

Table 1 Hypotheses and variables for models predicting Pd bout duration, torpid bout duration, and normothermic bout duration for tri-colored bats (*Perimyotis subflavus*) using thermally unstable roosts in the Upper Coastal Plain of South Carolina, 2017-2019. Predictor abbreviations are as follows: Ta, ambient temperature; Precip, precipitation; VPDa, ambient vapor pressure deficit; and Pbar, barometric pressure.

Hypothesis	Predictors	Example Reference
Simple weather	Mean Ta	(Stawski et al. 2009)
Energetic status	Mean Ta	(Stawski et al. 2009)
	Mass	(Boyles et al. 2007)
Weather	Mean Ta	(Stawski et al. 2009)
	Mean Pbar	(Turbill 2008)
	Total Precip	(Voigt et al. 2011)
Roost microclimate	Mean VPDa*Roost	(Thomas and Cloutier 1992)
Global	Mean Ta	(Stawski et al. 2009)
	Mean Pbar	(Turbill 2008)
	Total Precip	(Voigt et al. 2011)
	Mass	(Boyles et al. 2007)
	Mean VPDa*Roost	(Thomas and Cloutier 1992)
Null	Null	

Table 2 Hypotheses and variables for models predicting general activity, nighttime activity away, and roost switching for tri-colored bats (*Perimyotis subflavus*) using thermally unstable roosts in the Upper Coastal Plain of South Carolina, 2017-2019. Predictor abbreviations are as follows: Ta, ambient temperature; Precip, precipitation; pVPDa, previous day's ambient vapor pressure deficit; Pbar, barometric pressure; and Continuous date², a quadratic form of days from November 1st. Roost was only included in the general activity and nighttime activity away models.

Hypothesis	Predictors	Example References
Weather	Mean Ta	(Stawski et al. 2009)
	Mean Pbar	(Turbill 2008)
	Precip	(Voigt et al. 2011)
	Roost	(Czenze et al. 2017a)
Energetic status	Mean Ta	(Stawski et al. 2009)
	Mass	(Boyles et al. 2007)
	Roost	(Czenze et al. 2017a)
Warming cost	Hr Max Ta	(Turbill et al. 2008)
	Max Ta	(Turbill et al. 2008)
	Roost	(Czenze et al. 2017a)
Past roost microclimate	Mean pVPDa*Roost	(Thomas and Cloutier 1992)
Seasonality	ConDate ²	(Czenze et al. 2017a)
	Roost	(Czenze et al. 2017a)
Null	Null	

Table 3 Capture and summary data from tri-colored bats (*Perimyotis subflavus*) using thermally unstable roosts in the Upper Coastal Plain of South Carolina, 2017-2019. Predictor abbreviations are as follows: Recap, recapture; Wall Tr (°C), wall temperature in °C; Hours Logged, total time a bat's skin temperature was recorded in hours; Pd-zone, proportion of time logged a bat's skin temperature was amenable to *Pseudogymnoascus destructans* (Pd) growth (< 19.5°C); and Opt/Pd, proportion of time within the Pd-zone a bat's skin temperature was within the optimal temperature growth range of Pd (12.5-15.8 °C).

Date of capture	Band	Bridge	Sex	Weight (g)	Recap	Wall T (°C)	Hours Logged	Pd-zone	Opt/Pd
30-Nov-17	SR0163	02G	M	6.25		17.3	472.02	0.96	0.24
05-Jan-18	SR0789	03G	F	6.25	Y	2.2	873.89	0.81	0.34
20-Jan-18	SR0165	01G	M	5.00		2.3	152.12	0.84	0.25
18-Feb-18	SR0167	02G	F	5.75		12.4	293.20	0.67	0.25
26-Feb-18	SR0168	02G	F	6.00		14.8	497.06	0.60	0.35
17-Nov-18	SR0163	02G	M	6.75	Y	10.6	352.43	0.87	0.34
29-Nov-18	SR0300	02G	M	7.50		7.6	922.14	0.87	0.48
13-Dec-18	SR0253	02G	M	5.75			601.98	0.76	0.29
19-Dec-18	SR0254	03G	M	5.25		7.9	791.28	0.67	0.53
31-Dec-18	SR0255	03G	M	6.00		16.2	484.56	0.89	0.43
08-Jan-19	SR0256	03G	M	6.00			467.96	0.92	0.66
12-Jan-19	SR0257	03G	F	4.75		8.4	482.71	0.88	0.51

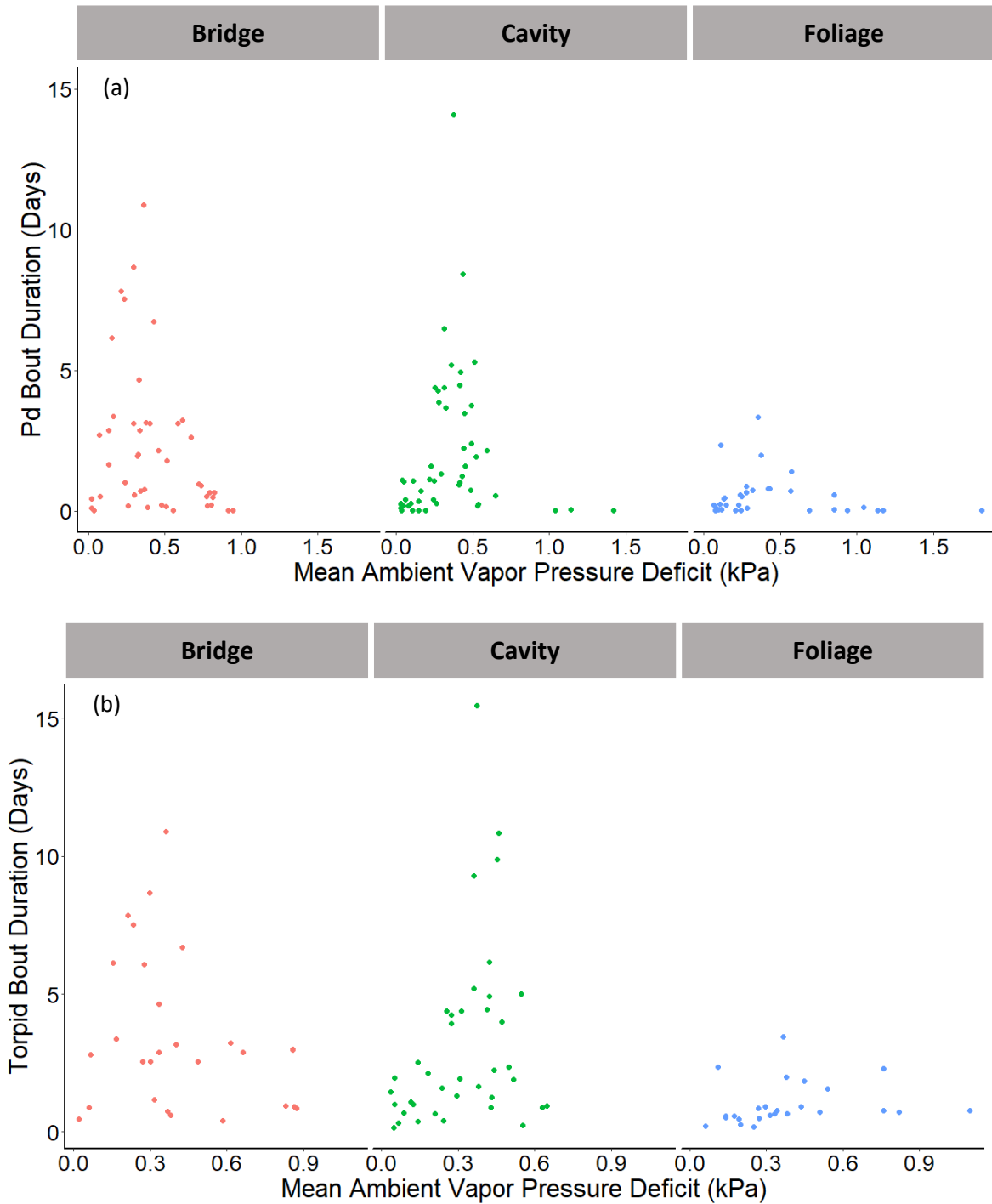


Fig. 1 (a) Pd bout duration and (b) torpid bout duration as a function of mean ambient vapor pressure deficit during bout in bridge, cavity, and foliage structures for tri-colored bats (*Perimyotis subflavus*) using thermally unstable roosts in the Upper Coastal Plain of South Carolina, 2017-2019.