

## Sean Brantley – Squirrel Observation Assignment

1. hypothesized that there would not be much of a difference between the two environments; therefore, the behaviors would be similar. I based this assumption on my experience with the two locations. I assumed that squirrel density and food availability, and because both were next to trafficked roads that the squirrels should behave in roughly the same ways.
2. I was wrong in my hypothesis. The squirrels into the two areas behaved differently. For starters, the tolerance for human interaction was much different. The squirrel on campus was more accepting of me being close enough to make out their behaviors, and because of this trait, I feel the second observation is more accurate. Additionally, the campus squirrel spent about two and a half times more time foraging than its open area counterpart. As a note, what I considered walking for the first squirrel I now think should be described as foraging. Another difference was the amount of time that the squirrels were frozen. While a difference of 8 % seems small, I think this is a significant difference. The more considerable the amount of that, the squirrel is stationary either says something about the behavior variation of that squirrel or that the squirrel's environment is more dangerous. A similarity that I found interesting is the percentage of time spent sitting up eating. Again, to me, this would suggest that the squirrels found a similar amount of food in the twenty minutes, which I find interesting. The coolest behavior that I saw was when the second squirrel flipped onto its back. Later in the week I saw this same behavior in a smaller squirrel outside my window and I realized that it a play behavior because this squirrel was doing it while holding a stick.

Squirrel Behavior Abbreviation			
Bite tail - BT	Foraging - Fo - dashes indicate	Perch - P	
Chasing - Ch	head lifts	Running - R	
Chasing tree spiral - Ch TS	Freezing - F	Scratch - Sc	
Climb down - CD	Gnaw/Sniff - G/Sn	Sit up - SU	
Climb up - CU	Hang from back two legs - H	Sit up eating - SUE	
Digging - D	Hang while eating - HwE	Slip - S	
Eating - E	Head down - HD	Small tail-flick - STF	
Flip onto back	Head up - HU	Tail-flick - TF	
	Jump - J	Walking - W	
Environment Transitions			
Behind tree - BT*	On ground - OG*	On road - OR*	On tree - OT*

### Squirrel One Time Budget

0:00 W	6:00 G/Sn	9:50 HwE	13:01 SU	15:50 J /////
0:45 STF ///	6:10 P	10:30 CD	13:10 F	16:16 SU
0:52 W	6:35 H	10:45 OG*	13:30 Ch	16:25 W
1:45 F	6:55 CU	11:06 F	13:39 STF /////	16:37 J ///
2:25 W	7:09 S	11:30 W	13:40 Ch TS	16:40 W
2:30 F	7:10 P	11:45 F	13:52 STF ///	16:45 HD
2:45 OT*	8:15 Cu	11:58 BT*	13:55 F	16:50 F
2:49 CU	8:22 P	12:15 W	14:09 W	17:08 W
2:57 P	8:29 H	12:31 OR*	14:30 F	17:17 HD W
3:43 CD	8:39 CD	12:33 F	14:44 W	17:20 Sc
3:46 P	8:50 CU	12:35 W	15:00 SUE	17:45 SUE
5:00 CD	9:00 P	12:37 F	15:03 W	18:06 Sc
5:15 F	9:05 H	12:45 R	15:15 R	18:14 SUE
5:20 G/Sn	9:10 P	12:48 OG*	15:20 W	19:15 F
5:24 CU	9:33 CD	12:50 F		

### Squirrel Two Time Budget

0:00 FOB ///	1:45 BT	5:12 SUE	7:28 CD	8:21 OT*
0:10 SAM F	2:00 Fo //////////	5:40 W	7:30 OG*	8:25 CU
0:20 TF /////	2:45 F	5:55 Fo //////////	7:30 Fo //////////	8:27 CD
0:25 F	2:50 Fo //////////	6:45 TF /// - bird	8:00 Ch	8:29 OG*
0:40 W	4:04 F	7:08 Fo	8:02 F	8:30 Fo //////////
0:45 SU	4:06 Fo //////////	7:14 OT*	8:10 TF //////////	9:15 SUE
0:50 TF ///		7:15 CU	8:15 W	9:20 OT*
1:01 Fo //////////				9:21 CU

9:36 P E	12:08 F	13:15 W	14:40 TF	17:53 TF
11:17 Sc	12:14 D	13:21 SUE	////////	////////
11:30 BT	12:20 F	13:24 OT*	14:49 F	18:15 W
11:45 P	12:25 SU	13:31 CU	14:58 TF ///	18:20 Ch
11:50 TF	12:30 TF ////	13:36 F	15:05 Fo ///	18:30 TF ////
////	12:50 F	14:07 CD	15:54 SUE	18:35 Fo ///
12:00 CD	12:55 Fo ///	14:08 OG*	15:55 Fo	18:44 SUE
12:01 OG*	13:00 D	14:10 Fo ///	////////	18:50 Fo
12:05 W	13:01 SUE	14:30 SUE	17:17 W	////////
			17:20 F	

Squirrel One	Squirrel Two
Walking - 20%	Foraging - 50 %
Perched - 20%	Frozen - 11%
Frozen - 19 %	Tail flick - 10 %
Sitting up eating - 8 %	Perch - 9 %
Climbing up - 7%	Sitting up eating - 6%
Climbing down - 6%	Walking - 4 %
Hanging - 3 %	Climb down - 2 %
Hanging while eating - 3 %	Climb up - 1.5 %
Scratching - 3 %	Scratching - 1 %
Jumping - 2.5 %	Sitting up - 1 %
Tree spiral chase - 2 %	Behind tree - 1 %
Chase - 1 %	Flip on back - 1 %
Gnaw/sniffing - 1 %	Chasing - 1 %
Head down - 1 %	Digging - 0.5 %
Sitting up - 1 %	
Small tail flick - 1 %	
Running - 0.5 %	

3. Eastern Gray Squirrel - *Sciurus carolinensis*

4. The first squirrel was observed on 6/6/20 at 6:30 am and the second was observed on 6/6 at 7:15 am.

5. Squirrel one's territory was located near my apartment complex's pool. Squirrel two was found at the crosswalk between the Dan Allen parking deck and the campus.
6. The first habitat is an open field with several large trees a few buildings and a road. The second habitat is very similar except the open ground area is smaller and the surrounding trees are not as large.
7. Sunny, slightly cloudy, and in the 80's. Warm for a morning.
8. The first squirrel was surrounded by only two squirrels that I noticed over the twenty-minute period. The second shared its space with at least six other squirrels.