

Angst is an integral part of graduate school I suppose. In retrospect, it's quite funny. But at the time, it's a bit never-racking, especially if it is not entirely clear that you will ever get useable data from your fieldwork so that you can actually finish a PhD. I did my fieldwork in the early 1990s on woodrats which live on cliffs and are nocturnal. I worked in Washington where it rains, a lot. The question you should be asking right now is, "Why didn't your advisor talk you out of this?" My PhD advisor, I'm afraid, had a peculiar sense of humor. Here is a collection of e-mails from my 3<sup>rd</sup> and 4<sup>th</sup> year of graduate school to a fellow grad student, Greg Dwyer, in my PhD lab. My current comments and clarifications are in [ ]'s.

## **Postcards from the field:**

### **August 6, 1992**

Field notes

9:40 am. It's raining on top of Rattlesnake ledge/ Horse rock. I am sitting under a tree near the tope hoping somehow that the rain will stop and I can set traps. Dense clouds stretch from horizon to horizon. I am not hopeful.

### **August 10, 1992**

Dear Greg [Dwyer],

Today Tim [my field assistant] and I collected ticks for the tick dispersal experiment. I will have nightmares about this day for a long time. We use flags to brush over the bushes and collect the ticks. There are loads of them. They are all over our clothes. They wave their little legs and try to grab you. Brrr... Why, why, why did I decide to study ticks. Why couldn't I study something cute?

--Eli

### **November 12, 1992**

Dear Greg,

Results of my tick dispersal experiment are in and I have to say we are in trouble. Here's my abstract for the graduate student symposium: [this is the actual abstract]

*Ticks on the run: the invasion of the U.S. by the hard tick,  
Dermacentor andersoni*

In order to access the velocity at which the hard tick, *Dermacentor andersoni*, might invade across the continental United States and cause untold death and misfortune by spreading Rocky Mountain Spotted Fever and Q fever, not to mention Colorado tick fever, tularemia, and last but not least, bovine anaplasmosis, I conducted a simple experiment to measure the rate of dispersal of *Dermacentor andersoni*. I combined this measurement of the dispersal rate with estimates of reproduction and mortality rates to calculate a velocity of invasion. From these studies, it

appears that the entire U.S. is in imminent danger of being overrun by a traveling wave of these disease carrying ticks.

**February 12, 1993**

Dear Greg,

I have tried my second mark-recapture experiment with the fleas on Liska [my dog]. First I marked 26 fleas with yellow fluorescent powder. The next morning, I recaptured 21 and all had fluorescent powder on them. I suspect that I put on too much powder and the excess is spread to fleas that I did not capture and mark. Sigh.

--Eli

**March 11, 1993**

Dear Greg,

I have designed yet another field contraption - mostly out of material from the lab recycling box - so I am all fired up to go out and try my time-saving/thesis-saving device. The humor of this may be a little lost on you as you haven't watched the progression of recycling bin contraptions that I have designed over the past 2 years. All the previous contraptions "failed to meet minimum requirements" (translation: failed), but I am becoming cleverer and cleverer. Peter [Kareiva, my PhD advisor], as one would expect, finds this all terribly amusing and scoffs at me continuously. Ah, what does he know.

--Eli

**October 24, 1993**

Dear Greg,

Programming is the pits. I hate it and despise it. In fact, I hate computers. Perhaps I should forget this science shit and become a carpenter. I hope I am at the low point of my thesis work. Can it get worse? I am accomplishing nothing. I am floundering. Damn this wasted day, wasted week, wasted month.

--Eli

**January 7, 1993**

Dear Greg,

I didn't find the spirochete. More computer nightmares. In general, I'm adrift in a very dense fog. It is better than it was before. At least, in the intervening period, I have had a moment of inspiration. Although, like most overly optimistic moments of inspiration, my earth shaking result turned out to not hold water.

--Eli

[I was disappointed I didn't find the Lyme disease spirochete in the ticks I was studying?!?!?!]

**October 18, 1993**

Dear Greg,

Sigh. The woodrats have thoughtfully pissed and shit all over the inside of my camp at my site. Egads. If I don't contract some hideous rat virus, it will be a true testament to the human immune system. Fortunately the fieldwork is interesting - if exhausting - at the moment. I'm doing mark-release experiments with fleas. Last time, I marked them with florescent dust, but next time I think I'll try clipping tarsals - yes, it's as tedious as it sounds.

--Eli

**November 1, 1993**

Dear Greg,

I'm laying in my tent which is dug into the side of a overgrown mountain. I am writing by the light of a small candle. The smell of moss and damp is overwhelming. I'm covered with grime from 3 days of crawling through the muck. There is no point undressing, so I sleep in my dirt encrusted clothes. There is a woodrat that keeps coming into camp. At the moment, he is trying to drag off the lantern. It is too heavy, but I must be careful to lock up anything small. He is fearless.

--Eli

**July 21, 1994**

Dear Greg,

Today the thing which I have so feared happened. Tim [my field assistant] was traversing above the 50 foot deep chasm we have to cross, and...he slipped. For a moment he hovered in air before beginning to fall. I can hardly believe what I did. I was standing below on the other side of the chasm, and as he fell past. I leapt, caught him in mid-air and crashed us onto a ledge on the other side. No shit. It was a genuine Indiana Jones moment. I think this qualifies me for official shero status.

--Eli

**August 3, 1994**

Dear Greg,

I took Peter [referring to my PhD advisor] up on the cliffs today to show him my field site today. Thank the lord, I didn't kill him. I'm not sure how I'd finish my thesis then.

--Eli

**August 4, 1994**

Dear Greg,

Today I performed mouth-to-mouth resuscitation on a woodrat. I kind of overdid it with the ether and the poor thing stopped breathing. It lay there still and limp my hand. Its eyes staring glassily. I knew what I had to do. Rodent CPR. And quick. It worked! No shit. The little guy took a deep breath, looked at me, and got the hell out of Dodge.

--Eli

**October 20, 1994**

Dear Greg,

I'm getting tired of getting bitten and peed on by woodrats.

--Eli