

GEOG Field School Traversing Basics

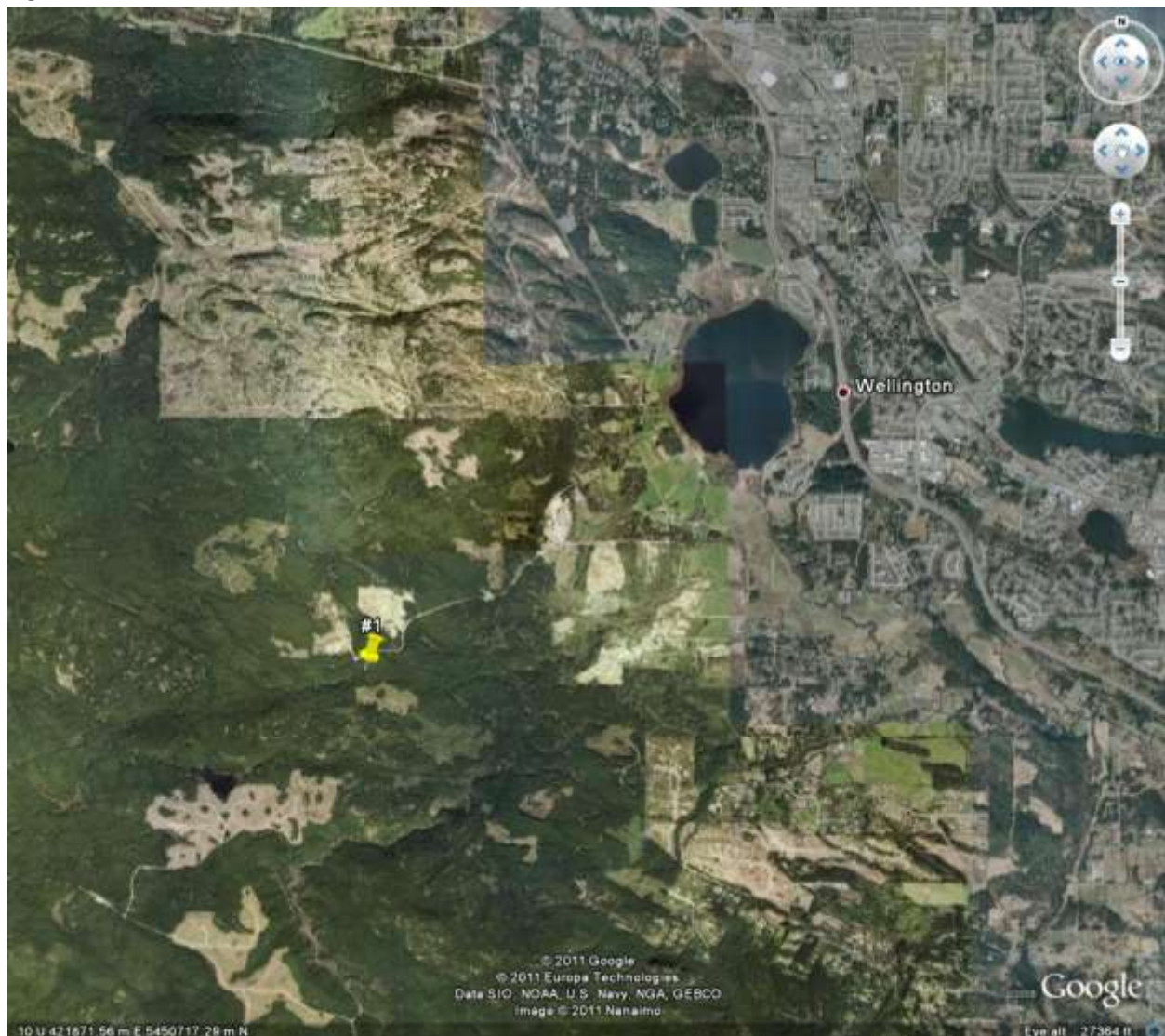
Who's the bald guy at the front: **Doug Corrin**

Why should I listen to him: **Gain proficiency in traversing & plotting**

The Plan for the day:

- Lecture:
 - Review of Traversing & Plotting
 - “Reading the Ground” – ecosystem typing
- Field: Traverse a “closed loop” – end of Dumont Road, just past *the Wastelands Moto-X* (see Figure 1)
- Office: Plot the traverse – location to be determined

Figure 1: Field Location



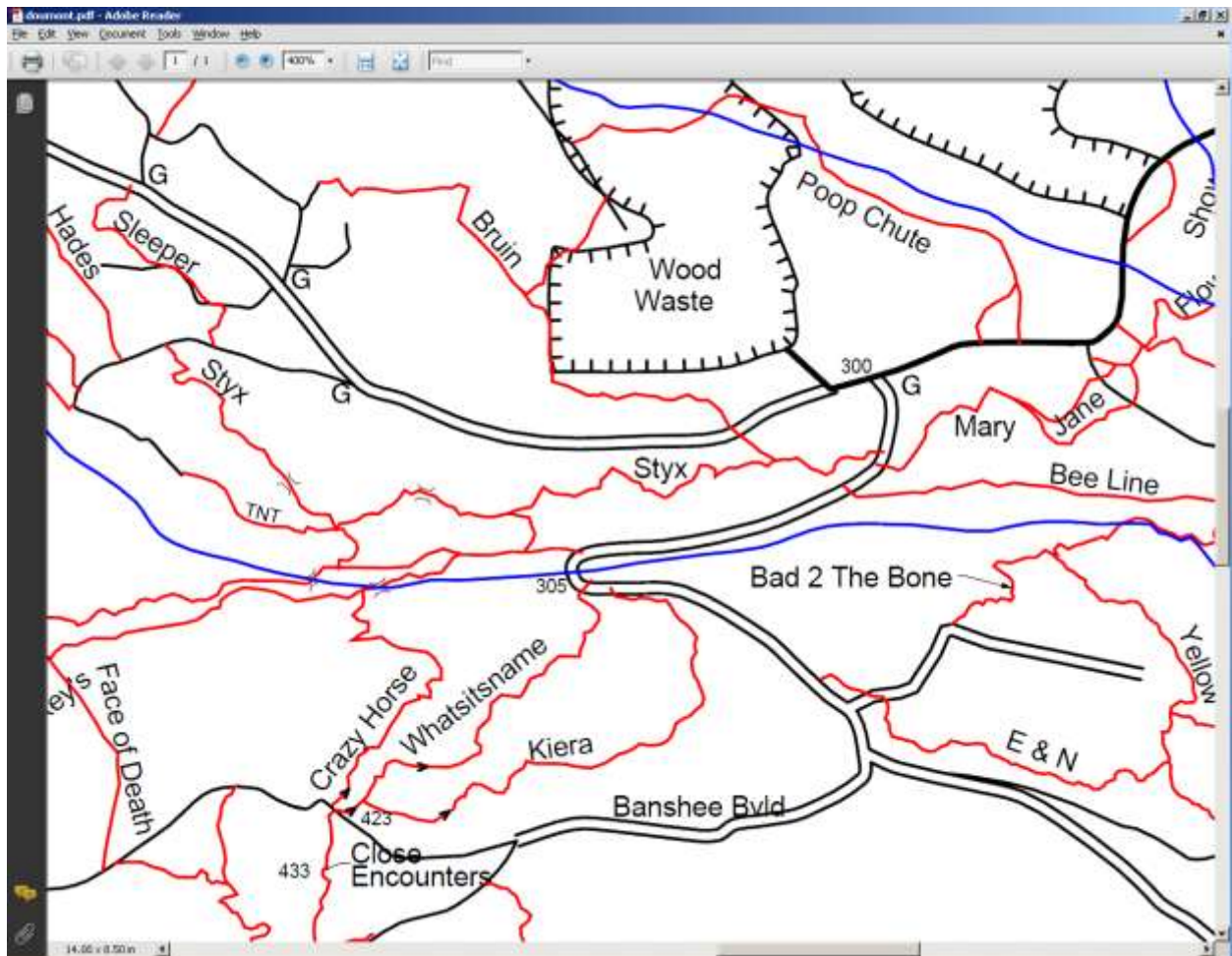
Assignment:

- Each crew will start at their assigned POC located on the road (see Figure 2)
- Traverse north “up the hill” until you get to the bike trail “Styx” (see Figure 3)
- Traverse along the trail for ~150m in the designated direction (east or west)
- Turn south and traverse downhill until you reach the road
- Turn and traverse back to your POC
- Wrap chain

Figure 2: POC's for Traverse



Figure 3: Trail Map



Hints - how to traverse:

- Check that you have all your gear (compass, clinometer, tape, field book, flagging tape)
- Unravel the chain while on the road (it's far easier)
- Only the lead person need "carry the chain" (you are not taking a snake for a walk)
- Leave the bloody thing unwrapped until you are finished traversing
- Stand at your POC (kick a mark in the ground)
- Lead person takes a bearing and sights on *something* (like a tree), then takes the "0" end of the chain and walks off towards that *something*. Check your bearing every 15m or so.
- Communicate as needed ("coming up", "chain", "mark" – then drop the chain)

- Once at the next station follow this routine:
 - Record the slope distance
 - Confirm bearings – target, be within 2 degrees – record **forward** bearing
 - Confirm slope percent & degrees – record **forward** shot in both percent & degrees
- Calculations:
 - $HD = \cos(\text{slope degrees}) * SD$
 - $DE = HD * \text{Slope\%}$
- Station marked with a letter and the cumulative distance (can be HD or SD – just be consistent); recording the new elevation for the station is a good idea
- Remember notes “zigzag up” from the bottom

Traverse Notes

- Start from bottom
- Zigzag up

STN	BRG	S.D. (m)	Slope%	Slope Deg	H.D. (m)	D.E. (m)	Elev. (m)
Stn D = 0	125.7						103.9
	056	45.2	-04	02	45.2	-1.8	
Stn C = 0	+ 80.5 =	Road C/L	(5m wide	Gravel rd)			105.7
	043	32.6	-20	11	32.0	-6.4	
Stn B = 0	+ 48.5						112.1
	185	50.0	+25	+14	48.5	+12.1	
Stn A = 0	+000 =	P.O.C.					100

Traversing Basics

- raw measures: SD (note chain is straight), slope (of chain), bearing
- Calculate: HD & DE (note loss of detail)
- mapping: Brg & HD (label with Elev → spot ht.) – discussed later

