

# **VIU Forest Orientation**

## *a.k.a. Lost in the Woods*

### **OBJECTIVE**

To develop proficiency using an air photo and a map for field navigation. A secondary objective is to re-enforce traversing skills.

### **OVERVIEW**

#### **Preparation**

- Determine orientation and scale of air photo
- Determine bearing and distances between assigned locations and fill-in sheet provided
- Transfer assigned locations to the map (optional)

#### **Field**

- Orient yourself with air photo and map for navigating in the woods
- Traverse and record field notes as you move between assigned locations
- Record the code word from each location

#### **Office**

- Plot the traverse
- Add additional detail and map data as needed

### **MATERIALS**

#### **Field:**

- 1:10,000 map
- Aerial photo PIM 91-C-003-30 – scale & orientation to be determined
- 50m chain
- Silva Compass
- Clinometer (Suunto)
- Paper ribbon
- Field notebook and note paper
- Proper field gear (boots, raingear, hard hat)

#### **Office:**

- Protractor (Douglas Protractor preferred)
- Ruler (triangular scale rule or post scale)
- Calculator

## PROCEDURE

### **Preparation**

1. Confirm the location of your assigned photo points.
2. Individually determine orientation (i.e. locate north) and scale of your photo.
3. Individually determine the bearings and distances between each photo point as per the assigned sequence (refer to Crew Assignments). Confirm with Instructor (1 person per group).

### **Field**

#### Notes:

- Required: appropriate field gear, compass, chain, clinometers note paper.
  - Bearings between locations do not follow trails or roads between photo points – be prepared to traverse through the bush.
  - Alternate responsibilities/tasks during the lab (i.e. everyone takes turns taking notes, using the compass, etc.)
  - Crew members must always be within eye sight of each other.
1. **Sign-in with the Instructor** – provide name, license plate of vehicle and “time in”. This is a required safety check. **Failure to do so will result in a zero grade for this lab.** Sign-in sheet will be located on the windshield of the Instructor’s vehicle.
  2. Orient yourself with the photo, map and “the real world”. At all times know your precise location on the photo and map.
  3. Each crew will proceed to their first photo point and commence traversing from there.
  4. At each photo point, you will find a ribbon that will have a key word written on it. Record the word and corresponding photo point number, but leave the ribbon as other crews may be assigned to the same spot.
  5. Record station, bearing, slope distance, and slope % on your field card. On the B page, map key features, such as roads, trails and creeks, as you traverse.
  6. **Sign-out with Instructor** upon completion of your traverse by entering the “time out”. Again, this is a required safety check. **Failure to do so will result in a zero grade for this lab.**

### **Drafting Assignment (to be done individually)**

1. Plot the traverse (HD not SD) in ink at a scale of 1: 1,5000 or 2,000 or 2,500 (whichever best fills a 8.5” x 11” sheet of paper). You may wish to plot it first lightly in pencil and then “ink over” your traverse route. Label the photo points with the code word obtained from the field, also plot any features encountered during the traverse (e.g. roads, trails etc.). Be sure the map has all the necessary map components (e.g. Title, name, etc.). Neatness will count in marking.

## Safety Tips for *Lost in the Woods*

- The first obvious tip is to drive safely to the field site
- Be sure to sign-in and sign-out with Instructor
- Always know where you are on the photo/map
  - always know your route back to the road (vehicle)
- Be aware of the time and be back no later than "quitting time" - even if you have not completed the route
- Always stay in sight of crew members
  - if you do get ~~lost~~ disoriented, simply stop and call out to others
- Take care when walking in the woods
  - Do not walk on fallen logs
  - Watch for "eye hazards"
  - Watch for overhead hazards, i.e. dead snags - (sigh ...) and guys, no macho contests of knocking them over
- If a crew member gets hurt (sprained ankle)
  - other crew members can walk the individual out, or
  - one crew member stays with individual and other gets help
    - call out to neighbouring crew or find Instructor

# Orienteering Exercise

Crew # \_\_\_\_\_

Name: \_\_\_\_\_

Assigned Location #	Estimated Bearing	Estimated Distance
<b>8<sup>th</sup> location:</b>		
<b>7<sup>th</sup> location:</b>		
<b>6<sup>th</sup> location:</b>		
<b>5<sup>th</sup> location:</b>		
<b>4<sup>th</sup> location:</b>		
<b>3<sup>rd</sup> location:</b>		
<b>2<sup>nd</sup> location:</b>		
<b>1st location:</b>		

No.	Feature
21	Fd 9" - short spur rd
22	Fd 18" dbh
23	Fd vet - reserve patch
24	Pl vet 18" - swamp
25	Fd vet 44"
26	Fd sapling - end overgrown spur
27	Dr - swamp/old rd
28	Fd 9" - short spur rd
29	Pl sapling - rd intersctn
30	Fd 14"
31	Dr 12" - forked
32	Fd sapling - trail intersctn
33	Fd 12"
34	Pl sapling
35	Fd vet
36	Dr 9"
37	small Hw
38	small willow
39	Fd 16"
40	Fd vet 32"
41	Fd 18"
42	Fd vet
45	big Fd vet
46	Fd 16"
47	Fd 14"
48	Fd vet - 25"
49	Fd snag - trail close to crk
50	Fd 18" - opening along trail
51a	Fd 14"
51b	Fd vet 27"
52	Fd vet
53	Fd vet
54	Fd vet
56	Fd 14"
57	Pl 13" sweep
58	Fd vet 24"
59	Fd vet 24"
60	Fd 18"
60	Fd 18"
61	leaning Fd sapling
61	Fd 18"
62	Fd vet 34"

- 63 2 Fd vets
- 64 Cw 25"
- 65 Fd 20" near gate
- 66 Fd sapling - intersection
- 67 ocean spray shrub (photo?)
- 69 Fd 26"
- 70 large Fd 56"
- 71
- 72 Fd 30"
- 73 Big Fd, below trail
- 74 Big Fd (56") – edge of gully
- 75 Big Fd (45") – scar on tree
- 76

Note:

**Fd (56")** means Douglas-fir that is 56" diameter at breast height

**Vet** means an older tree (i.e. verteran)