

Case Study: Forest Survey Sampling

for January 27, 2012

We need to conduct a forest survey this summer using 21 employees. Due to the sampling scheme and the logistics of the survey, we must construct three crews of seven each. Crews go out in the field for five days and then return to base camp on the weekends.

Each crew consists of six data collectors and one data recorder. The data collection effort is hard work, whereas data recording is rather less physically tiring. We need happy crews, so we need to make sure that everyone gets a turn at data recording. Furthermore, experience has shown that it is best to remix the crew assignments every week. So what we need are crew assignments for nine weeks, mixing up the employees to crews and making sure that everyone gets to be recorder once.

Questions for consideration: Why is this even a statistical problem? What additional questions do you have for the client? Do you have any suggestions for them? Brainstorm methods you might use to do this. Consider both methods you could do yourself, using whatever statistical and computing tools you liked, and methods that they could do in the field with no computing resources at all.

Groups: Here are the groups that will work together on this case. The first student on each list will present the group's findings and should also organize group meetings. The groups should get together in the coming week and consider the case.

Group 1, Presentation:		Group 2, Presentation:		Group 3, Report:		Group 4, Report:	
Name	Email	Name	Email	Name	Email	Name	Email
Lindsey	diet0146	Greg	schae029	Sarah	jaco0654	Joel	bear0201
Chris D	desja004	Jie	renxx034	Alain	vando026	Xiaoyi	zhuxx212
Wen	fanxx102	Jenny	dokke040	Yu-Feng	chang648	Emily	pech0081
Chris H	hulme005	Rachel	vonb0035	Bryan	mcca0828	Zhou	fang0157
Xin	zhan0648	Qi	yanxx195	Felipe	acosta	Matt	stear067
		Garrett	lepa0050				

Presentation groups: The presenter will have 12 minutes of class time to say what the team thought about the problem. To ease switching between groups, we will use my computer for all presenters, so if you choose to make a digital presentation, please email the slides to me by 2pm, or bring them on a thumb drive and arrive five minutes early. PDF format is preferred.

Report groups: Please email your report to me (PDF format preferred) by 2pm so I can make copies for the class. Your report should be at least one page long, but no more than two pages.