while on bicycle at each event, shall wear a protective, securely fastened helmet meeting the standards of the American National Standards Institute (ANSI).

5.2 Footgear shall be fully enclosed.

5.3 All bicycles shall have at least two brakes that are in good working order.

5.4 Bar ends and handlebar extensions shall be plugged and shall not have any sharp or jagged edges.

5.5 Eye protection is strongly recommended.



6.0 Racing Regulations

- 6.1 Racers shall complete the entire event, and complete it on the same bicycle upon which the event was begun.
- 6.2 All repairs during the event shall be performed by the individual racer and/or fellow competitors only. No other outside help or assistance is permitted.
- 6.3 All spare parts and tools shall be carried by the participants, while on course. Cannibalizing other bikes or obtaining spare parts from a pit area or the like is not permitted.
- 6.4 Water shall be available to anyone from anyone at any point along the course as long as rider safety is not threatened. The event will provide a neutral water zone for any race exceeding 60 minutes in length. Official water zones must be accessible and publicized before each race.
- 6.5 Racers riding bikes have the right of way over racers walking bikes. When practical, racers walking bikes should stay on the least rideable section of the course when being passed. A racer walking or carrying his/her bike can overtake a racer riding as long as they do not interfere with the other racer's progress.
- 6.6 Lapped riders must yield to leaders. Leaders should verbalize the command "track" when overtaking another. It is the responsibility of the challenging rider to overtake safely. You must yield to the passing rider on the first command.
- 6.7 In the event two racers are vying for position, the leading racer does not have to yield his/her position to the challenger. However, a racer may not bodily interfere, with the intent to impede another racer's progress. Traditional rules of racing apply: the leading racer owns the track.
- 6.8 Shortcutting and/or cutting trail switchbacks shall result in disqualification.
- 6.9 Unsportsmanlike behavior and/or the use of profane language are grounds for warning, relegation, disqualification or recommended membership suspension. The penalty imposed shall be determined by the race official or race director.
- 6.10 All local laws, rules and ordinances shall be observed during the participation in any event.
- 6.11 A racer may be suspended from EFTA for up to two years for damaging or destroying public and/or private property.
- 6.12 Practicing racers may not interfere in any way with racers competing in the event.



- 6.13 The use of electronic music players, radio communication devices, cell phones, and similar items is prohibited for mounted riders at any EFTA sanctioned event. Devices may be used while rider is dismounted and off the direct travel path of fellow competitors. (The preceding prohibition does not apply to usage of routine bicycle computers or GPS systems.)

7.0 Protests

- 7.1 Protests can be made by any registered race participant or EFTA member. The participant shall file the protest in writing with the race official, or the race director in the absence of a race official. The protest period is immediately following the race and up to 15 minutes following the posting of the complete results for his/her class.
- 7.2 An EFTA official (or race director in the absence of an official) will be permitted to make the final decision regarding an occurrence at an event not addressed in the EFTA Handbook. If the race official can not make a suitable decision for a given protest, the Competition Committee will be called to session and their decision will be final.
- 7.3 All result inquires, including placement and class considerations, must be made at the venue during the protest period. Once the protest period is over, results become final.

8.0 Promotions

- 8.1 Promotion Point Criteria - Promotion Points will be awarded at each qualified event (EFTA sanctioned, with 8.0 miles minimum for Novice classes and 12.0 miles minimum for Sport classes) based on the rider's finishing position in his/her ability category. Points will be assigned to the top 15% (rounded off) of the riders in each ability category. The total number of riders in each ability category will be the number who actually appeared at the event and were eligible to start. See Appendix A for promotion point chart.
- 8.2 Promotion Point Results - Promotion point records will be maintained by the EFTA scorekeeper. The event organizer must supply accurate race results to EFTA within 14 days after the event, so promotion point tallies may be calculated.
- 8.3 Promotion to Sport Category - A Novice category rider is promoted to the Sport category when he/she has accumulated 30 promotion points in any one season (based on the calendar year) or 50 points in two or more consecutive seasons (i.e. total for his/her racing career). Promotion points earned in the Novice category do not carry over when promoting to the Sport category.



- 8.4 Promotion to Expert Category - A Sport category rider is promoted to the Expert category when he/she has accumulated 60 promotion points in any one season or 100 points in two or more consecutive seasons, or he/she is the overall winner of an EFTA qualified event (EFTA sanctioned, with 8.0 miles minimum for Novice classes and 12.0 miles minimum for Sport classes)
- 8.5 Open Elite Category - The Elite category is an open class that may be entered at will by those considered at the top of the sport. No promotion points are maintained for eligibility into this category. Previously competing in this category will not preclude the participant from returning to their normal race ability level at future events.
- 8.6 Singlespeed, Tandem, and Open Racer/Touring specialty classes do not earn promotion points. Competing in these classes will not affect any previous promotion points earned in prior events, nor preclude the participant from returning to their normal race ability level at future events.

9.0 Course Markers

Appendix B lists the official EFTA course markers and their designated use. Markers should be installed on the right side of the trail at approximately 3 - 5 feet off the ground, generally with no less than one marker every 1/10th of a mile. Specific markers include start arrow, turn arrow, confirming arrow, danger marker, and wrong way marker.

10.0 Championship Awards

- 10.1 In addition to event awards and promotion points, a successful rider may earn championship points. Championship points are accumulated towards end-of-year awards. Championship points earned in one year are not applicable in any subsequent year. Championship awards shall be financed by a per rider fee charged to the event organizer, and kept in the awards fund by the EFTA treasurer. At the end of each season, the competition committee will determine the number of championship awards to be presented in each class.
- 10.2 Award Definition and Eligibility Rules - Championship awards are based on the riders' finishing positions at EFTA pre-designated "New England Championship Series" events (NECS). Awards will be presented as follows:
1. Class Championships Men: Annual awards will be made to the top riders in the men's junior 12-18, senior 19-29, veteran I 30-39, veteran II 40-49, and master 50+ classes in each of the novice, sport and expert ability categories.



2. Class Championships Women: Annual awards will be made to the top riders in the women's junior 12-18, senior 19-39, and veteran 40+ classes in each of the novice, sport and expert ability categories.
 3. Class Championships for Specialty Classes – EFTA will occasionally offer NECS championship competition for various specialty classes.
 4. Current classes include Male Singlespeed, Female Singlespeed, Clydesdale-Open, and Tandem. Specialty class championships offered may vary from season to season.
 5. Class Championships will be awarded for Open Male Elite and for Open Female Elite. Results in these two classes will not be considered for the Overall Championship competition.
 6. Overall NECS Champions – In addition to NECS points being awarded in the respective classes above, an additional set of overall champion points will be awarded to the fastest 11 finishers overall at each NECS event, in both the women's division and men's division. Participants in all listed classes above are eligible for the additional overall championship point consideration, except for the following classes: elite men, elite women, and tandem.
 7. EFTA events may occasionally offer additional specialty classes. Such classes do not qualify for NECS point consideration, unless so designated by EFTA prior to the start of the season.
 8. A rider must have completed a minimum of 2 NECS events in order to be eligible to receive a year-end Championship Award in their class. This minimum may be revised periodically.
- 10.3 Events Counted Toward Championship Awards - The number of events to be counted for points toward all championships will be set at the Annual Sanction Meeting. This number is the total number of "Championship" events actually held minus a number to be decided each season at the Annual Sanction Meeting. Scores to be counted will be the highest scores, with the lower scores being dropped.
- 10.4 Ties and Tie Breaking for Championship Awards - If there are ties in the final championship point totals at the end of the season, riders will be ranked in the order of their greatest number of highest place finishes, using as many scores as necessary to break the tie. EXAMPLE: At the end of the season two riders are tied for 5th place in the senior class with 740 points. Comparing their scores for the season, both have posted scores for three 2nd place finishes, and two 3rd place finishes. However, rider #1's next best placing is a 5th, while rider #2 has a 4th place recorded. Thus rider #2 wins. Points awarded closest to the finals can also be used as a tiebreaker.



10.5 Championship Points

10.5.1 Class Championship Points Schedule - Points towards all the yearly championships will be awarded to the top ten riders in each class at each championship event. Points will be assigned according to the following table. All ties for championship points will be broken at the event.

CLASS CHAMPIONSHIP POINTS

| | | | |
|-----------------|-----|------------------|-----|
| 1 st | 200 | 6 th | 130 |
| 2 nd | 190 | 7 th | 110 |
| 3 rd | 178 | 8 th | 88 |
| 4 th | 164 | 9 th | 64 |
| 5 th | 148 | 10 th | 38 |

10.5.2 Overall Championship Points Schedule - The top eleven riders overall for men and overall for women will also earn overall championship points, according to the following schedule.

OVERALL CHAMPIONSHIP POINTS

| | | | |
|-----------------|-----|------------------|-----|
| 1 st | 220 | 6 th | 148 |
| 2 nd | 200 | 7 th | 130 |
| 3 rd | 190 | 8 th | 110 |
| 4 th | 178 | 9 th | 88 |
| 5 th | 164 | 10 th | 64 |
| | | 11 th | 38 |

10.6 Points Awarded - To be eligible for championship points, the rider must complete the specified racecourse.

10.7 Championship Points Results - Championship point records will be maintained by EFTA and posted on the website for review throughout the season.

10.8 PayDirt Program Points - For the year 2003 and beyond, championship points may be earned for qualifying trail maintenance. Point qualifications and supporting documentation requirements will be published prior to the start of each season.



11.0 Disclaimer

The rules and regulations (collectively “rules”) contained in this booklet are intended solely to provide for the governance of the EFTA events for which a sanction has been issued and to establish general requirements for the orderly conduct of bicycling events.

All participants in events conducted according to these rules are deemed by their participation to have voluntarily complied with the rules. EFTA makes no express or implied warranty as to safety or guarantee against damage, loss, harm, injury or death to participants, spectators or other as a result of publication of or compliance with these rules.



APPENDIX A

EFTA PROMOTION POINT CHART - Updated October 2006
 Minimum of 3 racers per category to begin assigning points.

Number of racers in Category(Novice Sport, Expert)

| | 30 | 37 | 44 | 50 | 57 | 64 | 70 | 77 | 84 | 90 | 97 | 104 | 110 | 117 | 124 | 130 | 137 | 144 | 150 | 157 | 164 | 170 | 177 | 184 | 190 | 197 | 204 | 210 | 217 | 224 | |
|-------------------|------|----|----|----|----|----|----|----|----|----|----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|-----|
| | 3 to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | to | |
| | 29 | 36 | 43 | 49 | 56 | 63 | 69 | 76 | 83 | 89 | 96 | 103 | 109 | 116 | 123 | 129 | 136 | 143 | 149 | 156 | 163 | 169 | 176 | 183 | 189 | 196 | 203 | 209 | 216 | 223 | 230 |
| Place in Category | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | |
| 1 | 5 | 6 | 8 | 9 | 11 | 12 | 14 | 15 | 16 | 18 | 19 | 21 | 23 | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 2 | 4 | 6 | 7 | 8 | 10 | 12 | 14 | 15 | 16 | 18 | 19 | 21 | 23 | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 3 | 4 | 5 | 6 | 7 | 9 | 11 | 13 | 14 | 15 | 17 | 18 | 20 | 22 | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 4 | 3 | 4 | 5 | 6 | 8 | 10 | 11 | 12 | 12 | 15 | 17 | 19 | 21 | 22 | 23 | 23 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 | 24 |
| 5 | | 3 | 4 | 5 | 7 | 8 | 8 | 11 | 12 | 14 | 15 | 17 | 19 | 20 | 21 | 22 | 22 | 22 | 22 | 22 | 22 | 24 | 24 | 25 | 25 | 25 | 25 | 25 | 25 | 25 | 25 |
| 6 | | | 3 | 4 | 6 | 7 | 8 | 10 | 11 | 13 | 14 | 15 | 17 | 18 | 19 | 19 | 19 | 20 | 21 | 21 | 21 | 21 | 22 | 23 | 23 | 24 | 24 | 25 | 25 | 25 | 25 |
| 7 | | | | 3 | 4 | 6 | 7 | 8 | 10 | 11 | 12 | 14 | 15 | 16 | 18 | 18 | 18 | 19 | 19 | 20 | 20 | 20 | 21 | 21 | 22 | 23 | 23 | 24 | 24 | 25 | 25 |
| 8 | | | | | 3 | 5 | 6 | 7 | 8 | 9 | 11 | 12 | 14 | 14 | 17 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 22 | 22 | 23 | 23 | 23 | 24 | 24 |
| 9 | | | | | | 3 | 4 | 6 | 7 | 8 | 10 | 11 | 13 | 13 | 15 | 16 | 16 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 | 21 | 22 | 22 | 22 | 23 | 23 |
| 10 | | | | | | | 3 | 4 | 6 | 6 | 8 | 9 | 11 | 13 | 14 | 14 | 15 | 16 | 16 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 21 | 21 | 21 | 22 | 22 |
| 11 | | | | | | | | 3 | 4 | 6 | 7 | 8 | 10 | 11 | 13 | 13 | 14 | 15 | 15 | 16 | 16 | 17 | 17 | 18 | 18 | 19 | 20 | 20 | 20 | 21 | 21 |
| 12 | | | | | | | | | 3 | 4 | 7 | 7 | 9 | 10 | 12 | 12 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 | 18 | 18 | 19 | 19 | 20 | 20 |
| 13 | | | | | | | | | | 3 | 5 | 7 | 8 | 10 | 11 | 11 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 | 18 | 18 | 19 | 19 |
| 14 | | | | | | | | | | | 3 | 5 | 7 | 9 | 9 | 10 | 11 | 11 | 12 | 12 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 | 18 | 18 |
| 15 | | | | | | | | | | | | 3 | 5 | 8 | 8 | 9 | 10 | 10 | 11 | 11 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 | 17 | 17 |
| 16 | | | | | | | | | | | | | 3 | 6 | 7 | 8 | 9 | 9 | 10 | 10 | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 | 16 | 16 |
| 17 | | | | | | | | | | | | | | 3 | 5 | 7 | 7 | 7 | 9 | 9 | 10 | 10 | 11 | 12 | 12 | 13 | 13 | 14 | 14 | 15 | 15 |
| 18 | | | | | | | | | | | | | | | 2 | 5 | 6 | 6 | 8 | 8 | 9 | 9 | 10 | 11 | 11 | 12 | 12 | 13 | 13 | 14 | 14 |
| 19 | | | | | | | | | | | | | | | | 2 | 4 | 5 | 6 | 7 | 8 | 8 | 9 | 10 | 10 | 11 | 11 | 12 | 12 | 13 | 13 |
| 20 | | | | | | | | | | | | | | | | | 2 | 4 | 5 | 6 | 7 | 7 | 8 | 8 | 9 | 10 | 10 | 11 | 11 | 12 | 12 |
| 21 | | | | | | | | | | | | | | | | | | 2 | 4 | 5 | 6 | 6 | 7 | 7 | 8 | 8 | 9 | 10 | 10 | 11 | 11 |
| 22 | | | | | | | | | | | | | | | | | | | 2 | 4 | 5 | 5 | 6 | 6 | 7 | 7 | 8 | 9 | 9 | 10 | 10 |
| 23 | | | | | | | | | | | | | | | | | | | | 2 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 8 | 8 | 9 | 10 |
| 24 | | | | | | | | | | | | | | | | | | | | | 1 | 3 | 4 | 4 | 5 | 5 | 6 | 7 | 7 | 9 | 9 |
| 25 | | | | | | | | | | | | | | | | | | | | | | 1 | 3 | 3 | 4 | 4 | 5 | 6 | 6 | 7 | 8 |
| 26 | | | | | | | | | | | | | | | | | | | | | | | 1 | 2 | 3 | 3 | 4 | 4 | 5 | 6 | 7 |
| 27 | | | | | | | | | | | | | | | | | | | | | | | | 1 | 2 | 2 | 3 | 3 | 4 | 5 | 6 |
| 28 | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 2 | 2 | 3 | 4 | 5 |
| 29 | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 2 | 3 | 4 |
| 30 | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 | 2 | 3 |
| 31 | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 2 | 2 |
| 32 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 | 1 |
| 33 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 | 1 |
| 34 | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | | 1 |



APPENDIX B

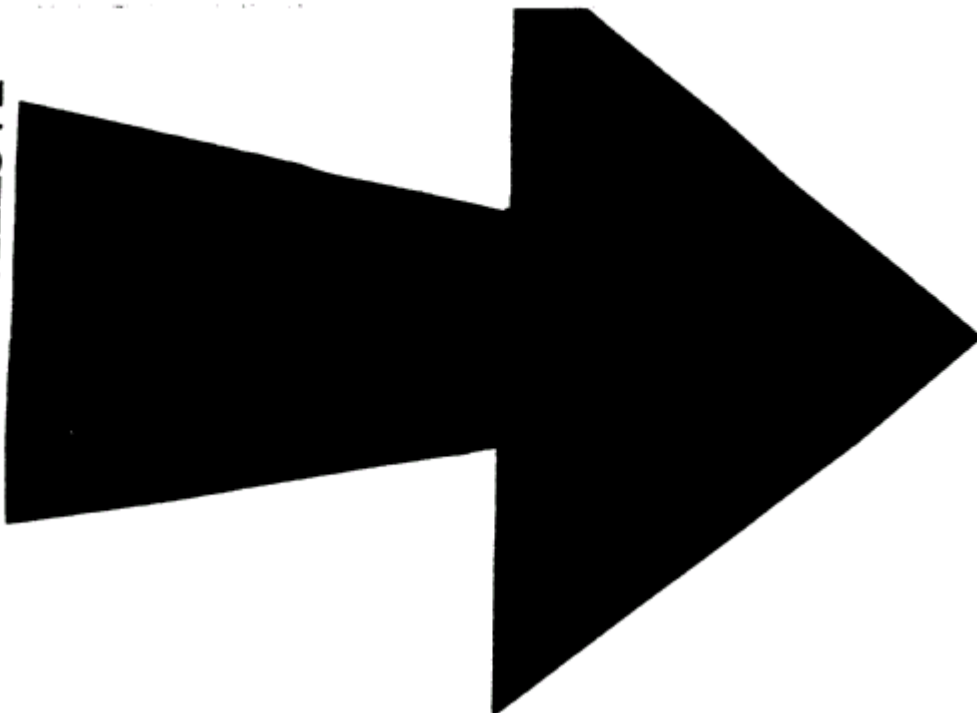
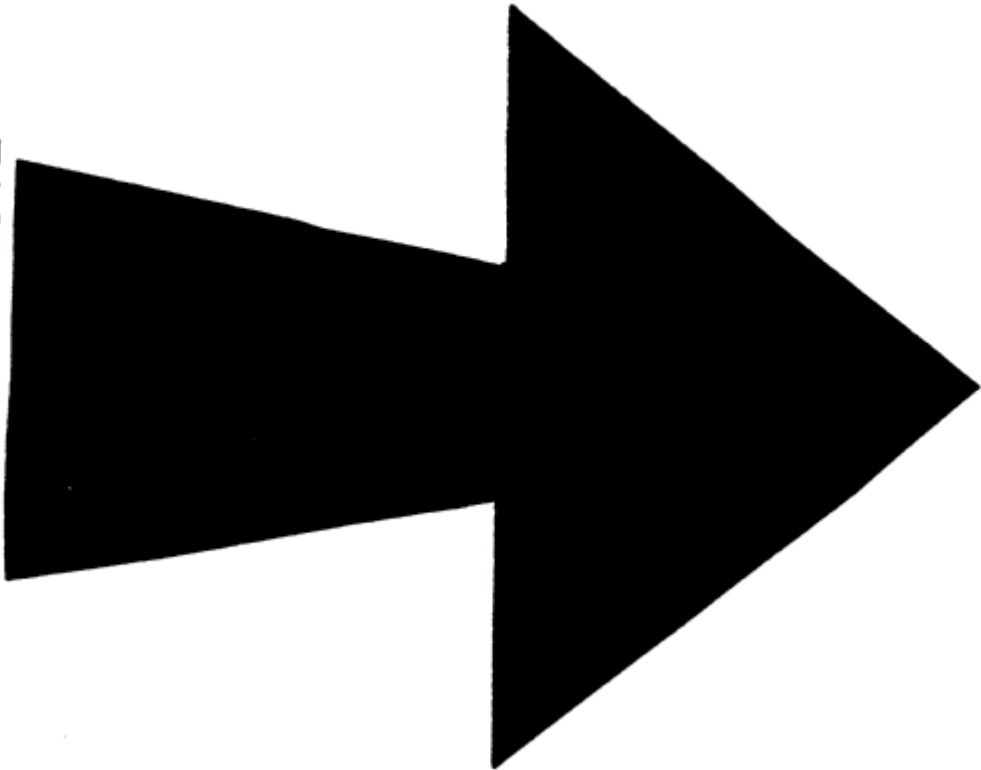


Start Arrow

Single arrow, directing riders to start of event. Arrow should be marked with a large “S” so as not to be confused with a course arrow. Start should be arrowed from a major intersection or landmark near the start of your event.



**APPENDIX B
(continued)**



Turn Arrows

Two arrows place horizontally, pointing in direction of turn. The only situation in which two arrows are used together.



**APPENDIX B
(continued)**



Confirming Arrow

Single vertical arrow shows direction of route. May be tilted to indicate direction of bends in trail. It should be placed approximately 100 ft. following turn arrows and no less than every 1/10th of a mile thereafter.



**APPENDIX B
(continued)**



Danger Marker

Used to warn of dangerous terrain or obstacles ahead. Must be placed enough ahead of a danger point so that even the fastest riders have time to see it and slow down. Up to three markers may be used to indicate the severity of the danger. One marker= caution, two markers= extreme caution, and three markers= stop may be necessary.



**APPENDIX B
(continued)**



Wrong Way Marker

Used to warn riders that they have missed a turn. Must be placed where riders will see them after they have missed the correct turn.