



A chance to work with Dr. Frick's data (Connects to Figure 3)

Dr. Frick has provided similar data (with counts from different bat species) to the raw data she used to generate Fig. 3. This data is found at the bottom of this PDF. The data is provided is available to the public and is found in the published study: Turner, GG, Reeder, DM and Coleman TH. A Five-year Assessment of Mortality and Geographic Spread of White-nose Syndrome in North American Bats and a Look to the Future. *Bat Research News* **52**, 13-27 (2011).

Using this raw data, students can generate their own graphs and calculate the population change, similar to what is shown in Fig. 3 of the paper.

Questions:

1. Why are the x and y axes labeled as they are?
2. Are the graphs generated with different bat species similar to Fig. 3? Are there trends that can be found by comparing the graphs of different species? Do different species differ by their location?
3. In Fig. 3A of the paper, there is a hibernating colony that experiences a large population decline in the year 1995. Do you see any unusual trends like this in your graphs? Can you explain what caused them?
4. In Fig. 3A of the paper, there is a hibernating colony that experiences robust population growth through 2006 when it became infected with WNS. Do you see any colonies like this in your graphs? Why do you think this population growth occurs in some colonies and not others?

species	site name	Pre-WNS count	Post-WNS count	% change
<i>Myotis lucifugus</i>	Baryte "Garden of Dina" mine, NY	1	3	
	Bartyes Cave, NY	24	1	
	Clarksville Cave, NY	21	0	
	Eagle Cave, NY	2,587	4,324	
	Gage's Cave, NY	940	40	
	Howe Cave, NY	1,213	29	
	Jamesville Quarry Cave, NY	1,346	573	
	Williams Fire Pit, NY	0	323	
	Alexander, PA	1,604	8	
	Woodward, PA	2,749	20	
	Brandon Silver Mine, VT	86	4	
	Ely Copper Mine, VT	531	4	
	Newberry--Bane, VA	4,143	557	
	Trout, WV	142	8	
<i>Myotis septentrionalis</i>	Baryte "Garden of Dina" mine, NY	6	0	
	Bartyes Cave, NY	12	0	
	Clarksville Cave, NY	2	0	
	Eagle Cave, NY	7	0	
	Gage's Cave, NY	1	0	
	Howe Cave, NY	5	0	
	Jamesville Quarry Cave, NY	2	1	
	Williams Fire Pit, NY	3	0	
	Alexander, PA	30	0	
	Woodward, PA	4	0	
	Brandon Silver Mine, VT	27	0	
	Ely Copper Mine, VT	41	0	
	Newberry--Bane, VA	NA	NA	
	Trout, WV	4	0	
<i>Perimyotis subflavus</i>	Baryte "Garden of Dina" mine, NY	1	3	
	Bartyes Cave, NY	1	0	
	Clarksville Cave, NY	59	4	
	Eagle Cave, NY	NA	NA	
	Gage's Cave, NY	27	0	

Howe Cave, NY	42	4
Jamesville Quarry Cave, NY	0	2
Williams Fire Pit, NY	1	0
Alexander, PA	16	1
Woodward, PA	30	0
Brandon Silver Mine, VT	4	1
Ely Copper Mine, VT	5	6
Newberry--Bane, VA	233	219
Trout, WV	432	63

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Baryte "Garden of Dina" mine, NY	7	15
Bartyes Cave, NY	1	16
Clarksville Cave, NY	NA	NA
Eagle Cave, NY	0	1
Gage's Cave, NY	NA	NA
Howe Cave, NY	13	10
Jamesville Quarry Cave, NY	NA	NA
Williams Fire Pit, NY	5	71
Alexander, PA	0	1
Woodward, PA	17	4
Brandon Silver Mine, VT	9	3
Ely Copper Mine, VT	146	126
Newberry--Bane, VA	7	4
Trout, WV	25	12