TRAINING PLAN SATURDAY, MAY 20, 2023 EAGER HILLS / DOUBLE DUCK

PARKING @ Fraggle Rock. Google Map link: https://goo.gl/maps/UATjtArAniLJGfGJA
Take HWY 95 EAST out of Cranbrook. Take the 2nd Left ~600m down the road.
PORTA-POTTIES: only in parking area

Meet @ parking lot:
9:00 am - Advanced
9:30 am - Adv-short + Intermediate

Day plan:
10-12 → AM Training
12- 2 → Lunch
2 - 4 → PM Training

We are NOT returning to the parking area for lunch, bring everything you need for the day with you.

INTERMEDIATE: 600M WALK TO THE START. ADVANCED: 2 OPTIONS FOR AM TRAINING SESSION:

ADVANCED	ADVANCED – SHORT
Walk to start: Route 1 - 2.6 km / 95 m climb or Route 2 - 3.4 km / 60 m climb Walk to lunch area: 1.9 km / 35 m climb	(Advanced version of Intermediate exercises) Shorter walk to start: 700 m / 50 m climb Ends at lunch area

AM – CONTOUR TRAINING (10 AM – 12 PM)

ADVANCED: DOGBONES

Training focus: Fine contour interpretation for navigation & contour simplification for route choice.
Instructions:

- Controls are connected in pairs. When you go to a control you must then go to the control it is connected to.
- Simplify the contours in your mind to help you choose a route to get all the controls.
- You may skip a number of pairs based on your speed.
- Some controls are not connected by a straight line. These are mini Line-Os. Follow the route marked by the line to the next control.

Map: contours-only. Most vegetation and trails have been removed. Dark green and major tracks are still on the map for safety.

ADVANCED SHORT: ACTIVITY 1 - LINE-O COURSE

Training focus: Practice fine contour interpretation.
Instructions:

- Follow walk/run the route marked by the line on the map
- To increase difficulty pick up your pace.
- Shortcut options

Contours-only Map: most vegetation is removed, trails are dimmed. Trails along the "line" are Dark Green.

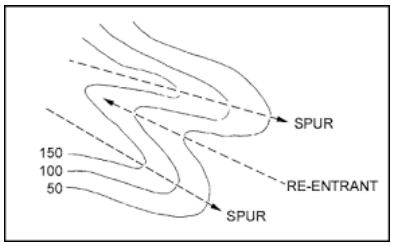
INTERMEDIATE: ACTIVITY 1: LINE-O COURSE

Training focus: To understand linear contour features and practice using them as handrails.
To add to your mental library of terrain features.

- Series of Re-entrants (valleys) & spurs
- Side-hilling (following a contour)

Map: Contours only, most vegetation is removed, trails are dimmed to light gray, rock features remain
Controls: marked with FLAGGING TAPE, no flags.
Instructions:

- Follow the dashed line along a linear contour feature to the next control
- On alternating controls follow the trail
- One leg has a harder route and an easier route to choose from



ADVANCED SHORT & INTERMEDIATE ACTIVITY 2: TRAIL DRAW

Training focus: To practice translating terrain elevation and shape observed in the real world to contour shape on the map

Controls: marked with FLAGGING TAPE, no flags.
Map: Contours-only for the first half of the course, regular map for the 2nd half.
Instructions:

- All controls are on trails but the portion of trail between controls has been removed from the map
- Walk the trail to the next control and observe the terrain around you. Every so often stop and draw in the trail on the map where you think it went. Compare your line with the master map.
- On some legs the trail is not removed. This is to give you a mental break; run/walk to the next control.
- To increase difficulty: Run the trail and draw it in at the next control.

3 levels of difficulty:

- INTERMEDIATE -Portions of the trail remain at the beginning/end of legs and sometimes in between controls on long legs
- INTERMEDIATE-HARD -Smaller portions of the trail remain at the beginning/end of legs
- ADVANCED -No portion of the trail remains on the map

SOLUTION: If you get stuck or want to check your work, flip over your map for a map of the trail.

LUNCH

12:00 – 2:00 PM

Meet at central lake area (too far to return to parking area)

ALL GROUPS: Map Draw

- Optional activity to be done at your leisure
- Take some pencil crayons, walk around the area blanked out area on the map and drawn in your interpretation
- Compare your map with the original
- Look at all the different maps created by your teammates. Map making is a combination of science and art. Everyone will come up with a different interpretation of the terrain.

2 levels of difficulty:

- ADVANCED: area is blank, create the whole map
- INTERMEDIATE HARD area has contours & green vegetation, draw in:
  - clearings, cliffs, boulders, boulder clusters, rocky ground, and knolls
- iNTERMEDIATE area has contours and vegetation, draw in:
  cliffs, boulders, boulder clusters, knolls

Skills practiced:

Translate observed terrain into map features

Method: Observe terrain → Simplify terrain into map features → Locate your position on the map → sketch map → Move, direction of Travel? → Restart cycle. You may have to revise previous sketches.

PM – RELOCATION TRAINING

2:00 – 4:00 PM

ALL GROUPS: PAIRED RELOCATION EXERCISE

Instructions:

- Find a partner with a similar skill level and speed
- 1 person will get Map A, the other Map B
- Person A navigates to their control #1
  - Person B puts their map away and follows Person A
- You arrive at the control (#1-A)
  - Person A puts their map away
  - Person B gets their map out
  - Person B relocates and navigates to their control #1
  - Person A follows

- You arrive at the control (#1-B)
    - Person B puts their map away
    - Person A gets their map out
    - Person A relocates and navigates to their control #2
    - Person B follows
- You arrive at the control (#2-A)
    - Person A puts their map away
    - Person B gets their map out
    - Person B relocates and navigates to their control #2
    - Person A follows
- … and repeats until the finish

INTERMEDIATE

2 Loops

Intermediate Relocation steps:

1. Stop, admit you lost contact with the map
2. Move towards large prominent features
3. Move uphill rather than down to view more terrain
4. Match terrain features you are most confident at identifying with the map
5. Review prominent features that you passed before losing contact with the map
6. Consider possible routes from your last know point on the map (where could you have made an error away from your planned route?)
7. Retrace your step to the last known point if it is close by
8. Take a compass bearing and bail to a prominent linear feature (trail, fence, stream, etc)

**Know where you are? Confirm your location with 2 other nearby features.

**Once you've found your location on the map you do not need to continue to the next step.

Common relocation pitfalls:

- Not admitting you're lost, morphing what you see to make it fit the map
- Hoping you'll find where you are on the map if you just keep going forwards
    - The margin of error increases as you go further into the unknown
    - The area of possible locations gets bigger
- Standing still for a long time trying to match what you see with the map
    - If you move, even a few meters, you get a new perspective and a better mental maps of your location
- Wandering aimlessly without looking at your map hoping to find something you recognize
    - Keep comparing what you see with the map as you move around
    - Keep an eye on your compass, don't walk around in circles

ADVANCED

2 different Loops with different focuses

Southern Loop: General Relocation

This loop tries to simulate the following scenario:

- An error was made halfway along the leg
- You are far from control in the wrong area

- Relocate to figure out your general location using large prominent features

Advanced General Relocation Techniques:

- Stop, admit you are not in your intended area of the map
- Re-orient your map even if you think it is right (an upside down map is a very common mistake even at the advanced level)
- Move towards large notable features
- Move uphill rather than down to view more terrain
- Visualize the general terrain type of the area you are in, does it match any areas on the map? (ie. large general slope/ cliffy area/ flat with small features/ open area, etc)
- Consider routes and distance from your last known location
- Have you figured out the general area you are in?
    - Yes → Start moving towards the area you want to be in, head in a direction of a catching feature you are sure to meet
    - No? → Use intermediate relocation strategies
    - Still No? → Bail to a prominent linear feature

Northern Loop: Fine Relocation

This loop tries to simulate the following scenario:

- An error was made close to the control in a feature heavy area
- You are in the right area but not in contact with the map
- Relocate using prominent, unique features without leaving the area

Advanced Fine-Relocation techniques:

1. Stop
2. Visualize a mental map of the terrain in more detail than you would normally
3. Consider routes you took thinking about what you recently passed
4. If this is taking more than ~15 seconds move onto the next step
5. Move towards unique features
6. Move uphill rather than down to view more terrain
7. Create a mental map of the terrain you've covered while relocating with those prominent features, can you confidently match it to the map?
8. No → Keep moving, find different types of prominent features (rock, veg, contour, etc)
9. Yes → Confirm location with 1-2 other nearby features.

The better you become at visualizing the terrain around you the faster you will be able to relocate.

CONTOUR SKILLS TRAINING SUPPLEMENT

Intermediate contour skills practiced in the Line-O:

Following a contour: walking along a slope at a consistent elevation ("side-hilling"). This will help you navigate between features but is not too reliable as it is easy to drift up or down as you travel. Doing this in training helps you understand how the shape of a contour translates to terrain shape.

Identify linear contour features and experience many examples of each. This will help you to become familiar with them and be able to identify them in many different terrain types in the future. The features you experienced will be added to your mental terrain library which will help you visualize similar features and predict what the terrain will look like before you arrive.

Linear contour features can be followed to navigate confidently through the forest.

Contour features to identify as handrails:

- A linear series of reentrants (valleys)
- A linear series of spurs
- Depressions with re-entrants and spurs leading up out of them.

Intermediate contour skills practiced in the Map Draw:

Translate observed terrain into contours you expect to see on the map.

Without the help of a trail, locate your present location on the map using the contours features around you. Determine the path you took through these contours.

Method: Observe terrain → Simplify terrain into map features → Locate features on the map → Direction of travel?

Observe the terrain. Visualize in your head what the map would look like, where does it match your map? Find the feature you just passed on the map, where did you cross it? What is your direction of travel? What do you expect to be able to see next?

Advanced strategies for contour reading:

Fine contour interpretation: Visualize the terrain elevation shape well ahead of where you are. Have the route in your mind. Map contact (when you visually confirm features in the terrain) updates your visualization. Advanced visualization goes beyond the next unique feature you are using for map contact. Your metal picture will have finer detail close to the control and key corridors along your route that you don't want to miss (ex. You want hit the saddle between 2 large hills).

Contour simplification: In order to choose the optimum control order in this session your visualization of the overall area will be more simplified. Pick out the highest and lowest areas. Separate the map into general areas of like terrain. Are there areas with continuous slopes? Rolling hills? Small elevation range with many contour features? Uncrossable features? Areas to avoid?

To improve your orienteering time you want to narrow the gap between your pure running race speed and your navigation race speed. Organizing and managing different zones of visualization in your mind at specific parts of the course will help you do this. During training sessions play with the timing of the different visualizations you do throughout the course to find what works best with you.

Examples:

- Are you one leg ahead with your route choice, two?
- It's the 2nd leg of a Long distance race, are you already aware of the longest legs? When do you choose a general route for that leg? Do you refine and visualize your routes for upcoming legs when opportunities arise?
- Are you checking off every contour feature on the map as you pass them in the terrain? Could you ignore some of those features and generalize your visualization at certain points of a leg? This could free up brain space to be able to look ahead in the course.

The more you train the more you add to your personal terrain library. The larger the library the better you can predict what the terrain will look like before you get there. When the general contour shape of a new map is similar to a map you have previously been on it can help you predict the new terrain.

Elite strategies for contour reading:

Personalize your techniques based on your strengths and weaknesses. If you have excellent spatial thinking and can visualize the terrain easily, take shorter riskier routes and rely more on your ability to do micro-relocations on fine contour features quickly as you move through the terrain.

Do you talk to yourself while orienteering?

Reduce your inner verbal monologue. Most people are faster at visual processing than verbal processing. Talking to yourself adds an extra step and requires information to be translated twice (pictorial → verbal → visual), this decreases the accuracy of your mental terrain models.

Try decreasing the amount of words you say to yourself, then create one-word queues for yourself and eventually move to a solely-visual monologue. Efficient map reading eliminates the verbal monologue. The goal is to get to a point where you can look at the map and translate it directly to visual terrain models in your head. These terrain models will only have the important features you've picked out for efficient navigation. Skipping the verbal step also frees up head space to concentrate on other tasks

While orienteering there are 2 types of visualization you will do. Mental maps and a mental 3D terrain models. Your Mental maps will be a simplified version of the map with only the information you have selected as useful for navigating. The mental 3D terrain model is your prediction of what the terrain will look like when you arrive using multiple sources of information: your mental library of terrain, the map, past experiences, etc. Fine contour navigation training in feature heavy terrain will help improve your ability to efficient mental maps.

You are at an elite level of contour reading when you are confident in your ability to quickly create reliable terrain models in your head and use them for efficient navigation. If you find you are creating your visualizations as you arrive to an area this means you are running faster than your ability to navigate. The goal is to be so efficient at visualization that your course time is only limited by your athletic fitness.