

**Table S6** A subset of climate variables defining climate change refugia predicted the probability of *U. beldingi* occupancy in Yosemite National Park. Significance was determined by two-sample Wilcoxon tests; variables significant at  $P < 0.05$  indicated in bold. The amount of climate change was characterized by comparing values in the recent period (1970-1999) to those in an historical period (1910-1939).

| Variable                                                                | Climate Change Refugia Definition                      | Wilcoxon W | More likely to be occupied? ( <i>P</i> value) |
|-------------------------------------------------------------------------|--------------------------------------------------------|------------|-----------------------------------------------|
| Mean Annual Temp.                                                       | Cooler                                                 | 154        | No effect (0.23)                              |
| Mean Maximum Temp.                                                      | Cooler                                                 | 301        | No effect (1.0)                               |
| <b>Mean Minimum Temp.</b>                                               | <b>Cooler</b>                                          | 68         | Yes (<0.001)                                  |
| Mean Temp. of the Coldest Quarter                                       | Cooler                                                 | 133        | Small effect (0.088)                          |
| <b># of Months Exceeding Historical Extreme Monthly Minimum Temp.</b>   | <b>Cooler (Fewer months above the 97.5 percentile)</b> | 75         | Yes (<0.001)                                  |
| # of Months Exceeding Historical Extreme Monthly Maximum Temp.          | Cooler (Fewer months above the 97.5 percentile)        | 264        | No effect (0.99)                              |
| <b>Mean Annual Precipitation</b>                                        | <b>Wetter</b>                                          | 73         | Yes (<0.001)                                  |
| <b># of Months Exceeding Historical Extreme Monthly Maximum Precip.</b> | <b>Wetter (More months above the 97.5 percentile)</b>  | 96         | Yes (<0.01)                                   |
| # of Months Exceeding Historical Extreme Monthly Minimum Precip.        | Drier (Fewer months below the 2.5 percentile)          | 235        | No effect (0.95)                              |
| <b>April 1<sup>st</sup> Snow-Water-Equivalent</b>                       | <b>Increase in Snow Pack</b>                           | 45         | Yes (<0.0001)                                 |