

**Table S3** Summary of MAXENT models for nine North American species of *Cypripedium* for the LTI (2010-2019). Percent contribution of each environmental variable is reported, with retained variables bolded. Variables with a percent contribution of 0.0% were not used in the respective species model. The AUC of each model is also reported.

Variable	<i>C. acaule</i>	<i>C. arietinum</i>	<i>C. californicum</i>	<i>C. fasciculatum</i>	<i>C. guttatum</i>	<i>C. montanum</i>	<i>C. parviflorum</i>	<i>C. passerinum</i>	<i>C. reginae</i>	Mean
Bio1	0.0%	0.0%	<b>1.4%</b>	0.0%	<b>24.6%</b>	<b>14.9%</b>	0.0%	0.0%	0.0%	<b>4.5%</b>
Bio2	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>0.0%</b>
Bio3	<b>0.4%</b>	<b>30.6%</b>	0.0%	<b>1.8%</b>	0.0%	<b>8.3%</b>	<b>26.0%</b>	<b>15.3%</b>	<b>18.8%</b>	<b>11.2%</b>
Bio4	<b>1.3%</b>	<b>8.9%</b>	0.0%	<b>9.3%</b>	0.0%	<b>35.1%</b>	<b>15.6%</b>	0.0%	<b>5.5%</b>	<b>8.4%</b>
Bio5	<b>22.3%</b>	0.0%	0.0%	0.0%	0.0%	0.0%	<b>39.9%</b>	<b>52.8%</b>	<b>39.9%</b>	<b>17.2%</b>
Bio6	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>0.0%</b>
Bio7	0.0%	0.0%	0.0%	0.0%	<b>12.4%</b>	0.0%	0.0%	<b>5.4%</b>	0.0%	<b>2.0%</b>
Bio8	0.0%	0.0%	0.0%	<b>10.3%</b>	0.0%	0.0%	0.0%	0.0%	0.0%	<b>1.1%</b>
Bio9	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>0.0%</b>
Bio10	0.0%	<b>60.4%</b>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>6.7%</b>
Bio11	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>0.0%</b>
Bio12	0.0%	0.0%	0.0%	0.0%	<b>2.8%</b>	0.0%	0.0%	0.0%	0.0%	<b>0.3%</b>
Bio13	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>0.0%</b>
Bio14	<b>70.9%</b>	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>26.0%</b>	<b>10.8%</b>
Bio15	0.0%	0.0%	0.0%	0.0%	0.0%	<b>3.3%</b>	0.0%	<b>0.7%</b>	<b>3.5%</b>	<b>0.8%</b>
Bio16	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>0.0%</b>
Bio17	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	0.0%	<b>0.0%</b>
Bio18	0.0%	0.0%	0.0%	<b>21.6%</b>	0.0%	<b>12.1%</b>	0.0%	0.0%	0.0%	<b>3.7%</b>
Bio19	0.0%	0.0%	<b>50.1%</b>	<b>36.5%</b>	0.0%	<b>20.7%</b>	0.0%	0.0%	0.0%	<b>11.9%</b>
Soil	<b>2.1%</b>	0.0%	<b>48.5%</b>	<b>20.5%</b>	<b>60.2%</b>	<b>5.6%</b>	<b>8.8%</b>	<b>25.9%</b>	<b>1.5%</b>	<b>19.2%</b>
Land Cover	<b>3.0%</b>	0.0%	0.0%	0.0%	0.0%	0.0%	<b>9.7%</b>	0.0%	<b>4.9%</b>	<b>2.0%</b>
AUC	0.8747	0.9730	0.9958	0.9889	0.9332	0.9764	0.9110	0.9119	0.9600	<b>0.9472</b>