

The background is a solid green color with several white silhouettes of people engaged in outdoor activities. On the left, a person is riding a mountain bike. In the upper center, a person is rappelling down a rope. On the right, a person is rappelling down a rope. The silhouettes are semi-transparent and blend into the green background.

ADVENTURE RACING IN THE FRONT RANGE

Presented by Big Mountain Adventure
www.BigMountainAR.com

Outline

The background of the slide is a dark green color with a silhouette of a person rappelling down a rock face. The person is on the right side of the frame, leaning back and holding a rope. The overall tone is adventurous and outdoorsy.

- Who is Big Mountain Adventure
- Video
- What is Adventure Racing
- What to Expect in Your First Adventure Race
- Team dynamics
- Training for AR
- Navigation
- AR Gear
- What is BMARE?
- Event Calendar
- Q&A Session (Questions throughout ok!)

Who is Big Mountain Adventure?

- Adventure Racing and Sporting Event Company in Colorado Springs
- Also an active AR team
 - Mike
 - Gabi
 - James
 - Chelsea
 - Tony



Adventure Racing Video



What is Adventure Racing

- A combination of 2 or more outdoor endurance sporting disciplines centered on fun, adventure, navigation, and teamwork



What Sports?

Transition Areas Between Sports

Core Disciplines

Trail Running

Fixed Ropes

Mountain Biking

Flatwater Kayaking

Whitewater Kayaking

Climbing / Scrambling

Navigation / Orienteering

Fixed and Low Ropes

Ascending

Slack-lining

Other Elements of Ropes Courses

Rappelling

Tyrolean Traverse

Zip-lining

Other

Whitewater Rafting

In-line skates or scooters

Coasteering

Canoeing

Riverboarding

Special and Teamwork Challenges

Tubing

Canyoneering

Caving

Mountaineering

Swiftwater swimming

Race Length Defined by Time

- ◉ Example distances are given for training purposes
- ◉ The course is secret until racer check-in
 - Prevents unfair advantages of teams discovering the course
- ◉ Navigation/route choices affect distance
- ◉ Short course options... Can skip checkpoints if low on time



AR Race Lengths

◎ *Sprint:*

- 2 to 6 hour race, minimal navigation, occasionally involving games or special tests of agility or cunning.

◎ *12-Hour, 24-Hour, Multi-day:*

- More route choice/navigation, more events, more in-depth

◎ *Expedition:*

- 3 to 11+ days, extensive adventure elements

Unsupported Race

You carry all your equipment or drop of gear in transition areas



Supported Race

Your crew moves your equipment for you and replenishes your supplies



Race Divisions

- ⦿ Usually by team size, sometime age (Master's Division)
- ⦿ Teams and Solos
 - Teams race together, not relay-style
- ⦿ Open and Coed

- ⦿ BMA's Divisions:
 - 3-4 Person Coed (Premiere)
 - 2 Person Open
 - 2 Person Coed
 - Solo Male
 - Solo Female
 - Large Group and Family (4+ open and 5+ coed)

AR Considerations in the Front Range



AR Considerations in the Front Range

- Some things to consider taking along... arm warmers, light waterproof jacket, bottoms to zip pants
- Flatwater or Whitewater Paddling
 - Stay Warm!
 - Wetsuits if in water



Splash Jackets in wind



- Awesome Ropes Venues in Colorado (if can get access)

WHAT TO EXPECT IN YOUR FIRST AR

Pre Race Preparations

- **Mandatory Gear List**
 - Know your gear
- **Pre-race Announcements and Hints**
 - Train in similar terrain
 - Study area maps before hand



What to Expect...

Racer Check In

- Race design finally disclosed
- Pre-race meeting
- Rules are important
 - No motorized travel
 - No GPS
 - No outside assistance except at designated transition areas
 - Must carry all mandatory gear
- Intentional ambiguity



What to Expect...

Prior to Race Start

- Checkpoint Plotting
- Team Strategizing
- Pack/Repack Gear
 - Mandatory Gear Check
 - Proper Function Gear Check
 - Plan Food/Drink



What to Expect...

Go!!!

- **Mass Start vs. Stagger Start**
- **During Race**
 - **Highly Competitive vs. "Enjoying the Scenery" folks**
 - **Everyone messes up**
 - **Keep Fueling!**



What to Expect...

Finish!

- **Post Race Party/Meeting**
 - Family and friends at finish line
 - Waiting at finish for race to conclude (if fast)
 - Stash comfort clothes @ finish if possible
 - Prizes/Awards, Raffle
 - Fatigue, Food, Fun!



Team Dynamics

How to choose racing partners:

- ⦿ **Gut feeling**
- ⦿ **Similar goals or you will work against each other. Do you want to win, have fun, or have fun winning?**
- ⦿ **Matched physically, mentally, and emotionally.**
- ⦿ **Be honest with yourself and the other person.**
- ⦿ **Willingness to work together.**
- ⦿ **It could take years or happen sooner than you think.**



Team Dynamics

Teammate roles:

● Captain

Good Teams are well managed, but great teams are well led! In any problematic situation, a first class leader will be able to guide a team in the right direction. Great leaders have the objectivity and poise to maneuver through a minefield of human emotions, thoughts, and feelings that affect a team's dynamic.

● Navigator

- Keeps the team heading in the right direction.
- Very difficult and stressful job to perform.



Team Dynamics

Teammate roles, **continued**:

- Food and water nag:
 - Periodically reminds the team to eat and drink.
- Pace Counter:
 - Responsible for keeping track of distance traveled.
 - 100 meters equals 109.4 yards.
 - Determine how many paces/steps it takes for you to walk/run 100 meters on flat ground, uphill and downhill.



Team Dynamics

Teammate roles, continued:

- Mule:

- Helps a bonking/injured/slower teammate



- All of these roles will and should be assumed by everyone on the team at some point in time throughout a racing season. You should even take the time to practice each role while you train.

Team Dynamics

How to help your teammates

- ⦿ Towing (bike and run)
- ⦿ Carrying packs
- ⦿ Watching out for your teammate's physical and mental state.
- ⦿ Assuming their team role if necessary
- ⦿ Help navigator by making sure he or she is eating etc.



Team Synergy

- Synergy happens when the sum of the group exceeds the sum of its parts.
 - An adventure racing team that develops synergy moves faster and makes better decisions than the individual athletes could alone.



Team Synergy

The background of the slide is a dark green color with a faint, semi-transparent image of a team of rowers in a boat. The rowers are in various stages of their stroke, and the boat is moving forward. The overall tone is professional and focused.

◎ More powerful synergy by synchronizing your motivation, mental energy, and emotional states:

- Agree to and support the team's goals
- Be highly motivated to perform
- Be physically and emotionally prepared for the challenge
- Be willing to relinquish ego
- Put the team ahead of him or herself
- Be able to put aside personal differences and suppress emotional outbursts.
- Focus all of his or her energy on moving forward
- See problems as challenges waiting to be solved
- See mistakes as an opportunity to learn, not to blame
- Want to develop synergy

Training for Adventure Racing



◎ Distance Training

- Training the whole distance is not important as you'd think
 - Pros train as little as 9 hours per week
 - “The longer the race... the slower you go.”
 - Team Nike in Primal Quest
 - Know your abilities
- ## ◎ Go the distance of your race in training?
- Not as important as hill and interval training
 - Not as important as sustained differing VO2MAX modalities

Biking Training

Mountain Biking

- Interval training
- Practice towing
- Ride some single-track, get used to obstacles
 - Easy on the front break
 - Get your weight back on your seat
 - Loose in the elbows to absorb shock



Running Training

Trail Running

- Hill repeats
- Tempo runs
- Run **THROUGH** the apexes of hills
- Run single-track
 - Get used to obstacles
 - Keep your toes up, especially when tired



Training Nutrition

○ Pre-Race Nutrition

- To carbo-load, or not to carbo-load?
- <http://www.roy-stevenson.com/adventure-racing.html> says yes.
 - 3-4 days prior to race
 - 60-70% carb diet

○ Nutrition

- Needs will vary with temperature
- Generally between 280-420 calories/hr.
- Mix of solids and liquids
- Practice!

○ Hydration: 1 liter per hour should be the goal in high temps.

○ Electrolytes: NUUN 30 minutes. Electrolyte-load??



Psychological Aspects



Psychological Toughness

- You CAN finish, even if it means going slower or altering the course
- Taking the next step:
 - Prepare for some pain... things will hurt
 - Hike 14ers, paddle for miles, etc.
 - Find your limit, then go harder
 - Discover the weaknesses in the team
 - Not knowing weaknesses can slow down the team
 - Don't be a pansy, but we all are at some point
 - Be merciful with yourself and your team

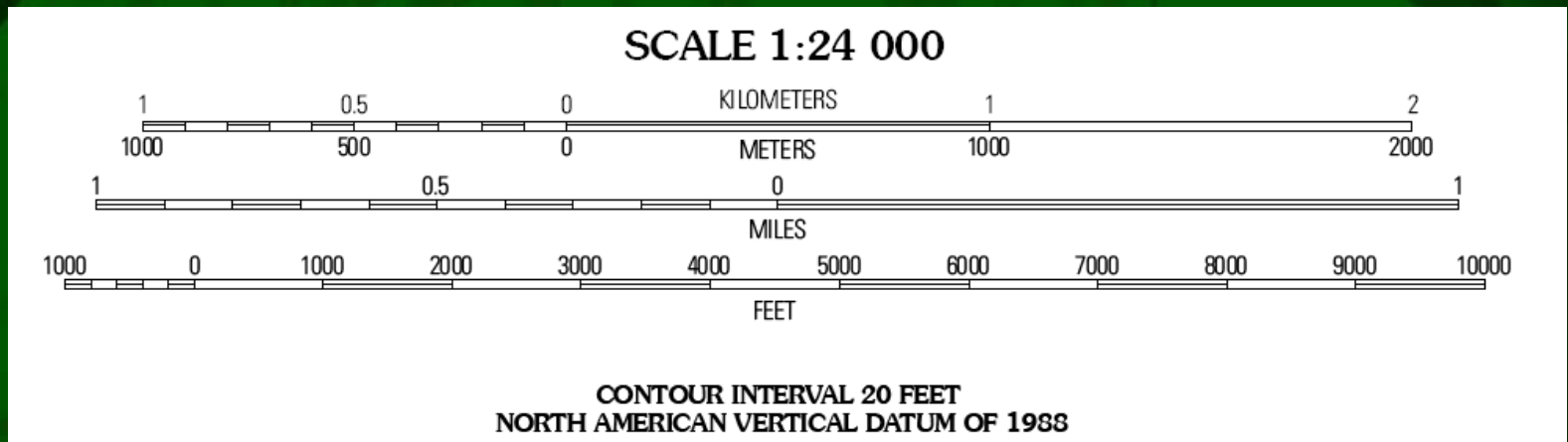
Navigation

- ◎ Navigation in some form is in every Adventure Race
 - Route selection
 - Finding checkpoints (orienteering)
- ◎ Two most common styles
 - Point-to-Point
 - Rogaine
- ◎ Missed Point Penalties
 - Time penalties
 - Ranked below other teams
 - DNF

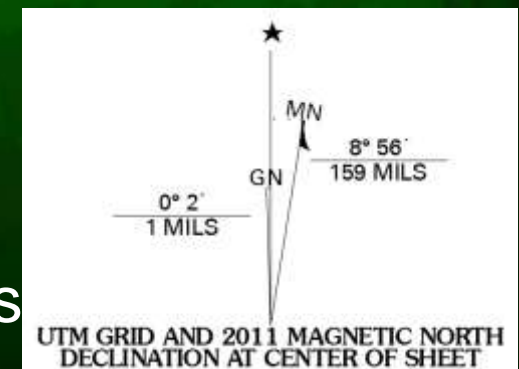


Reading Topo Maps

- Date Published (how old?)
- Map Legend
- Scale and Counter Interval

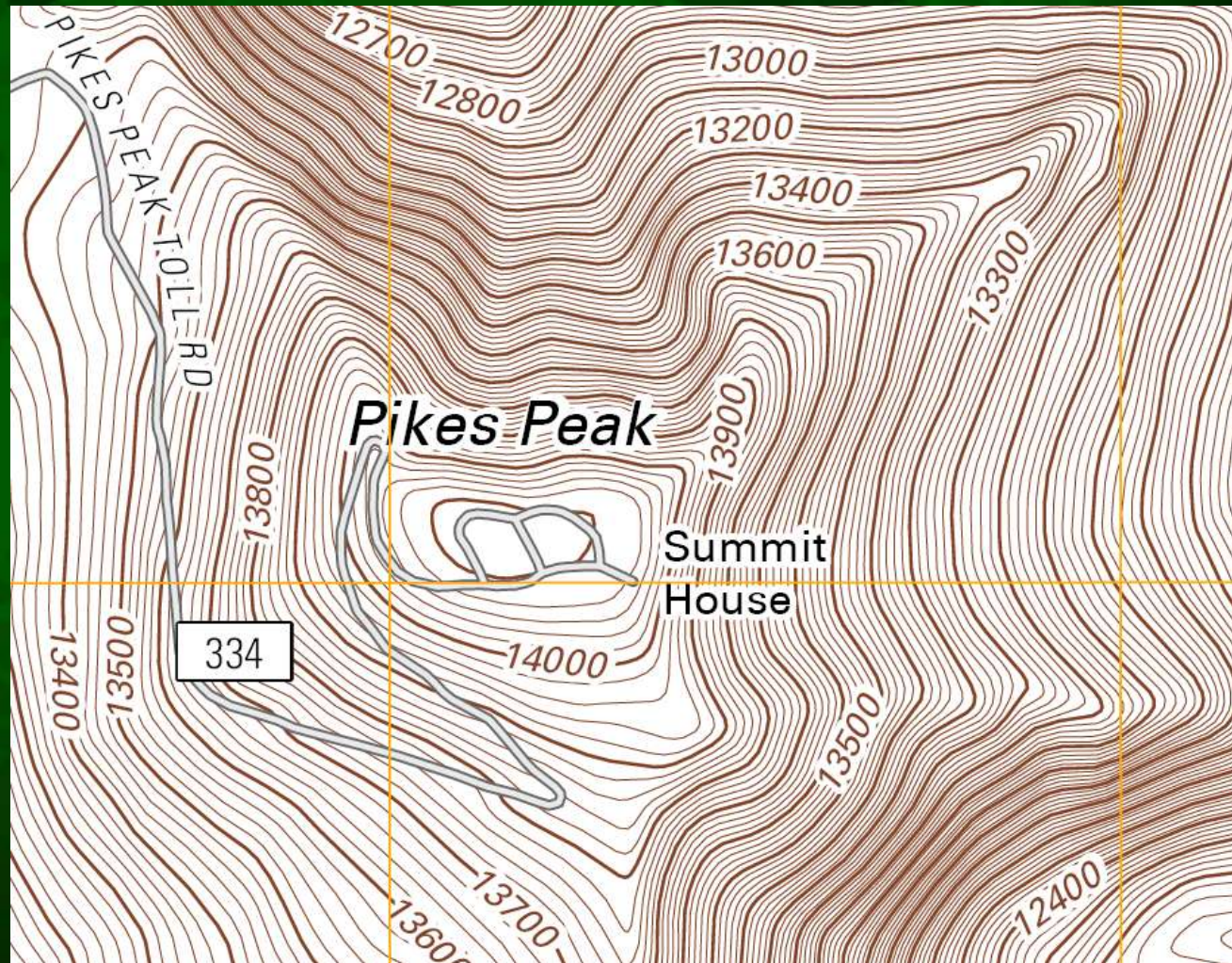


- True North and Magnetic North
More on this later!!
- Vertical black lines are true north lines



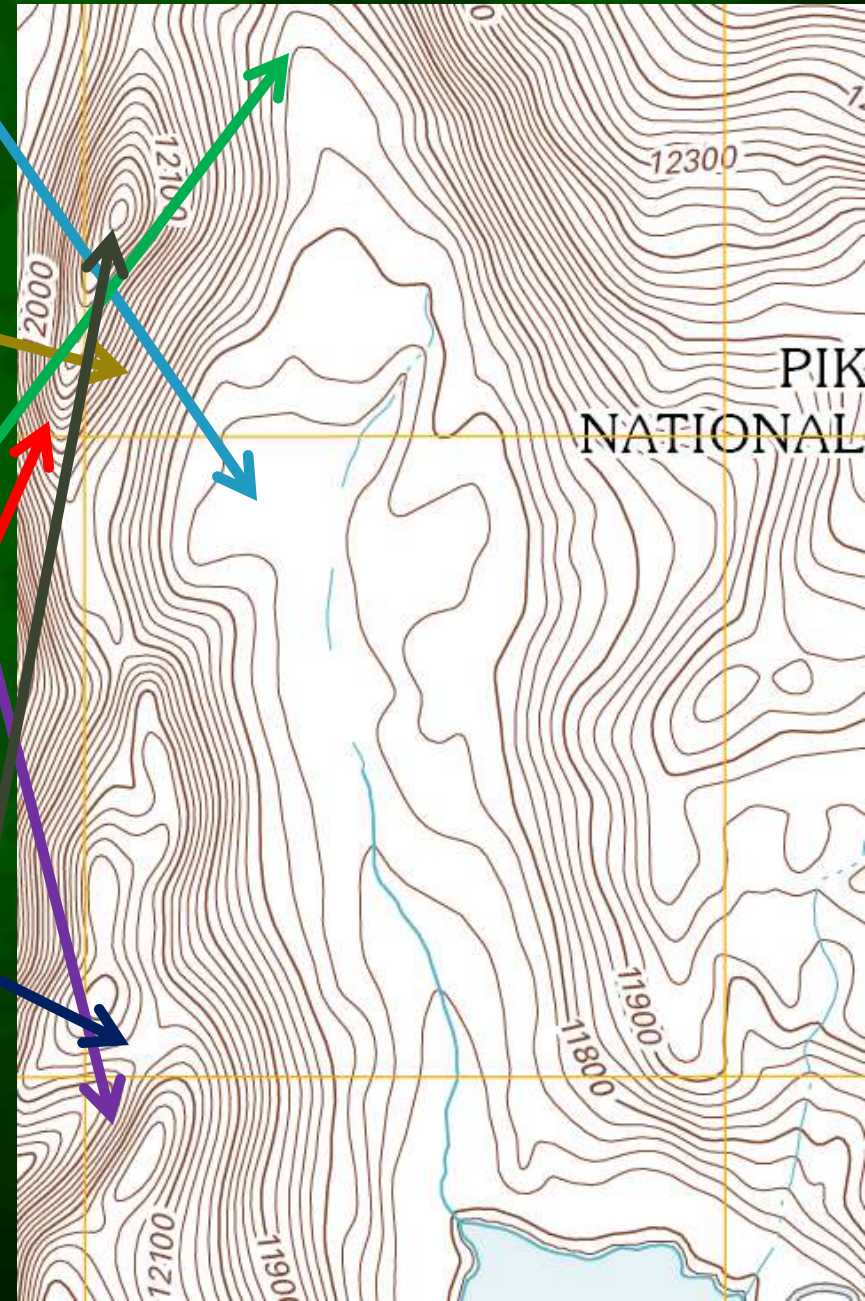
Contours

- Contour Lines:
Areas of same elevation
- Index Lines:
Display the elevation



Major Contour Features

- **Flat area / Gentle terrain**
 - contour lines are very far apart, or non-existent
- **Steep terrain**
 - contour lines are closely spaced
- **Cliffs**
 - contour lines are very close to one another
- **Ridges/spurs**
 - contour lines point downhill in the shape of U's for gentle/rounded ridges, or V's if steep
- **Valleys, re-entrants**
 - contour lines point uphill in the shape of U's for gentle terrain, or V's if steep
- **Saddles/passess/cols**
 - contour lines create a hourglass shape, on a low spot on a ridge
- **Peaks/summits**
 - contour lines creating a series of rings, the innermost ring, or the highest, indicates the summit



Colors on a Map

- ◎ **Red:** major roads, land survey lines, & urban areas
- ◎ **Blue:** water sources
- ◎ **Green:** vegetation
- ◎ **Brown:** contour lines & elevations
- ◎ **Black:** man-made features, *e.g., trails, (minor) roads, structures,*
- ◎ **White:** can be most anything other than water or trees; *e.g., rocky,*

What features can we find?



Orienteering Maps

- Much more detail than most generic topo maps, usually accounts for magnetic declination***

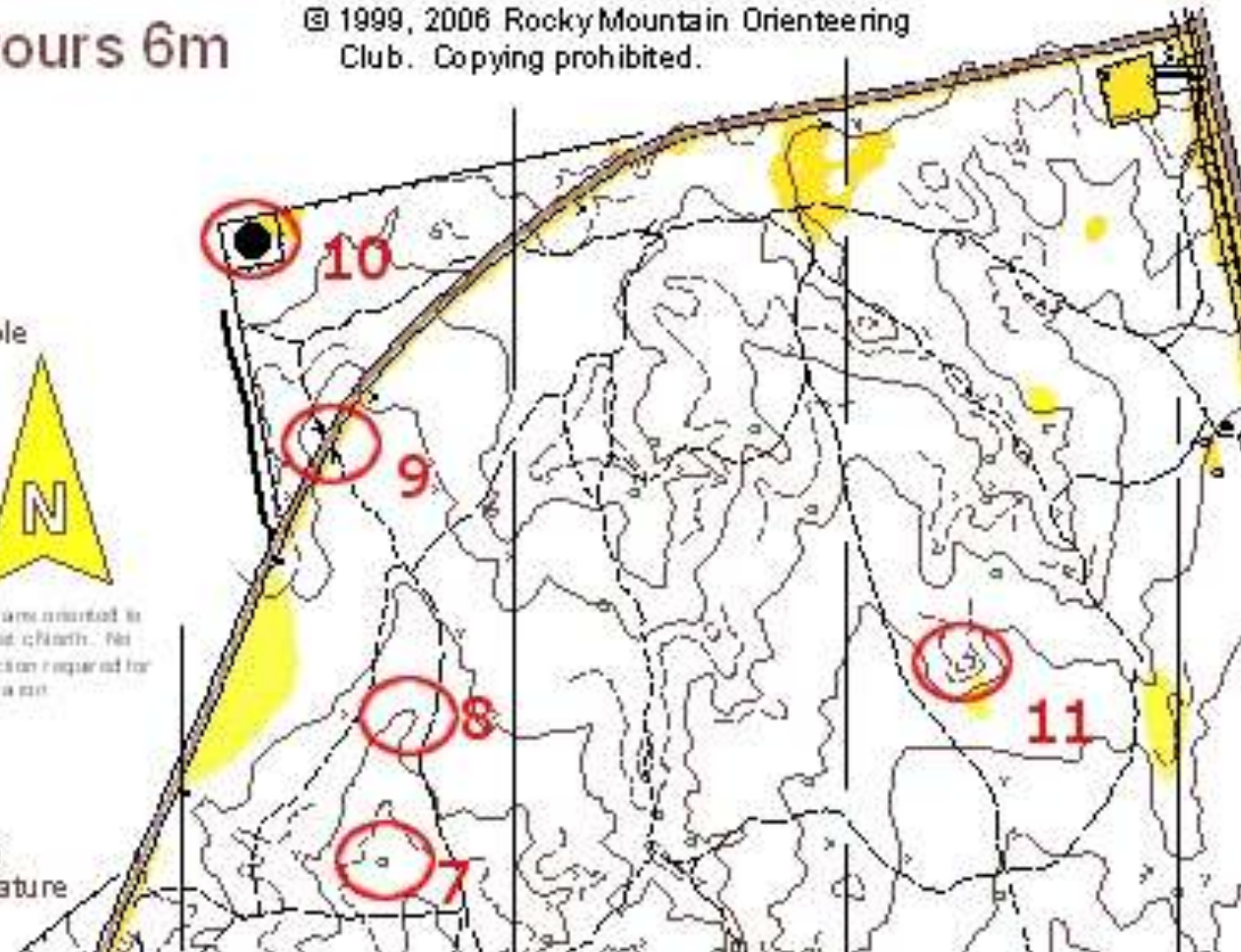
Fox Run Black Forest, CO
scale 1:7500 contours 6m

© 1999, 2006 Rocky Mountain Orienteering Club. Copying prohibited.

- paved road, tunnel
- dirt road, parking
- large footpath
- small footpath
- indistinct path
- fence: crossable/uncrossable
- buildings
- contours (6 m)
- form lines
- knolls
- depression, pit
- dry ditch
- steep bank
- lake
- rootstock, stump
- open land, semi-open
- slow run
- private (keep out!)
- faucet, other water feature
- picnic table, man-made feature
- ride



North arrow oriented to magnetic north. No correction required for declination.



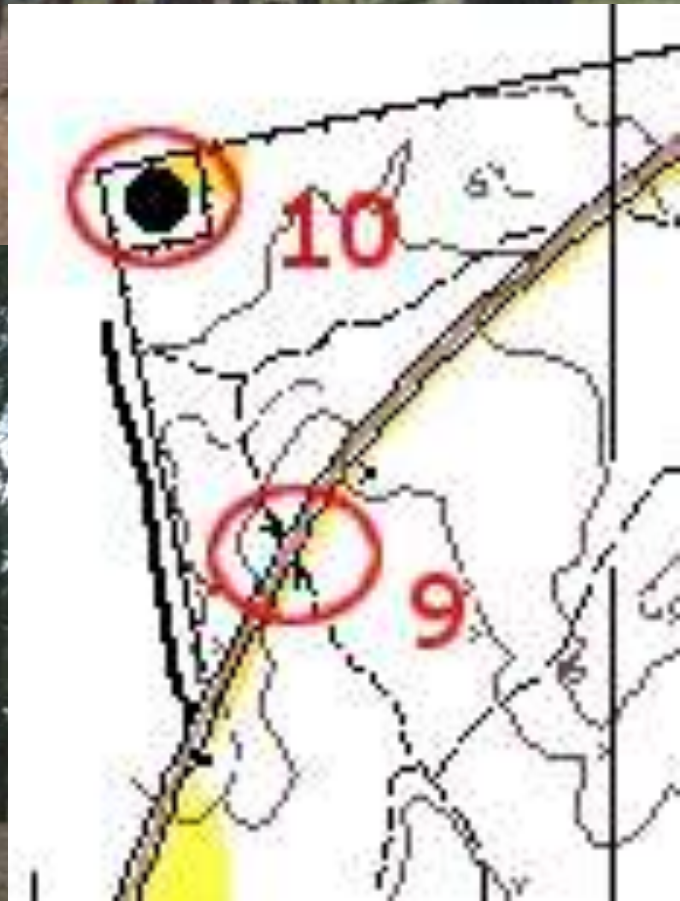
CP5



CP8

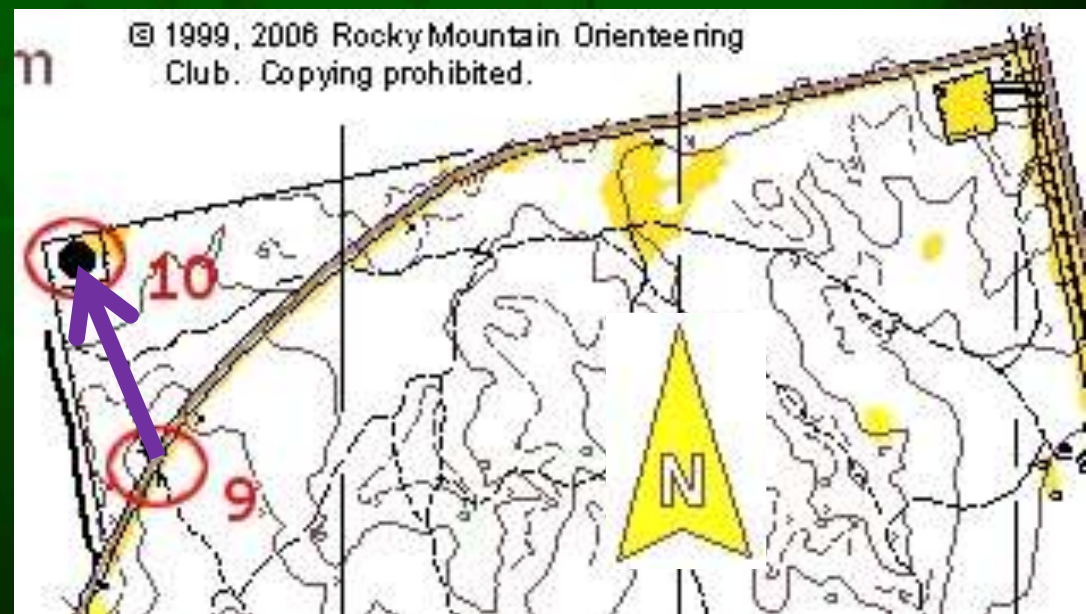


CP9&10



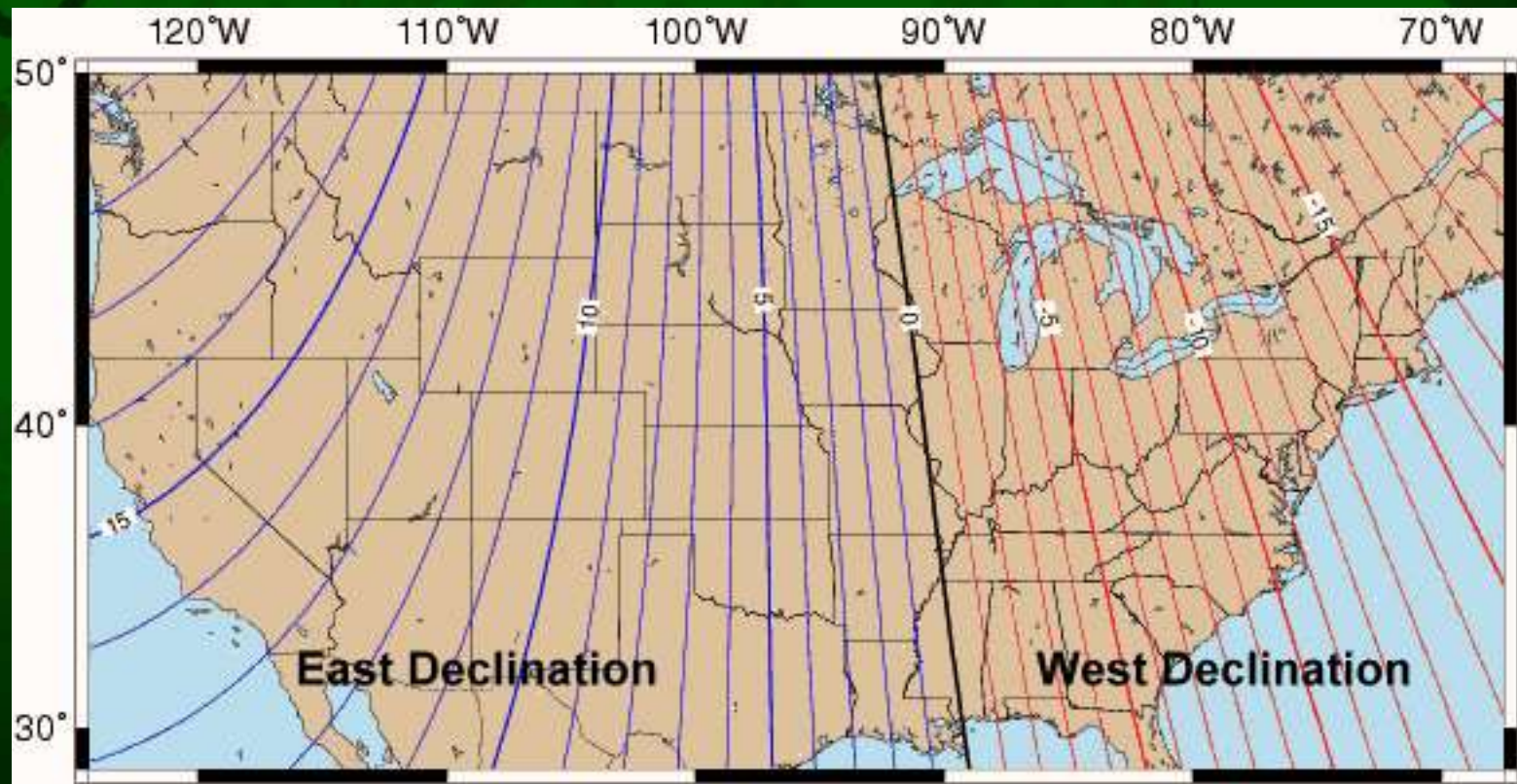
Compass

- Points to Magnetic North***
- Used to orient the map to the land and you to the map
- Bearings:
 - Used to precisely tell you in which direction to travel to reach a feature on a map
- Triangulation:
 - Using angles between landmarks in life and on the map to determine your location on the map



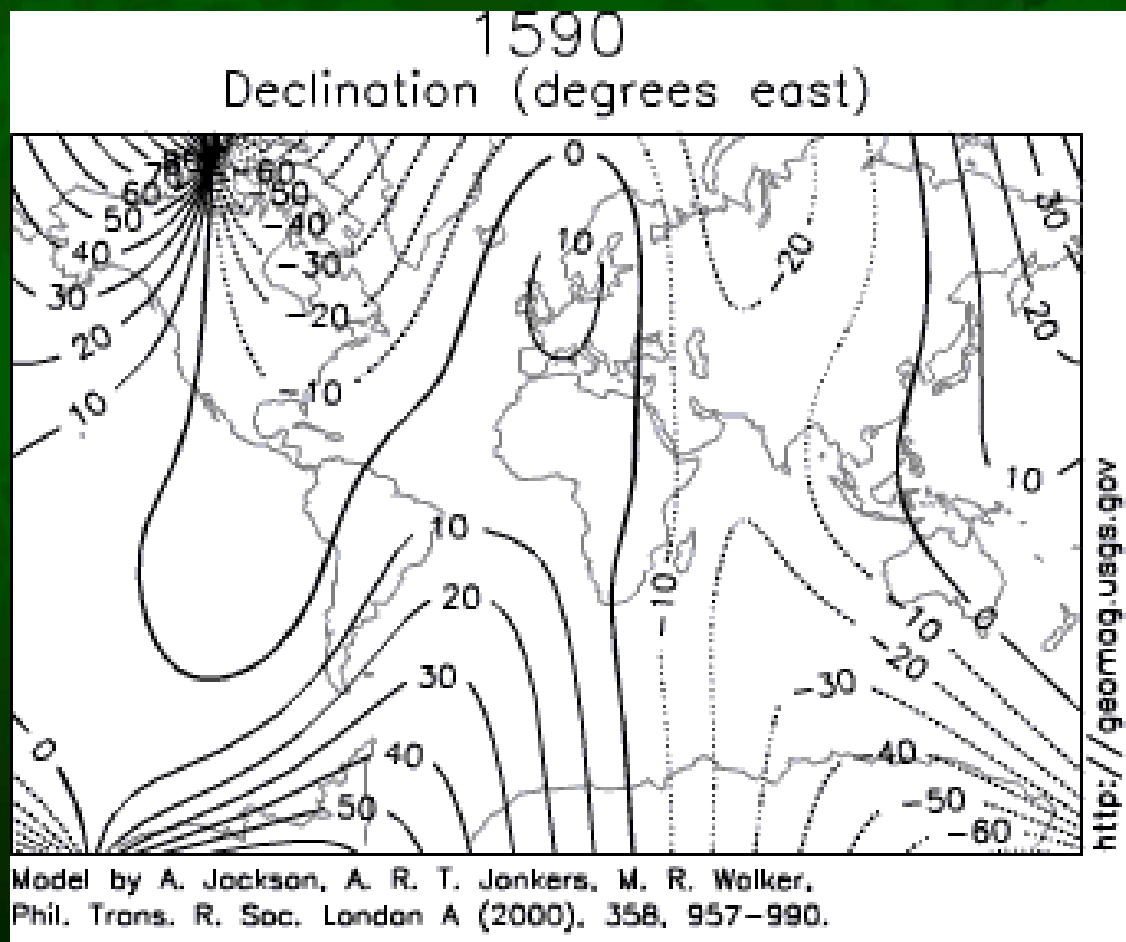
Magnetic Declination

- Changes from year to year
- West of the Mississippi River, magnetic north points slightly east (about 9 degrees here)



Changing Magnetic Declination

- Video of magnetic field changes from 1590 through 1990



Navigation

The background of the slide is a solid green color. On the left side, there is a faint, semi-transparent silhouette of a person riding a bicycle. On the right side, there is a faint, semi-transparent silhouette of a person climbing a rope, likely a rock climber or rappeller.

- ◉ Contact us if you would like to register for a race but need more navigation help
 - BMAR@BigMountainAR.com

Navigation Resources

- Download Topo Maps for Reading Practice
[store.usgs.gov/b2c_usgs/usgs/maplocator/\(xcm=r3standardp
itrex_prd&layout=6_1_61_75&uiarea=2&ctype=areaDetails&
carearea=\\$ROOT\)/.do](http://store.usgs.gov/b2c_usgs/usgs/maplocator/(xcm=r3standardp
itrex_prd&layout=6_1_61_75&uiarea=2&ctype=areaDetails&
carearea=$ROOT)/.do)
- How to use UTM Coordinates
www.maptools.com/UsingUTM/
- Rocky Mountain Orienteering Club
www.rmoc.org/
http://www.rmoc.org/component/option,com_weblinks/catid,20/Itemid,23/
- International Orienteering Federation Control Descriptions
orienteering.org/wp-content/uploads/2010/12/IOF-Control-Descriptions-2004.pdf
- International Orienteering Federation Resources
orienteering.org/resources/
- Colorado Front Range Groupies Resources
www.coloradofrog.com/skills/

Gear Needed for AR

Mandatory Gear Personal Equipment

- ⦿ Mountain Bike and Helmet
- ⦿ Spare Inner Tube
- ⦿ Biking Gloves (usually needed for ropes rather than biking)
- ⦿ Climbing Harness - UIAA Approved
- ⦿ Locking Carabiners
- ⦿ Belay Device (ATC or Figure 8)
- ⦿ Hydration System (2 liters minimum)
- ⦿ Emergency Blanket



Gear Needed for AR

Mandatory Team Equipment

- ⦿ Compass
- ⦿ Bike Tire Inflation system (pump, CO2)
- ⦿ Bike Repair Tool
- ⦿ First Aid Kit
- ⦿ One fully charged cell phone in a waterproof enclosure (zip bag ok)



Gear Needed for AR

◉ Recommended Equipment

- Backpack to hold all gear for the race
- Knife
- Cool Weather Sport Performance Clothing (no cotton!)
- Water Resistant Jacket
- Beanie
- Whistle
- Waterproof Map Case
- Waterproof bags or zip-lock bags for sensitive gear or clothing

◉ Unique Gear Needs

◉ Gear Questions?



What is BMARE?

- Big Mountain Adventure Racing for the Environment
- Trash pick-up and creative trash display challenges –fun prizes!
- Help keep our trails and local community beautiful!!



SOLE



BMA Event Calendar

The background of the slide is a dark green color. On the right side, there is a silhouette of a person rappelling down a rock face. On the left side, there is a silhouette of a bicycle.

● Adventure Races

- April 23rd, 2011

- Rock2Rock Sprint Race

- July 16th, 2011

- Rampart RAGE 6 & 12hr Race

- September 17th, 2011

- The Big Mountain Adventure 6 & 12 hr Race

BMA Event Calendar

Other Events

- **May 28th, 2010**

- **BMARE Mt. Herman Road Cleanup and AR training**

- **Other clinics TBD**

Q&A

- ◎ Link to this presentation, join our mailing list!
www.BigMountainAR.com
- ◎ Register for a BMA Event
www.bigmountainar.com/register.php
- ◎ Join the Front Range Outdoor Groupies
www.ColoradoFROG.com
http://sports.dir.groups.yahoo.com/group/Colorado_FROG/
- ◎ Join Pikes Peak Sports Adventure Racing Group
www.pikespeaksports.us/group/adventure