

## **Tribal Nations Botanical Research Collaborative species list**

1. *Achnatherum hymenoides*
2. *Acourtia wrightii*
3. *Allium cernuum*
4. *Artemisia frigida*
5. *Carnegiea gigantea*
6. *Cucurbita foetidissima*
7. *Ephedra aspera*
8. *Ephedra viridis*
9. *Erythrina flabelliformis*
10. *Gutierrezia sarothrae*
11. *Helianthus annuus*
12. *Juglans major*
13. *Juniperus communis*
14. *Larrea tridentata*
15. *Mentha arvensis*
16. *Mentha canadensis*
17. *Mentha spicata*
18. *Nicotiana attenuata*
19. *Peritoma serrulata*
20. *Phragmites australis*
21. *Pluchea sericea*
22. *Pseudotsuga menziesii*
23. *Quercus emoryi*
24. *Rhus aromatica*
25. *Rumex crispus*
26. *Rumex hymenosepalus*
27. *Salix gooddingii*
28. *Sambucus cerulea*
29. *Typha angustifolia*
30. *Typha domingensis*
31. *Typha latifolia*
32. *Washingtonia filifera*
33. *Yucca angustissima*
34. *Yucca baccata*

## **Codes for bioclimatic variables**

BIO1 = Annual Mean Temperature

BIO2 = Mean Diurnal Range (Mean of monthly (max temp - min temp))

BIO3 = Isothermality (BIO2/BIO7) ( $\times 100$ )

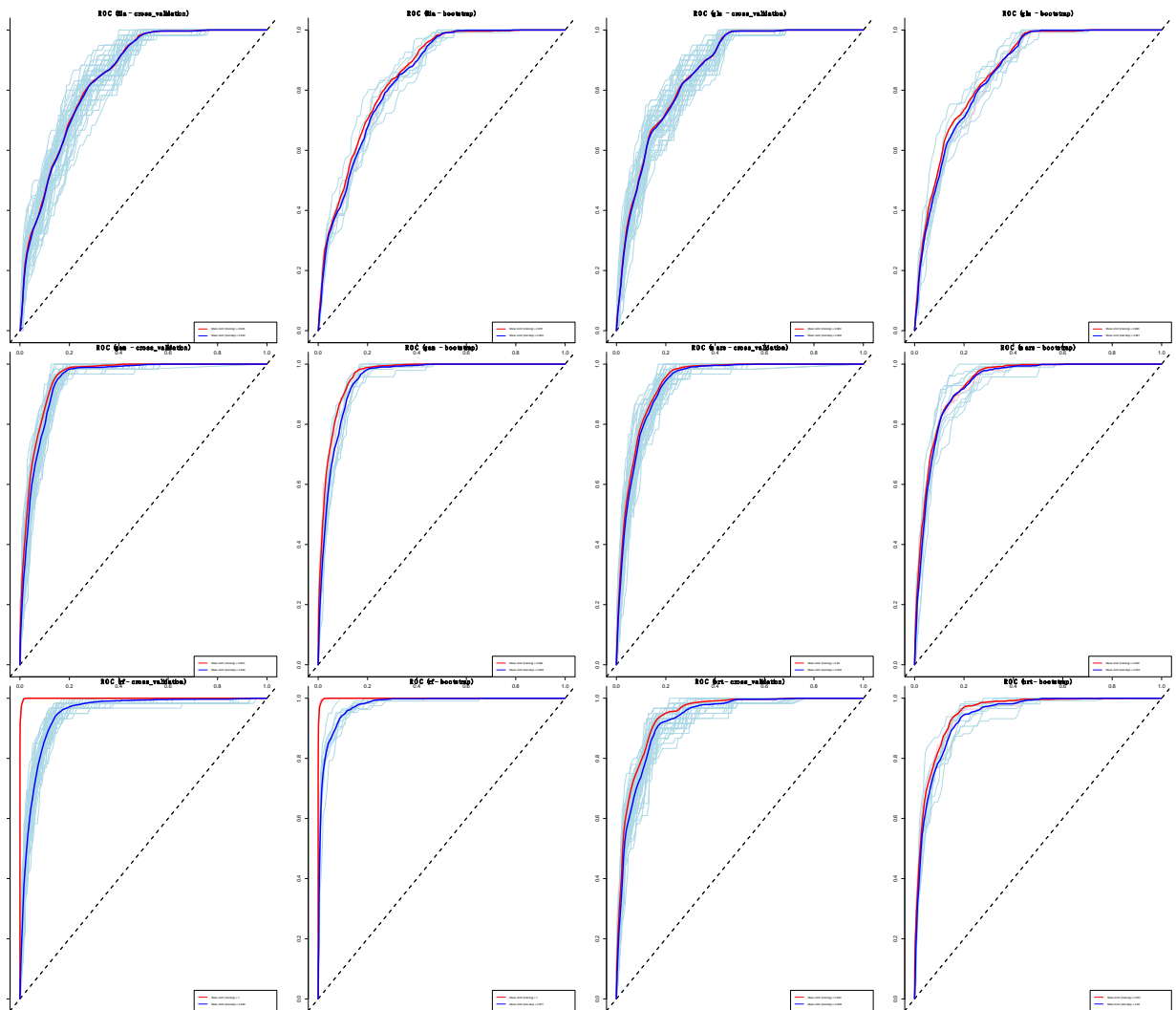
BIO4 = Temperature Seasonality (standard deviation  $\times 100$ )

BIO5 = Max Temperature of Warmest Month

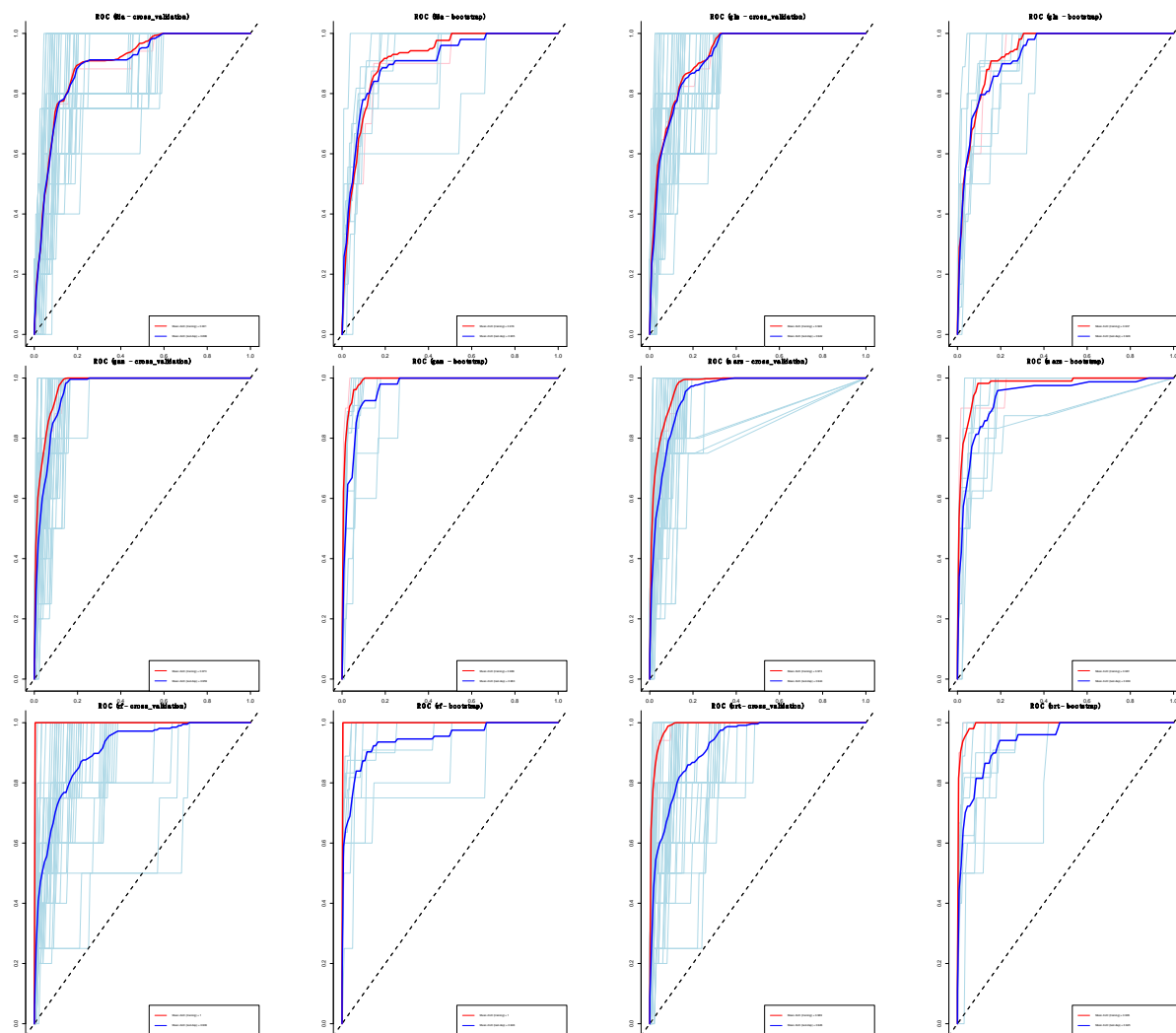
BIO6 = Min Temperature of Coldest Month

BIO7 = Temperature Annual Range (BIO5-BIO6)

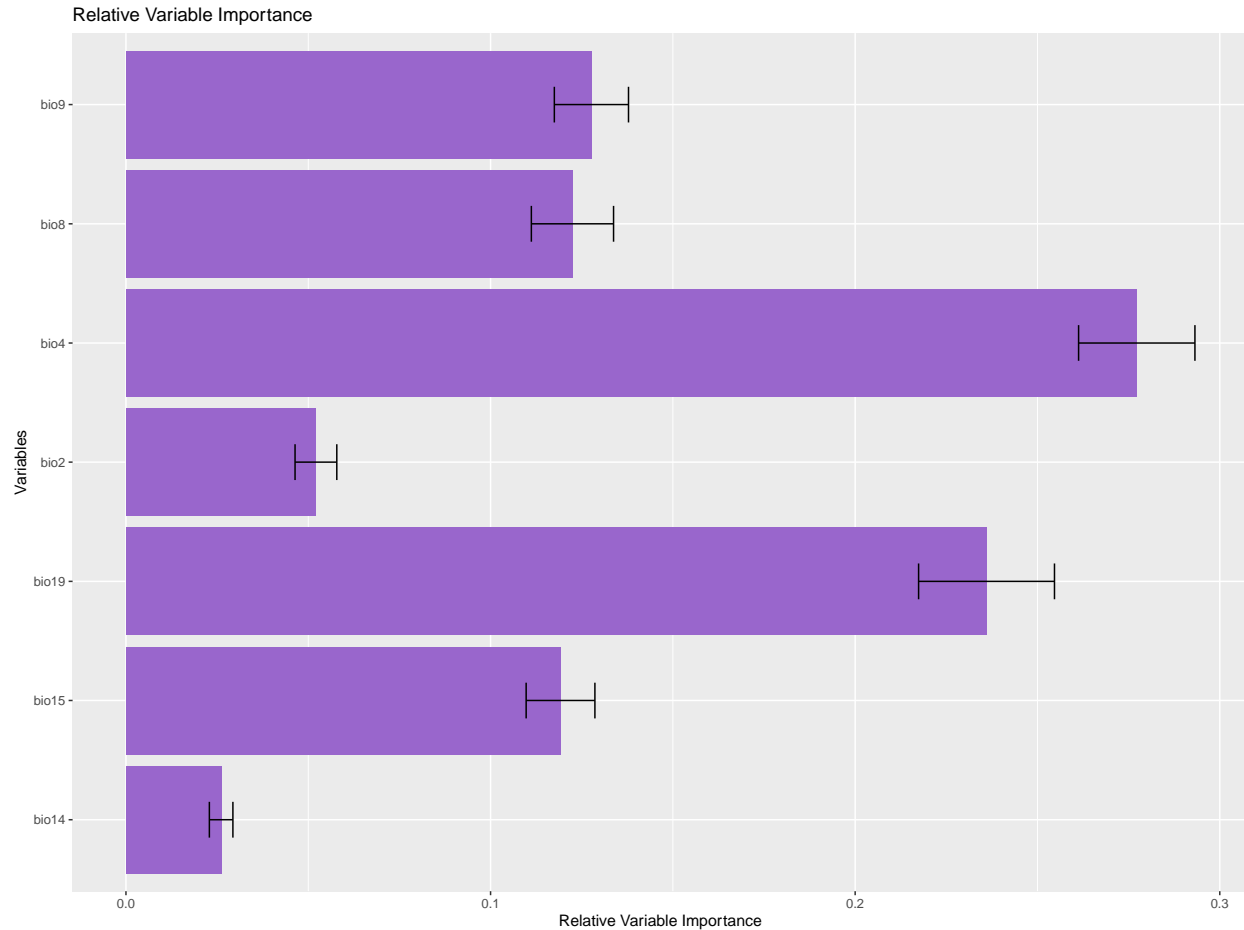
BIO8 = Mean Temperature of Wettest Quarter  
 BIO9 = Mean Temperature of Driest Quarter  
 BIO10 = Mean Temperature of Warmest Quarter  
 BIO11 = Mean Temperature of Coldest Quarter  
 BIO12 = Annual Precipitation  
 BIO13 = Precipitation of Wettest Month  
 BIO14 = Precipitation of Driest Month  
 BIO15 = Precipitation Seasonality (Coefficient of Variation)  
 BIO16 = Precipitation of Wettest Quarter  
 BIO17 = Precipitation of Driest Quarter  
 BIO18 = Precipitation of Warmest Quarter  
 BIO19 = Precipitation of Coldest Quarter



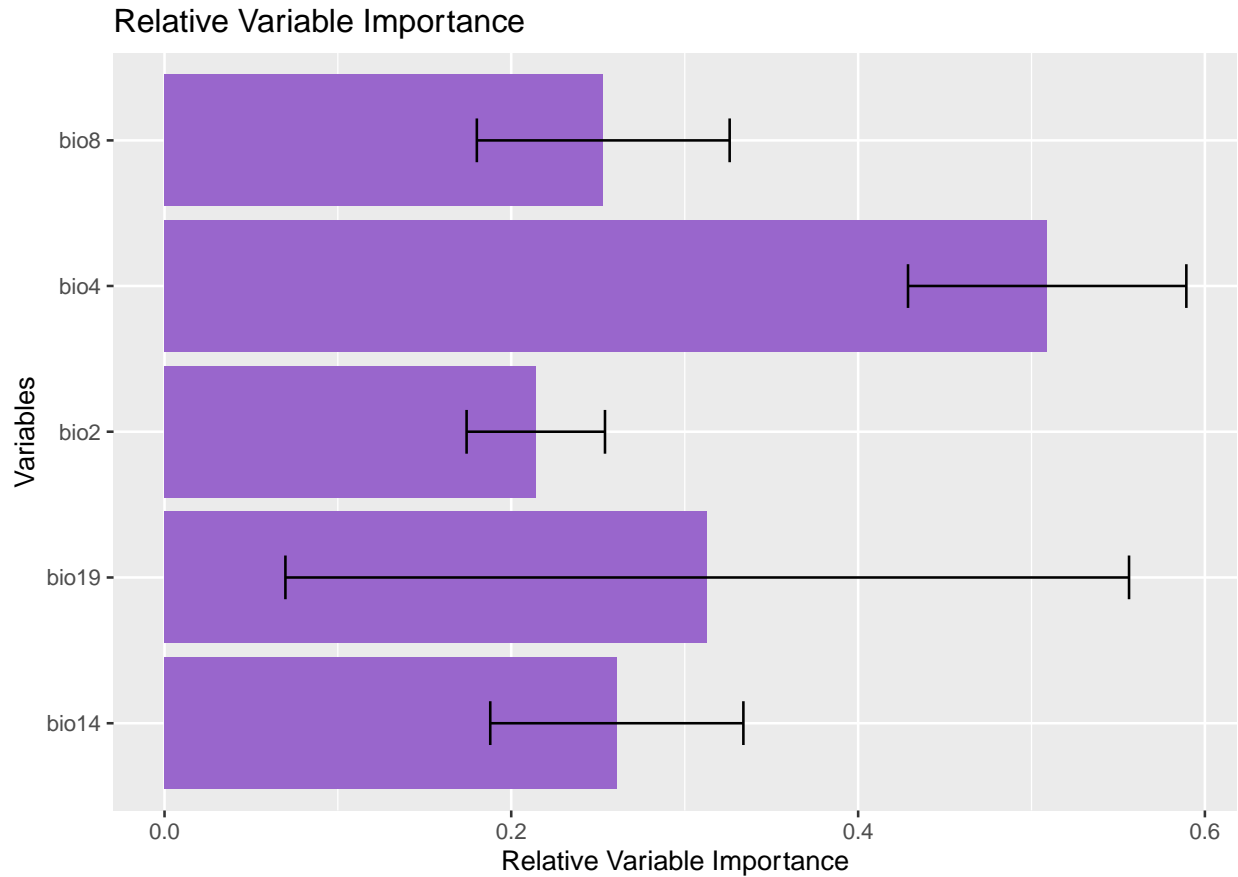
**Figure S1.** ROC curves for various modeling techniques and subsampling methodology for FIA based models.



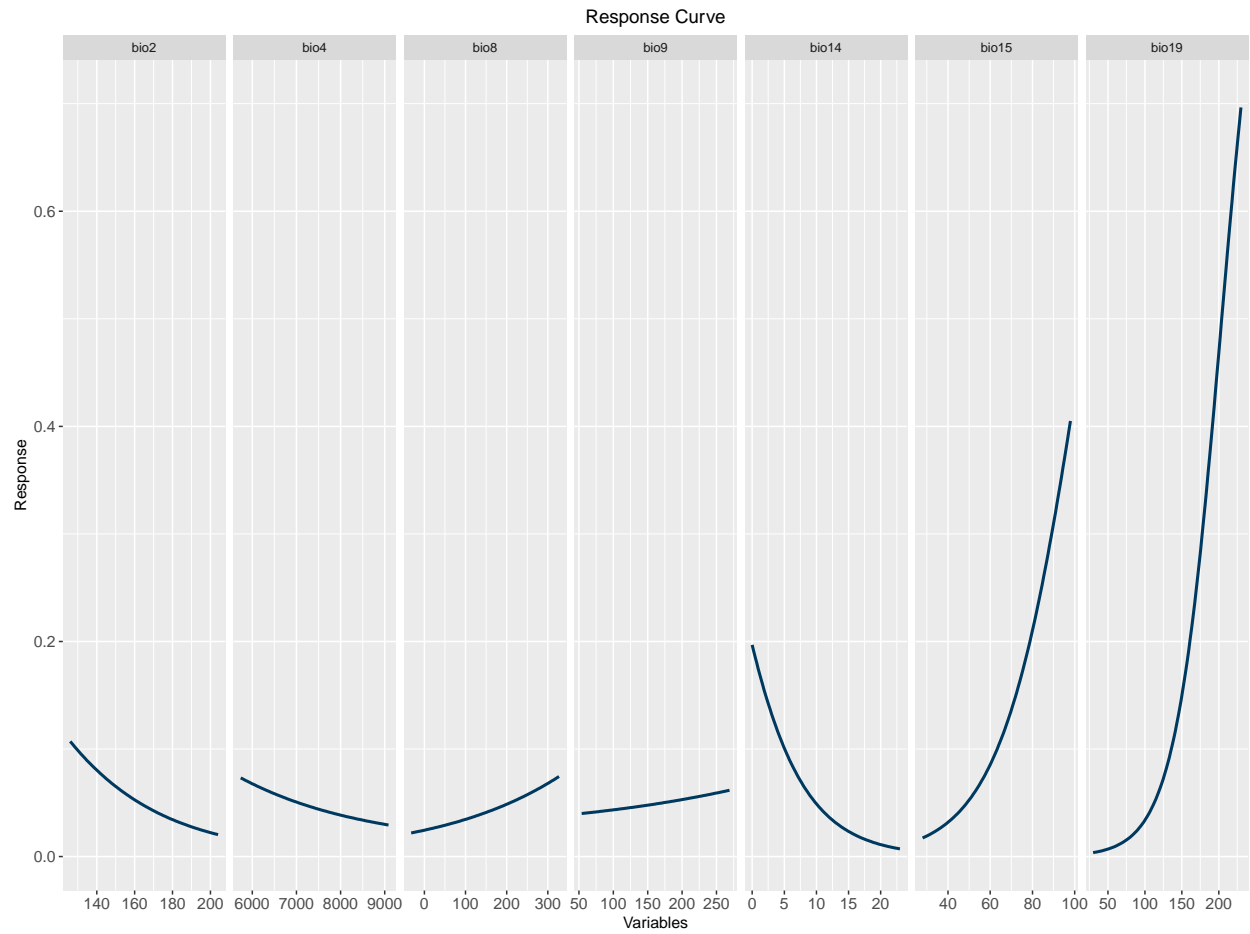
**Figure S2.** ROC curves for various modeling techniques and subsampling methodology for GBIF based models.



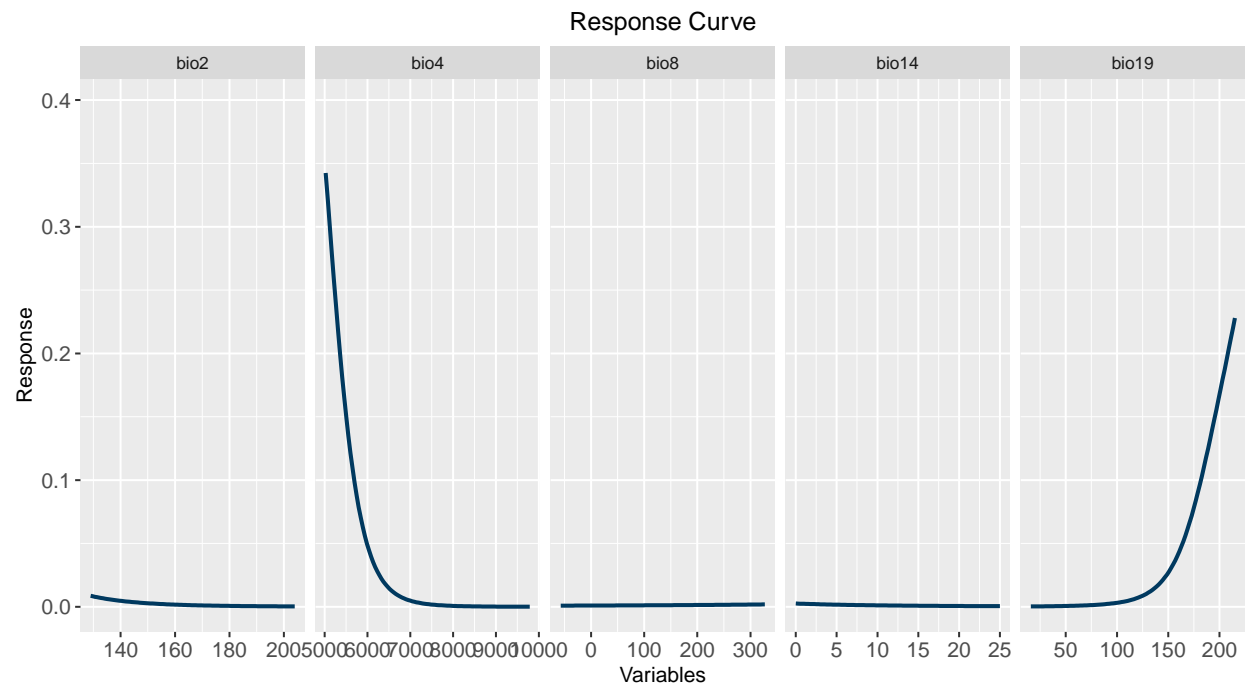
**Figure S3.** Importance of environmental predictors of Emory oak habitat in SDMs built from FIA data. Variables of most importance included mean temperature of driest quarter (bio9), mean temperature of wettest quarter (bio8), temperature seasonality (standard deviation  $\times 100$ ) (bio4), mean diurnal range (mean of monthly (max temp - min temp)) (bio2), precipitation of coldest quarter (bio19), precipitation seasonality (coefficient of variation) (bio15), precipitation of driest month (bio14), with temperature seasonality and precipitation of the coldest quarter explaining the greatest variation in Emory oak occurrence.



**Figure S4.** Importance of environmental predictors of Emory oak habitat in SDMs built from GBIF data. Variables of most importance included mean temperature of driest quarter (bio9), mean temperature of wettest quarter (bio8), temperature seasonality (standard deviation  $\times 100$ ) (bio4), mean diurnal range (mean of monthly (max temp - min temp)) (bio2), precipitation of coldest quarter (bio19), precipitation seasonality (coefficient of variation) (bio15), precipitation of driest month (bio14), with temperature seasonality explaining the greatest variation in Emory oak occurrence.



**Figure S5.** Relationships between Emory oak presence and bioclimatic variables for FIA based models.



**Figure S6.** Relationships between Emory oak presence and bioclimatic variables for GBIF based models.