

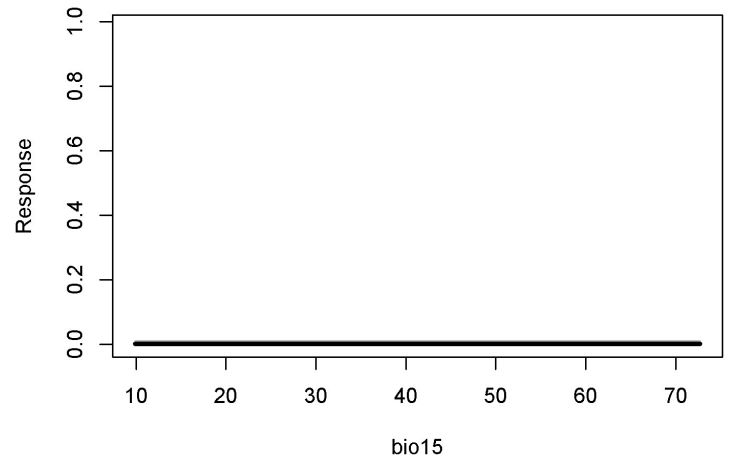
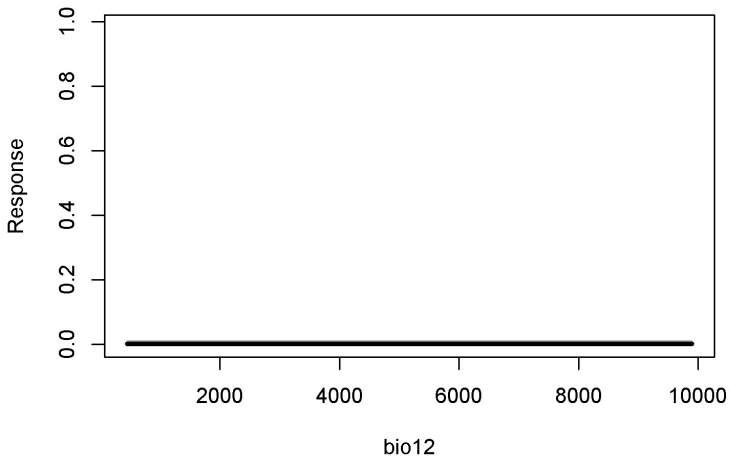
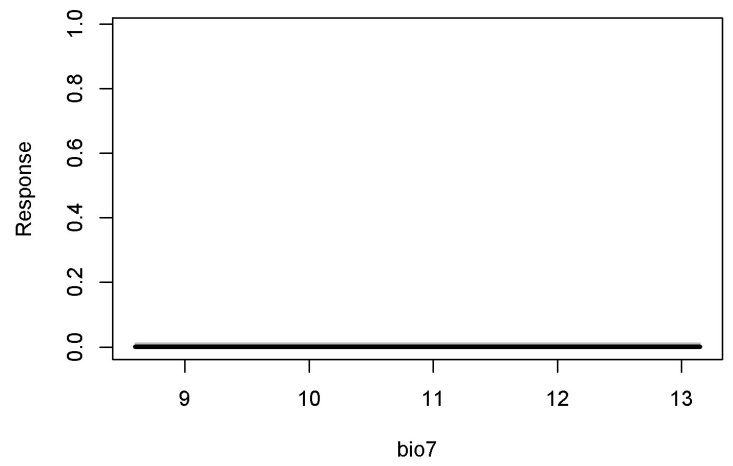
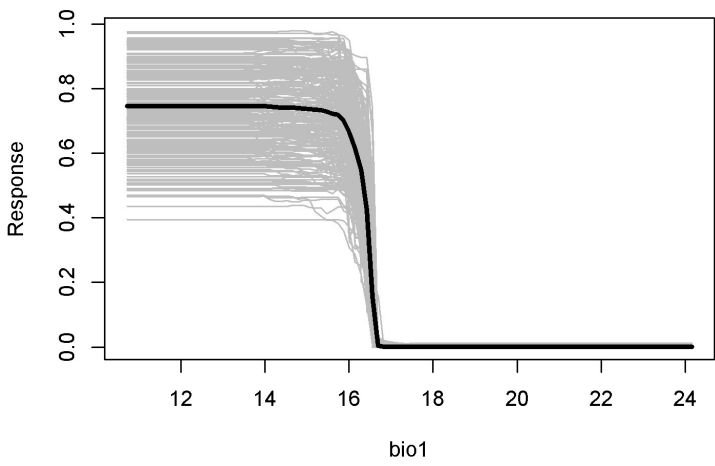
Appendix S3. Response curve and model predictor importance graphs for all Hawaiian forest bird species models.

First section of appendix includes species response curves for all individual species with a curve for each model run in grey and the mean response curve in black. The second section of the appendix includes predictor importance graphs for all species and modeling approaches. We use bioclim variable names for all predictors in all included graphs: mean annual temperature (**Bio1**), mean annual precipitation (**Bio12**), temperature annual range (**Bio7**), and precipitation seasonality (**Bio15**). Predictor importance graphs were generated using the `1opt_var_importance_graph.R` script in repository. The response curves were generated using the `2opt_BM2_FB_SDM_response_curves.r` script.

S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Akekee response curves GBM all vars

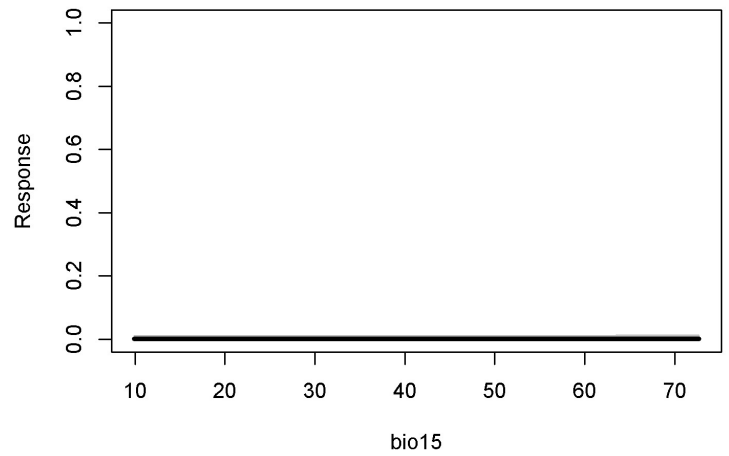
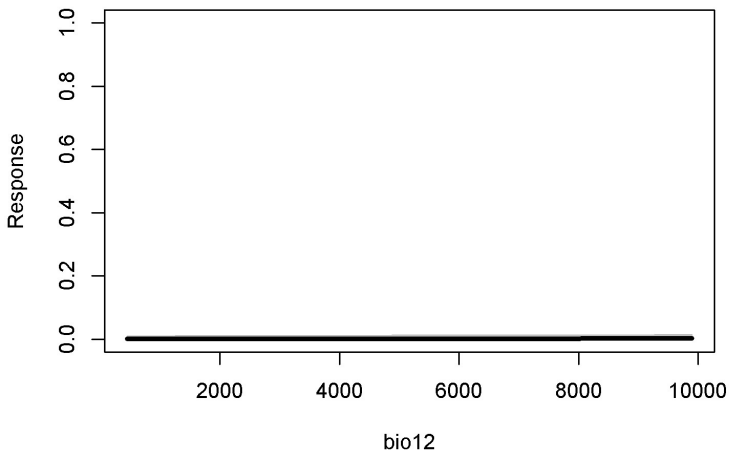
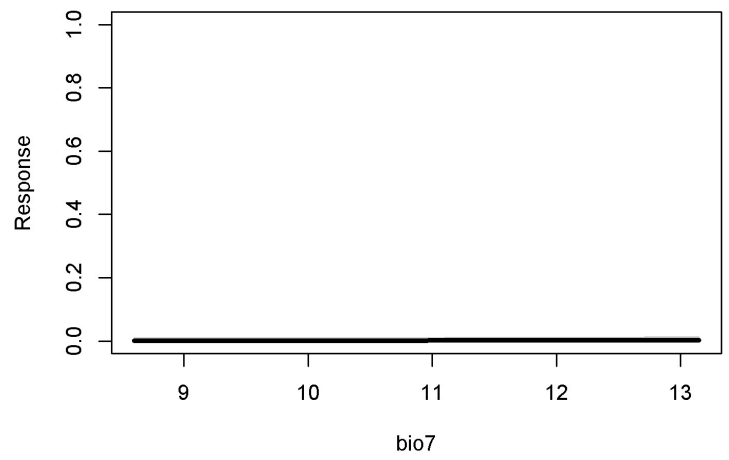
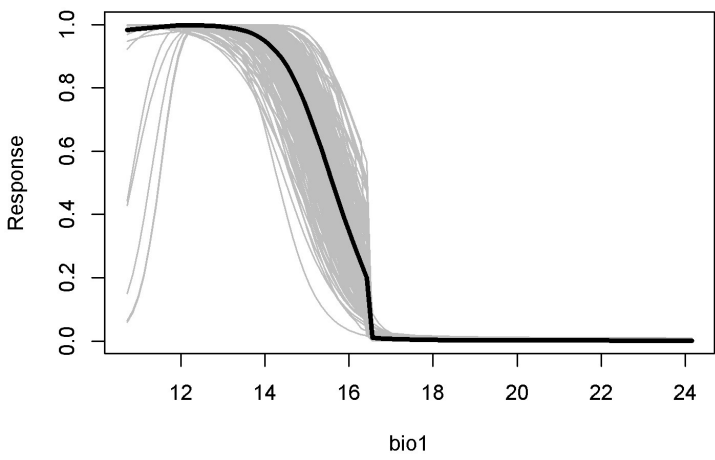
GBM modeled response for Akekee



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Akekee response curves MAXENT all vars

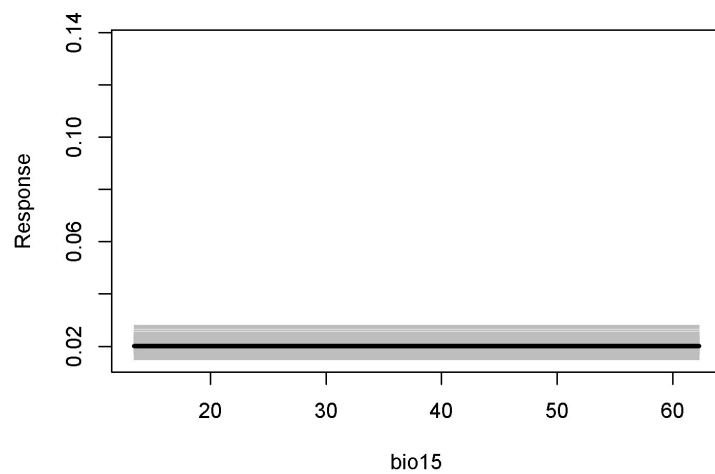
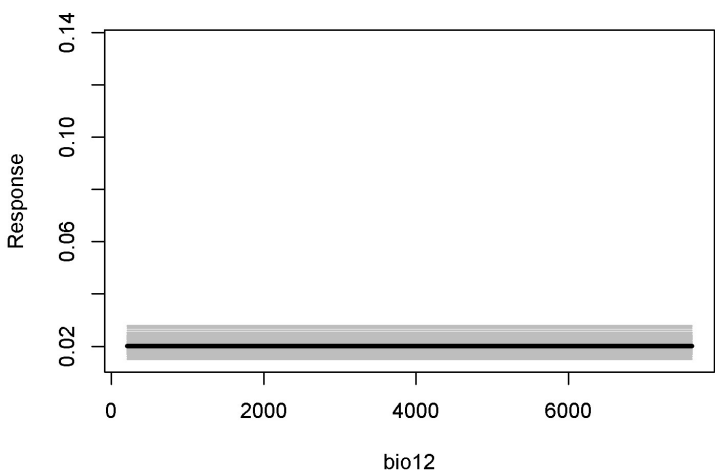
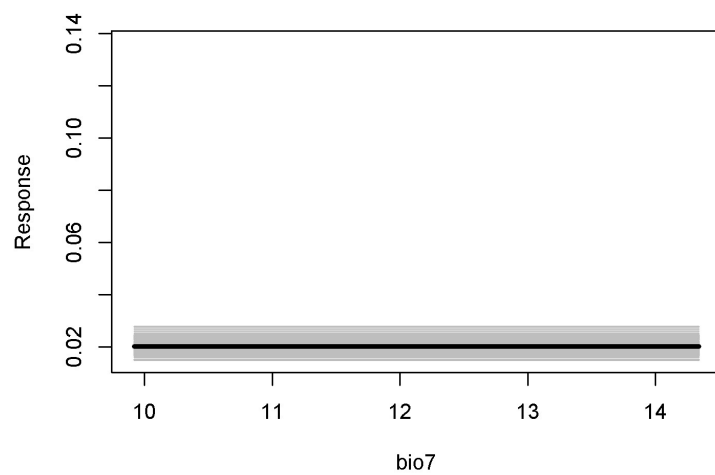
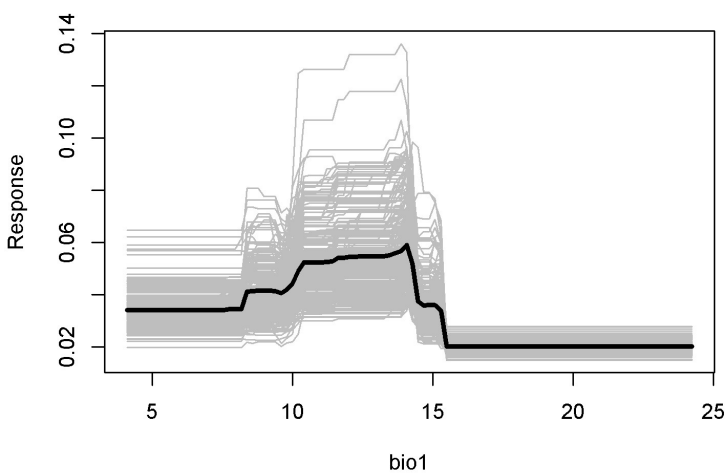
MAXENT modeled response for Akekee



S3: SPECIES RESPONSE CURVES HIGH MODEL RELIABILITY SPECIES

Akiapolau response curves GBM all vars

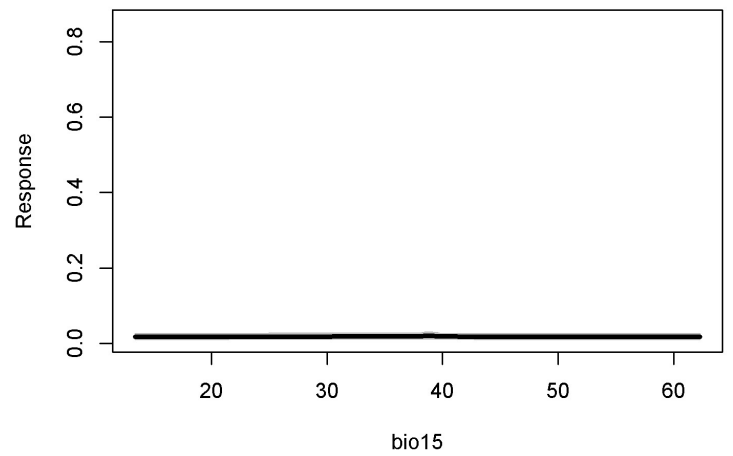
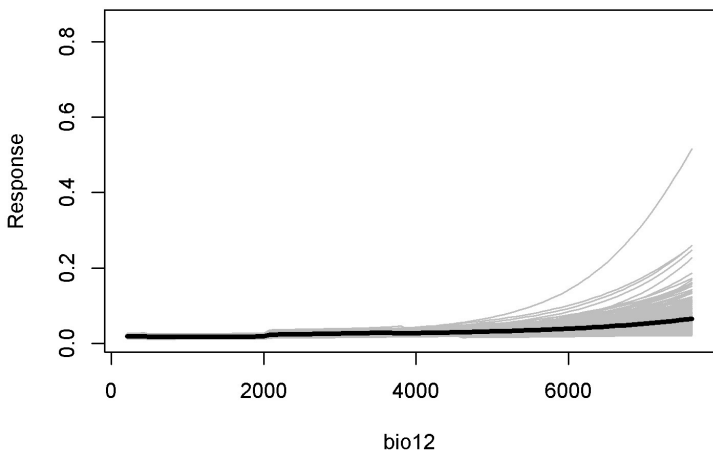
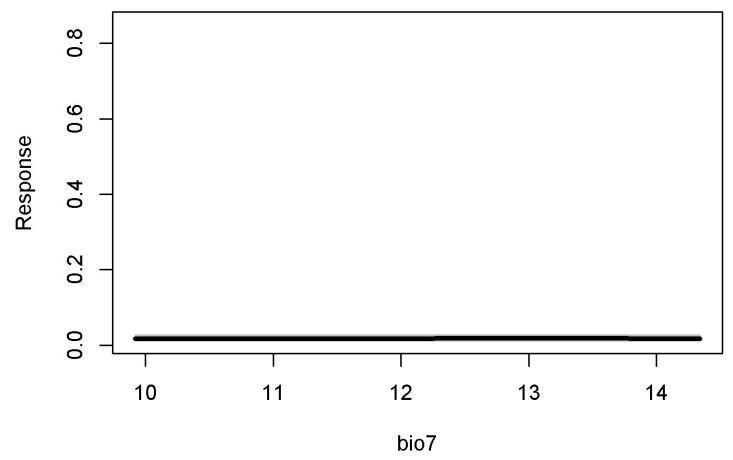
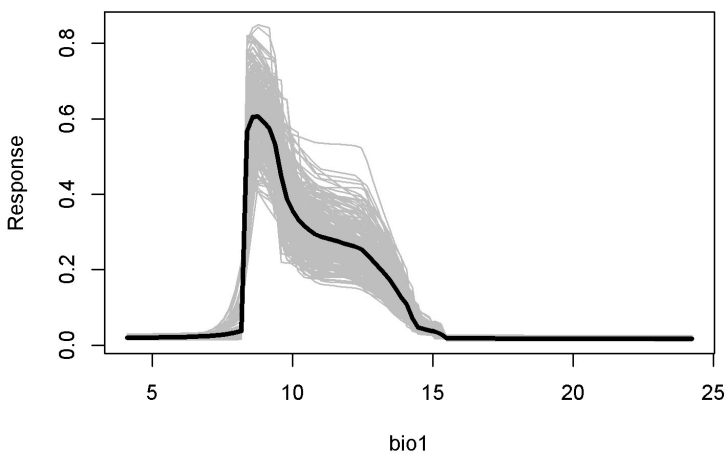
GBM modeled response for Akiapolau



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Akiapolau response curves MAXENT all vars

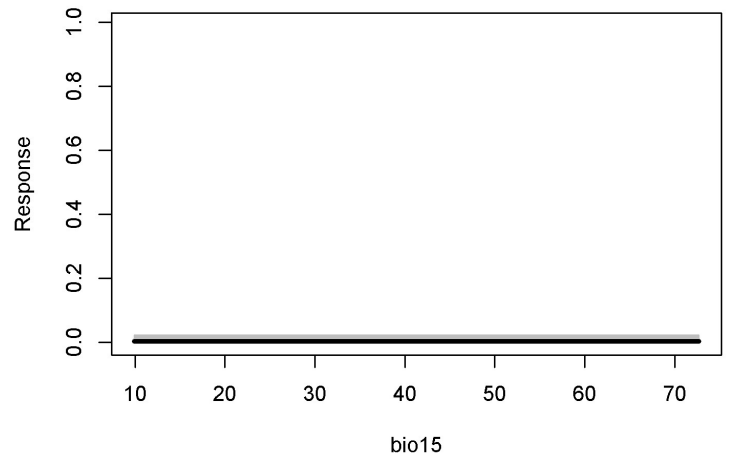
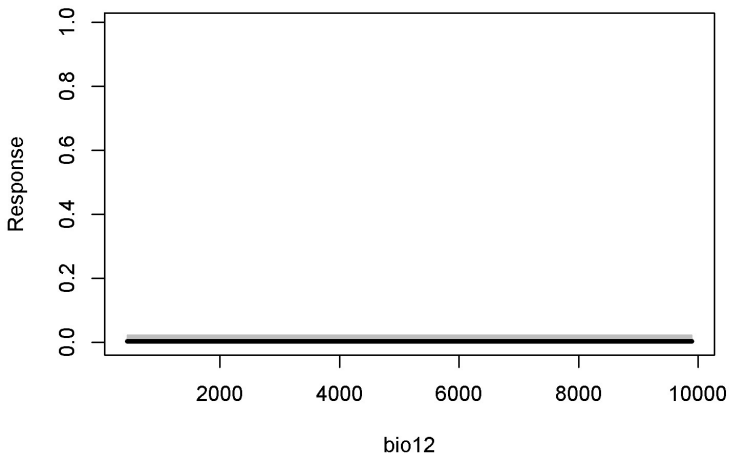
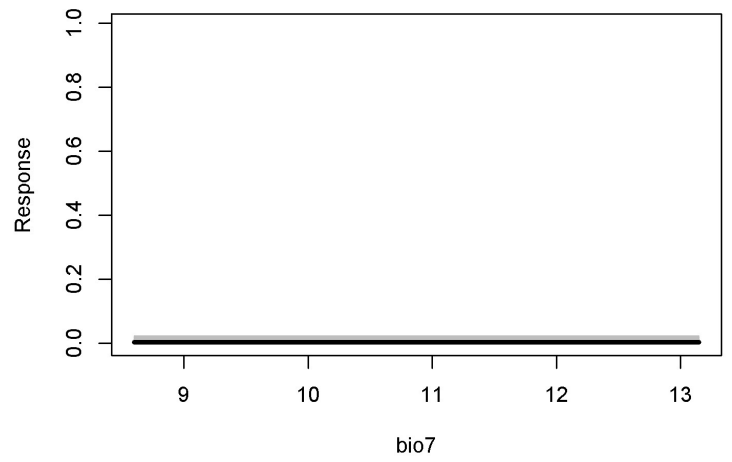
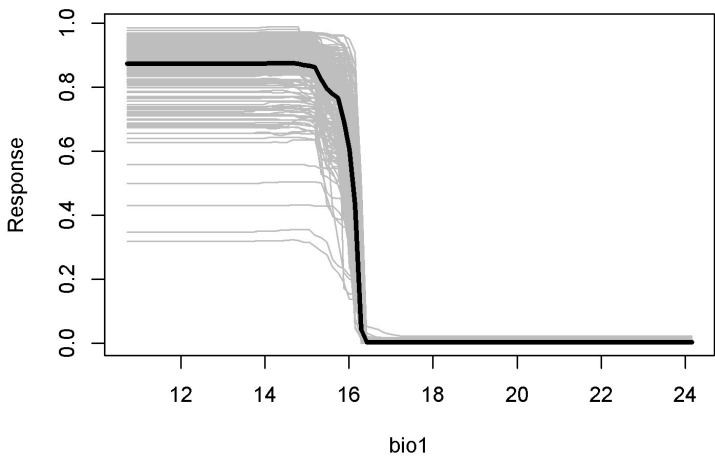
MAXENT modeled response for Akiapolau



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Akikiki response curves GBM all vars

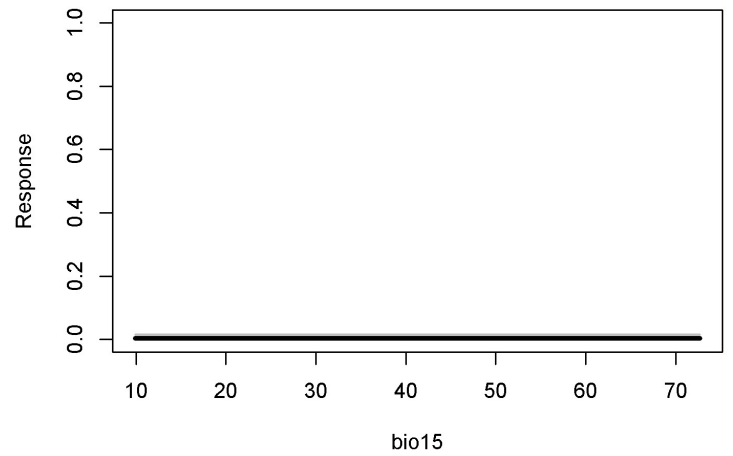
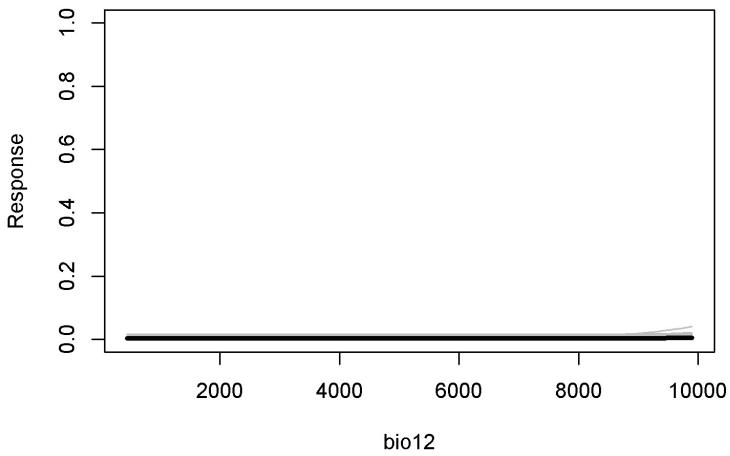
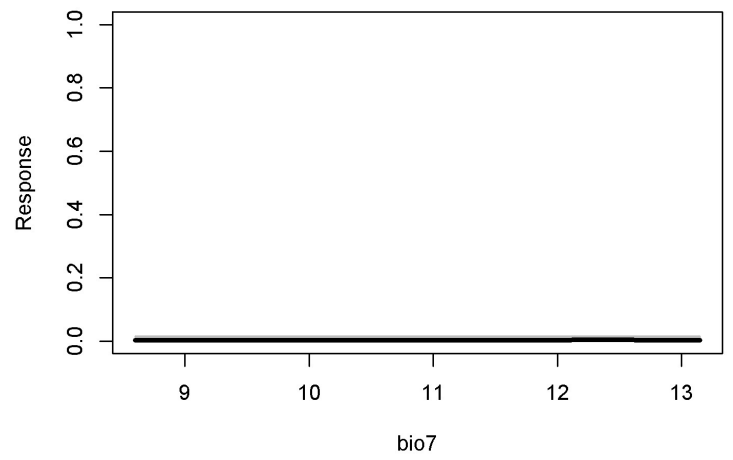
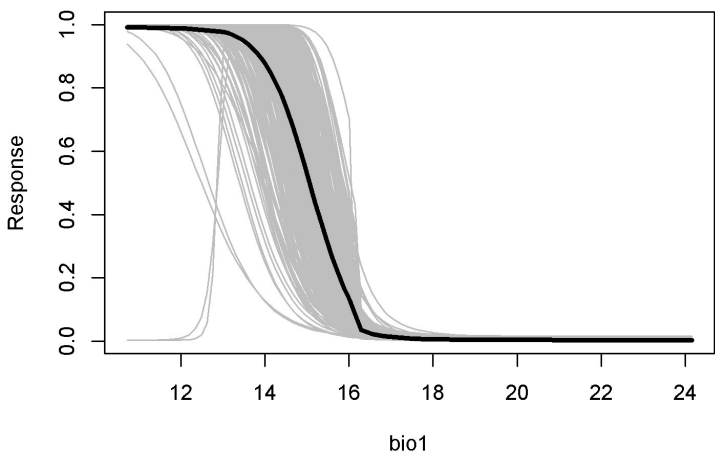
GBM modeled response for Akikiki



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Akikiki response curves MAXENT all vars

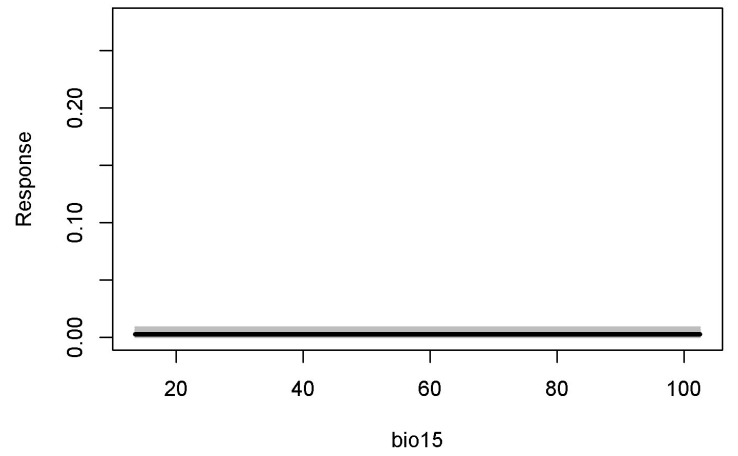
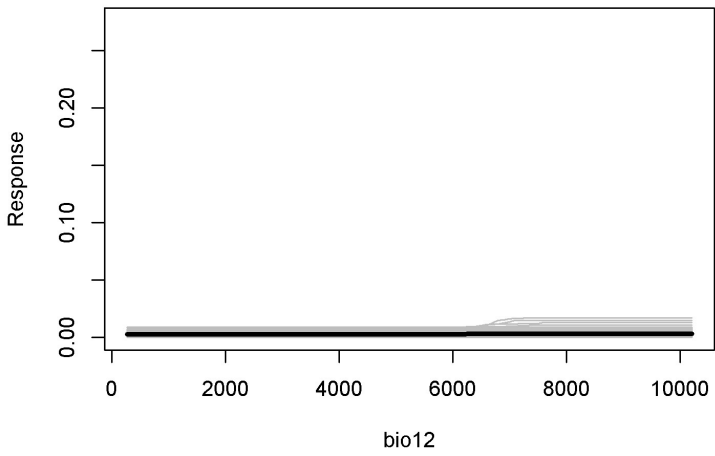
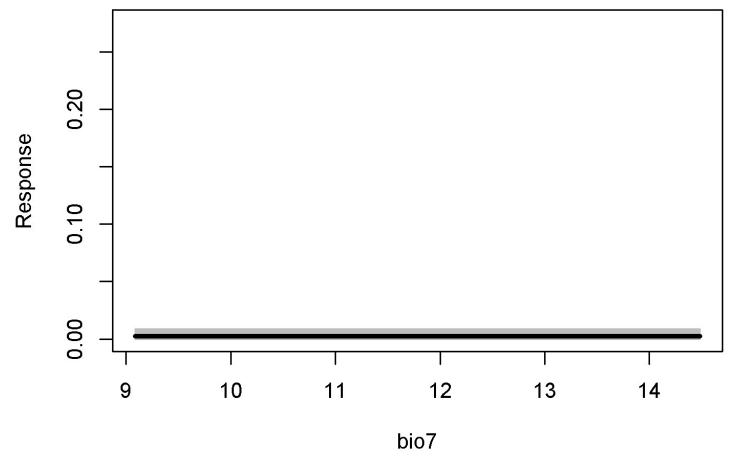
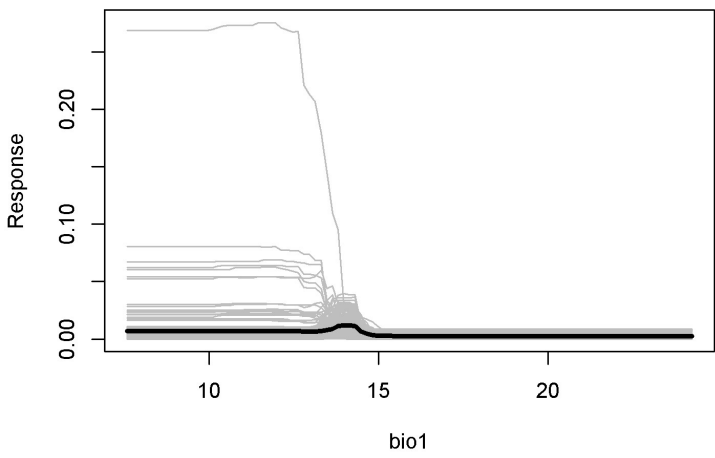
MAXENT modeled response for Akikiki



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Akohekohe response curves GBM all vars

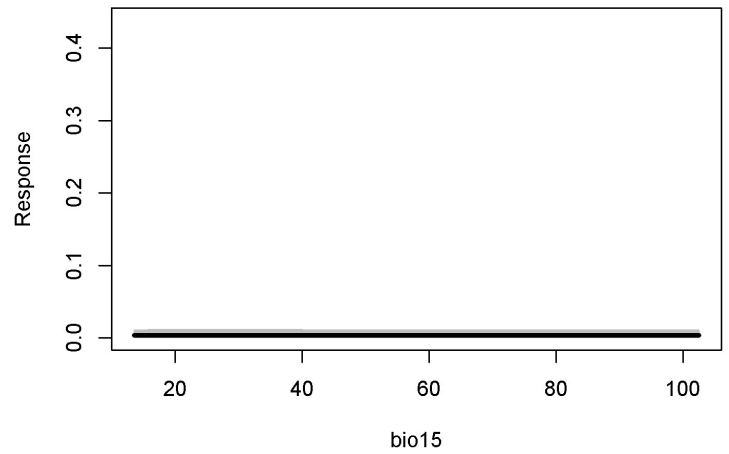
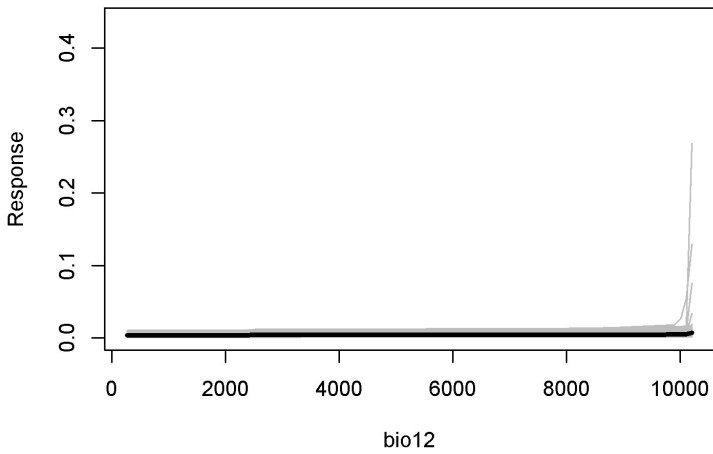
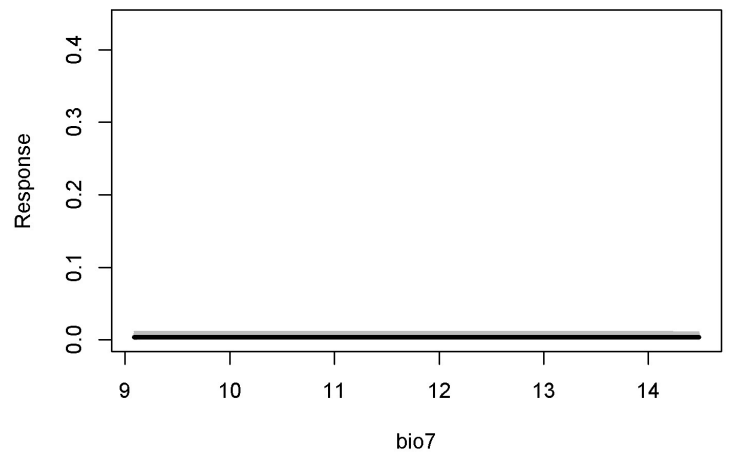
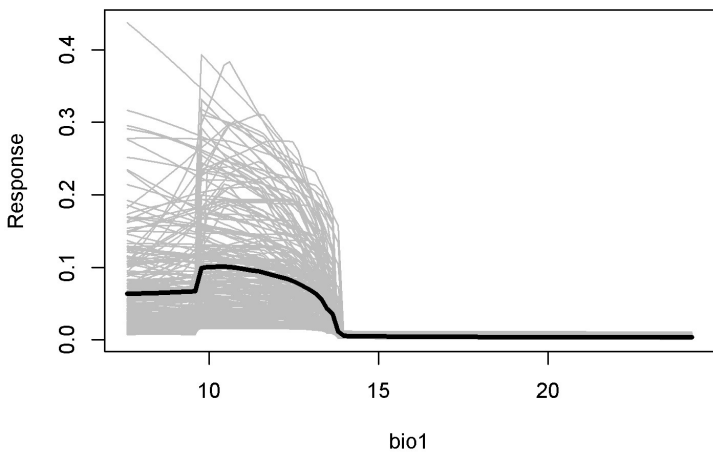
GBM modeled response for Akohekohe



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Akohekohe response curves MAXENT all vars

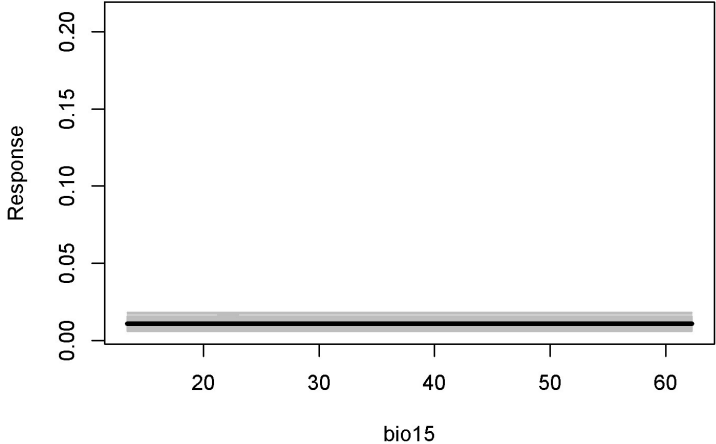
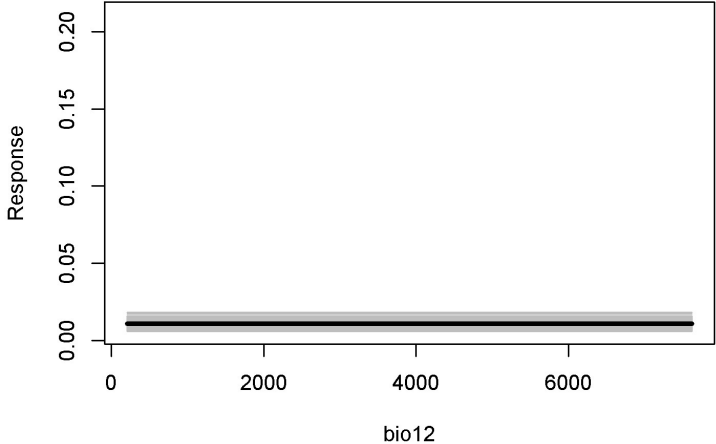
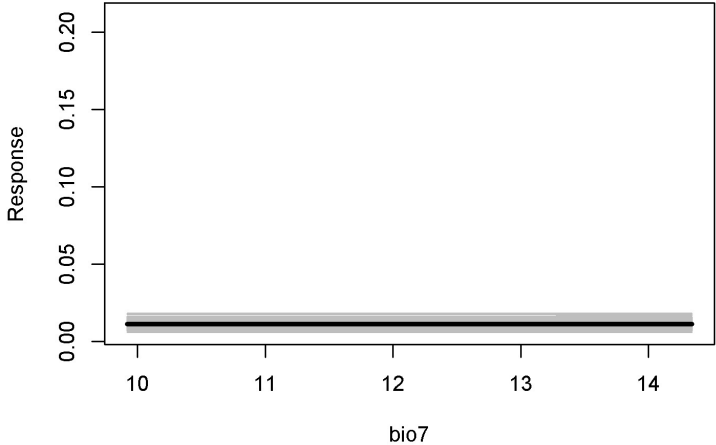
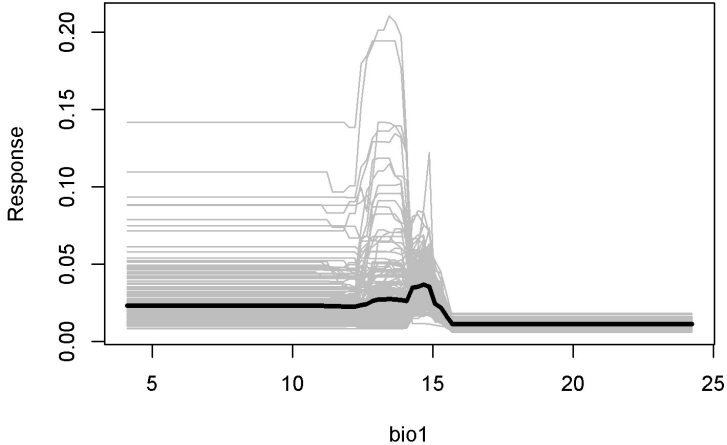
MAXENT modeled response for Akohekohe



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Hawaii.Akepa response curves GBM all vars

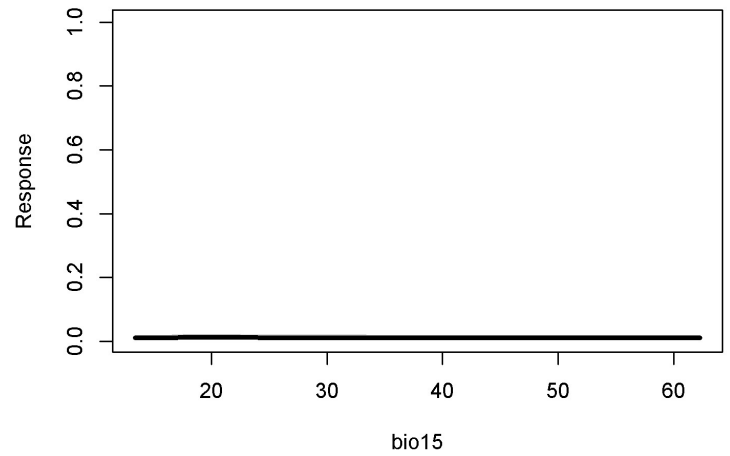
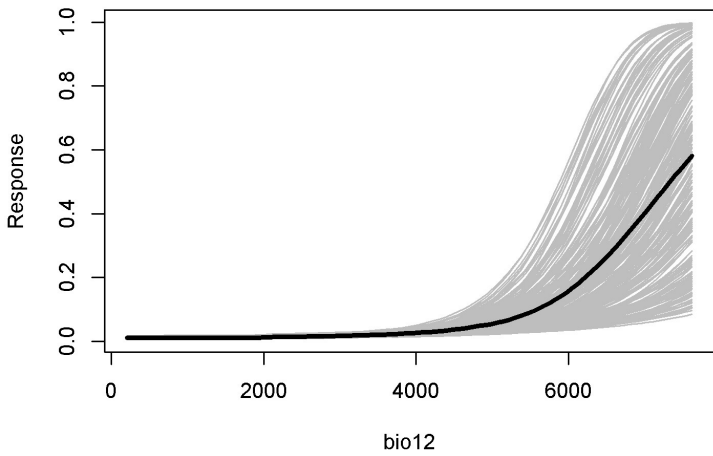
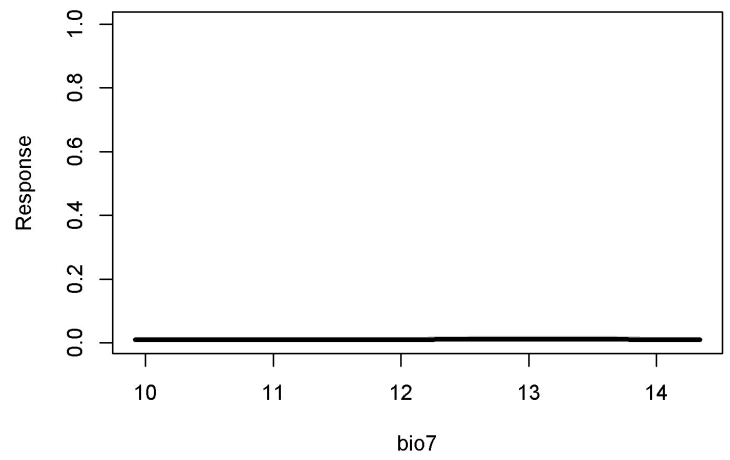
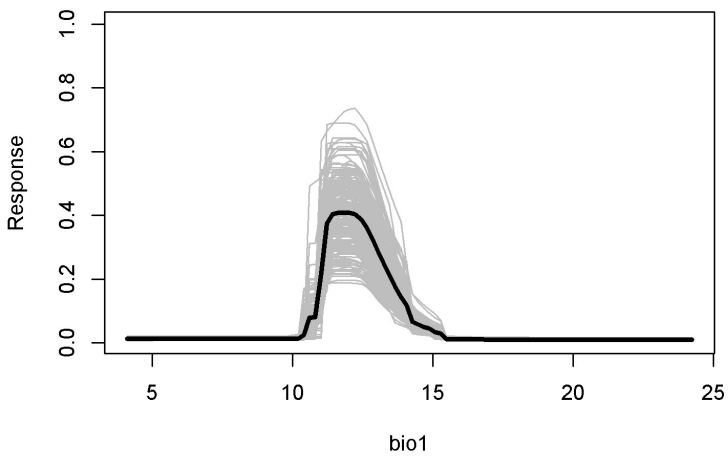
GBM modeled response for Hawaii.Akepa



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Hawaii.Akepa response curves MAXENT all vars

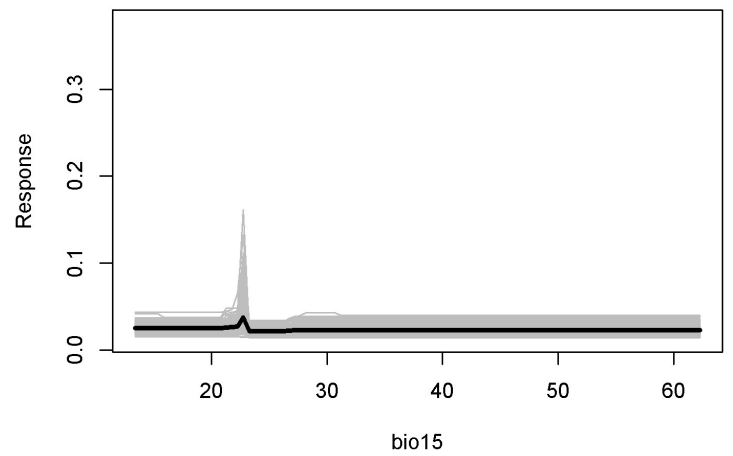
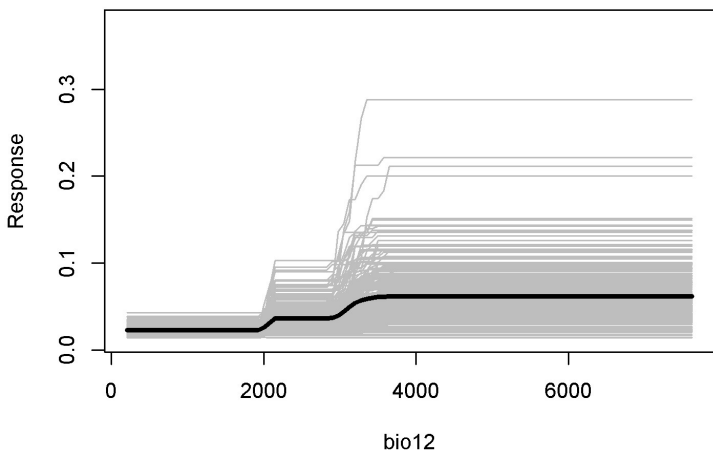
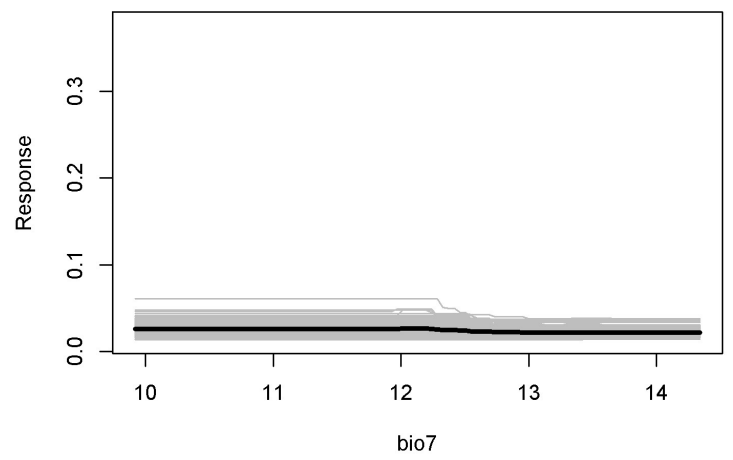
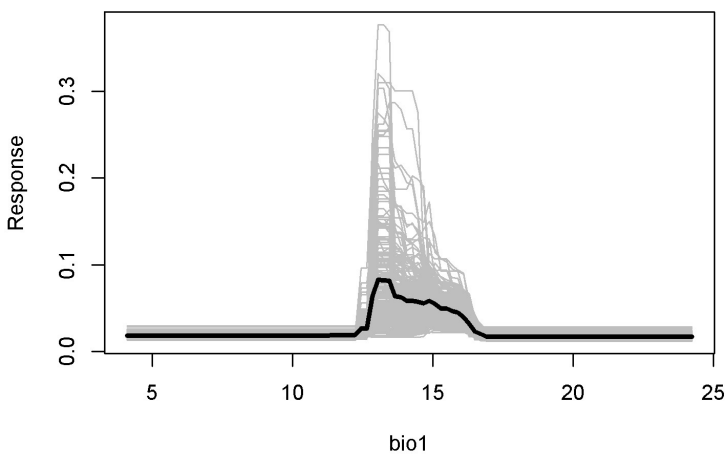
MAXENT modeled response for Hawaii.Akepa



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Hawaii.Creeper response curves GBM all vars

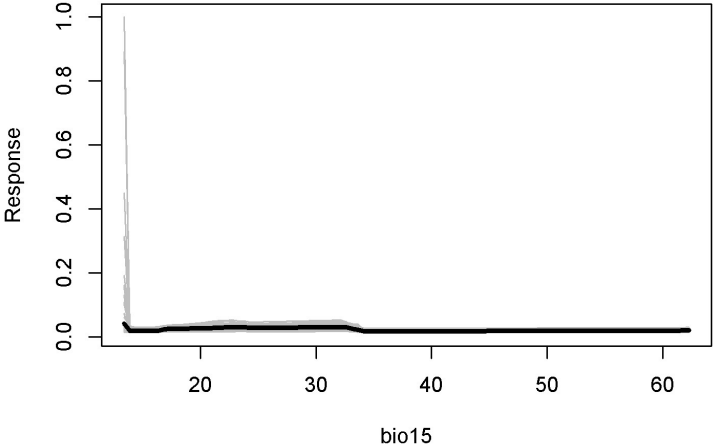
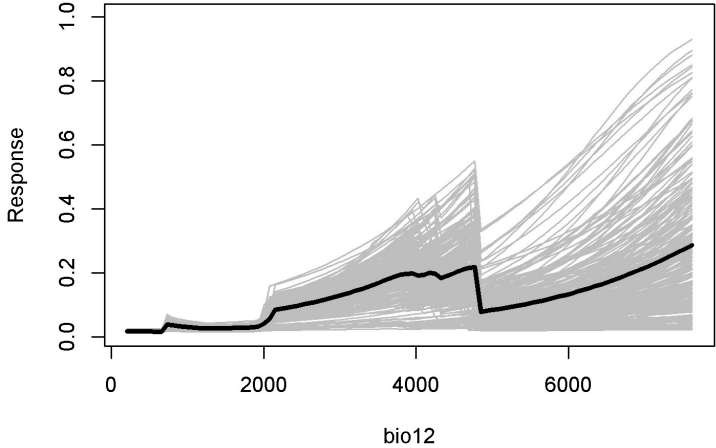
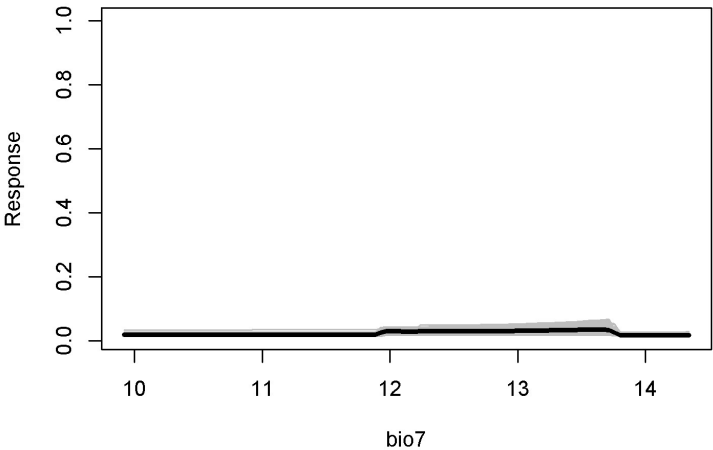
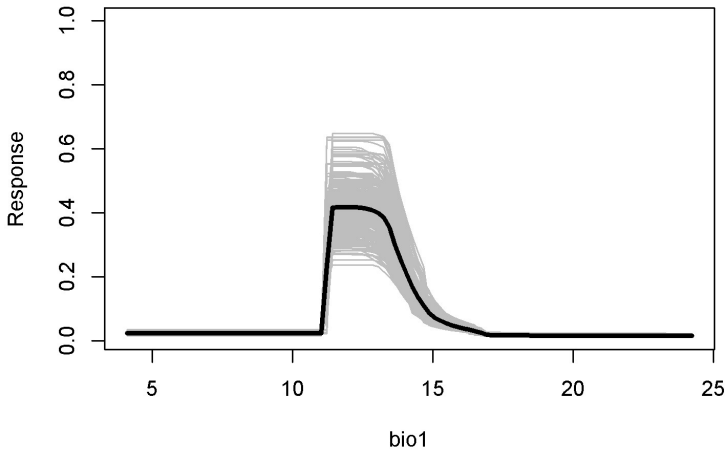
GBM modeled response for Hawaii.Creeper



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Hawaii.Creeper response curves MAXENT all vars

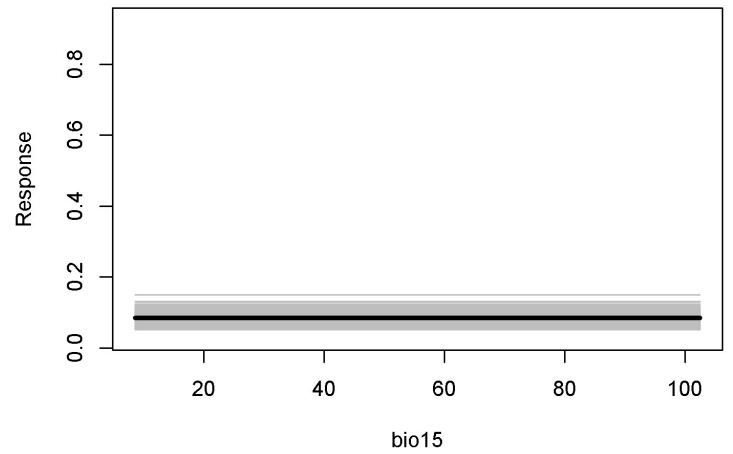
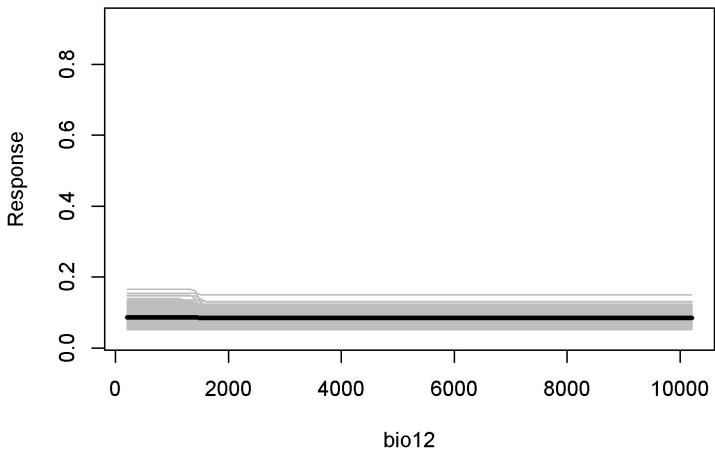
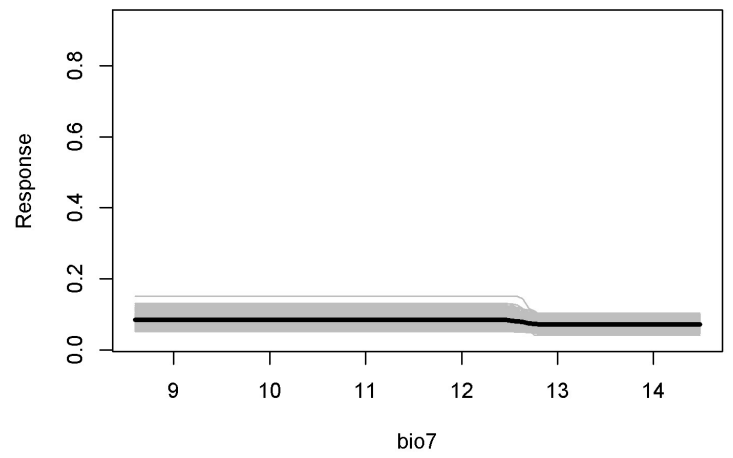
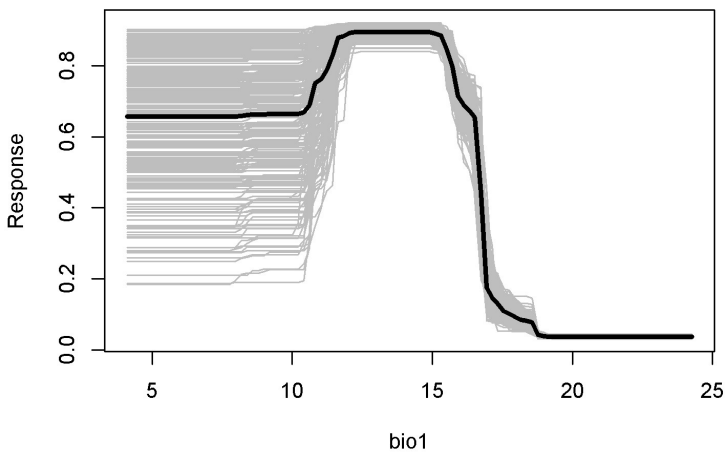
MAXENT modeled response for Hawaii.Creeper



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

liwi response curves GBM all vars

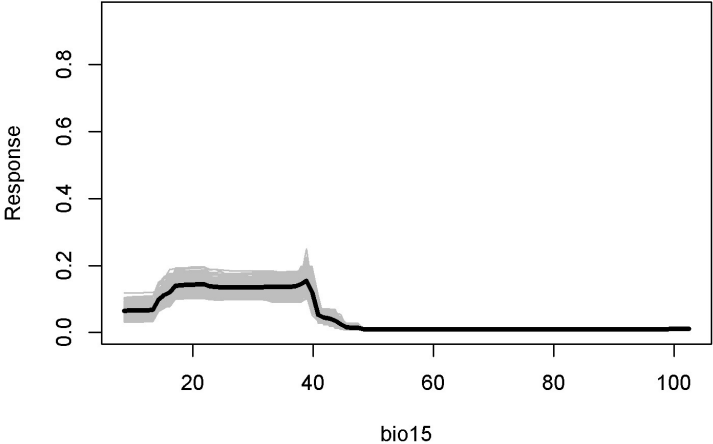
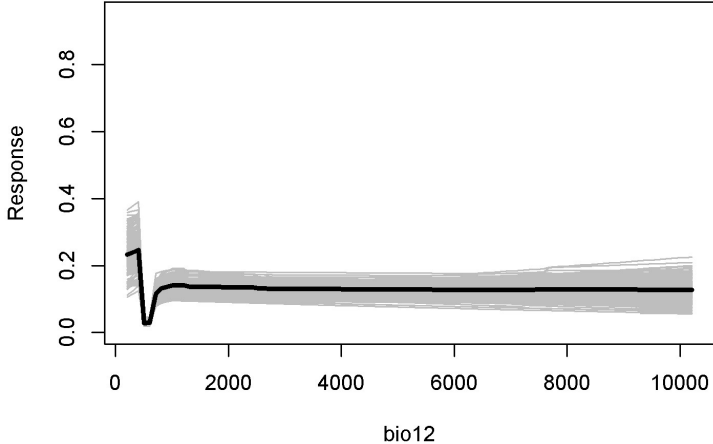
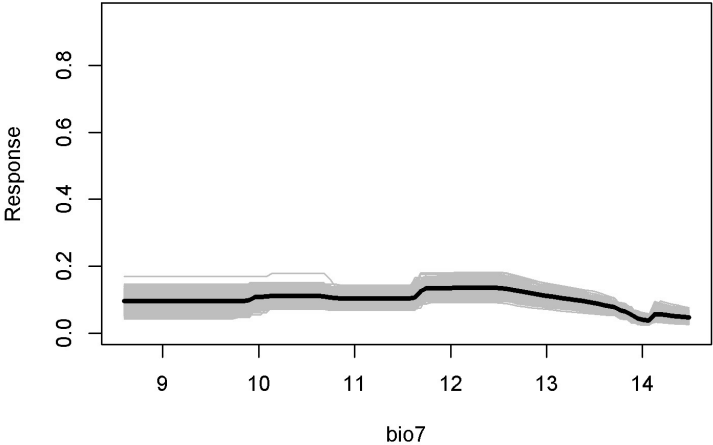
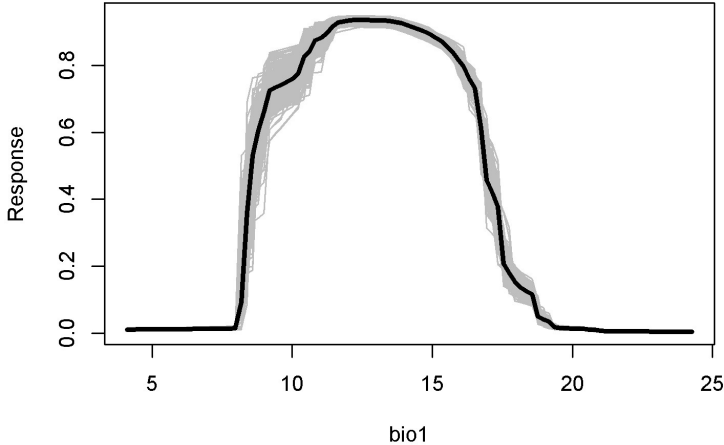
GBM modeled response for liwi



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

liwi response curves MAXENT all vars

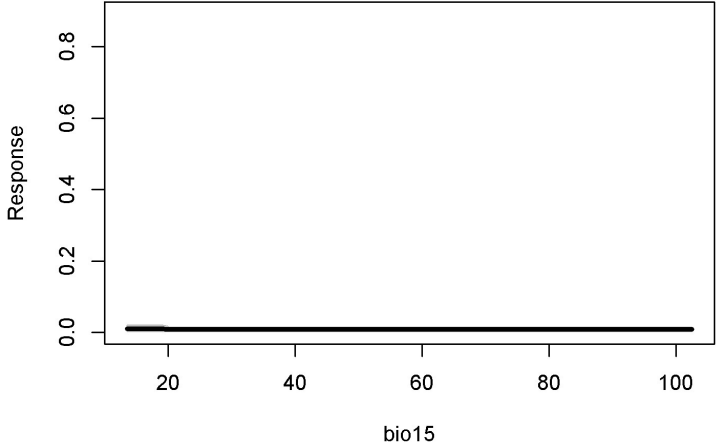
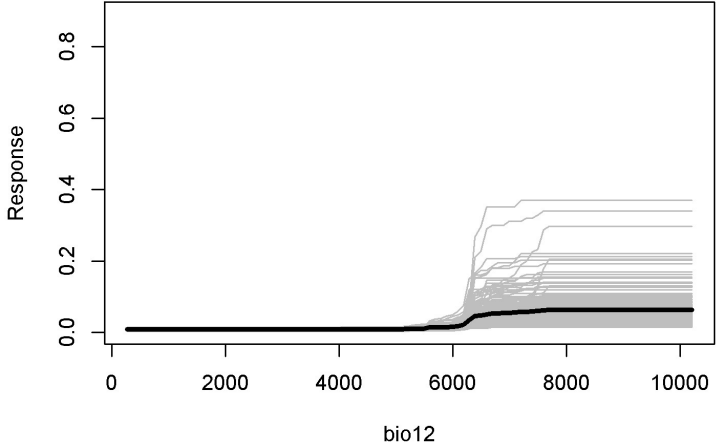
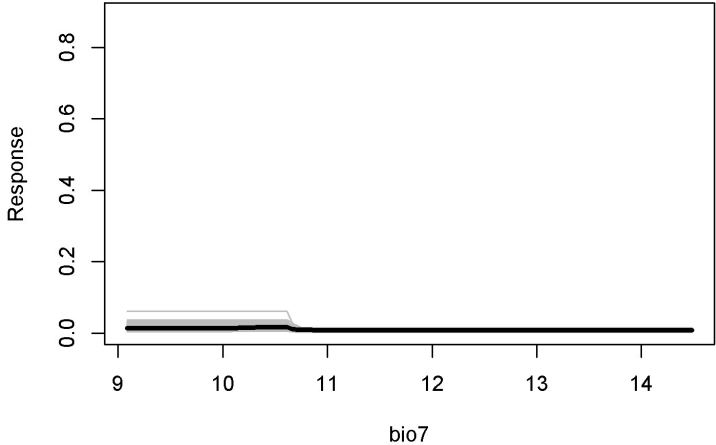
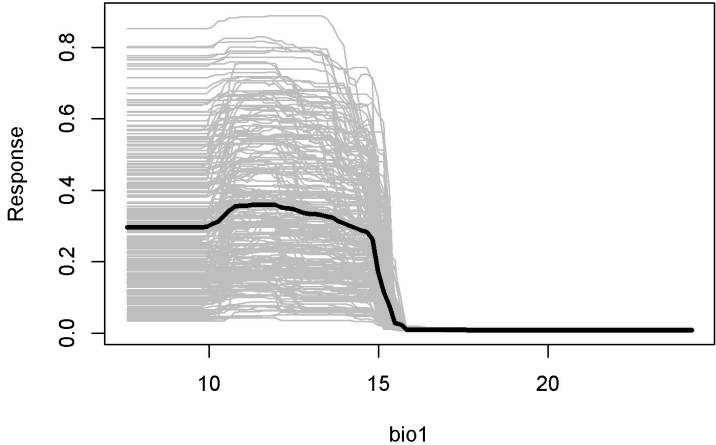
MAXENT modeled response for liwi



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Maui.Alauahio response curves GBM all vars

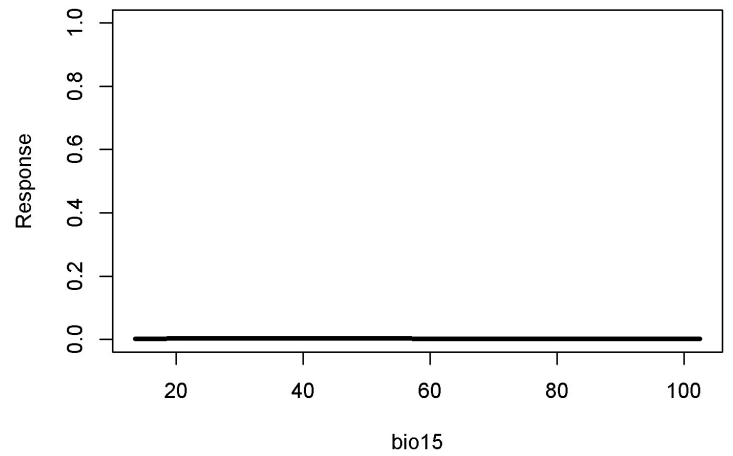
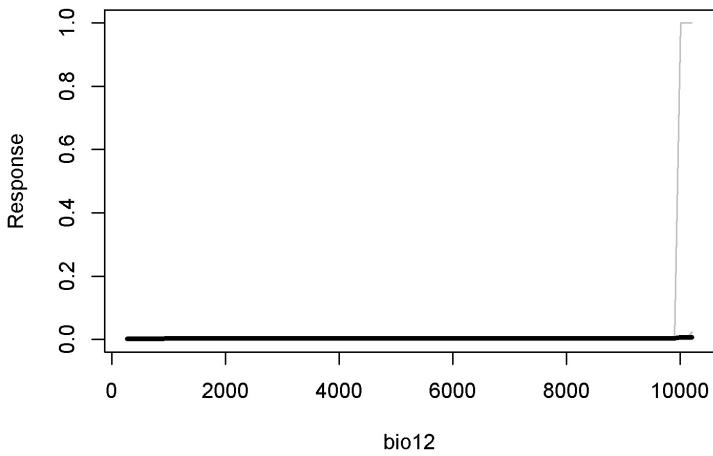
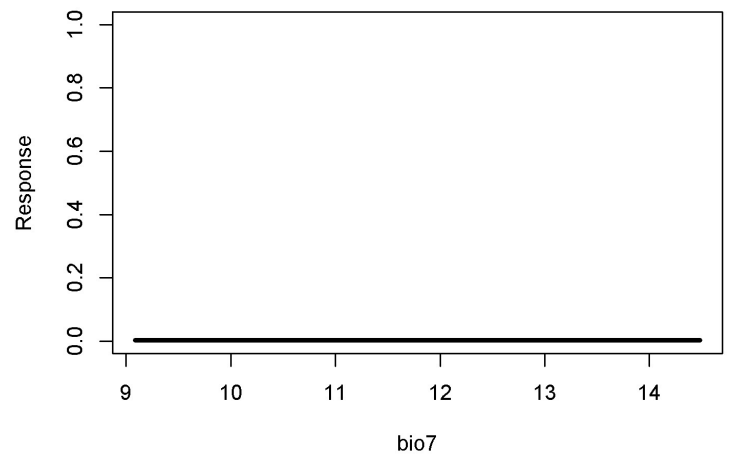
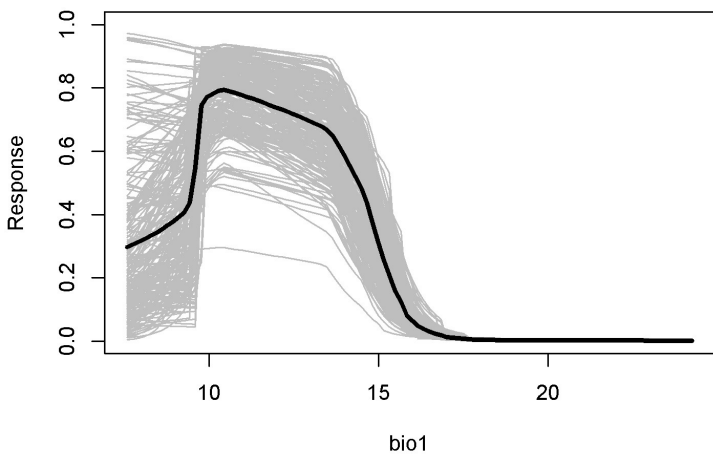
GBM modeled response for Maui.Alauahio



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Maui.Alauahio response curves MAXENT all vars

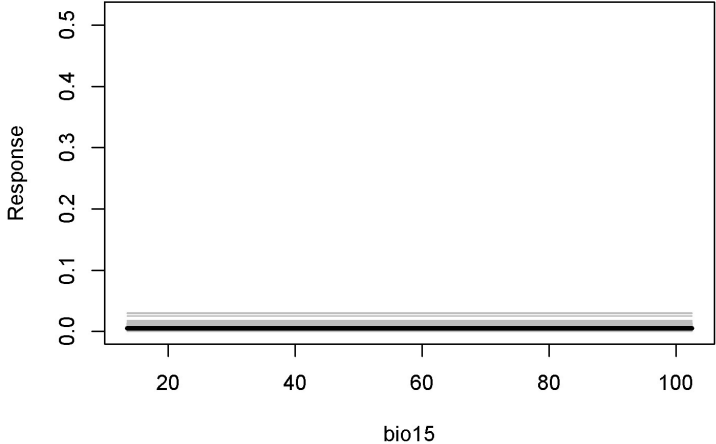
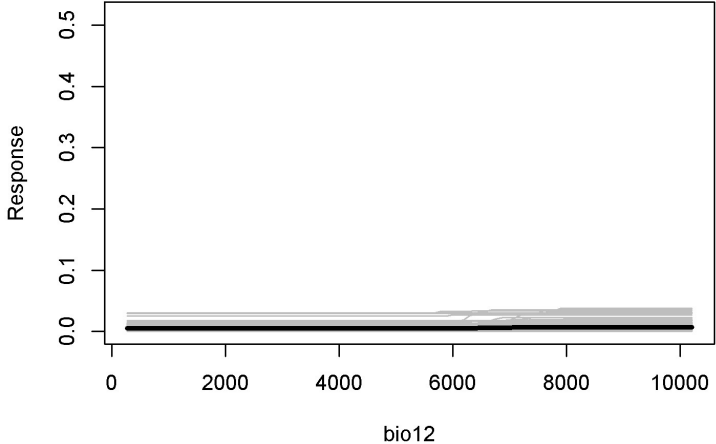
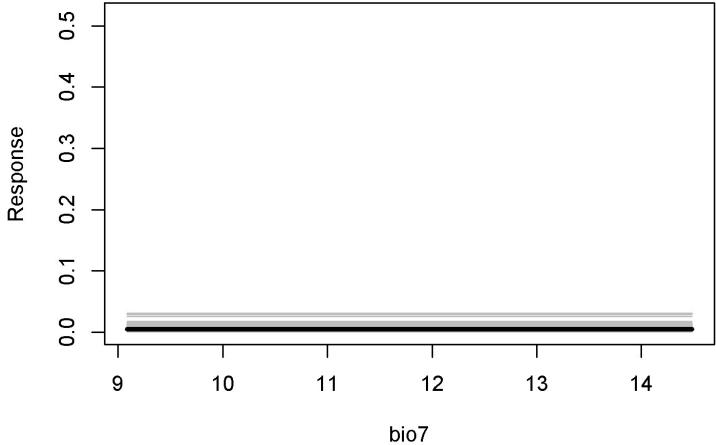
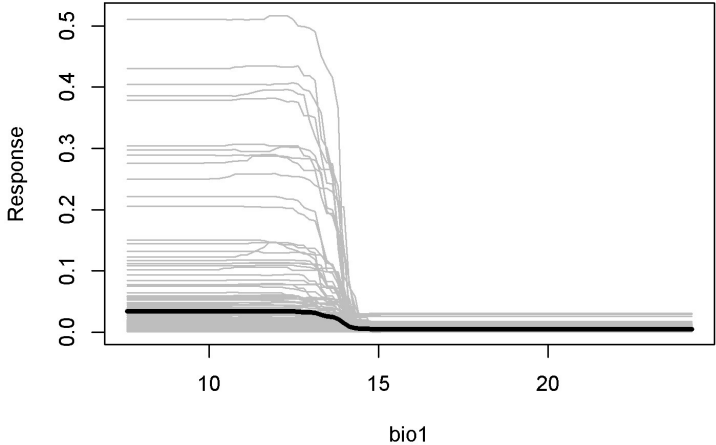
MAXENT modeled response for Maui.Alauahio



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Maui.Parrotbill response curves GBM all vars

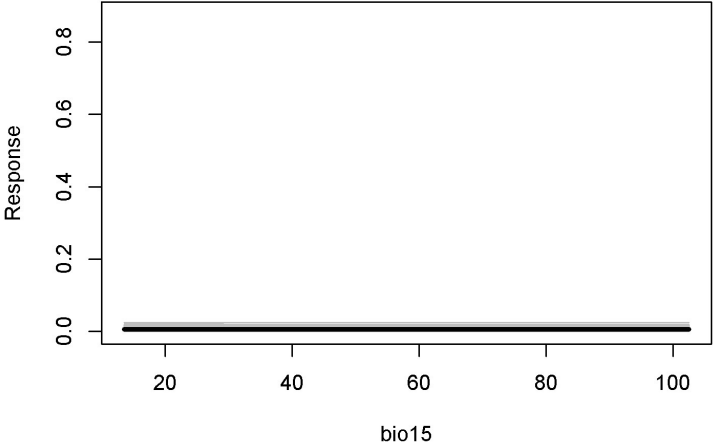
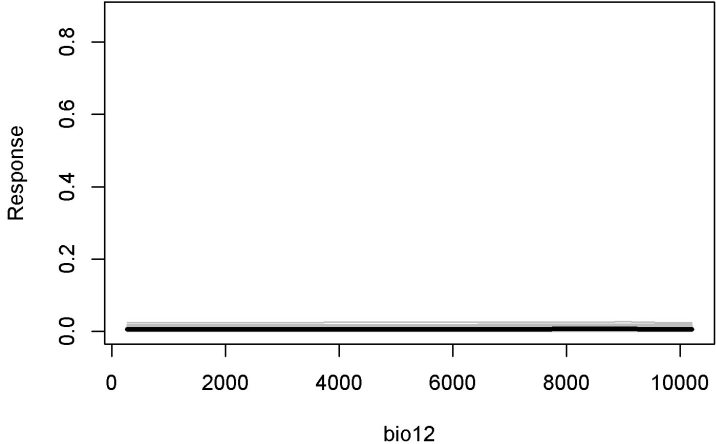
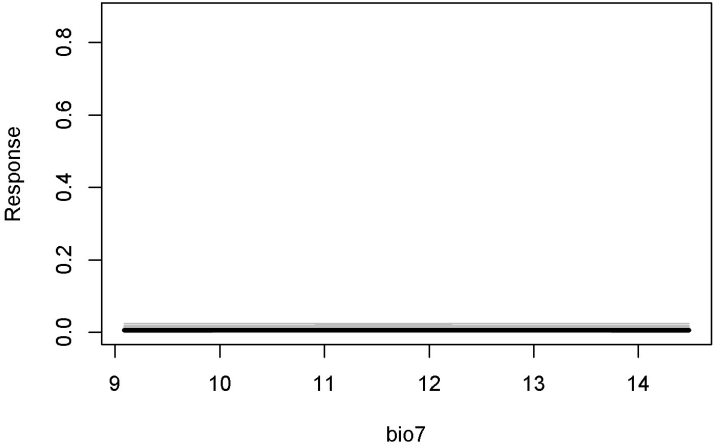
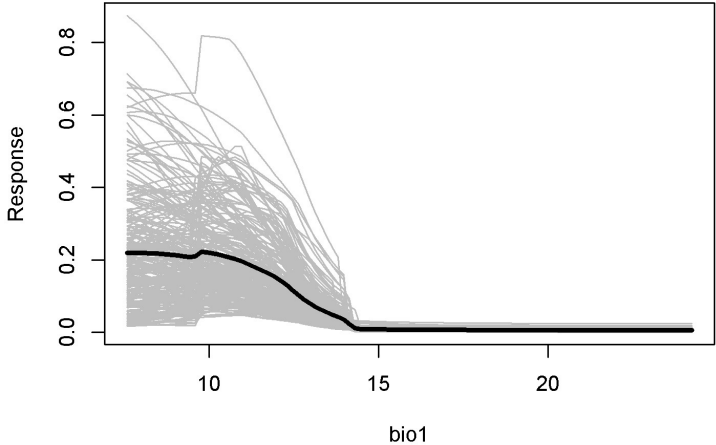
GBM modeled response for Maui.Parrotbill



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Maui.Parrotbill response curves MAXENT all vars

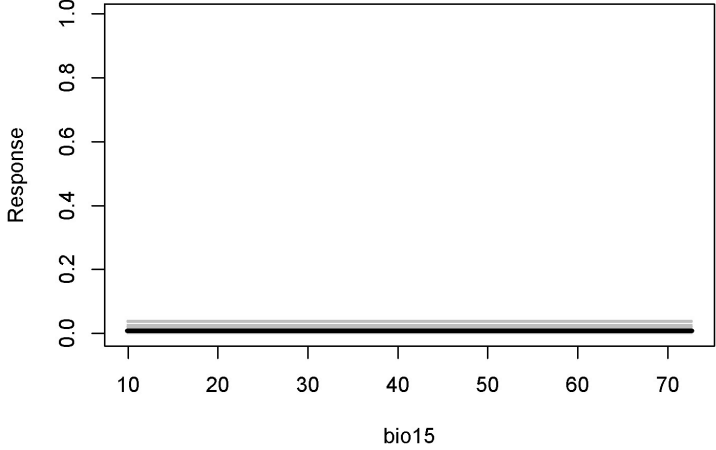
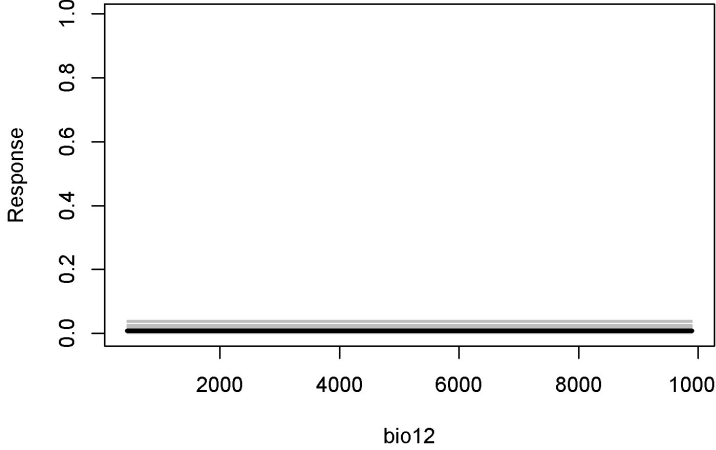
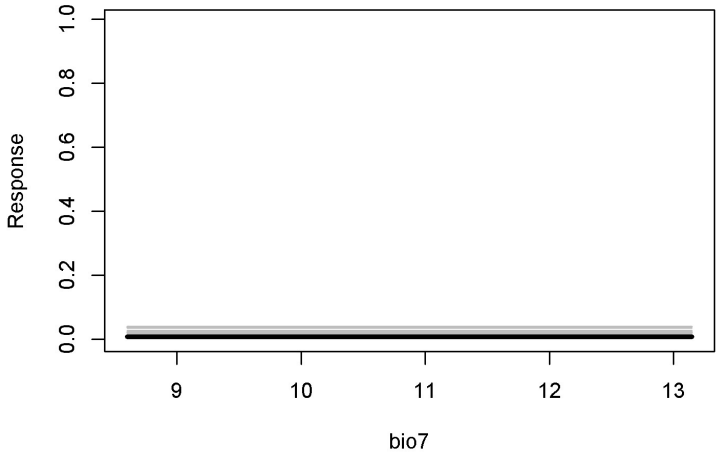
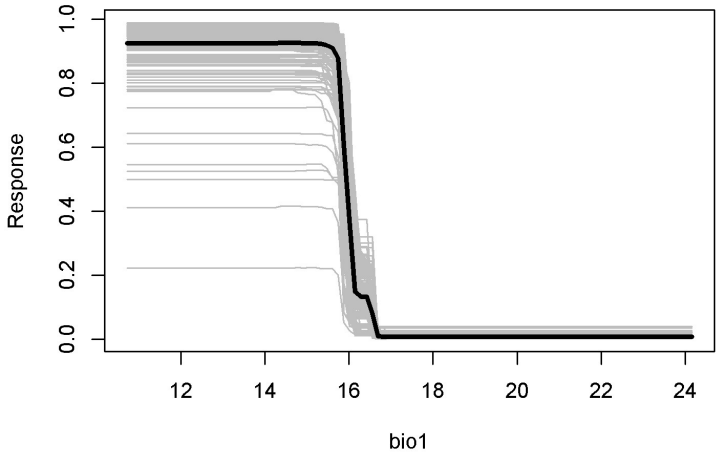
MAXENT modeled response for Maui.Parrotbill



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Puaiohi response curves GBM all vars

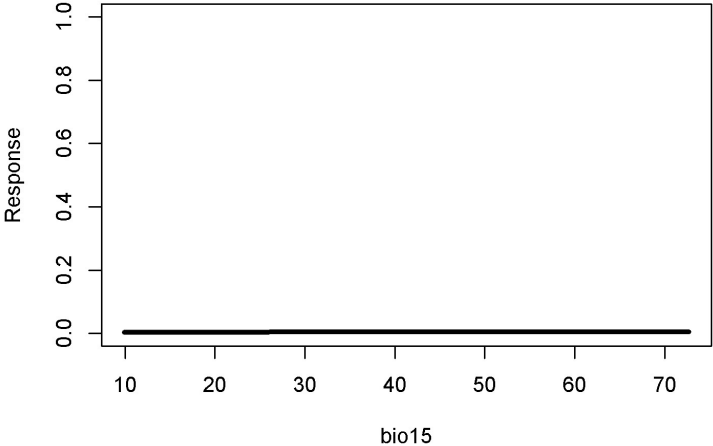
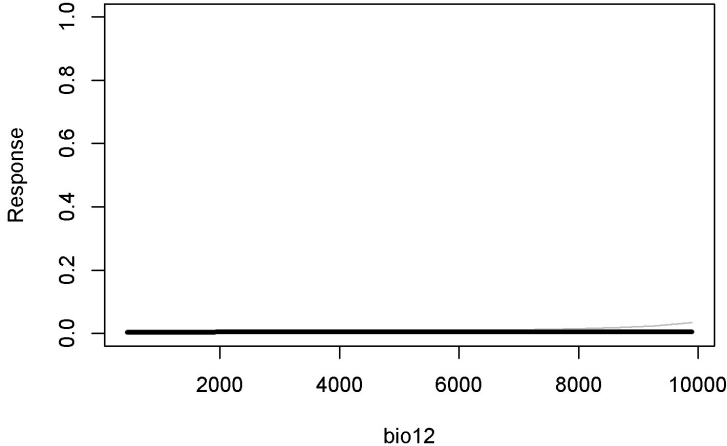
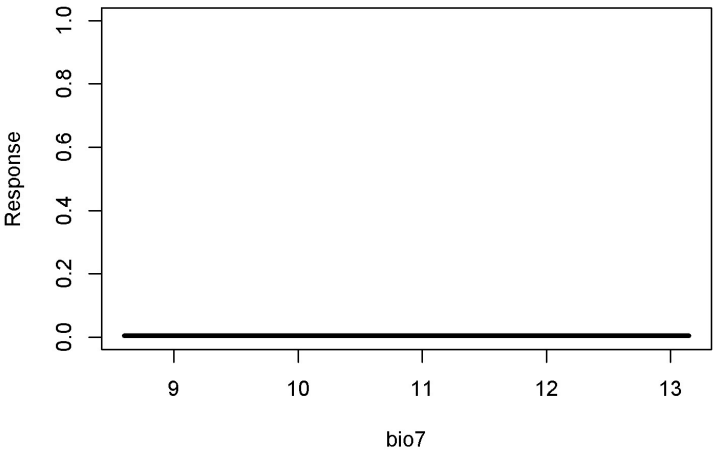
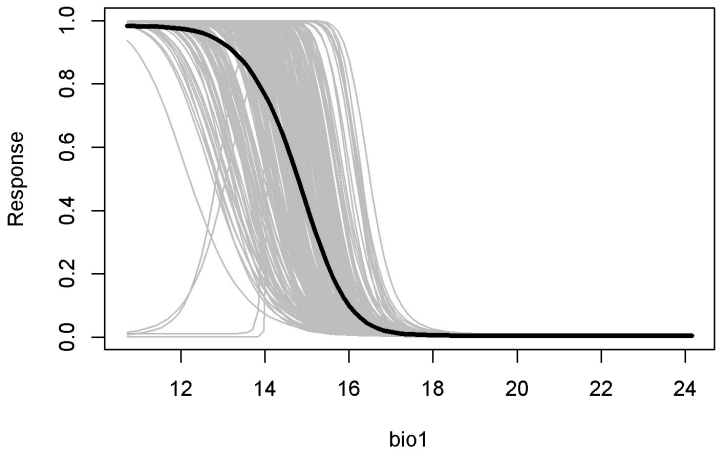
GBM modeled response for Puaiohi



S3: SPECIES RESPONSE CURVES
HIGH MODEL RELIABILITY SPECIES

Puaiohi response curves MAXENT all vars

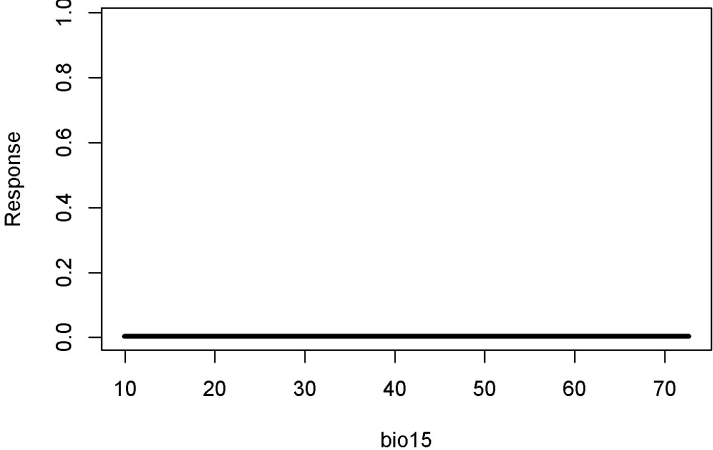
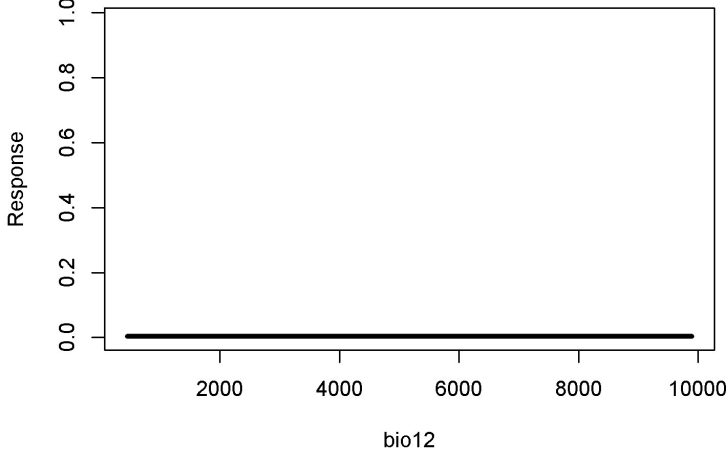
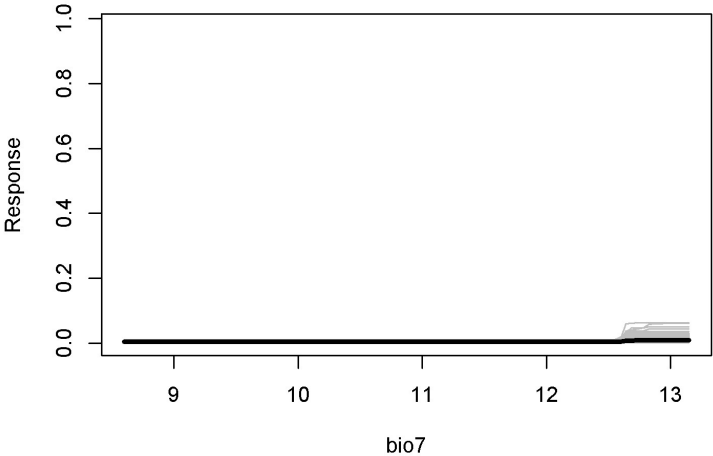
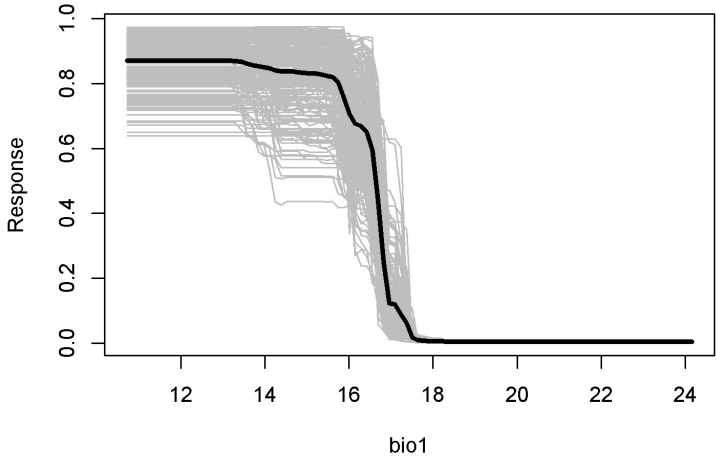
MAXENT modeled response for Puaiohi



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Anianiau response curves GBM all vars

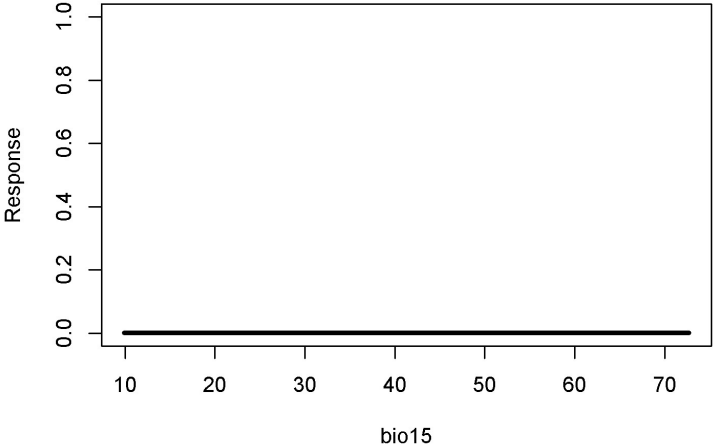
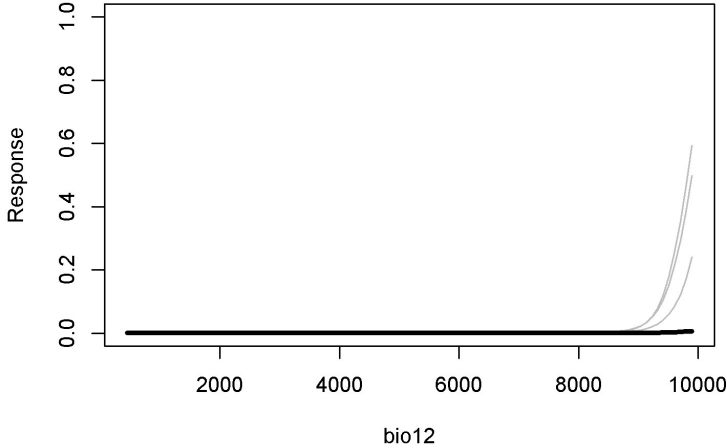
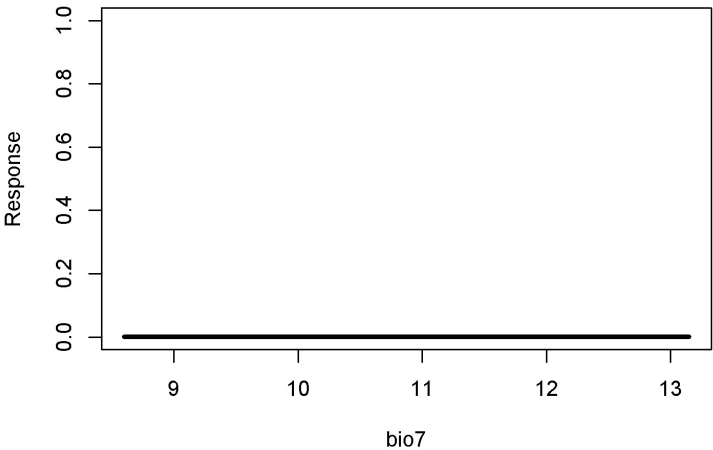
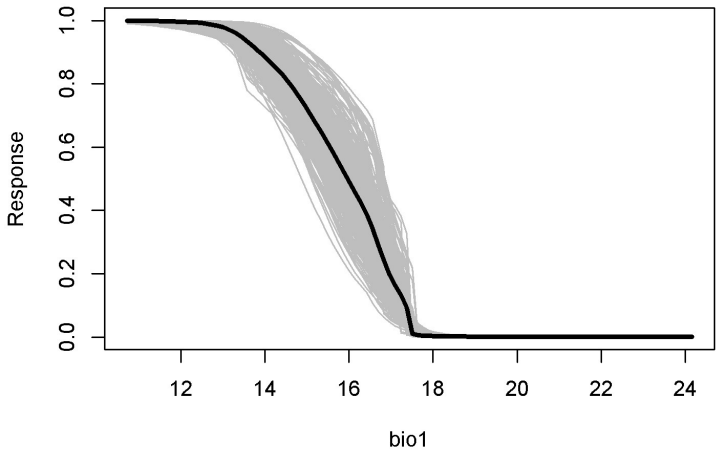
GBM modeled response for Anianiau



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Anianiau response curves MAXENT all vars

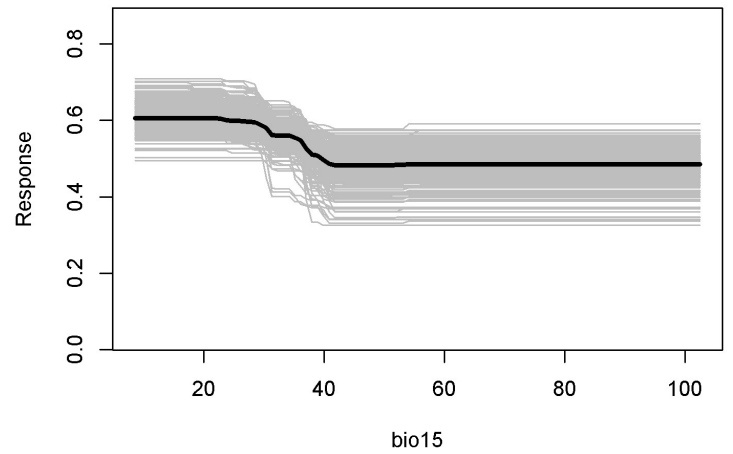
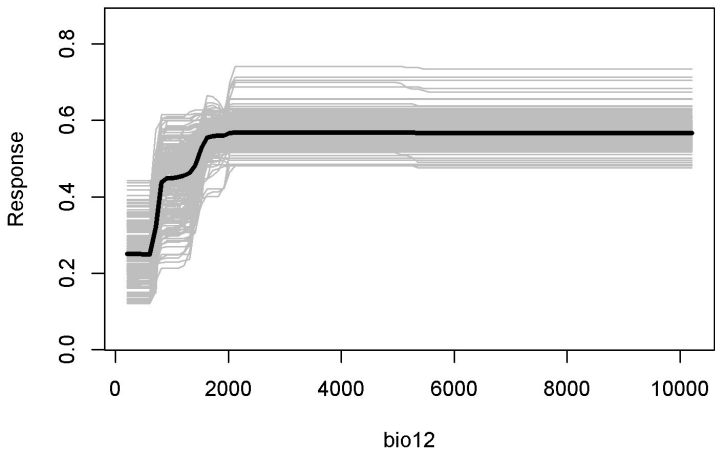
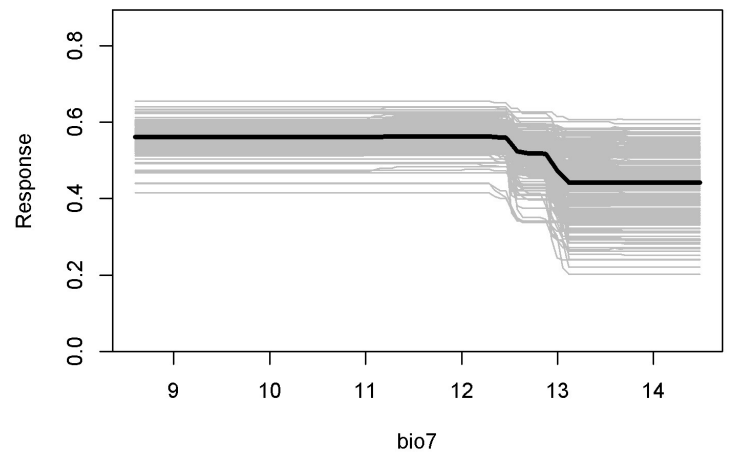
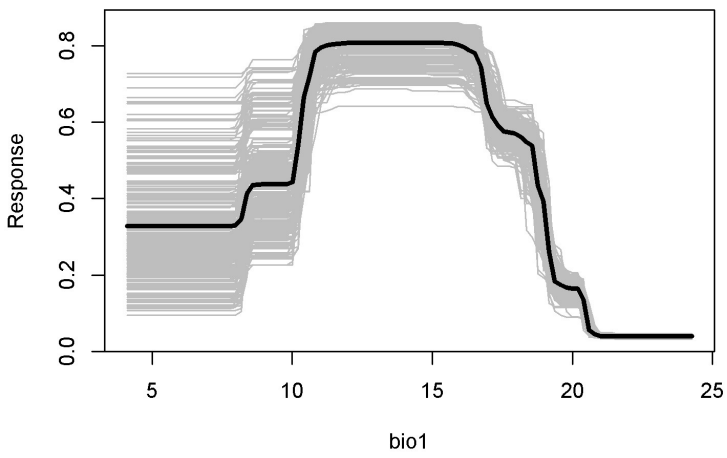
MAXENT modeled response for Anianiau



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Apapane response curves GBM all vars

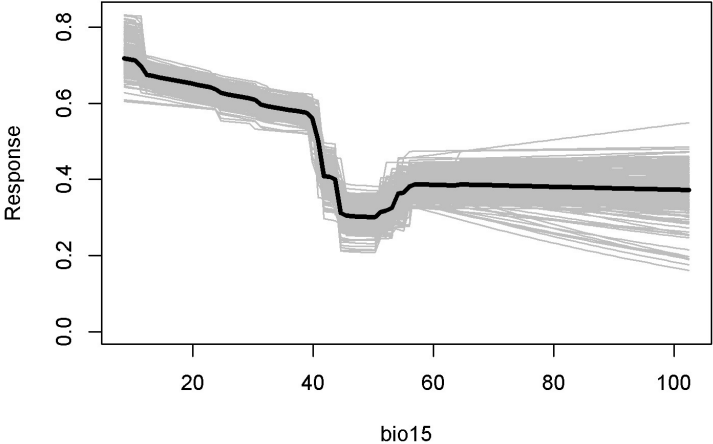
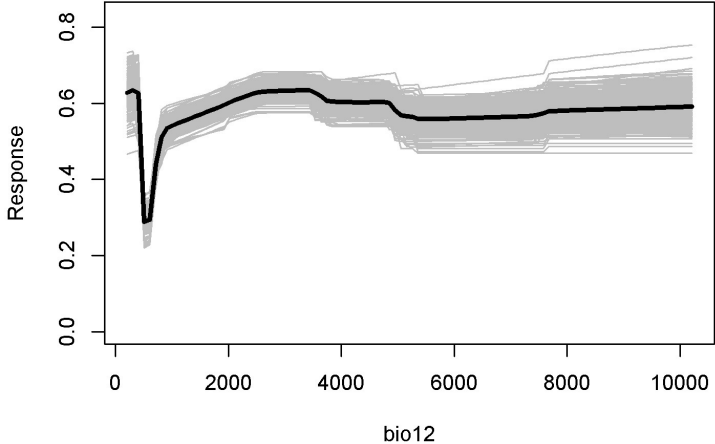
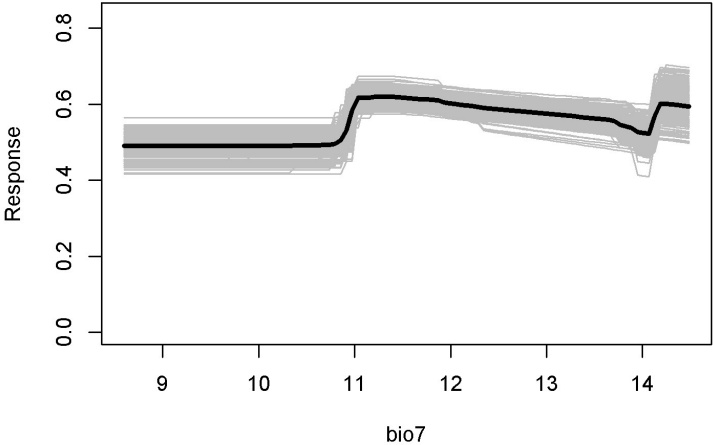
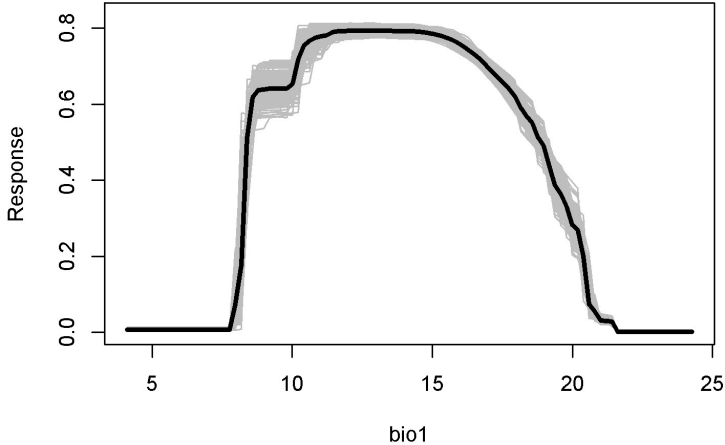
GBM modeled response for Apapane



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Apapane response curves MAXENT all vars

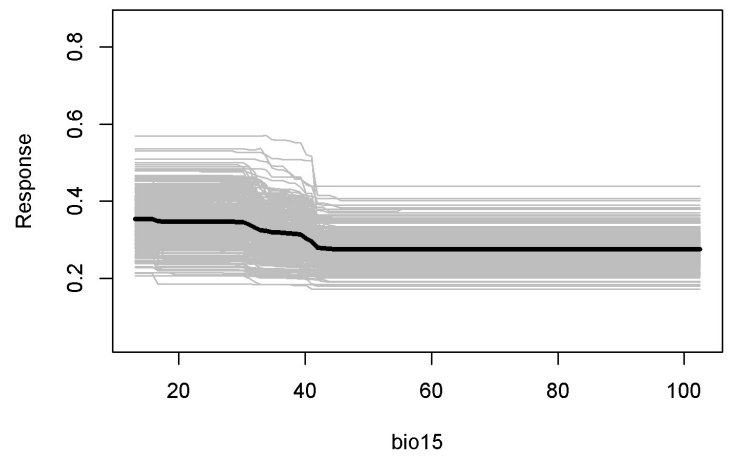
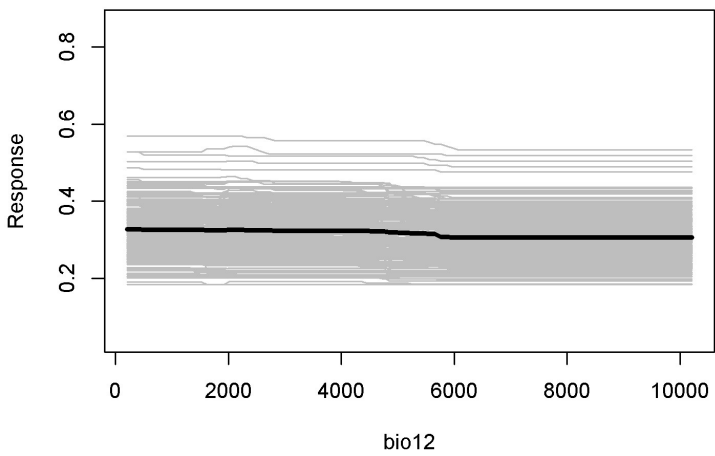
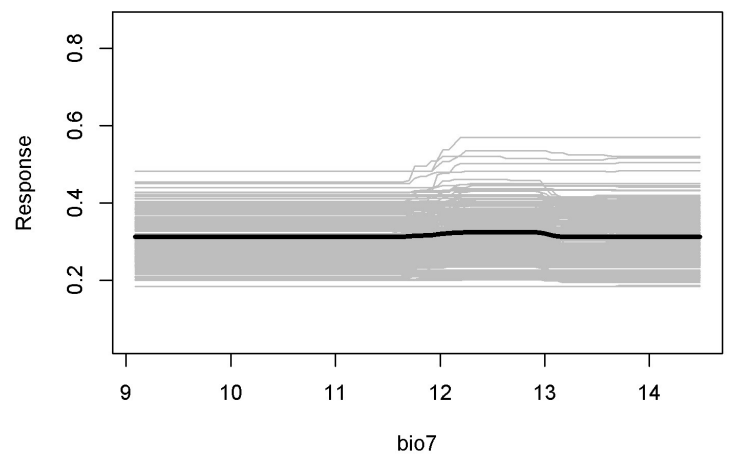
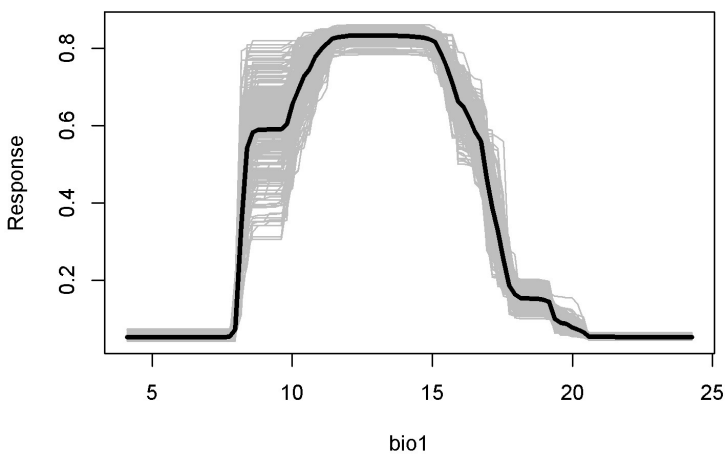
MAXENT modeled response for Apapane



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Hawaii.Amakihi response curves GBM all vars

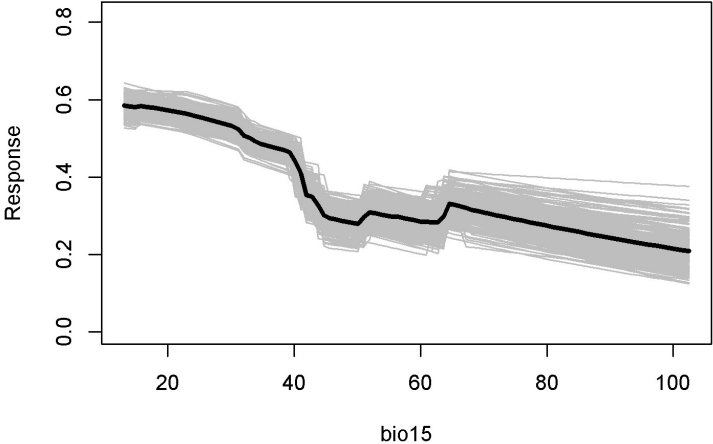
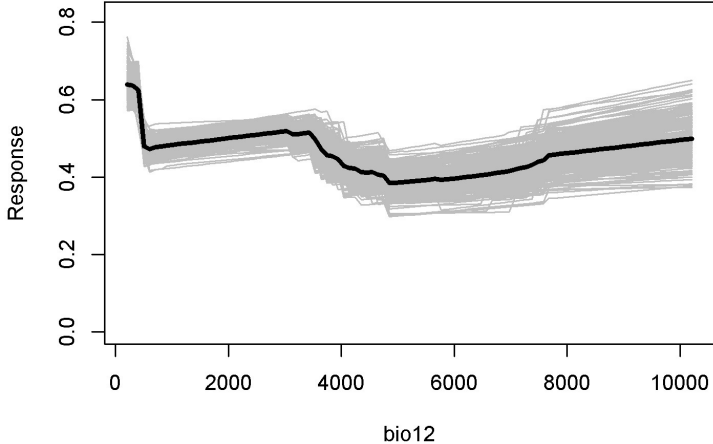
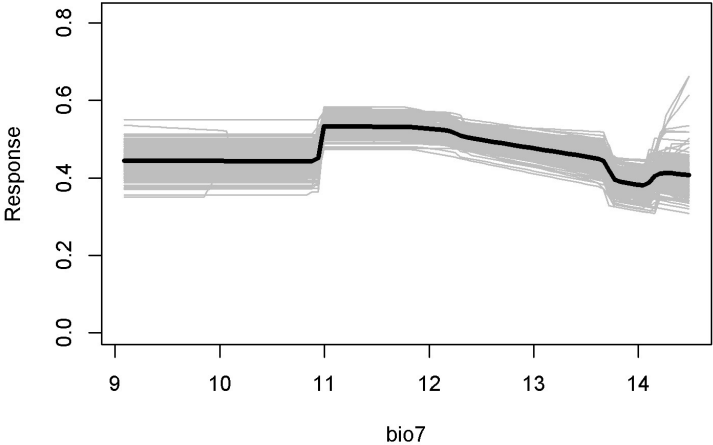
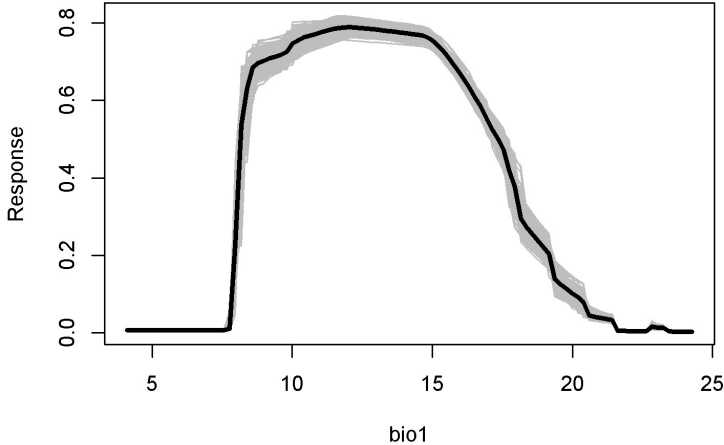
GBM modeled response for Hawaii.Amakihi



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Hawaii.Amakihi response curves MAXENT all vars

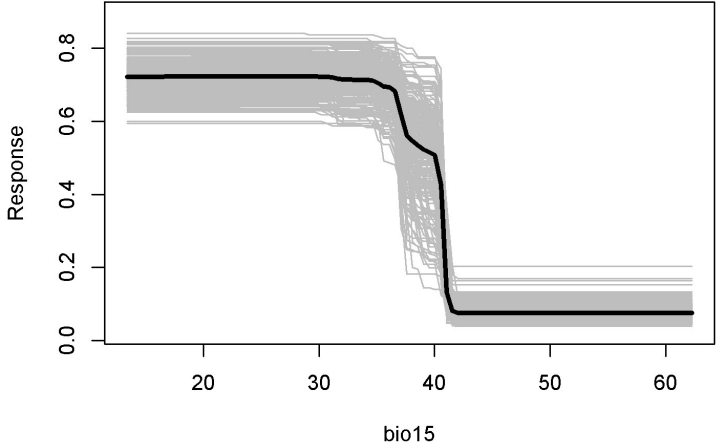
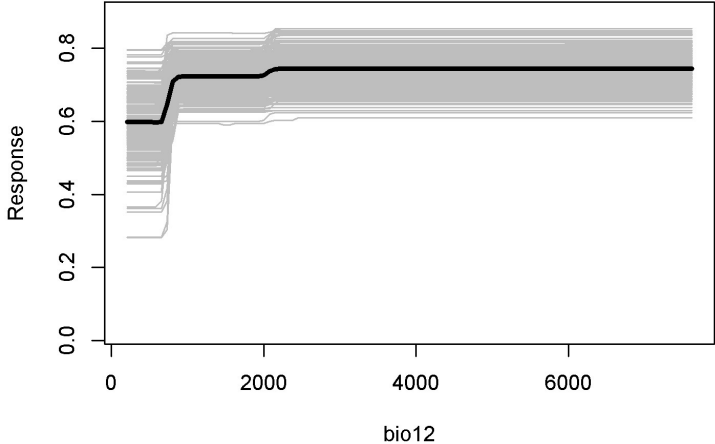
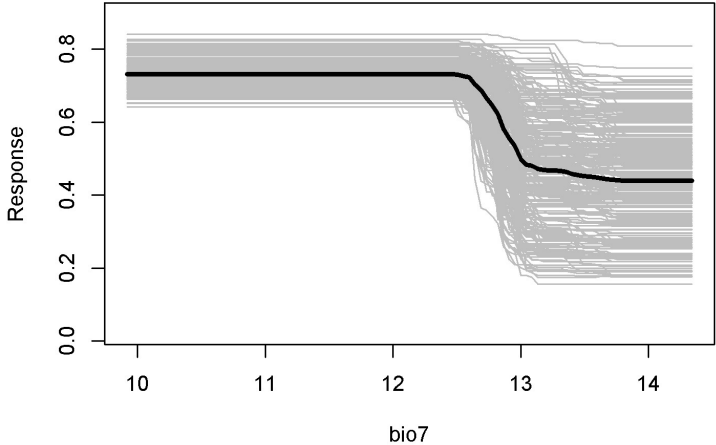
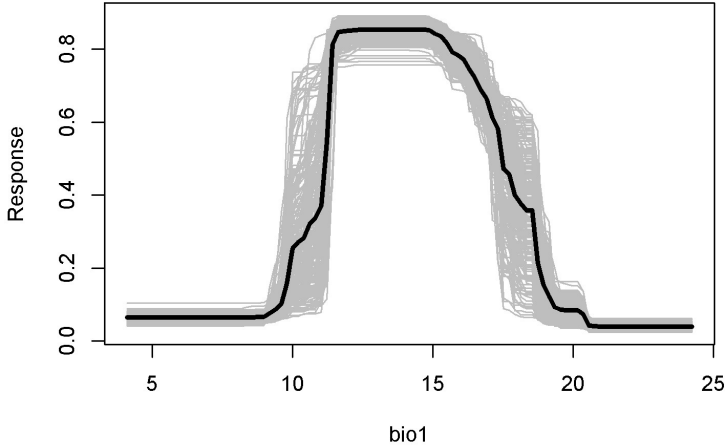
MAXENT modeled response for Hawaii.Amakihi



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Hawaii.Elepaio response curves GBM all vars

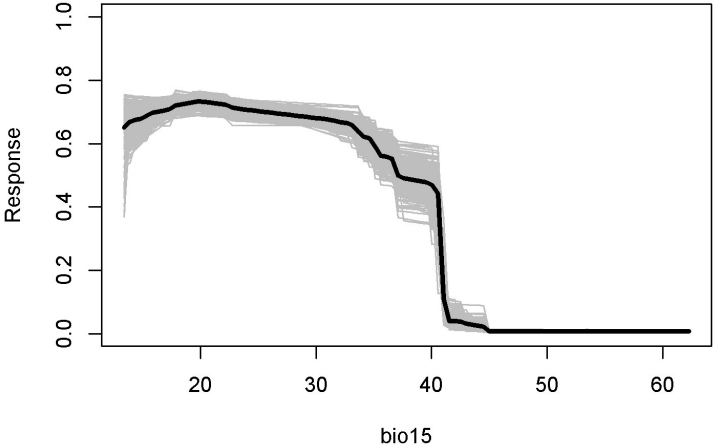
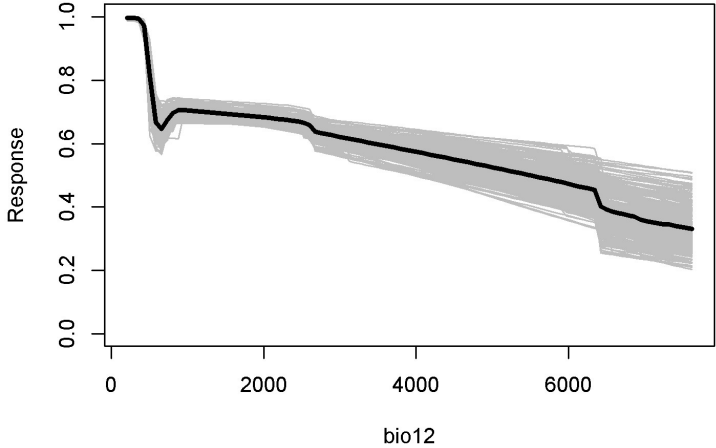
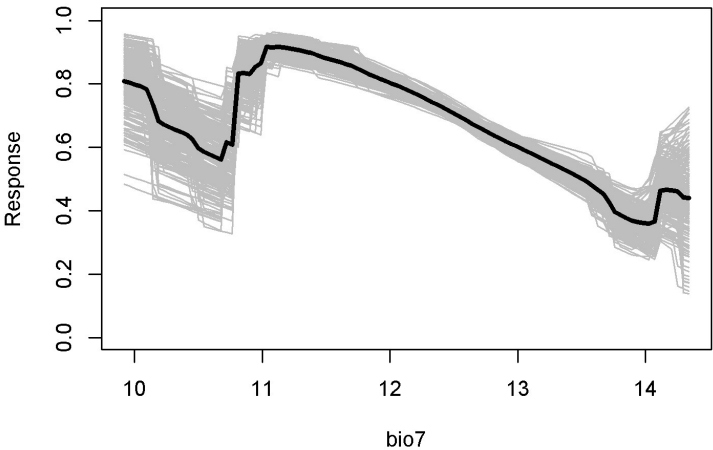
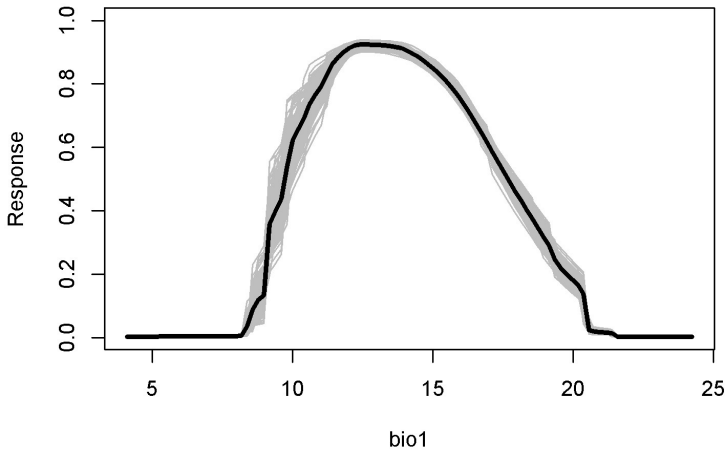
GBM modeled response for Hawaii.Elepaio



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Hawaii.Elepaio response curves MAXENT all vars

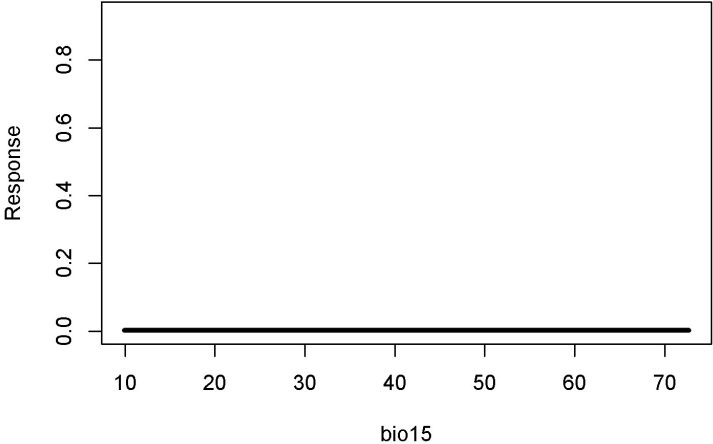
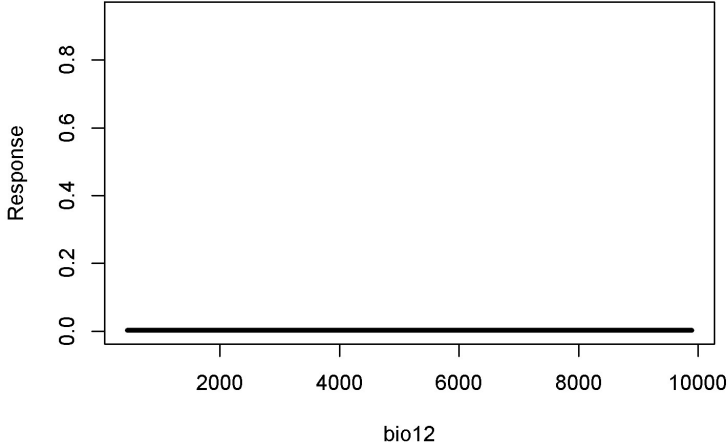
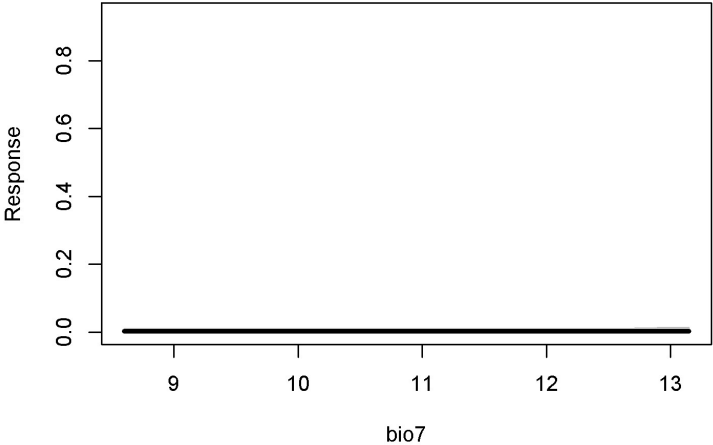
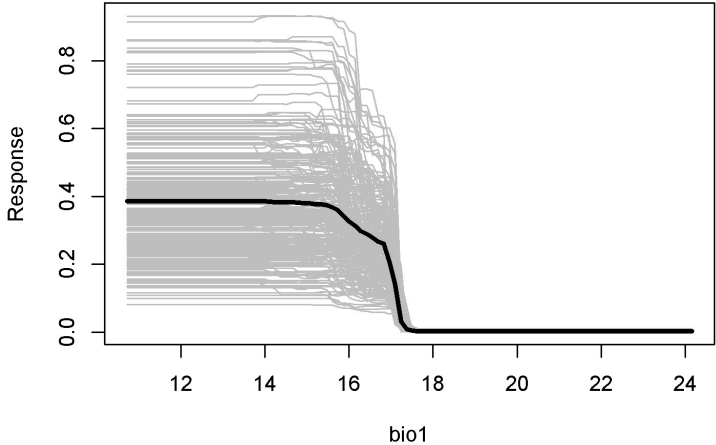
MAXENT modeled response for Hawaii.Elepaio



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Kauai.Amakihi response curves GBM all vars

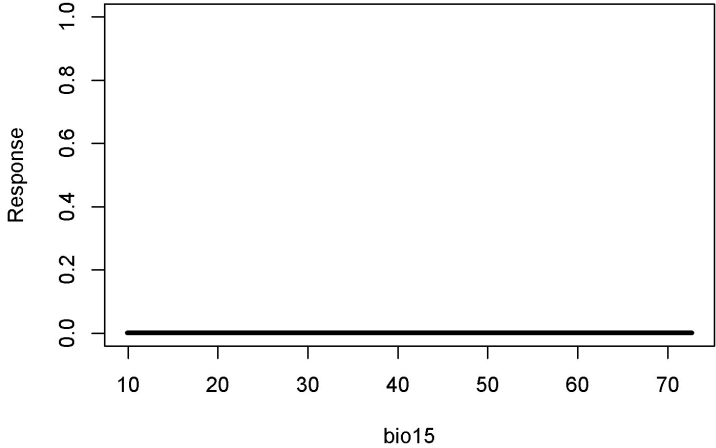
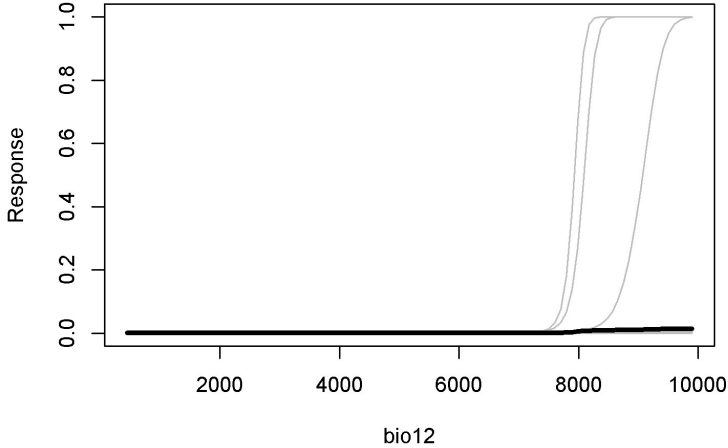
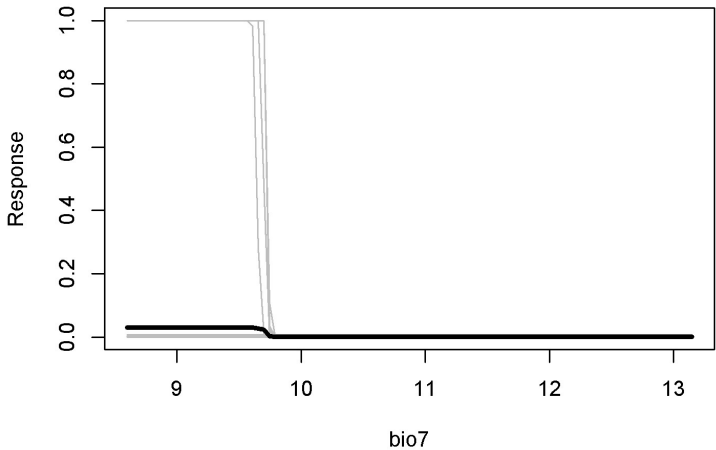
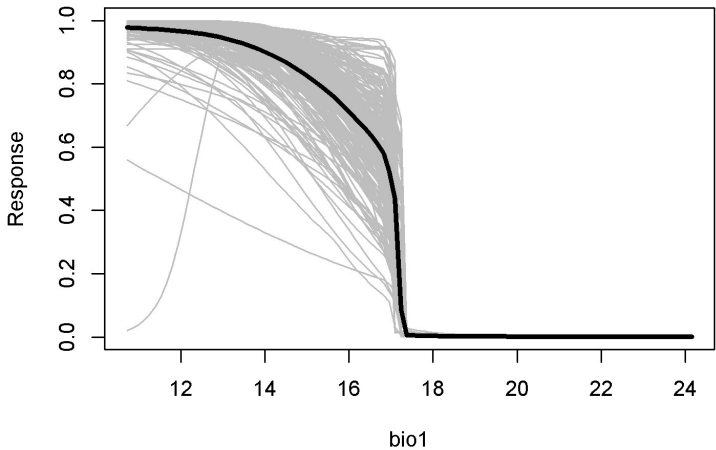
GBM modeled response for Kauai.Amakihi



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Kauai.Amakihi response curves MAXENT all vars

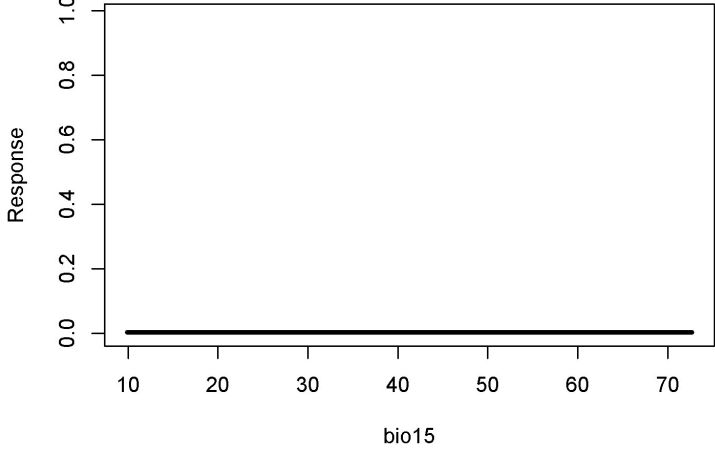
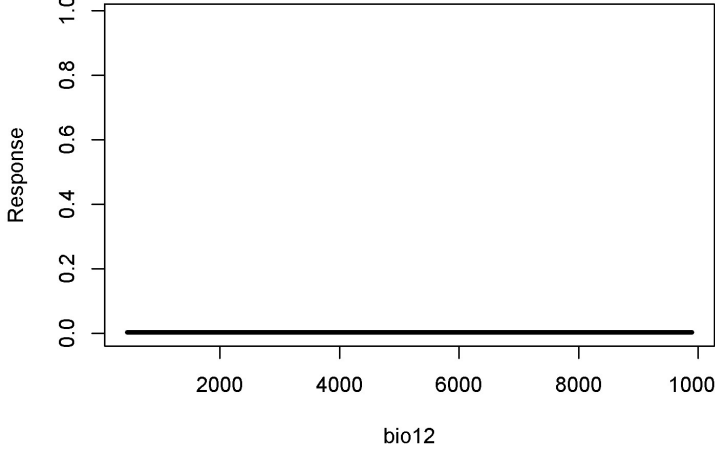
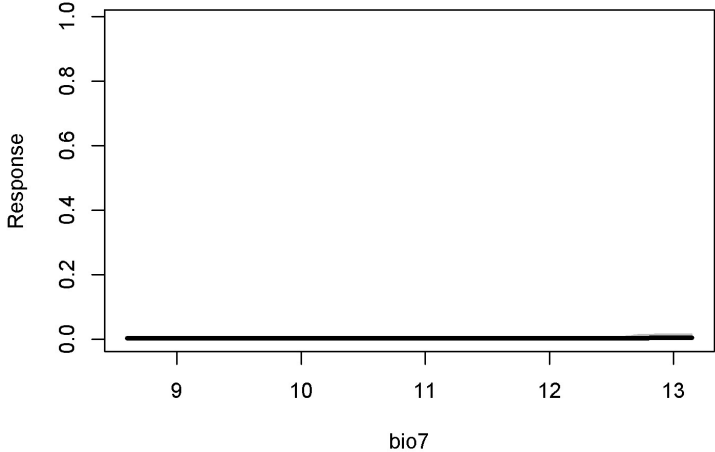
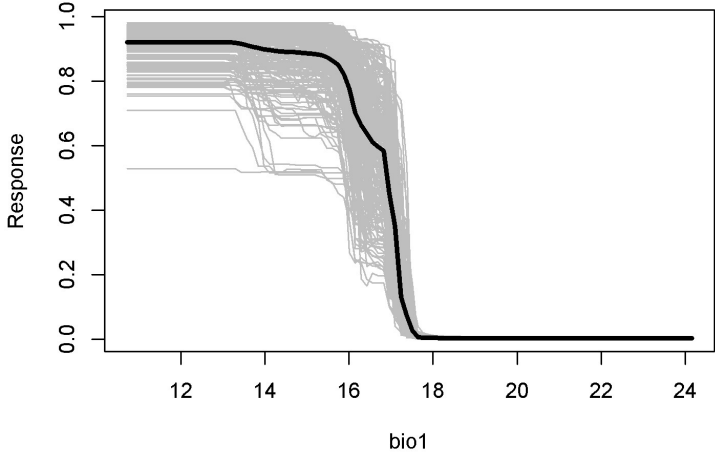
MAXENT modeled response for Kauai.Amakihi



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Kauai.Elepaio response curves GBM all vars

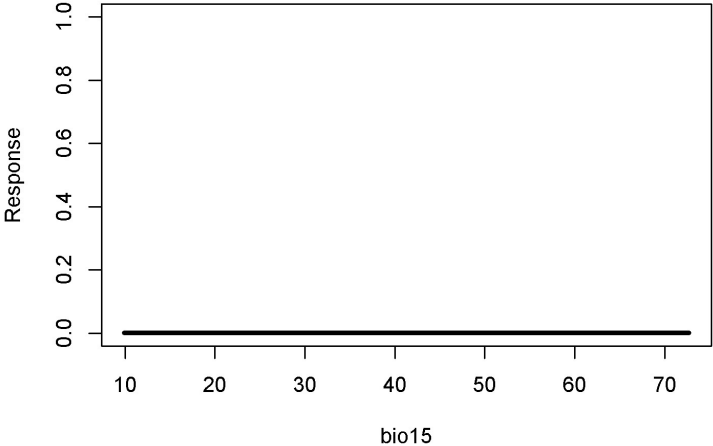
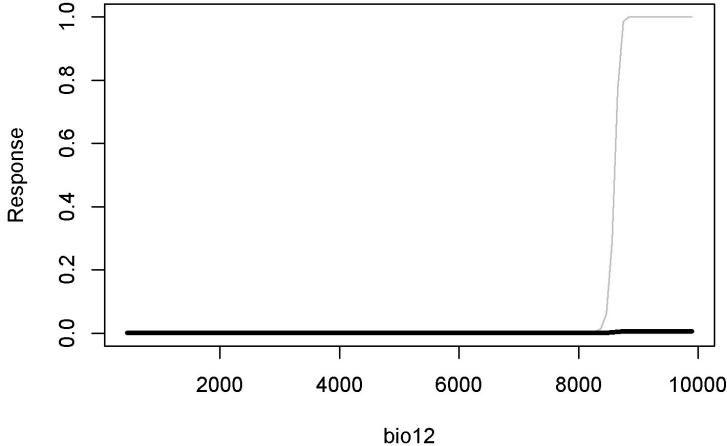
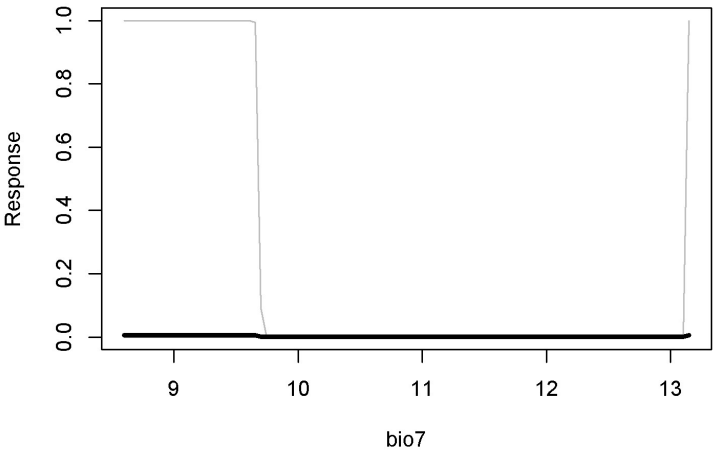
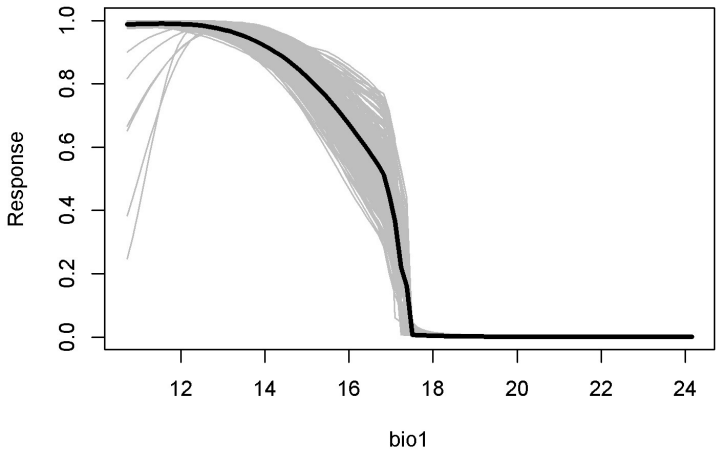
GBM modeled response for Kauai.Elepaio



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Kauai.Elepaio response curves MAXENT all vars

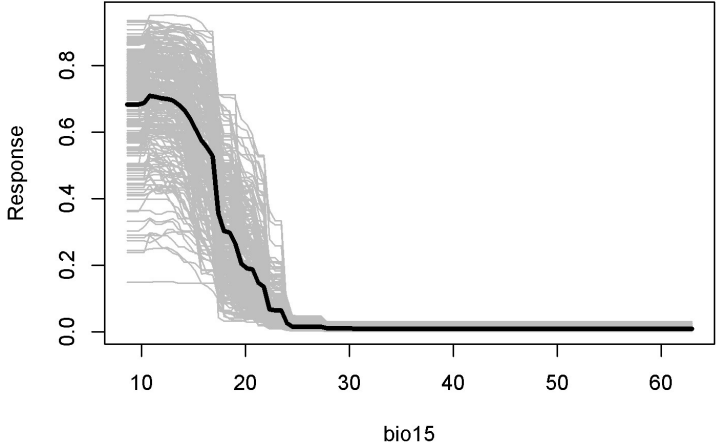
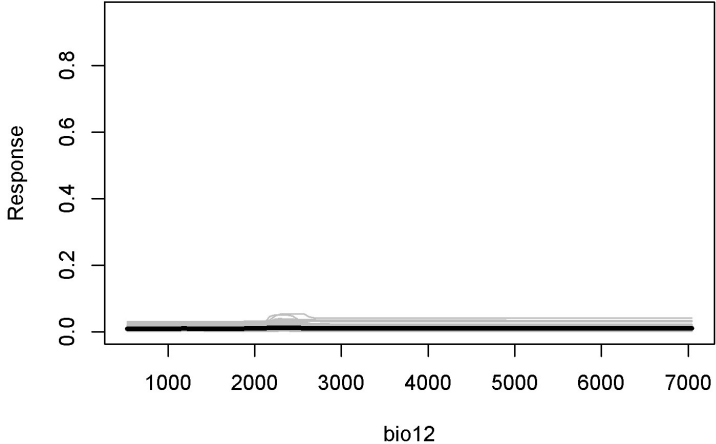
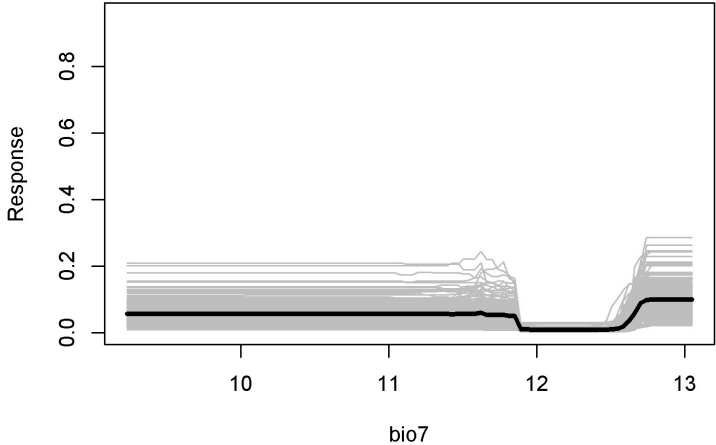
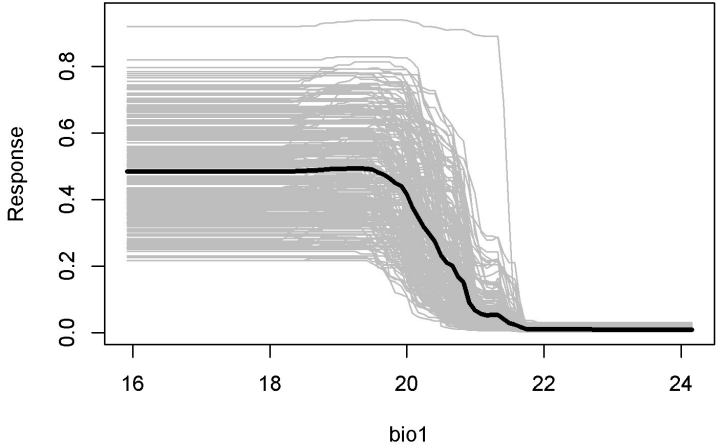
MAXENT modeled response for Kauai.Elepaio



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Oahu.Amakihi response curves GBM all vars

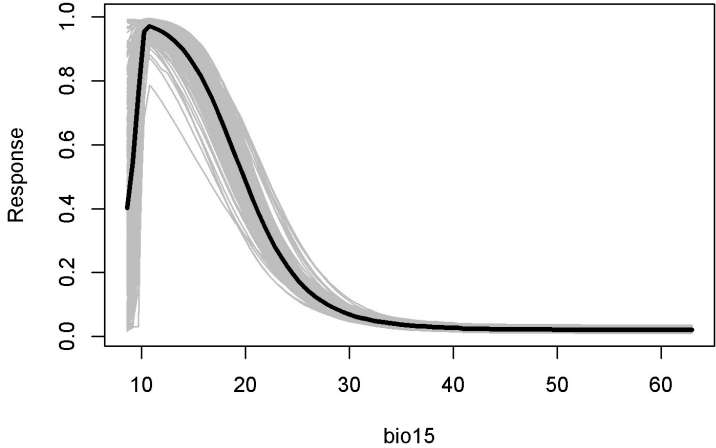
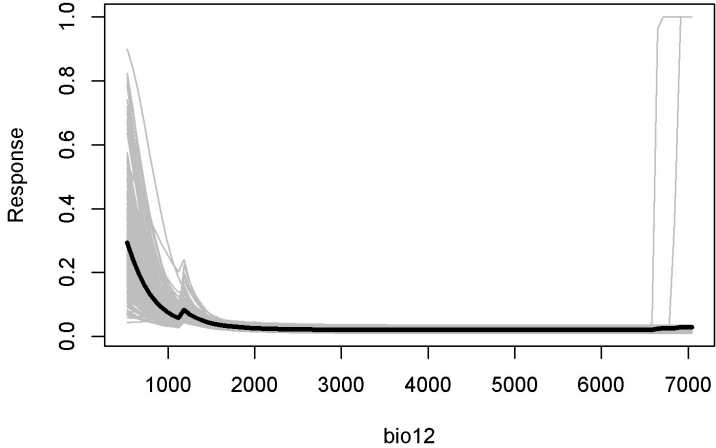
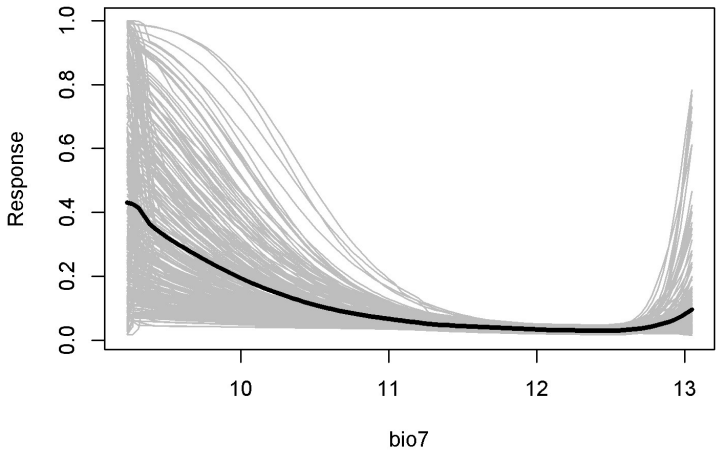
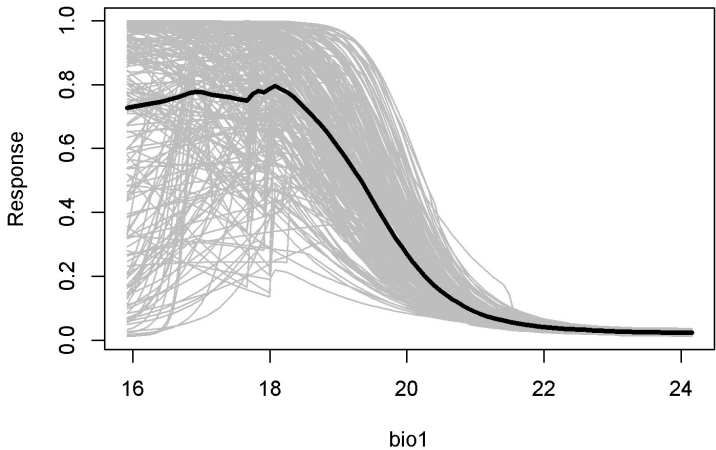
GBM modeled response for Oahu.Amakihi



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Oahu.Amakihi response curves MAXENT all vars

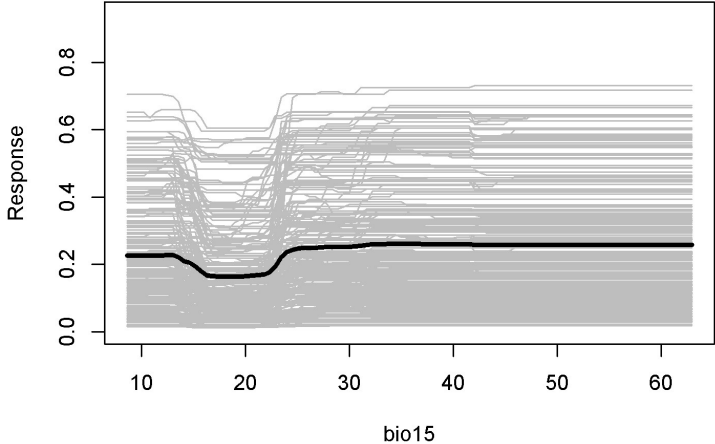
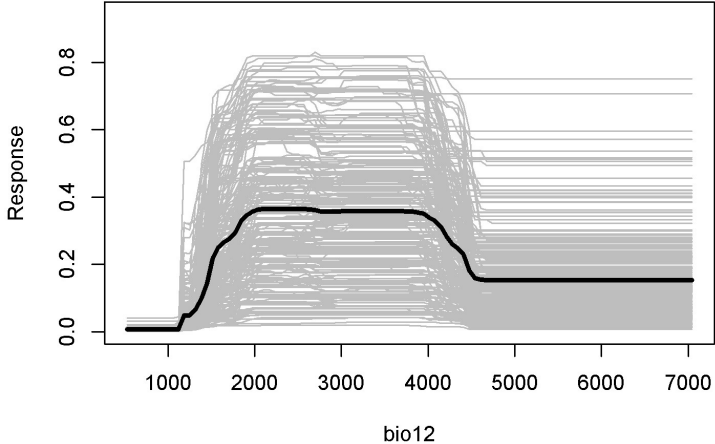
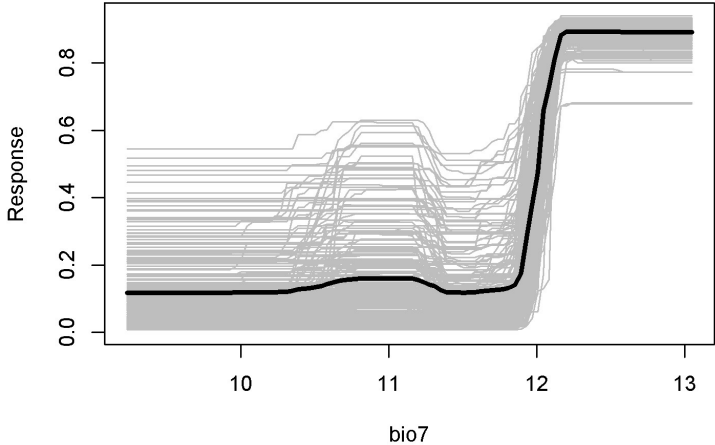
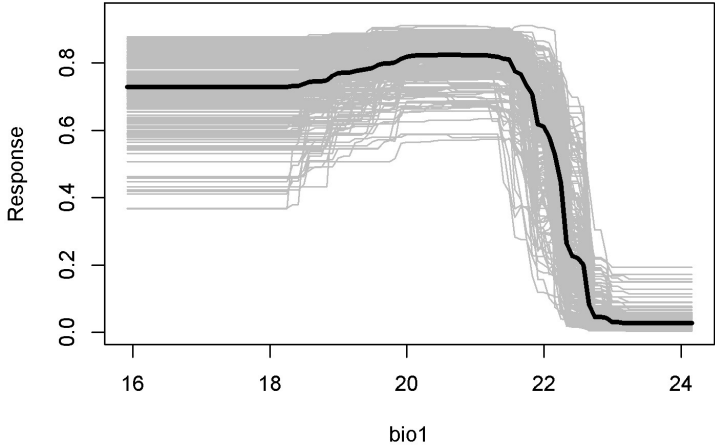
MAXENT modeled response for Oahu.Amakihi



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Oahu.Elepaio response curves GBM all vars

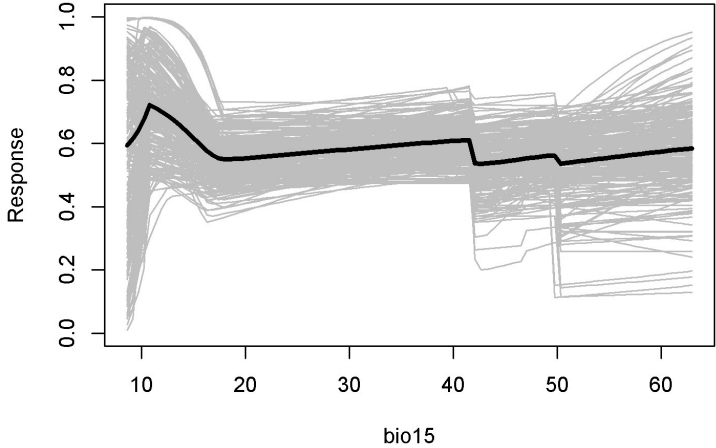
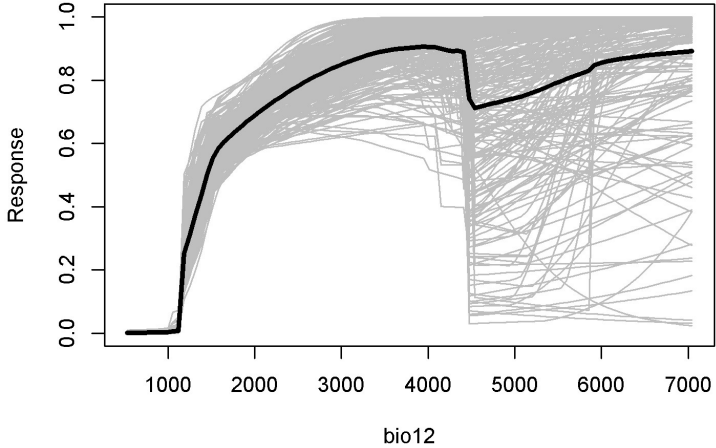
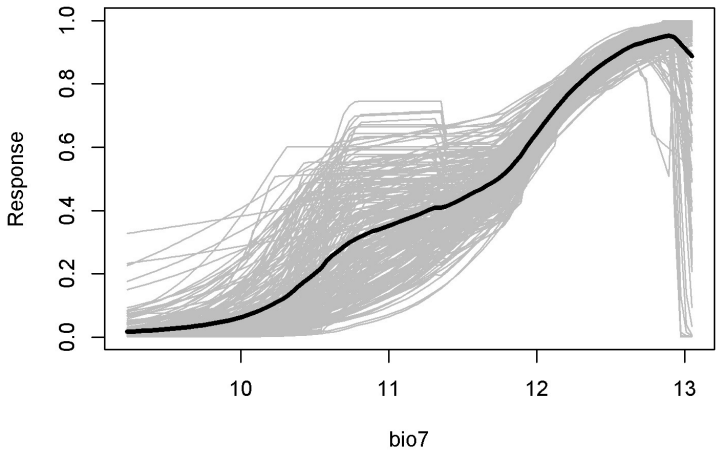
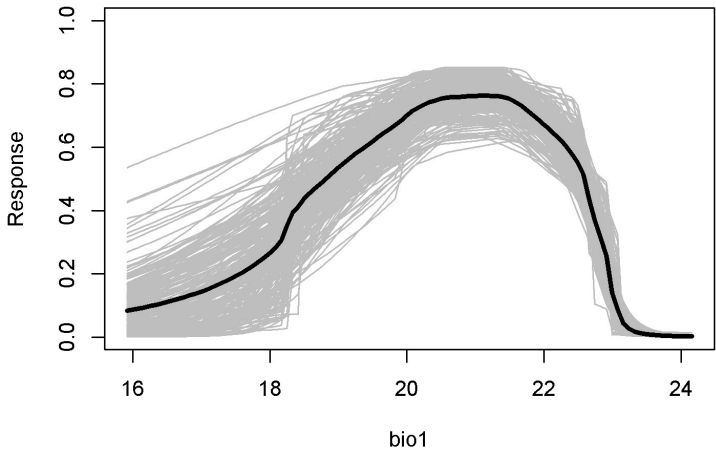
GBM modeled response for Oahu.Elepaio



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Oahu.Elepaio response curves MAXENT all vars

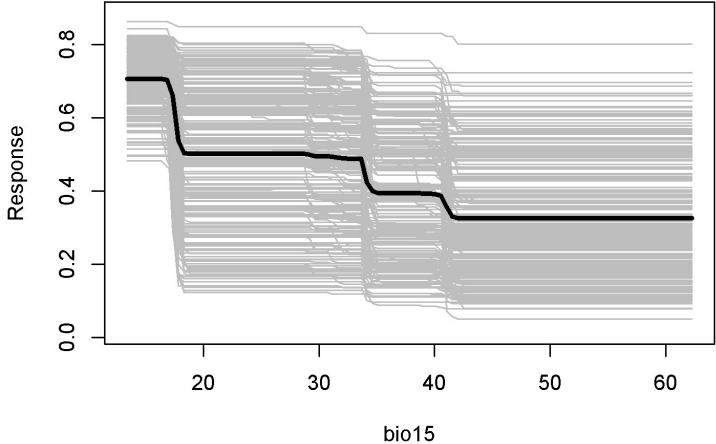
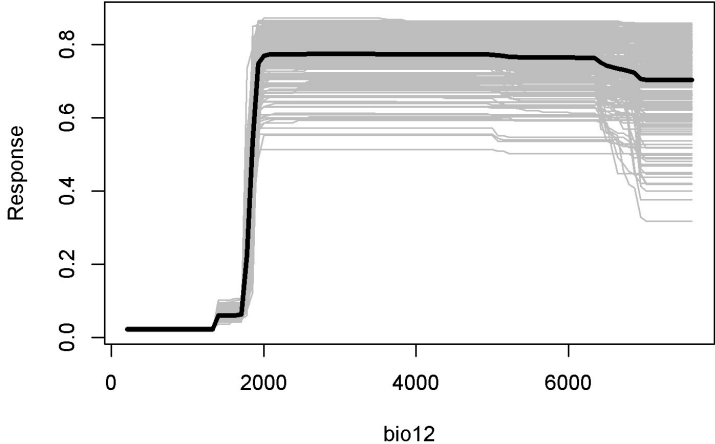
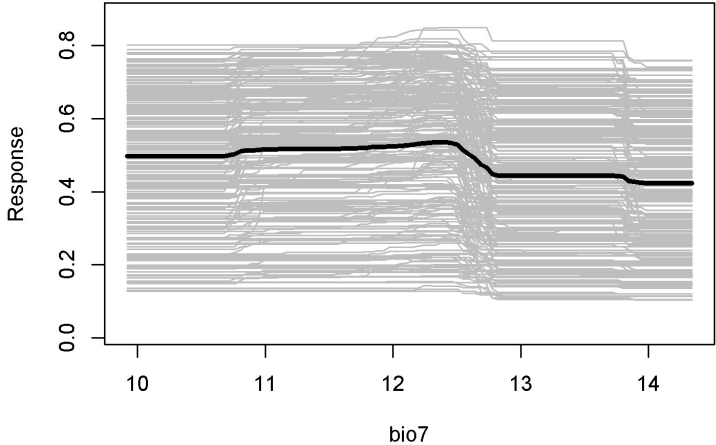
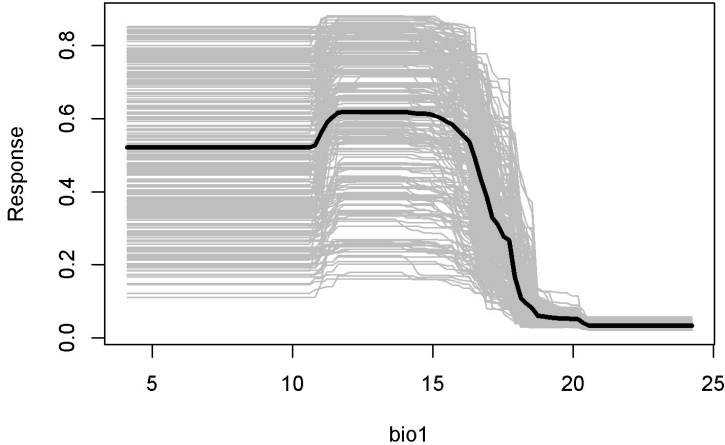
MAXENT modeled response for Oahu.Elepaio



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Omao response curves GBM all vars

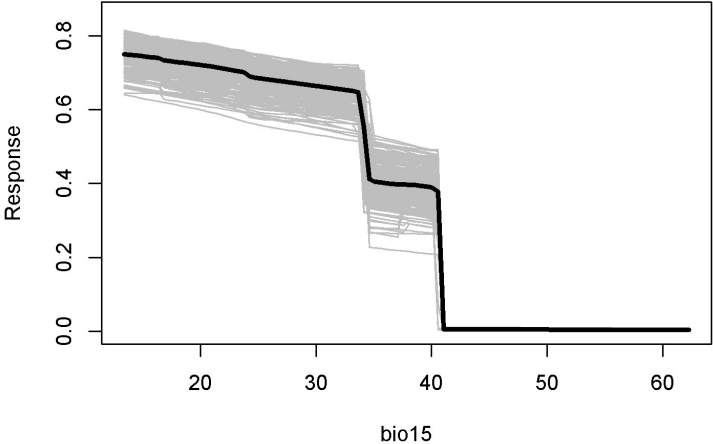
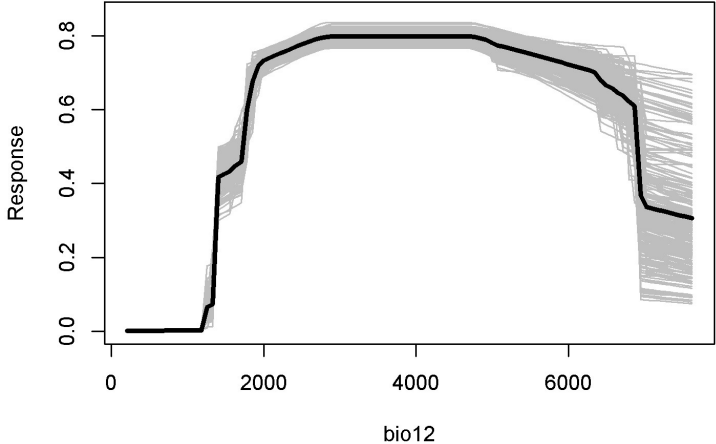
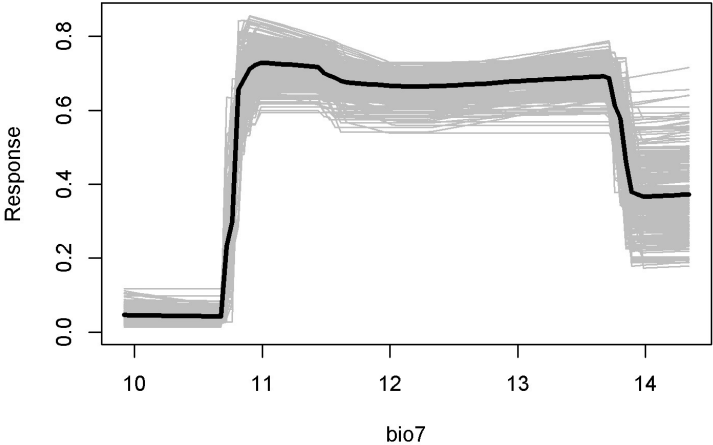
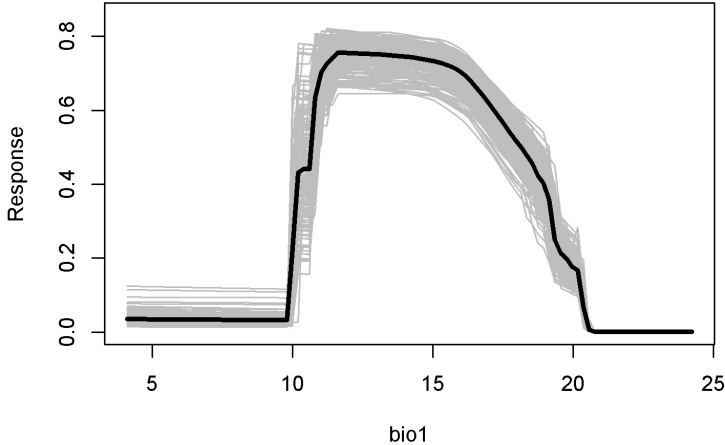
GBM modeled response for Omao



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Omao response curves MAXENT all vars

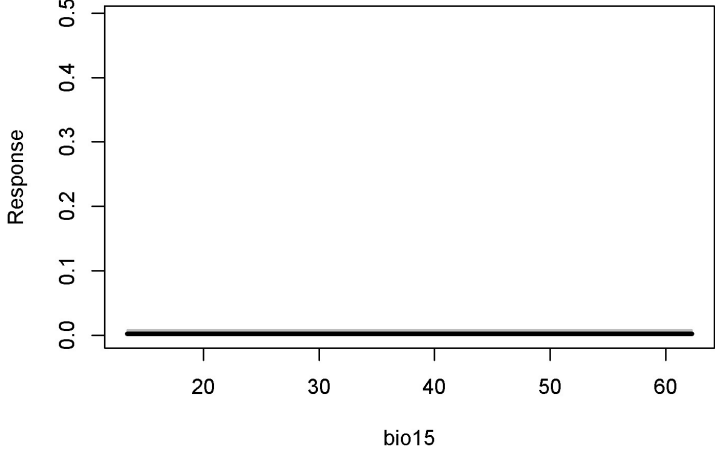
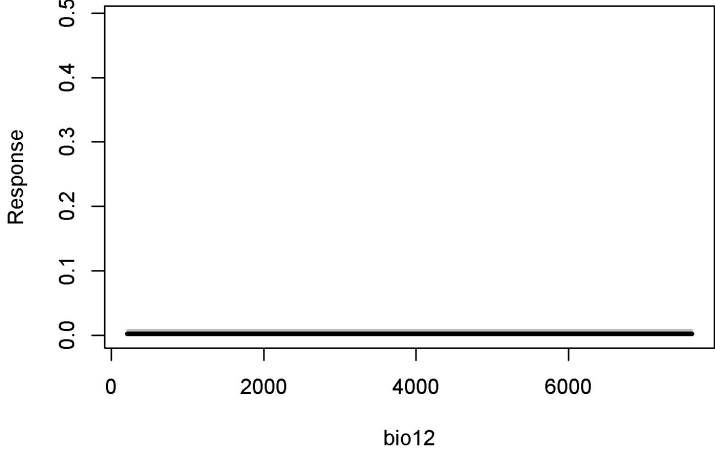
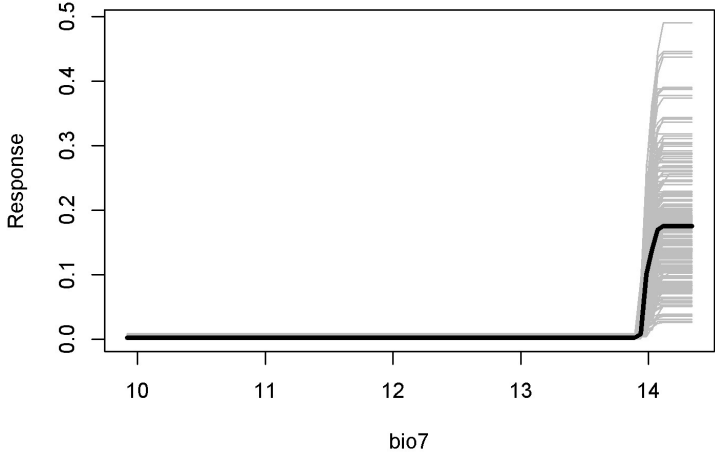
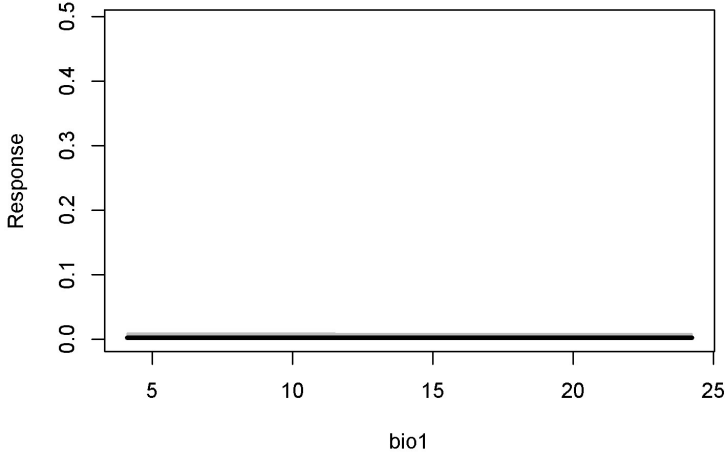
MAXENT modeled response for Omao



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

Palila response curves GBM all vars

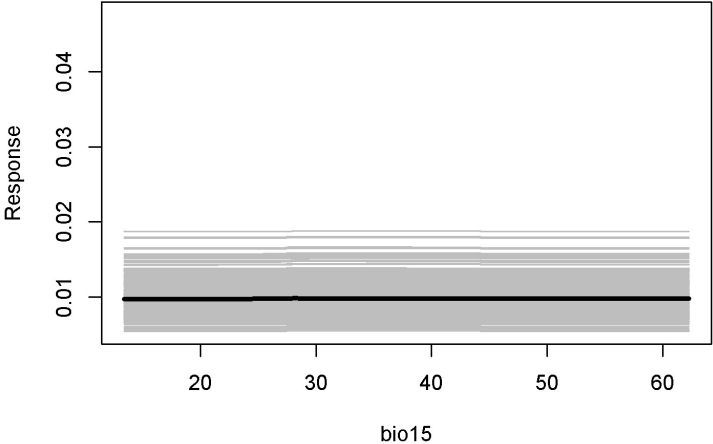
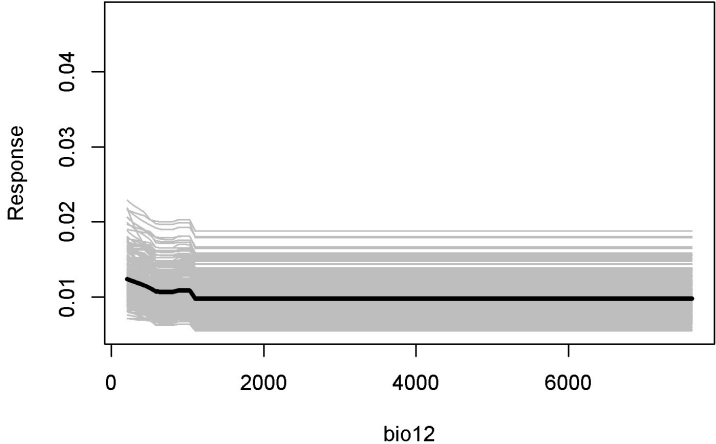
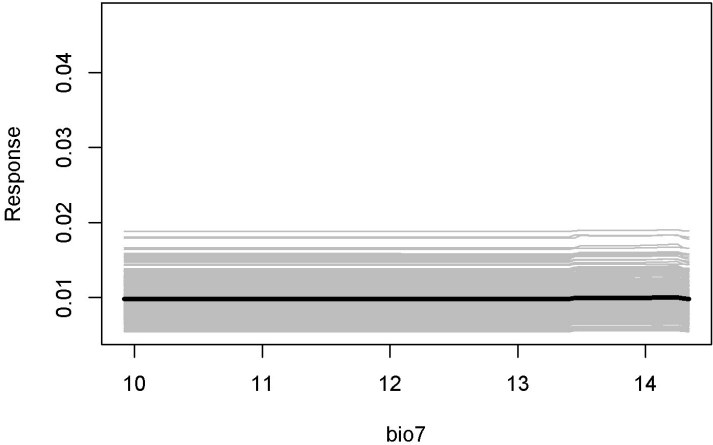
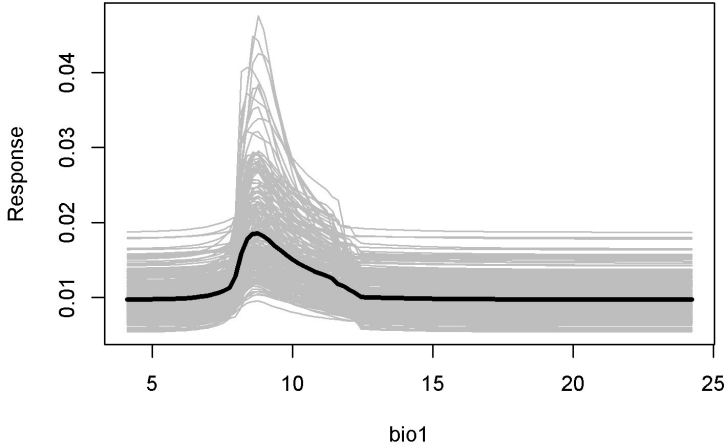
GBM modeled response for Palila



S3: SPECIES RESPONSE CURVES
REDUCED MODEL RELIABILITY SPECIES

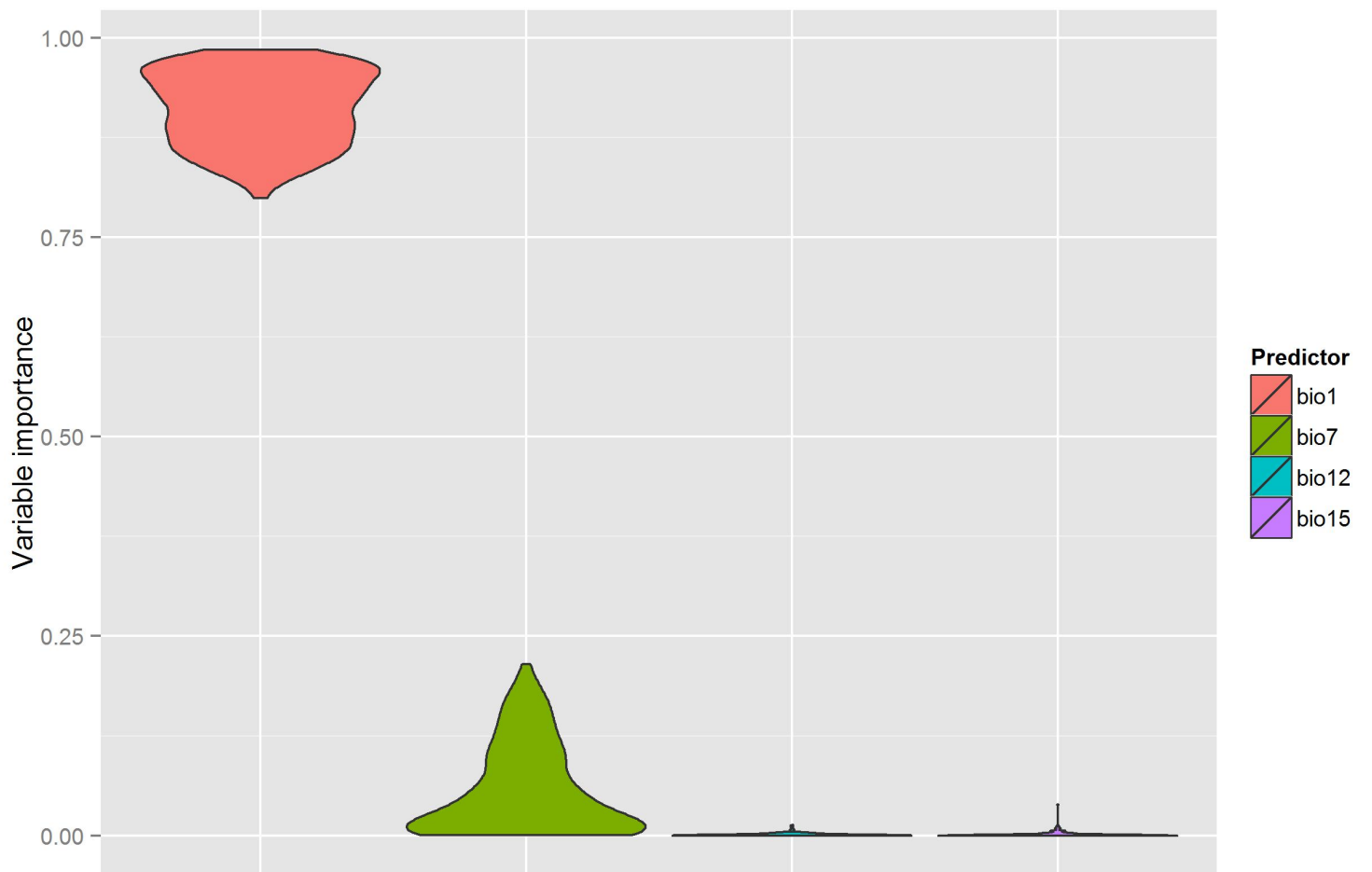
Palila response curves MAXENT all vars

MAXENT modeled response for Palila



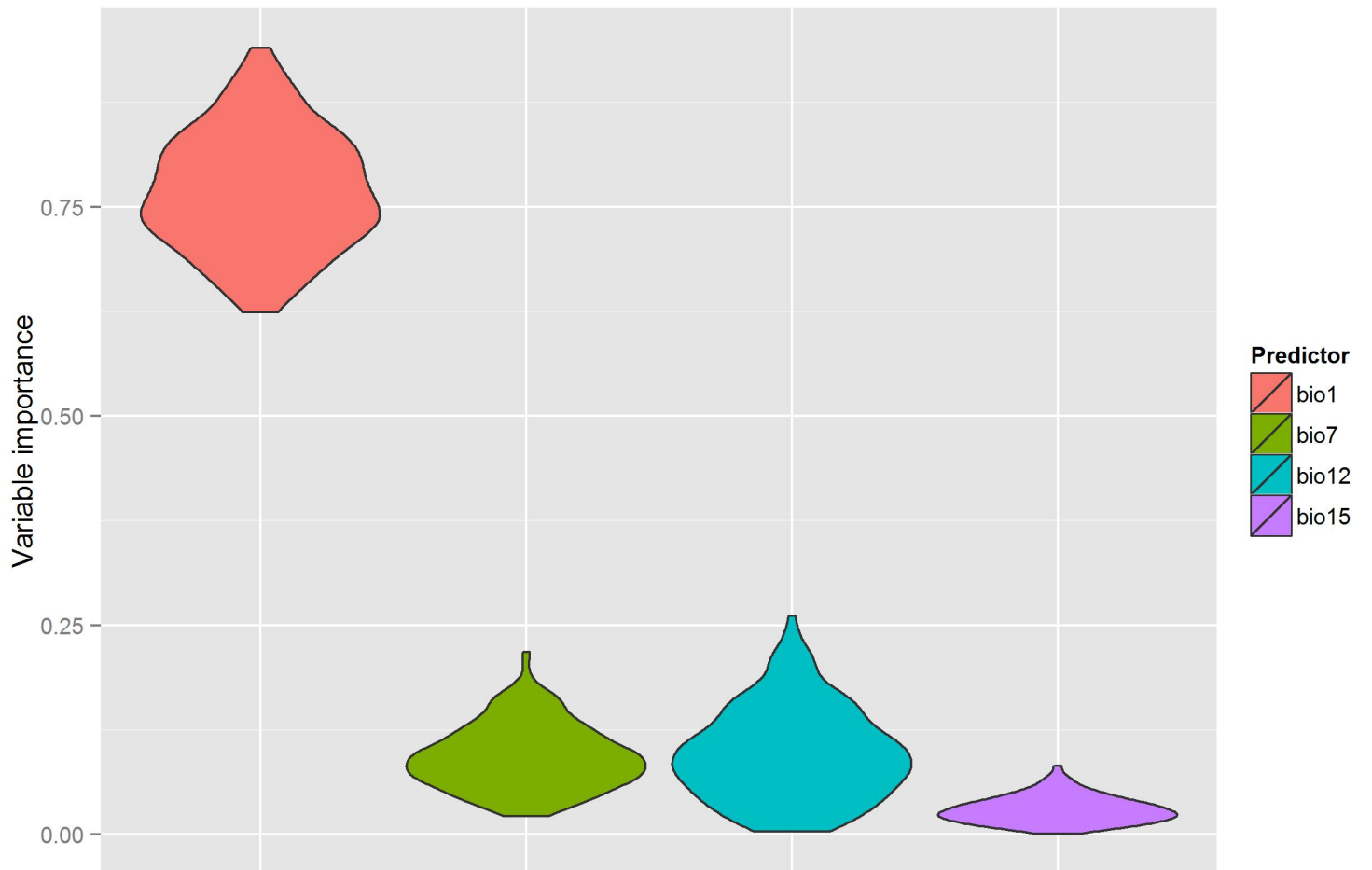
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Akekee GBM variable importance violin plot



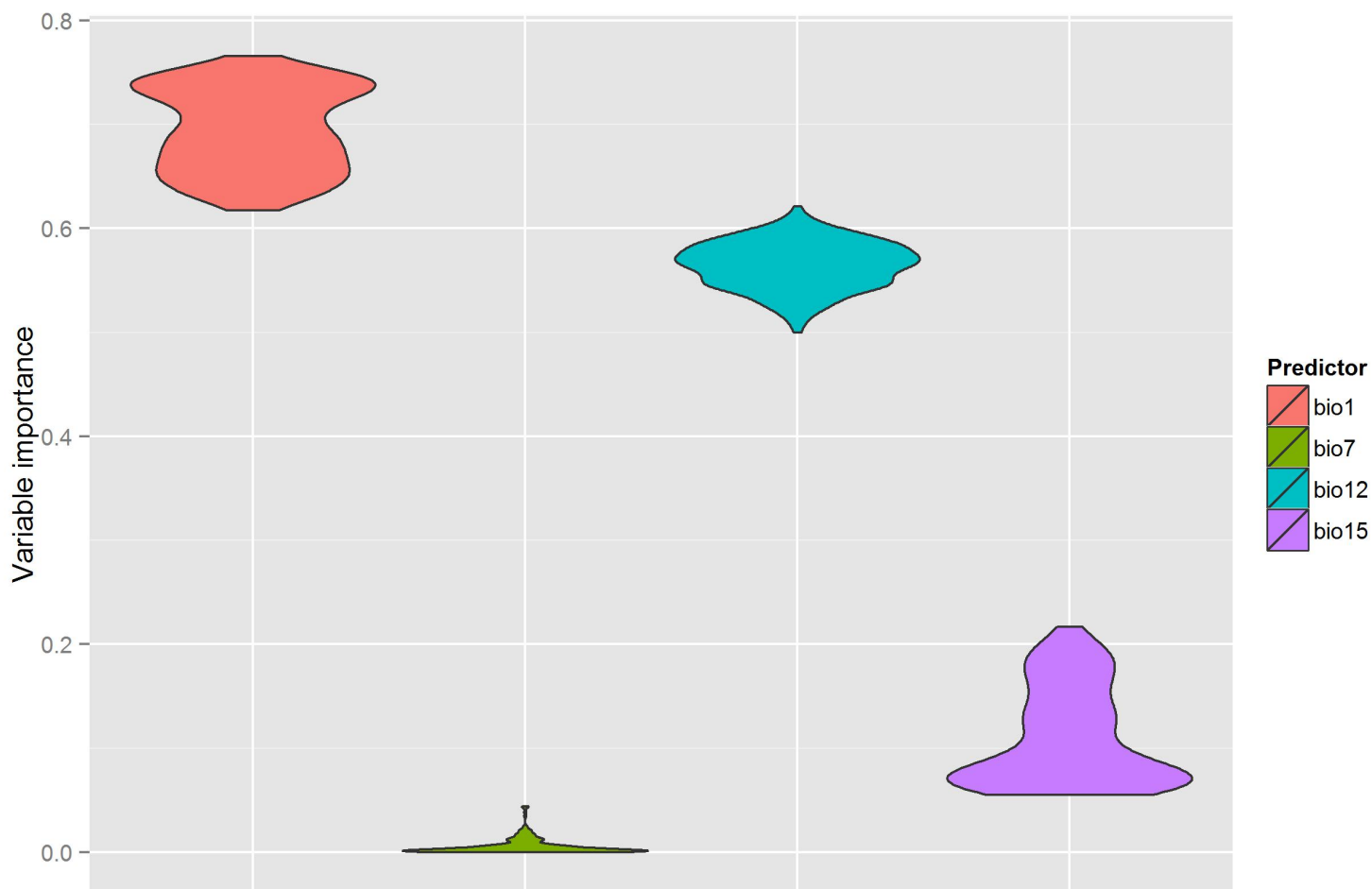
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Akekee MAXENT variable importance violin plot



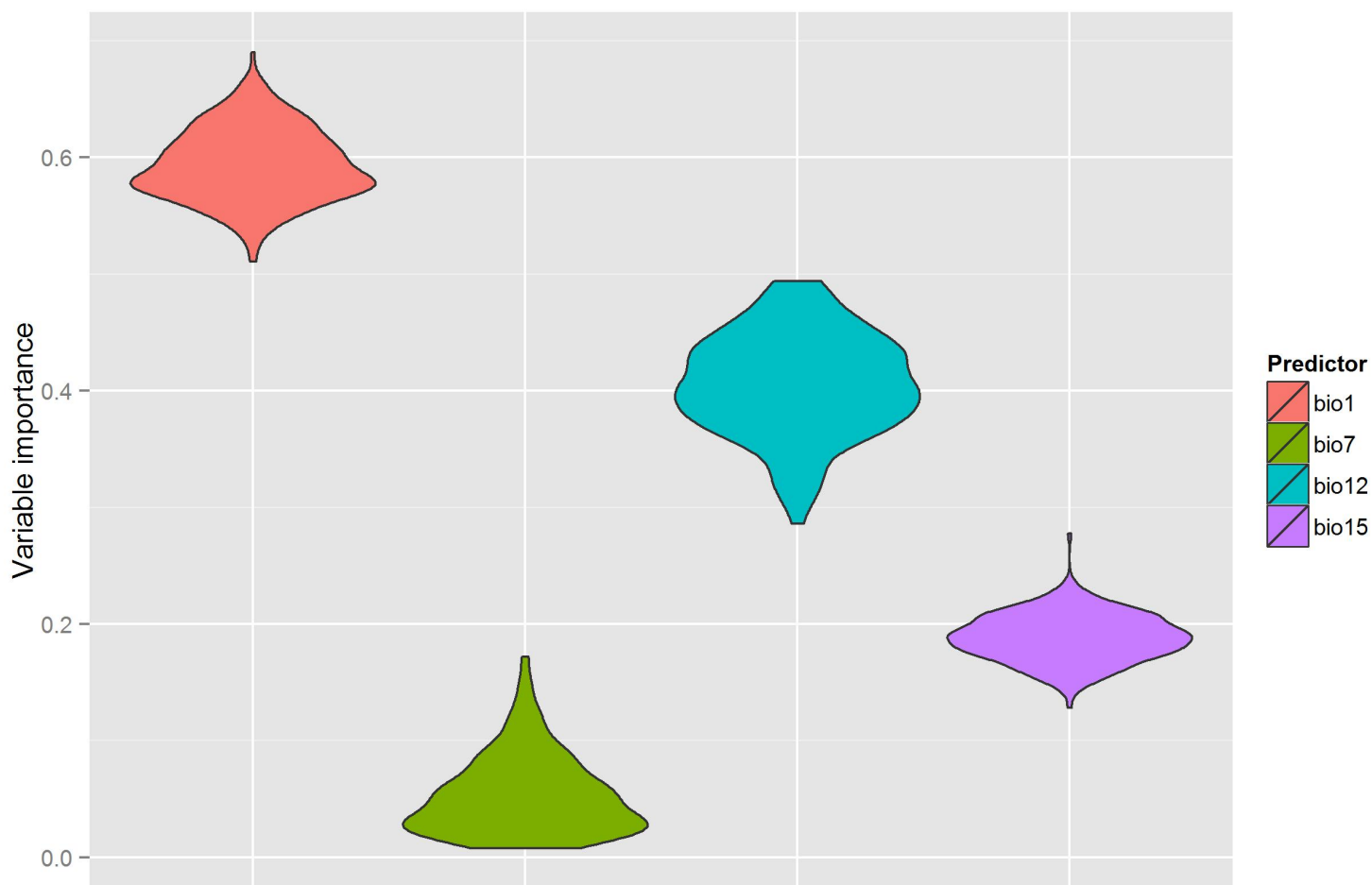
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Akiapolau GBM variable importance violin plot



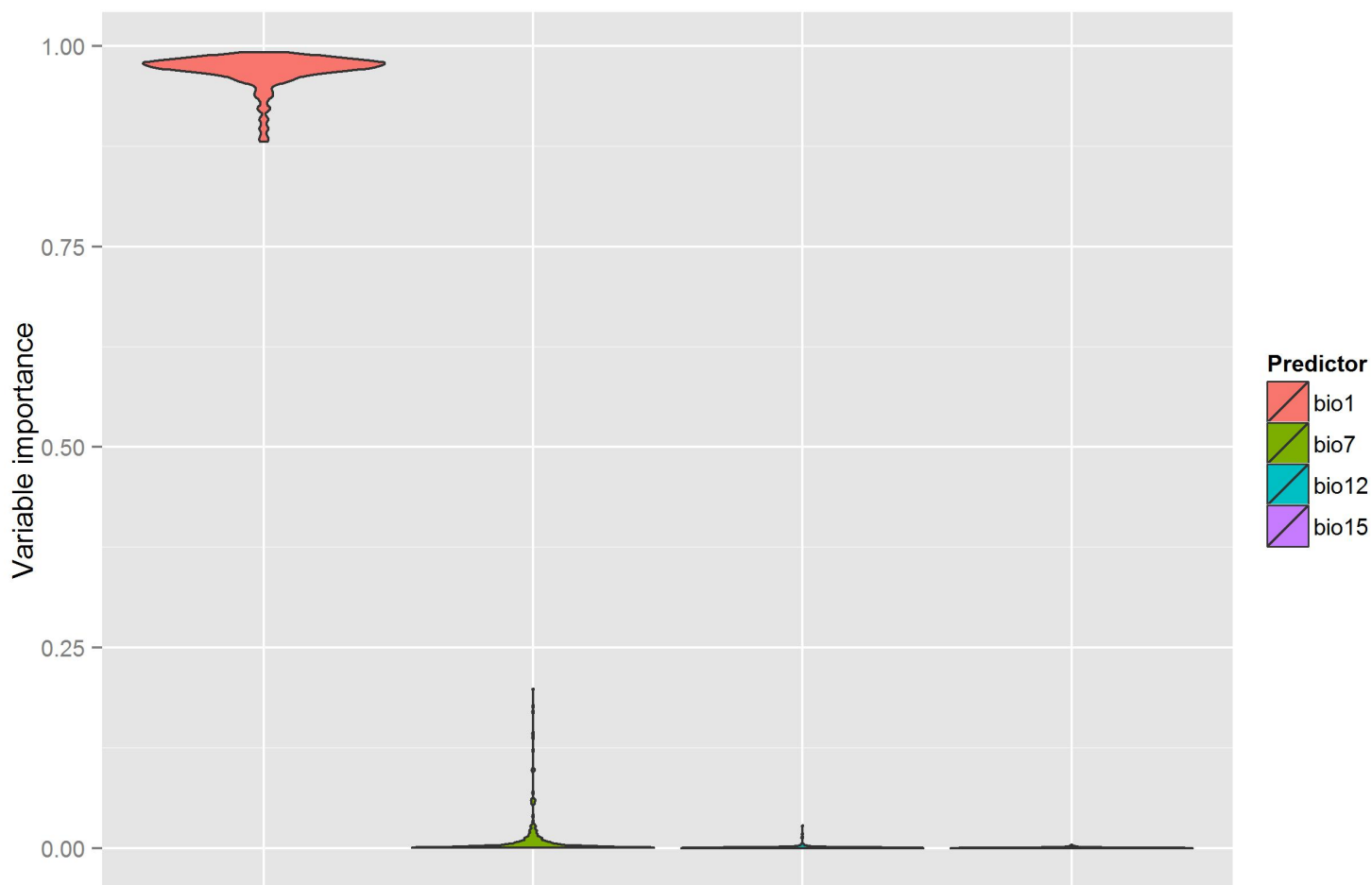
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Akiapolau MAXENT variable importance violin plot



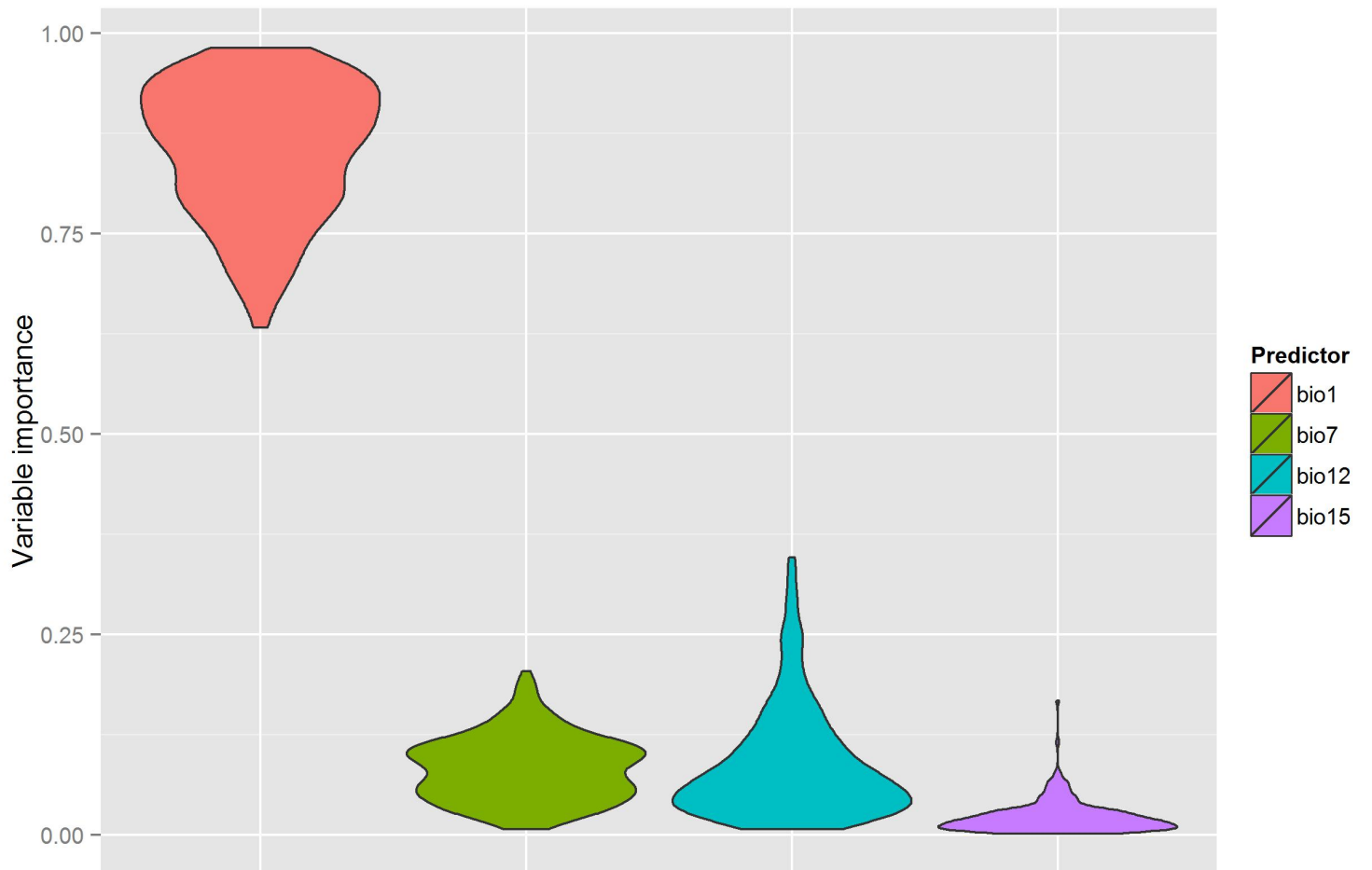
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Akikiki GBM variable importance violin plot



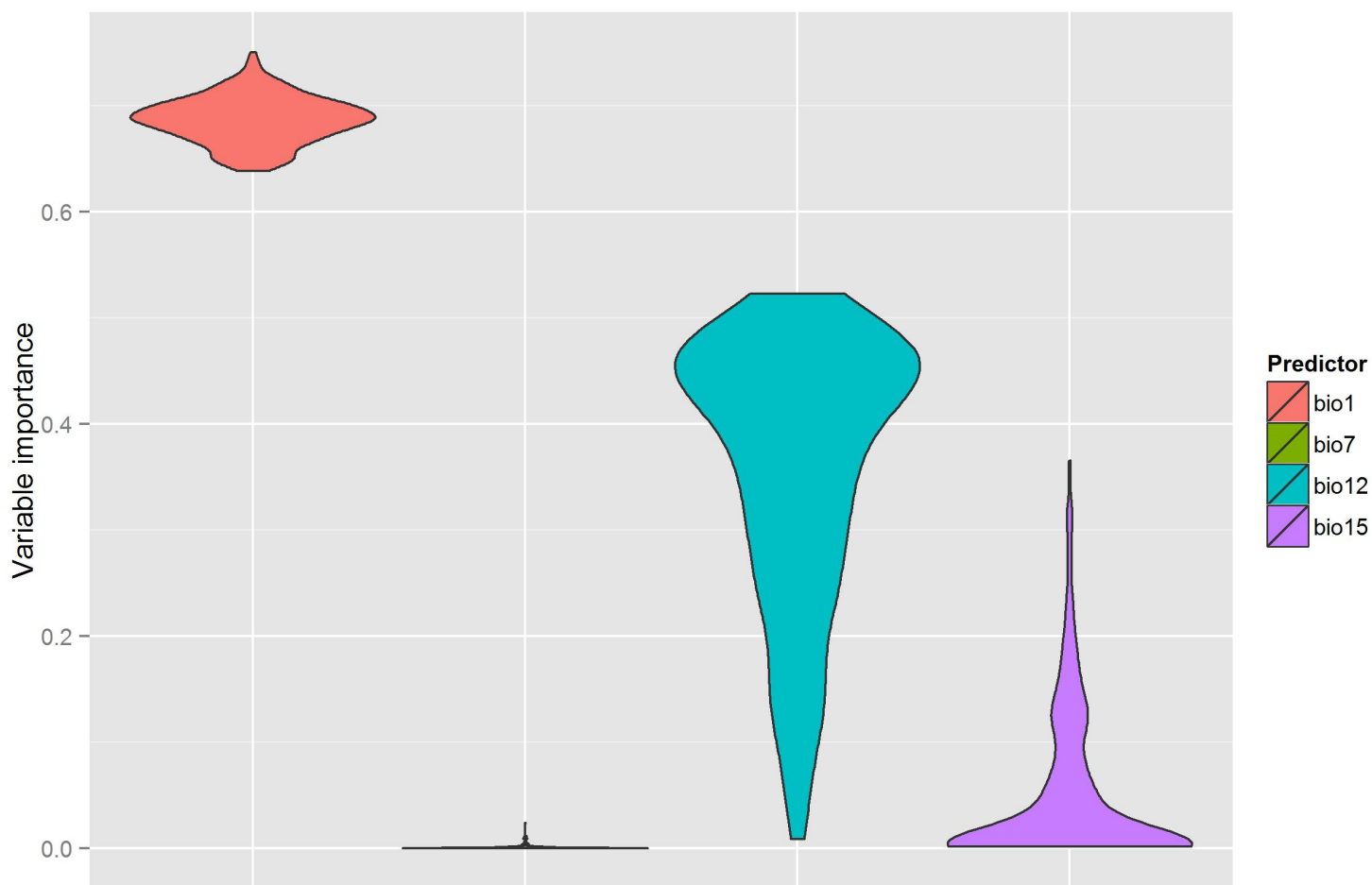
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Akikiki MAXENT variable importance violin plot



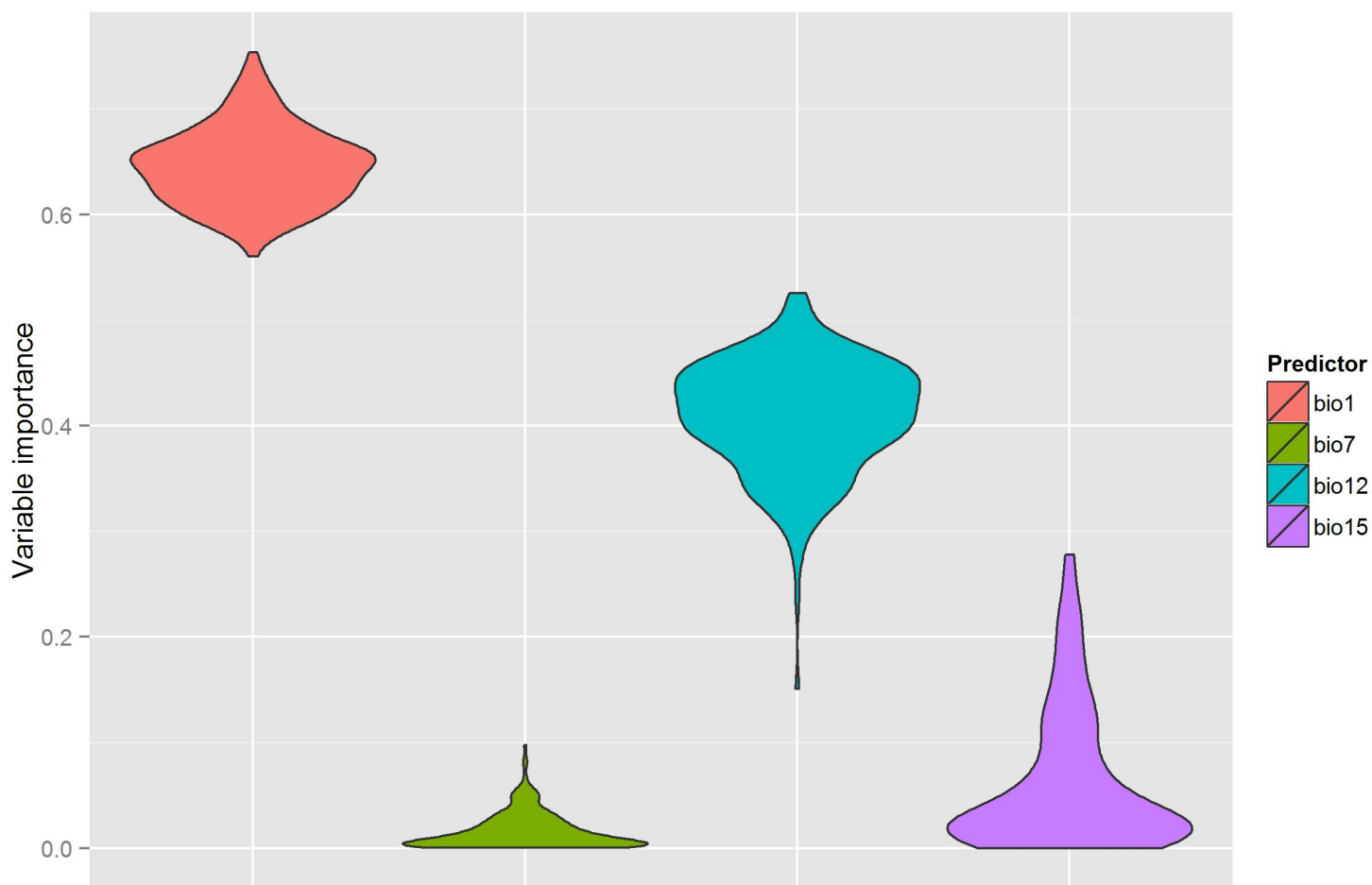
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Akohekohe GBM variable importance violin plot



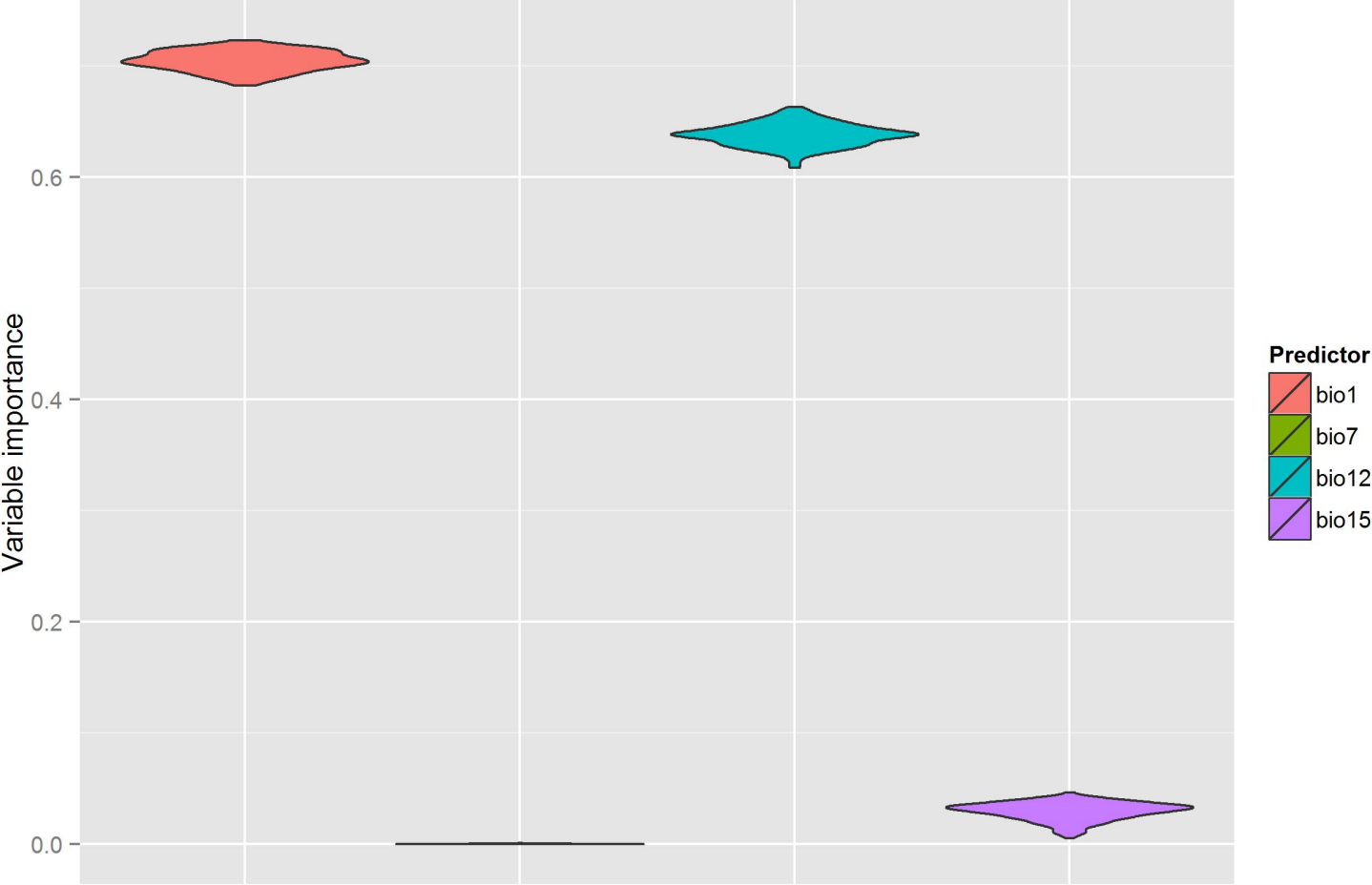
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Akohekohe MAXENT variable importance violin plot



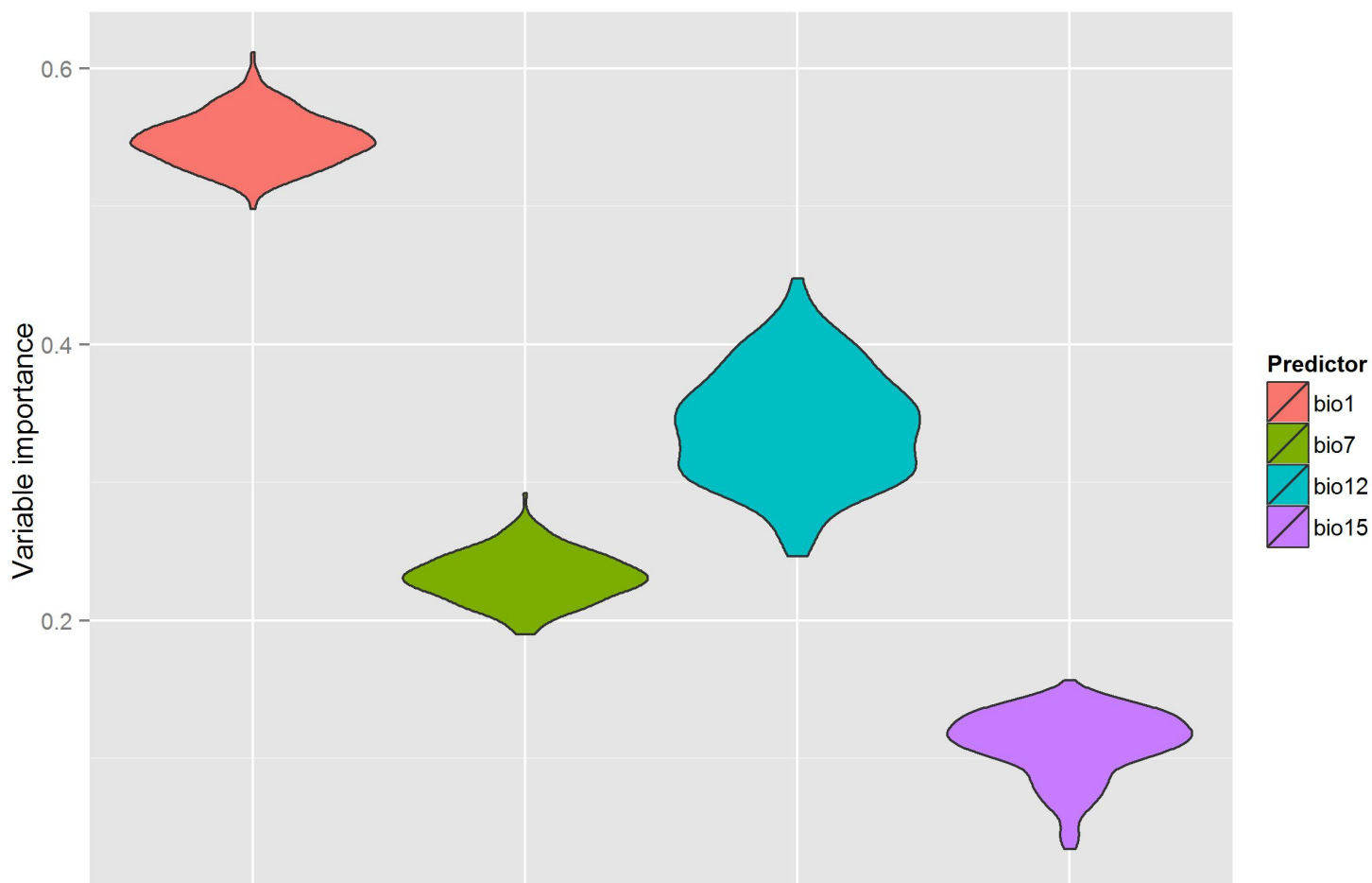
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Hawaii Akepa GBM variable importance violin plot



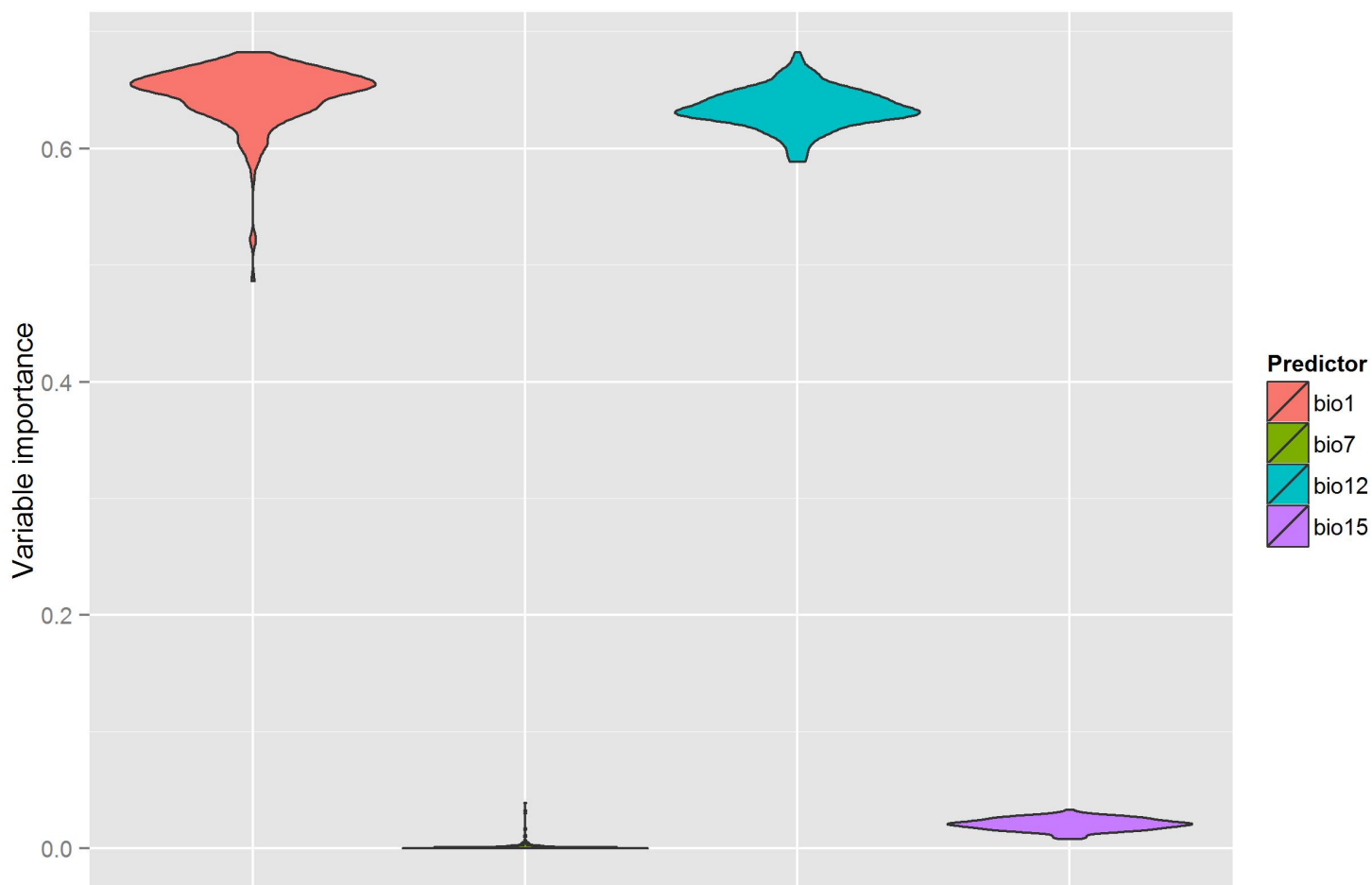
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Hawaii Akepa MAXENT variable importance violin plot



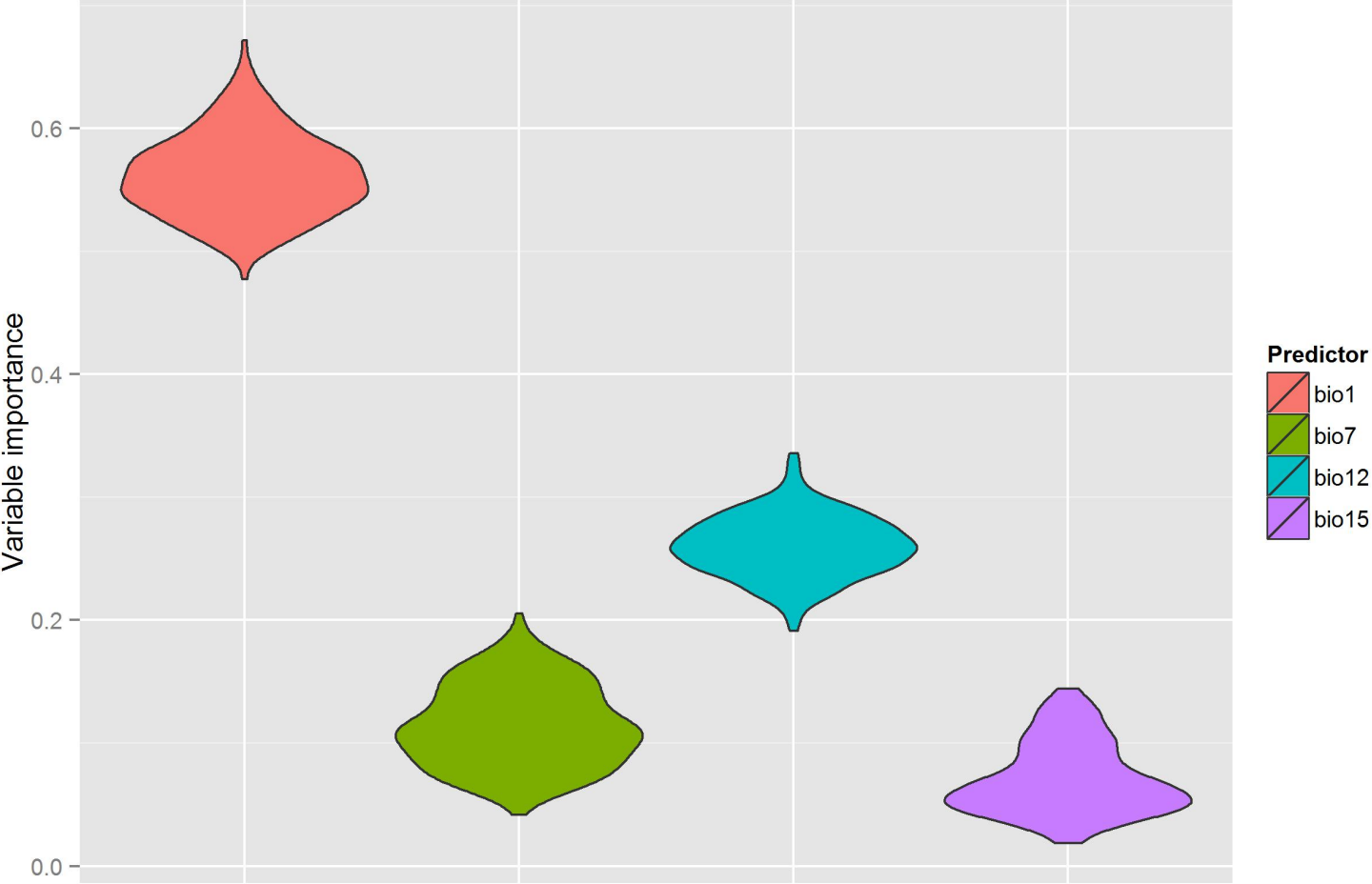
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Hawaii Creeper GBM variable importance violin plot



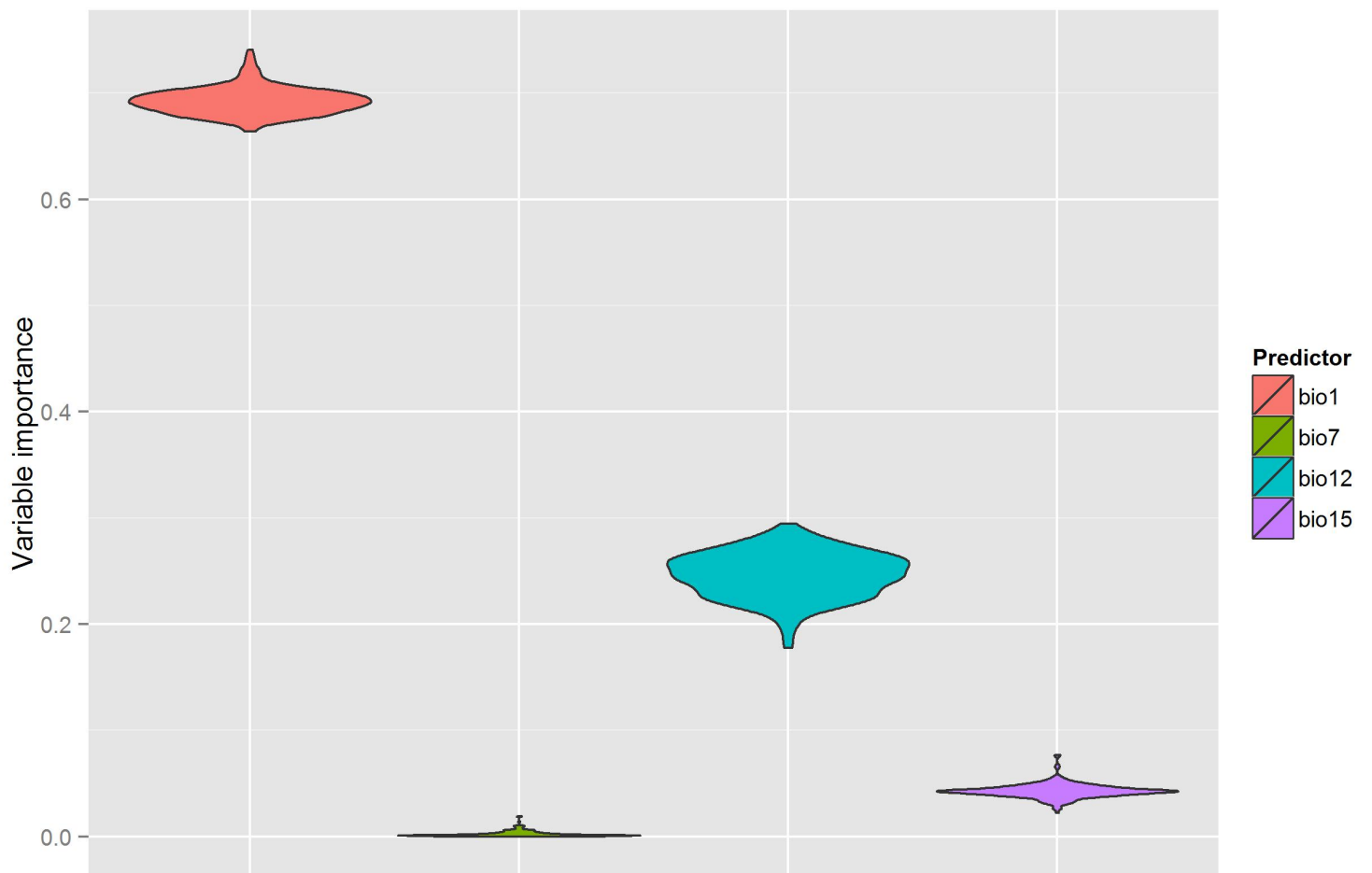
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Hawaii Creeper MAXENT variable importance violin plot



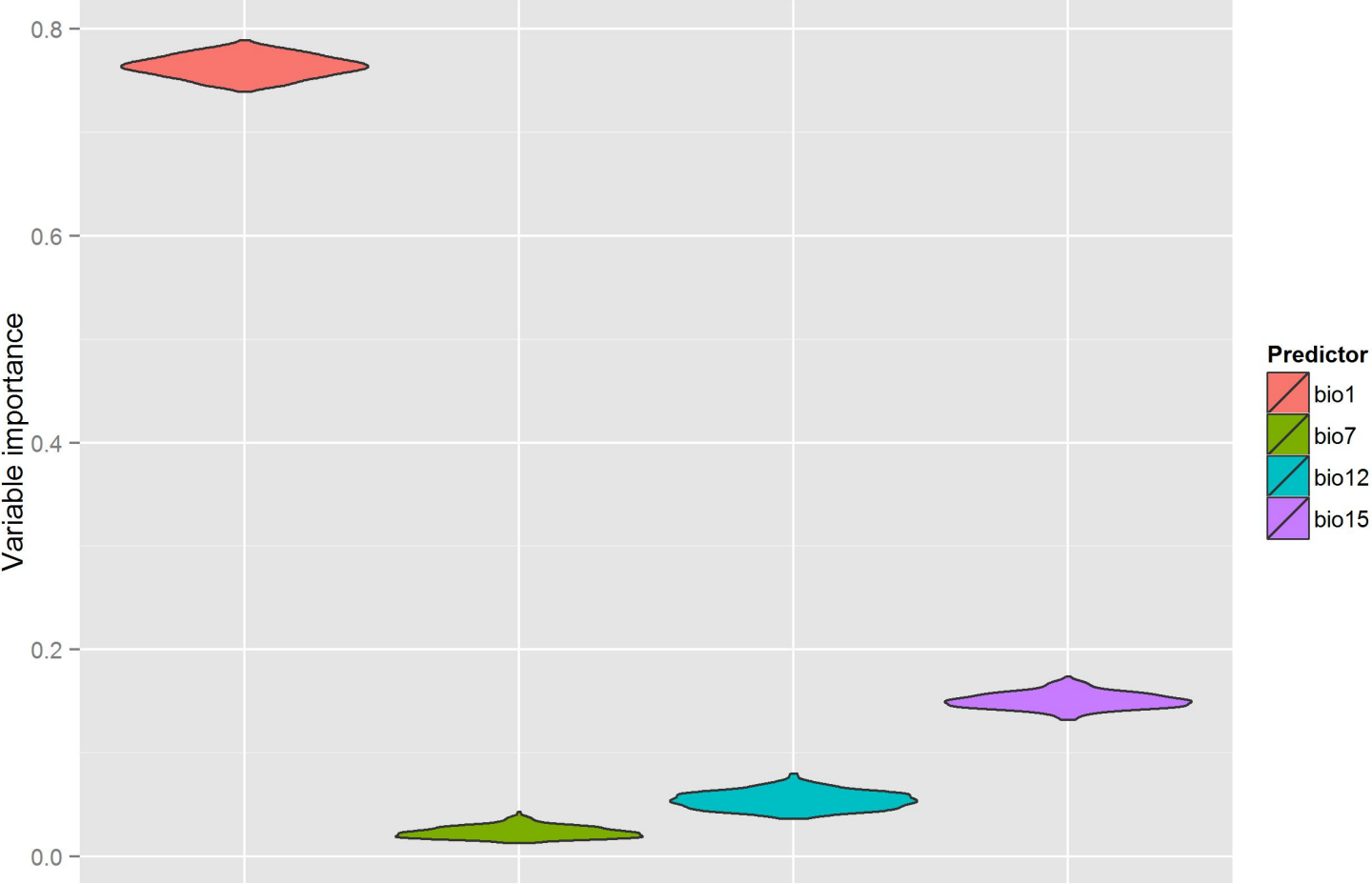
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

liwi GBM variable importance violin plot



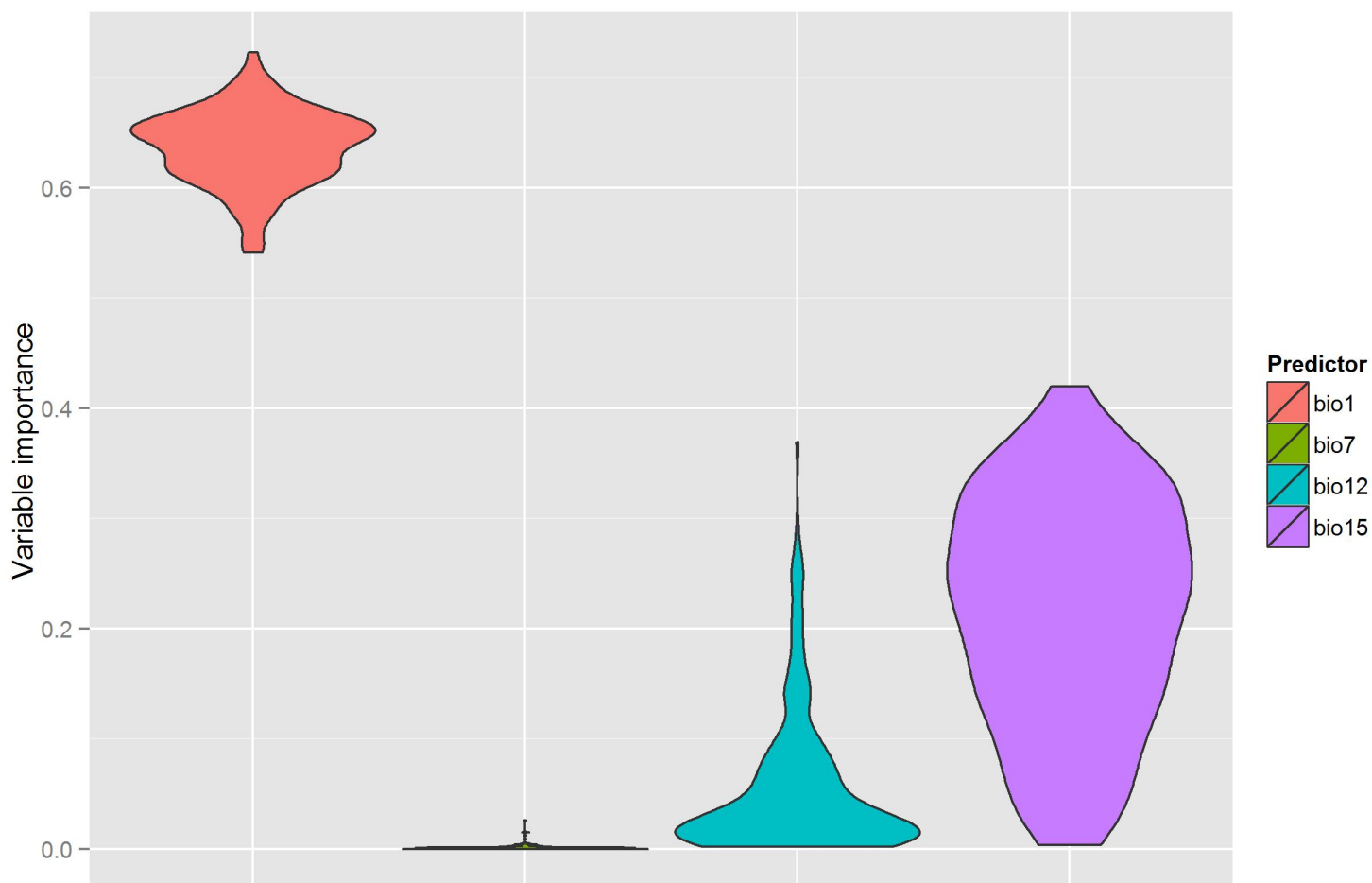
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

liwi MAXENT variable importance violin plot



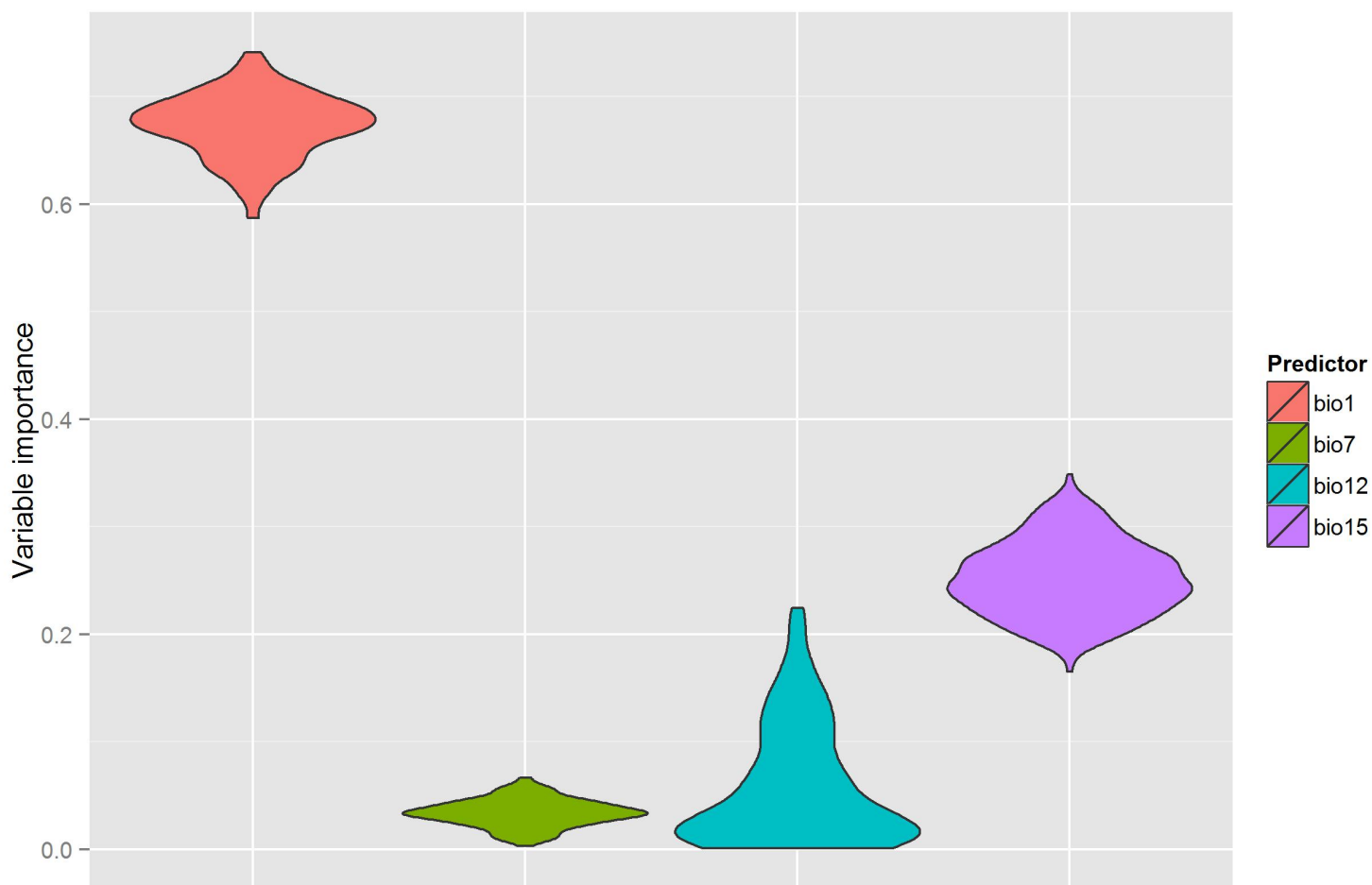
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Maui Alauahio GBM variable importance violin plot



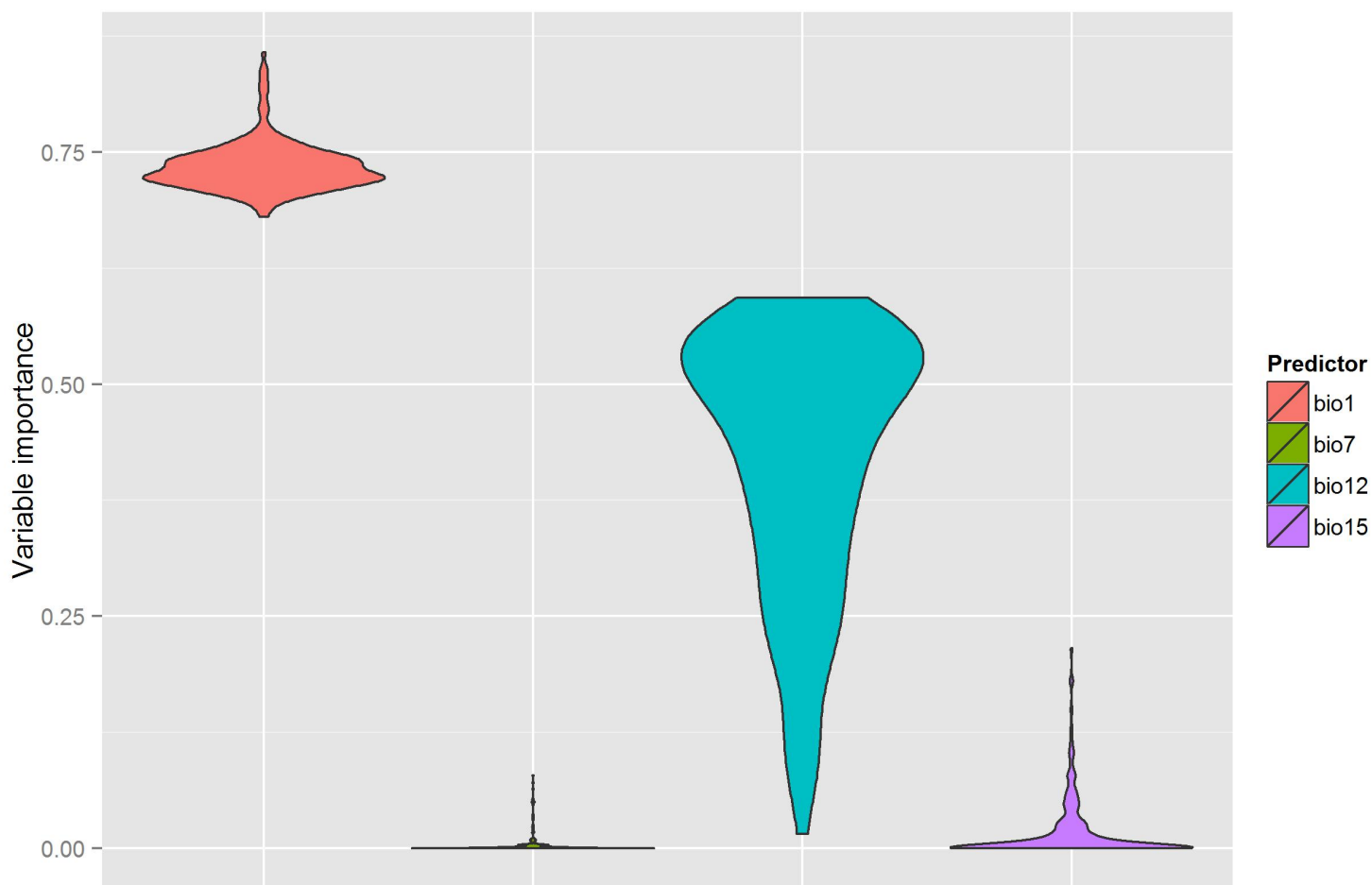
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Maui Alauahio MAXENT variable importance violin plot



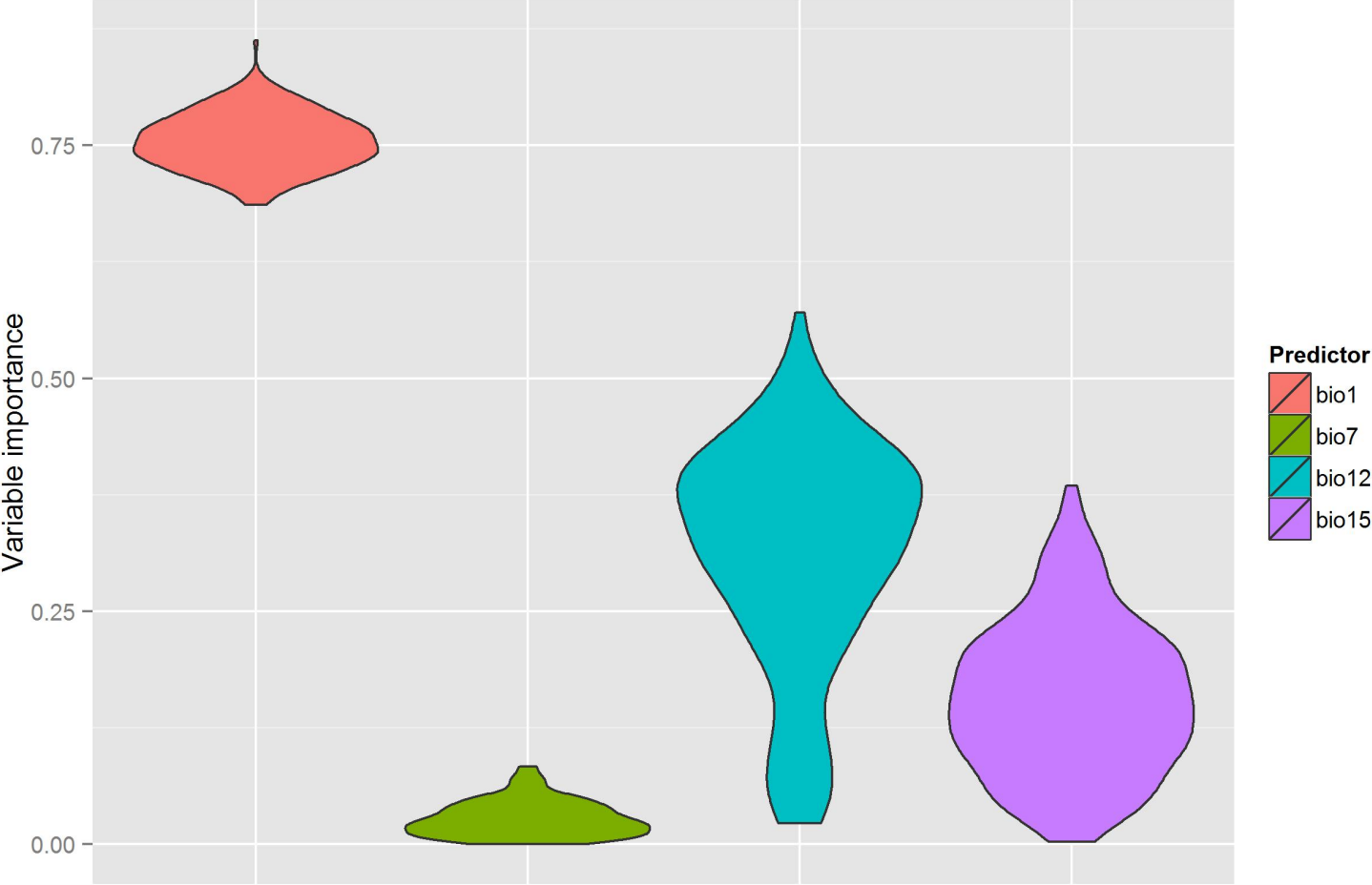
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Maui Parrotbill GBM variable importance violin plot



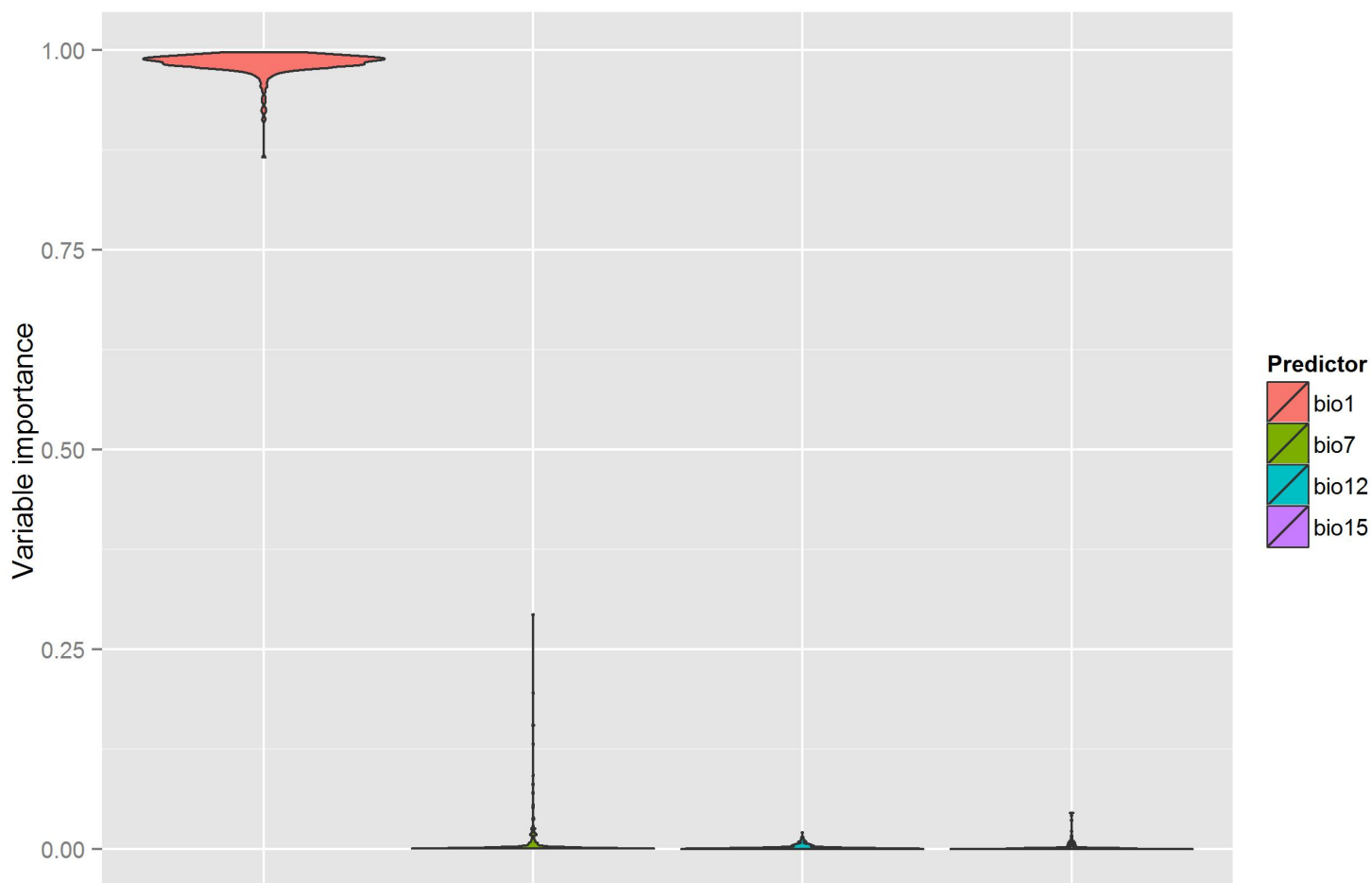
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Maui Parrotbill MAXENT variable importance violin plot



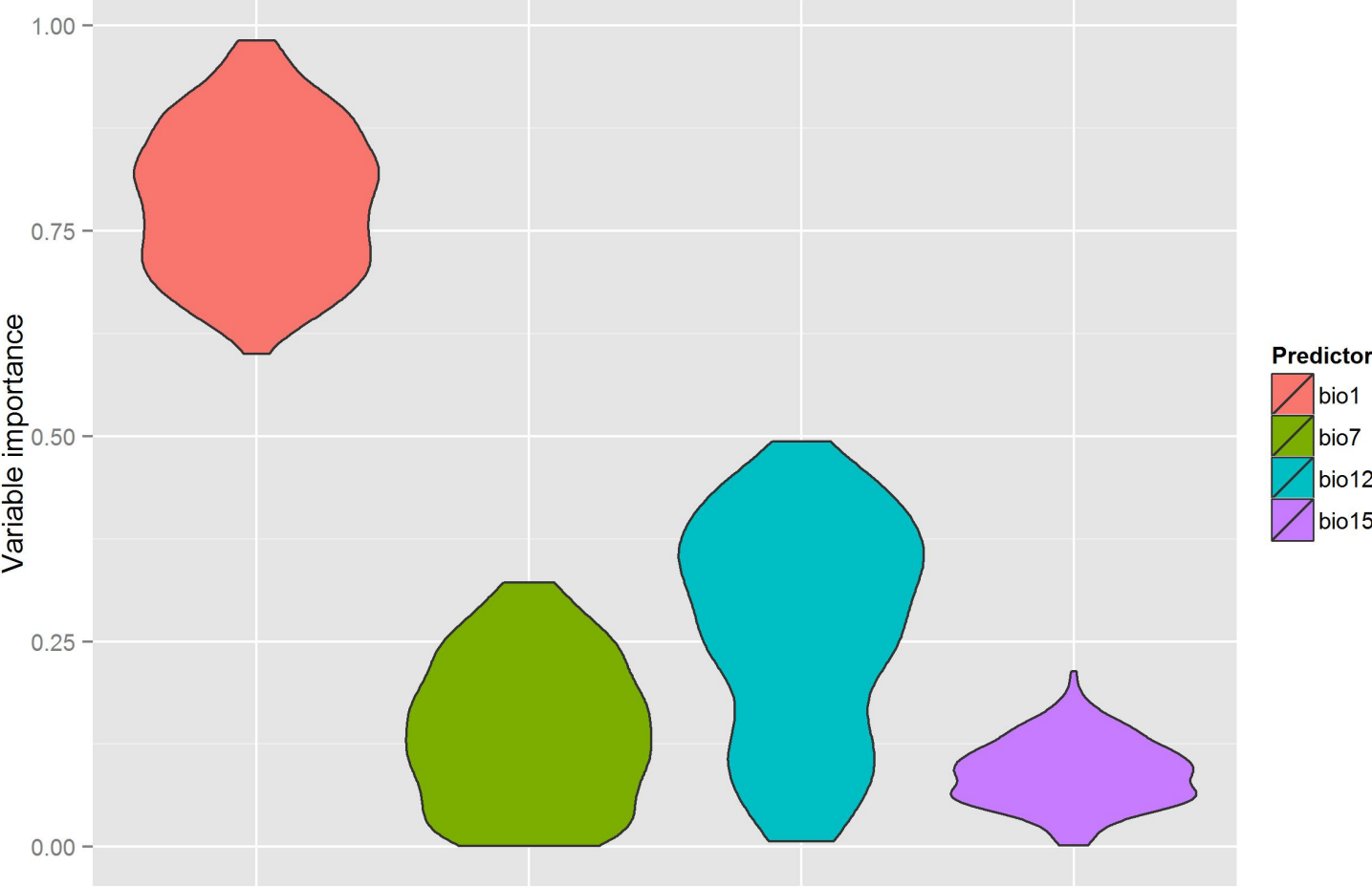
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Puaiohi GBM variable importance violin plot



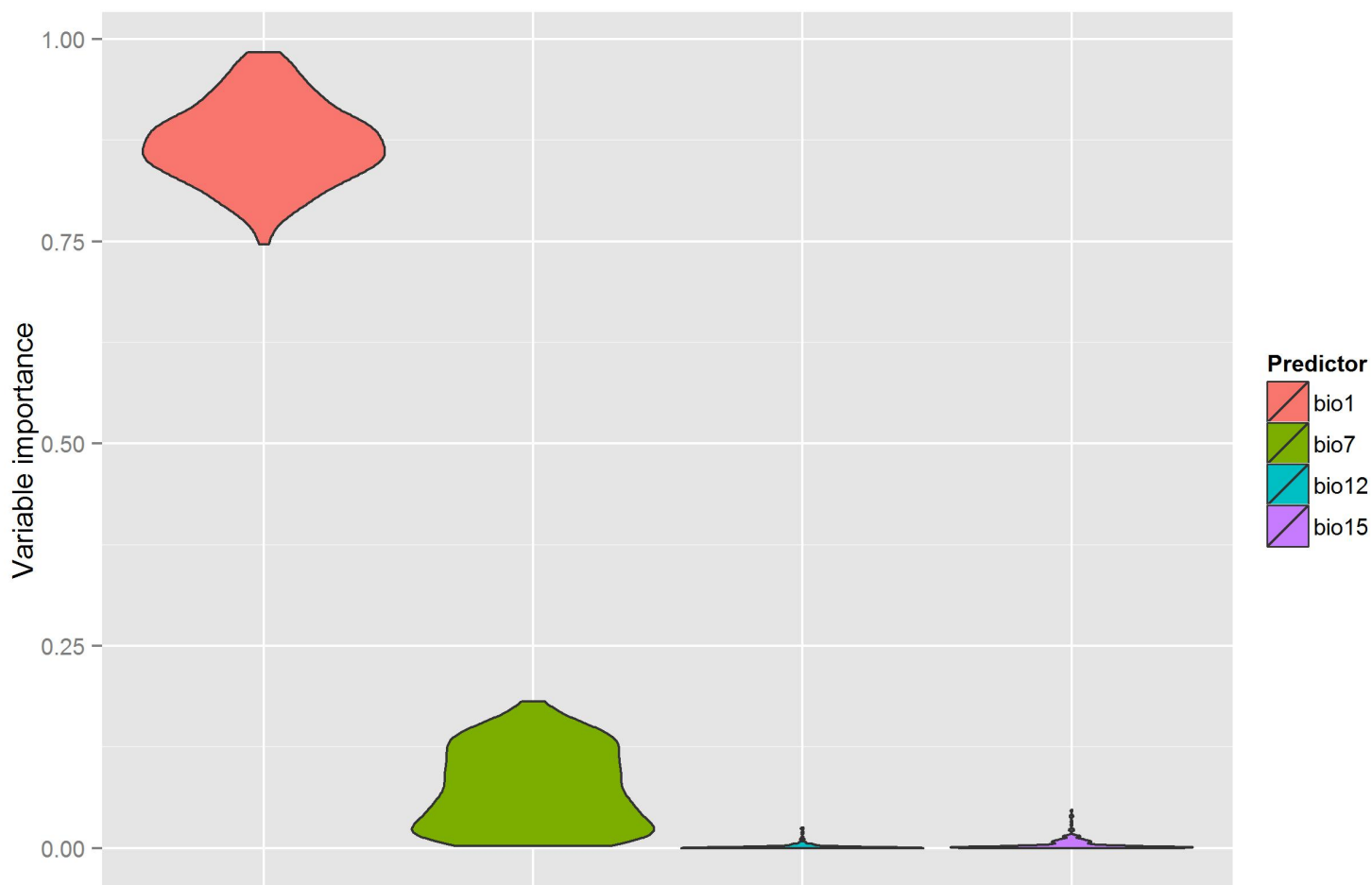
S3: VARIABLE IMPORTANCE GRAPHS
HIGH MODEL RELIABILITY SPECIES

Puaiohi MAXENT variable importance violin plot



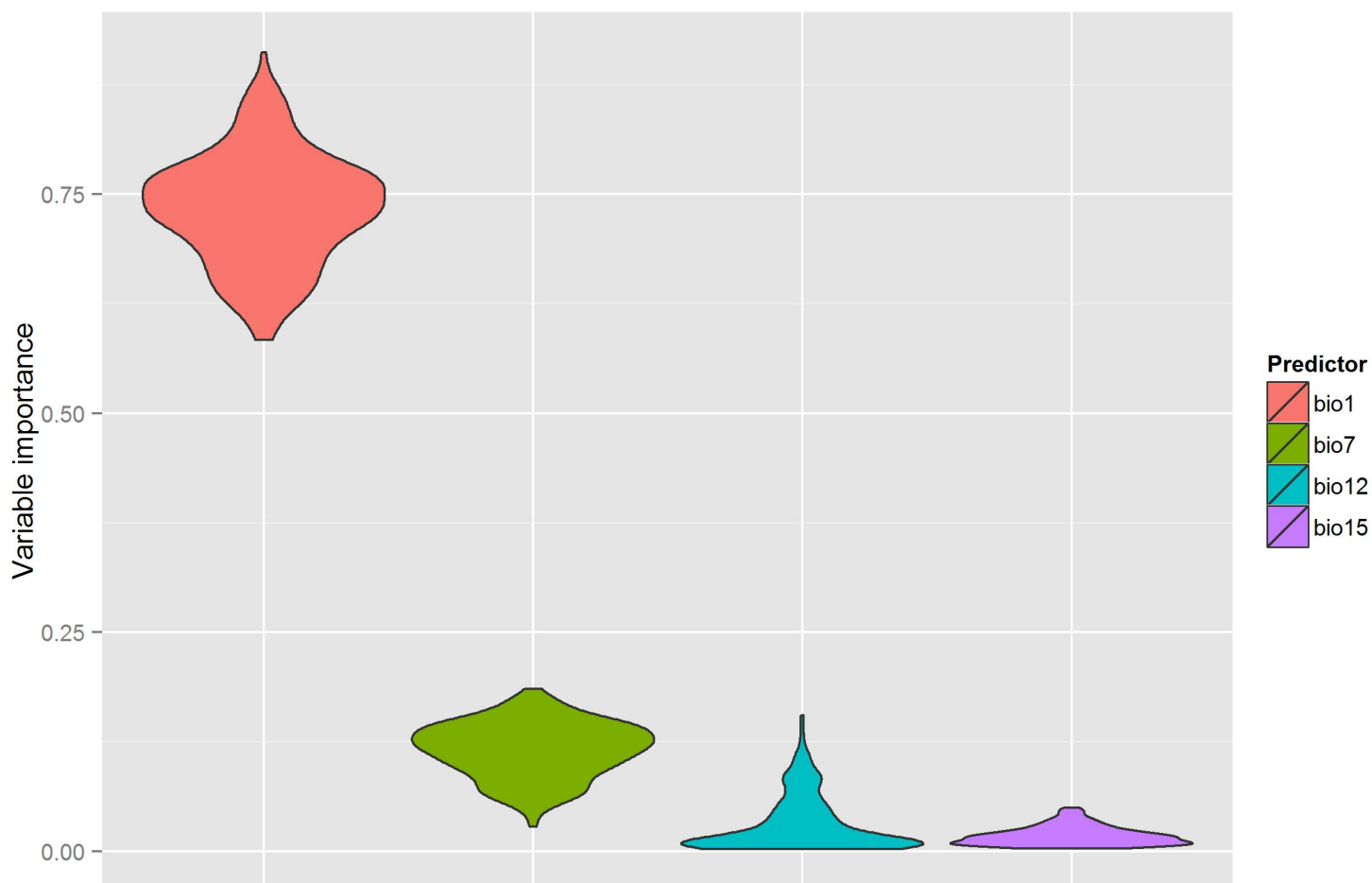
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Ananiau GBM variable importance violin plot



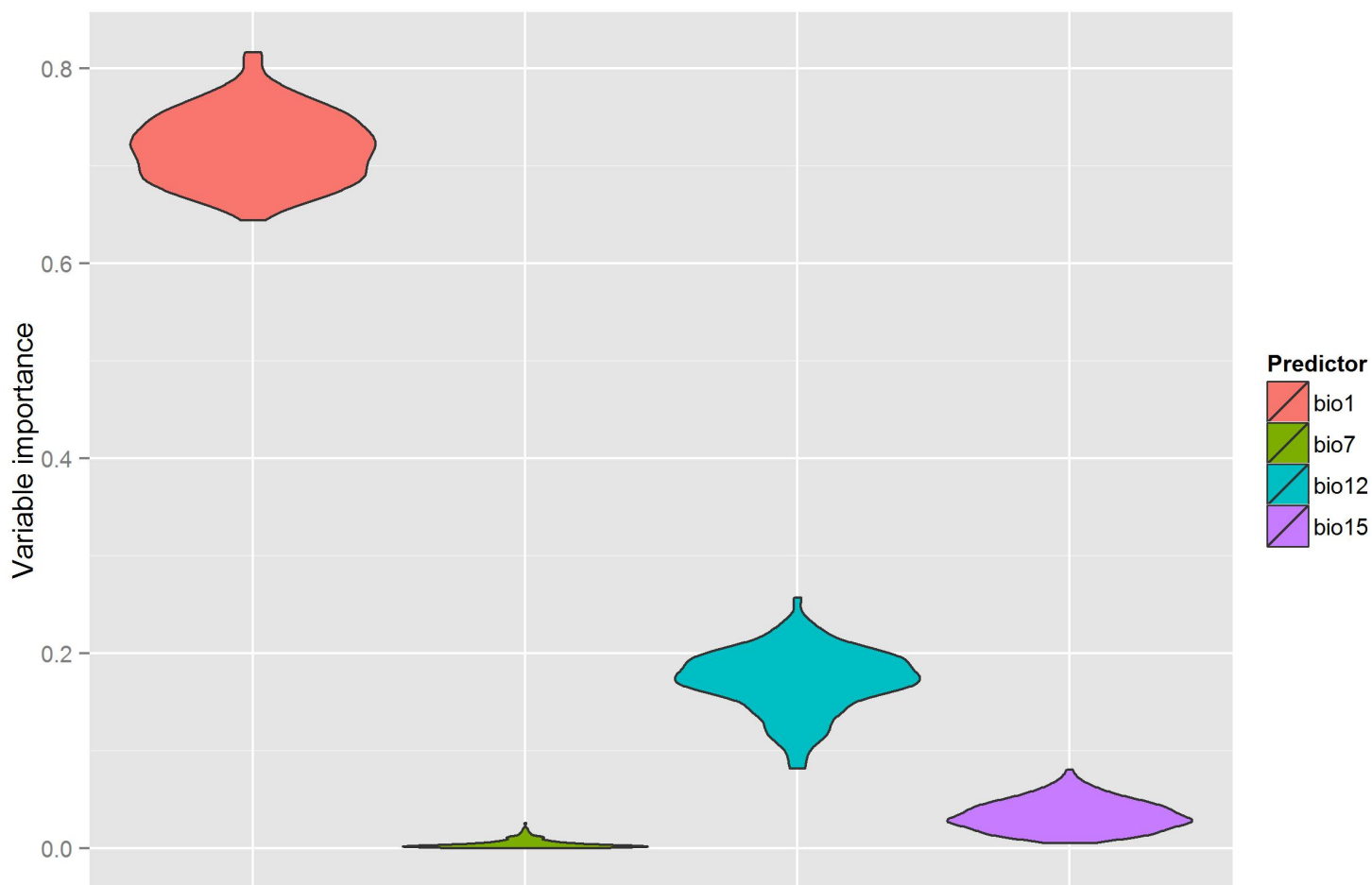
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Ananiau MAXENT variable importance violin plot



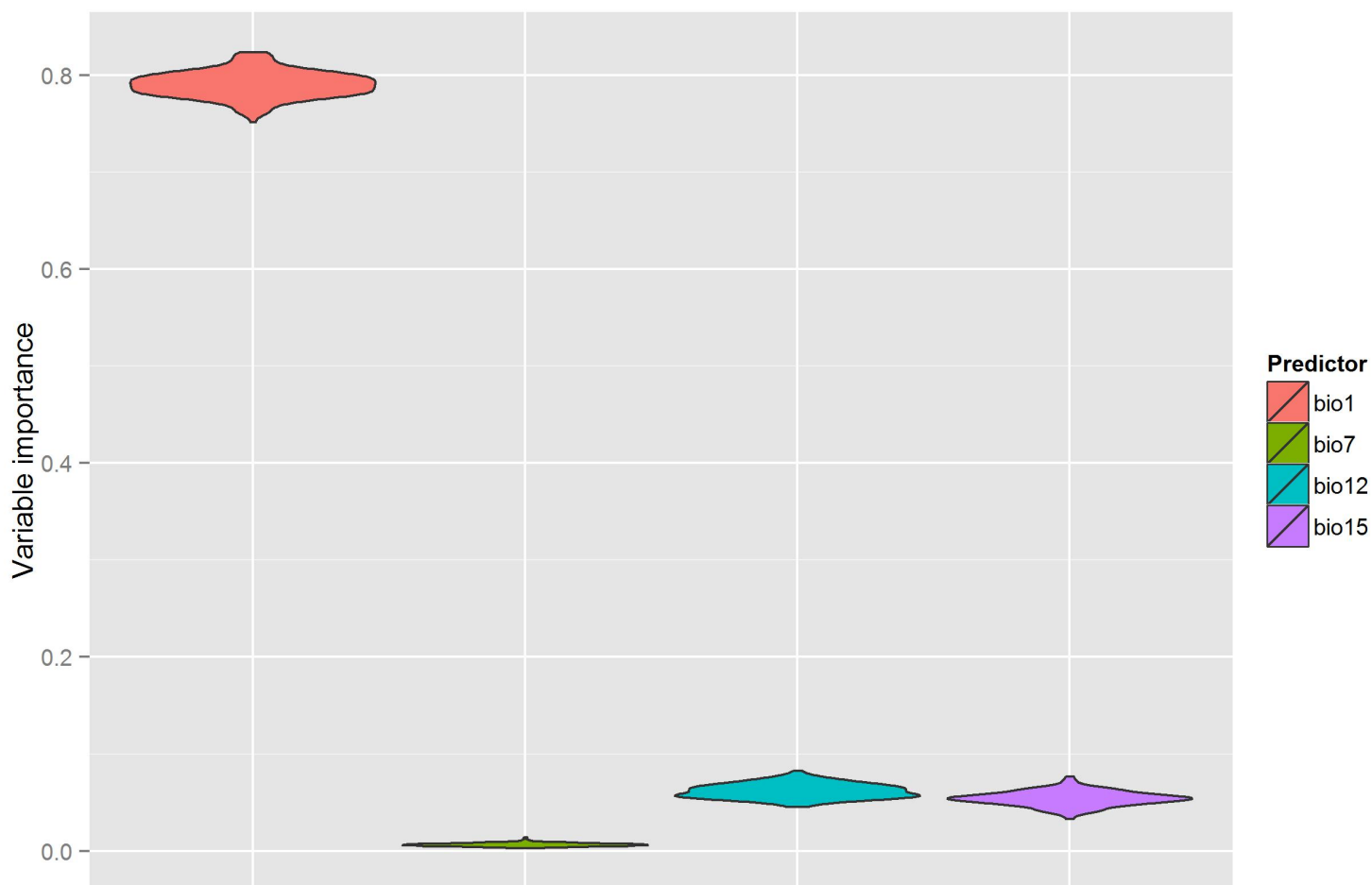
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Apapane GBM variable importance violin plot



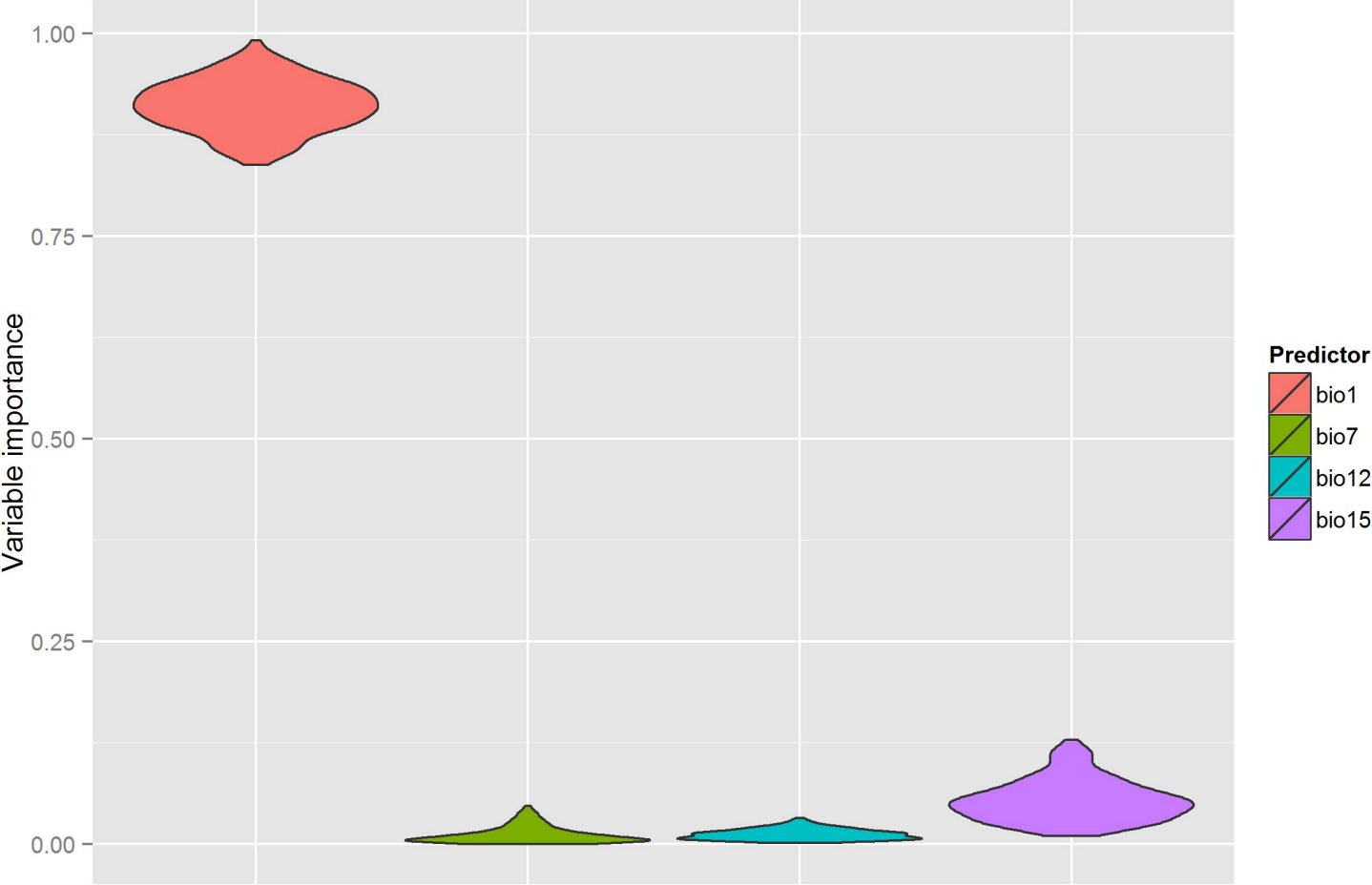
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Apapane MAXENT variable importance violin plot



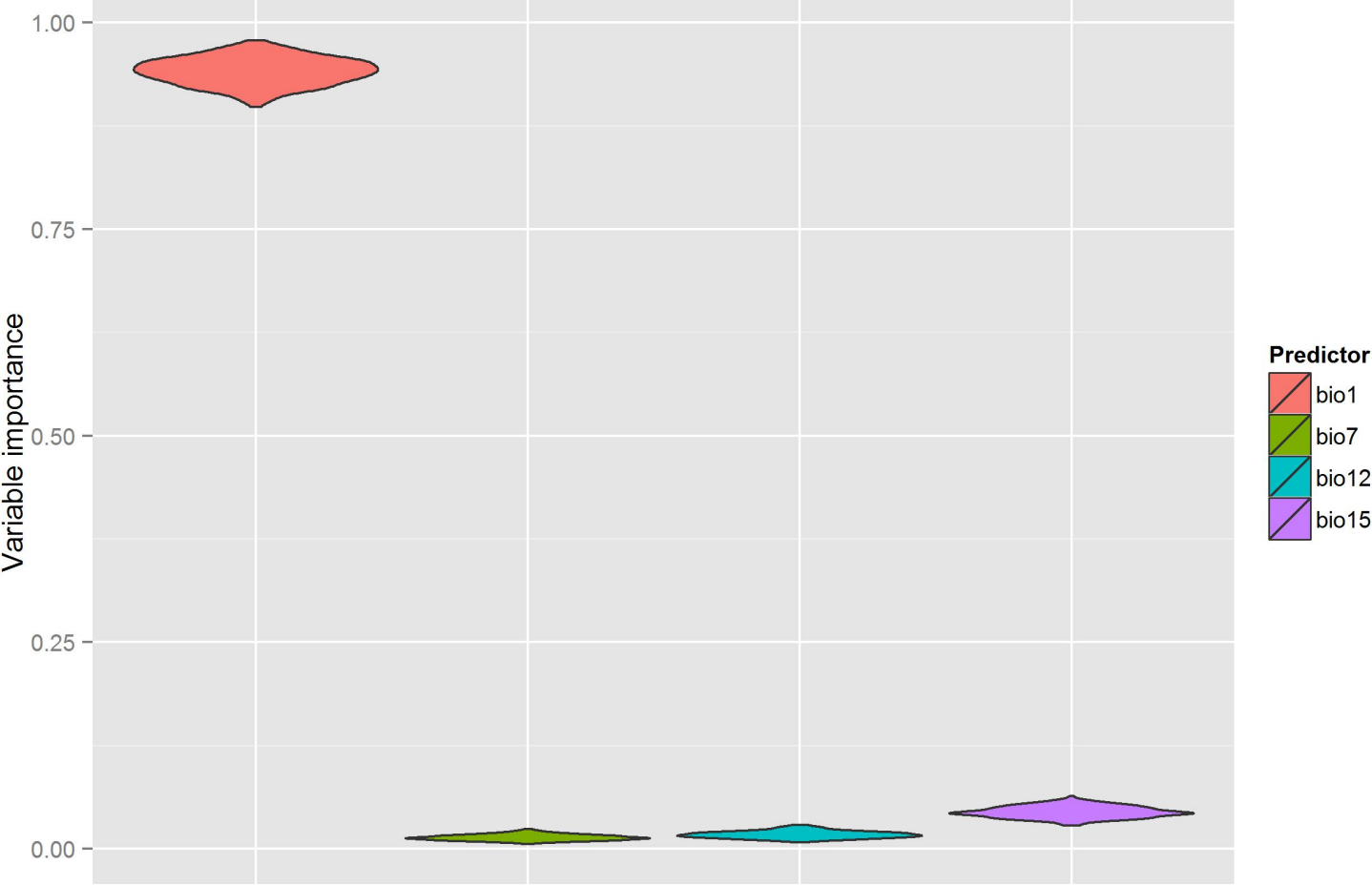
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Hawaii Amakihi GBM variable importance violin plot



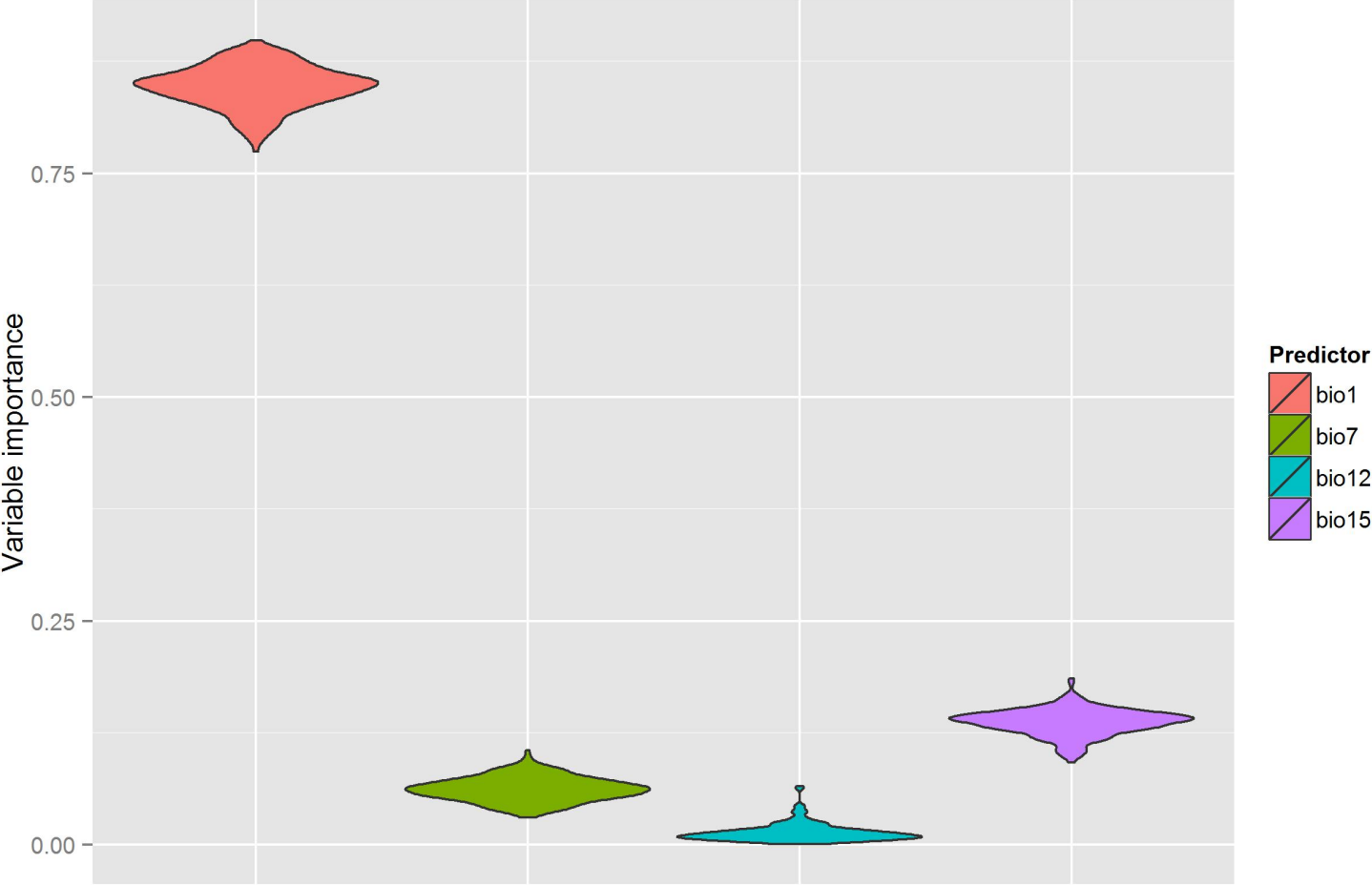
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Hawaii Amakihi MAXENT variable importance violin plot



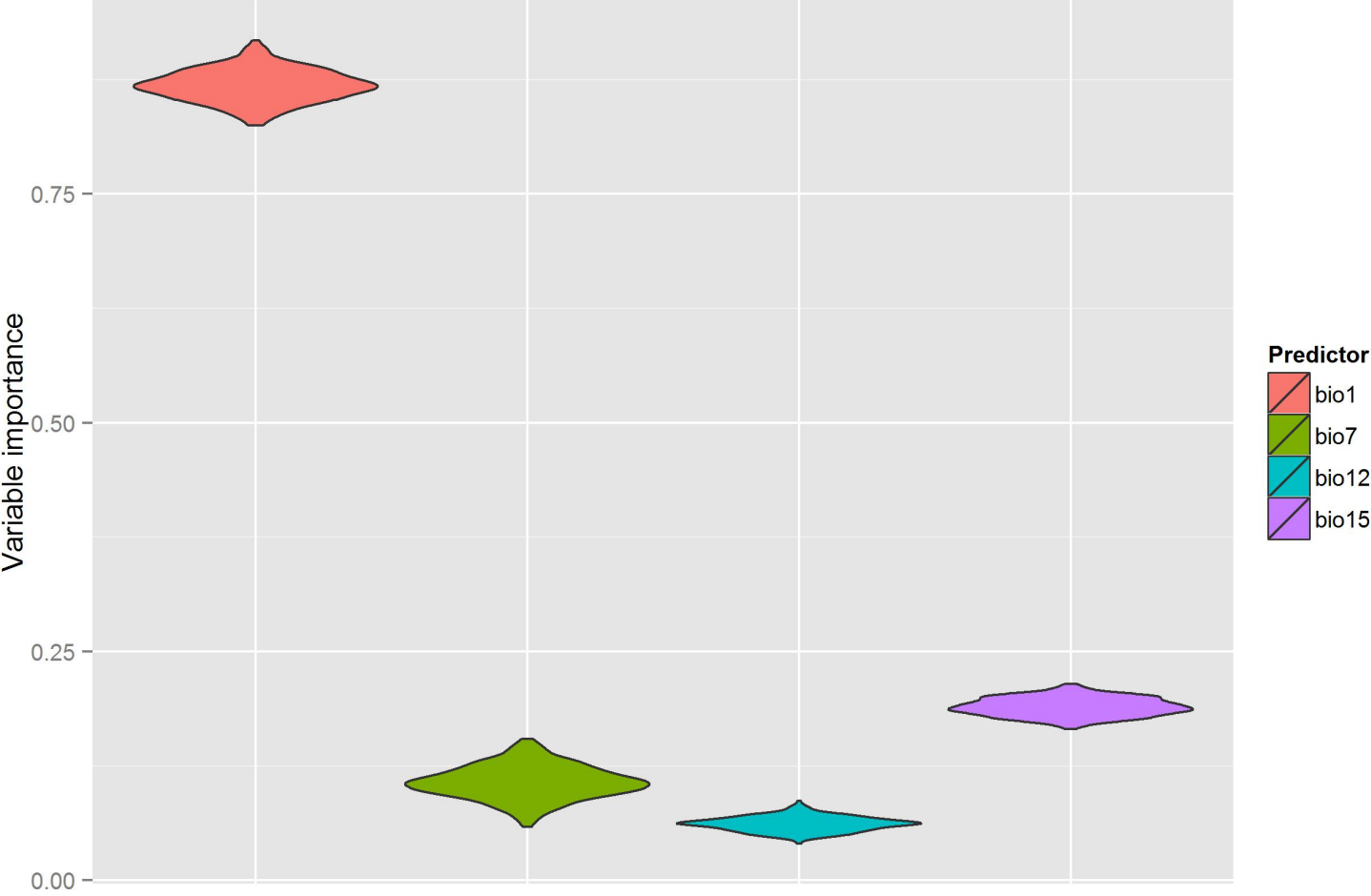
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Hawaii Elepaio GBM variable importance violin plot



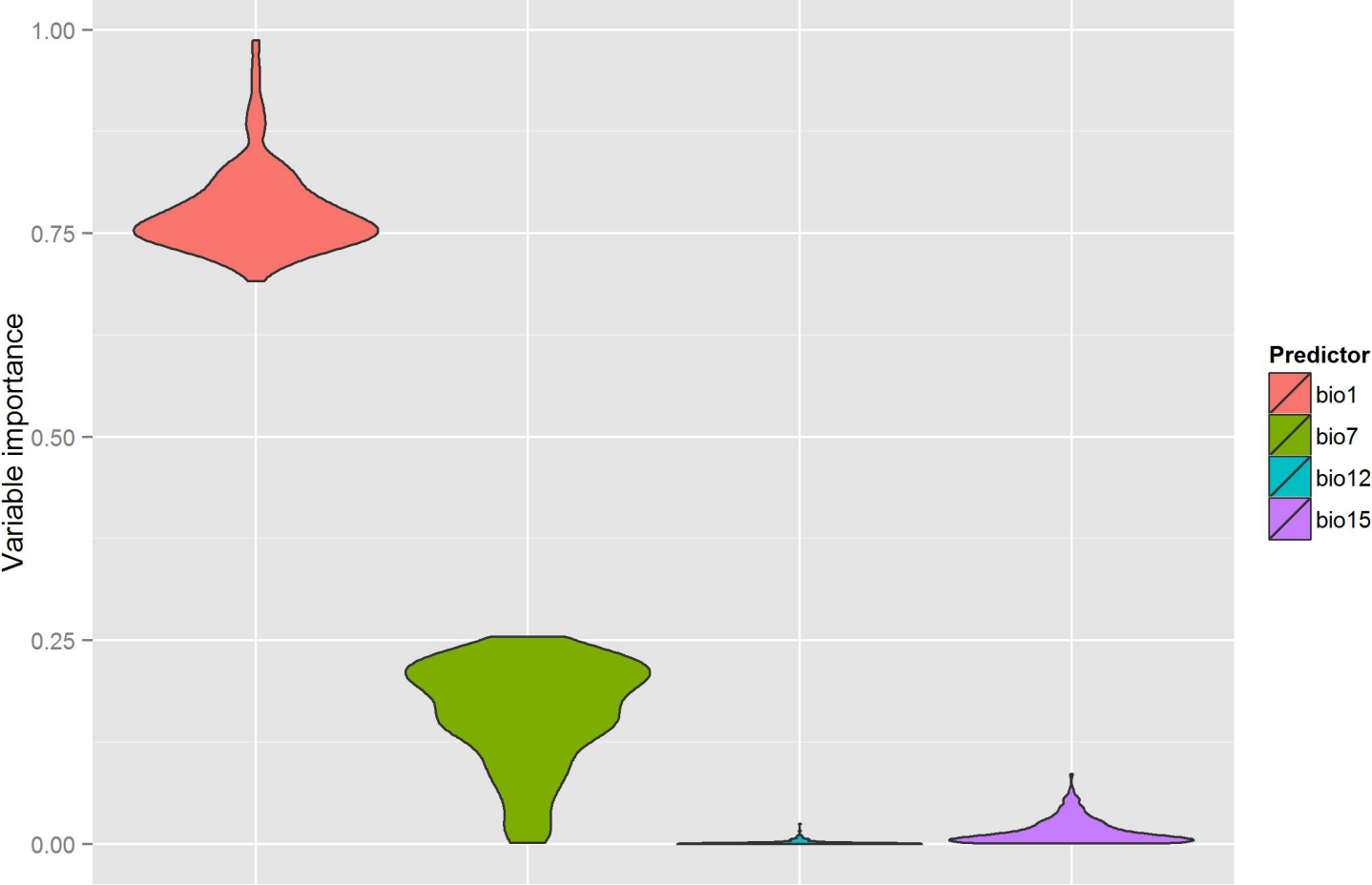
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Hawaii Elepaio MAXENT variable importance violin plot



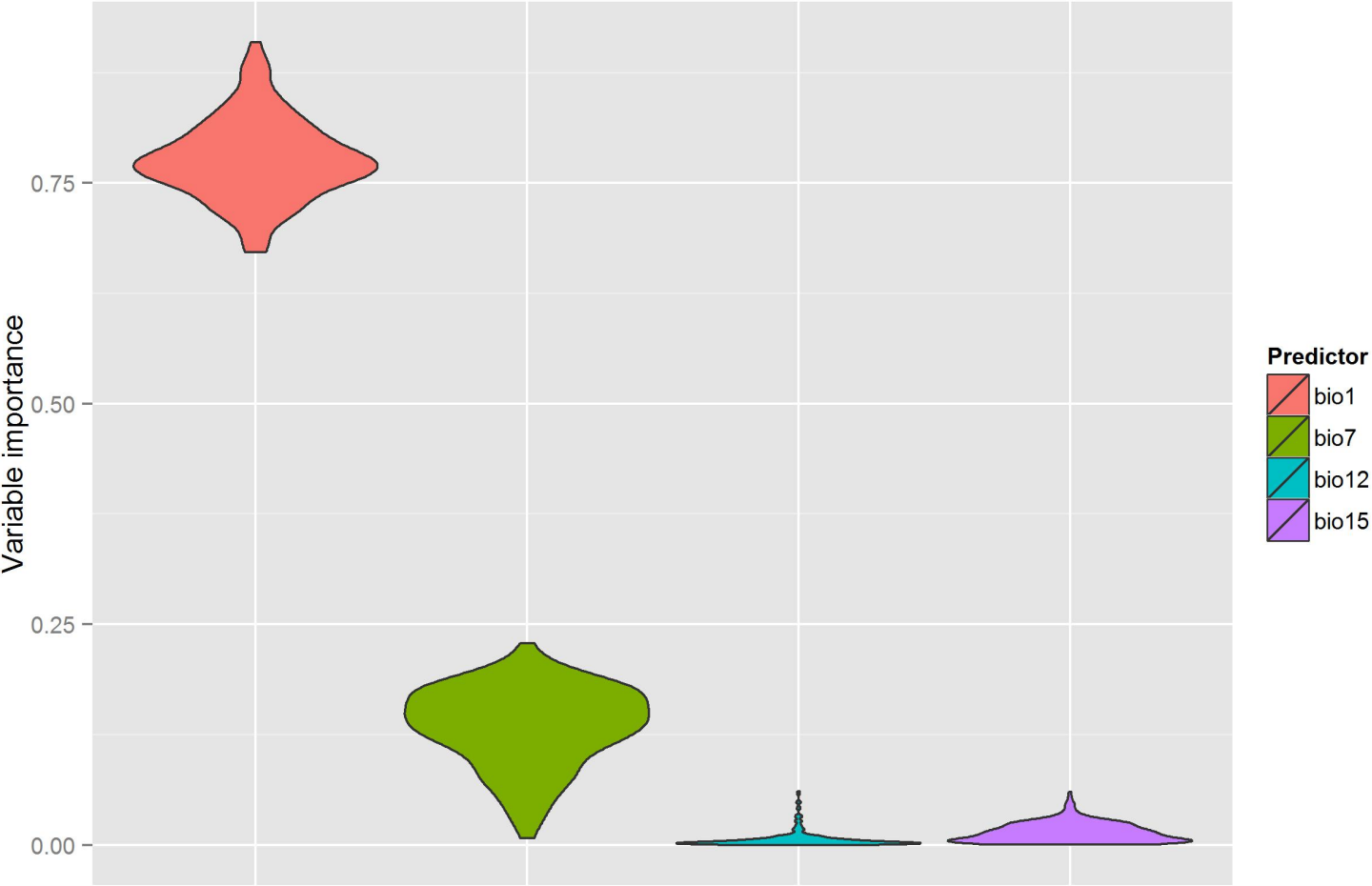
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Kauai Amakihi GBM variable importance violin plot



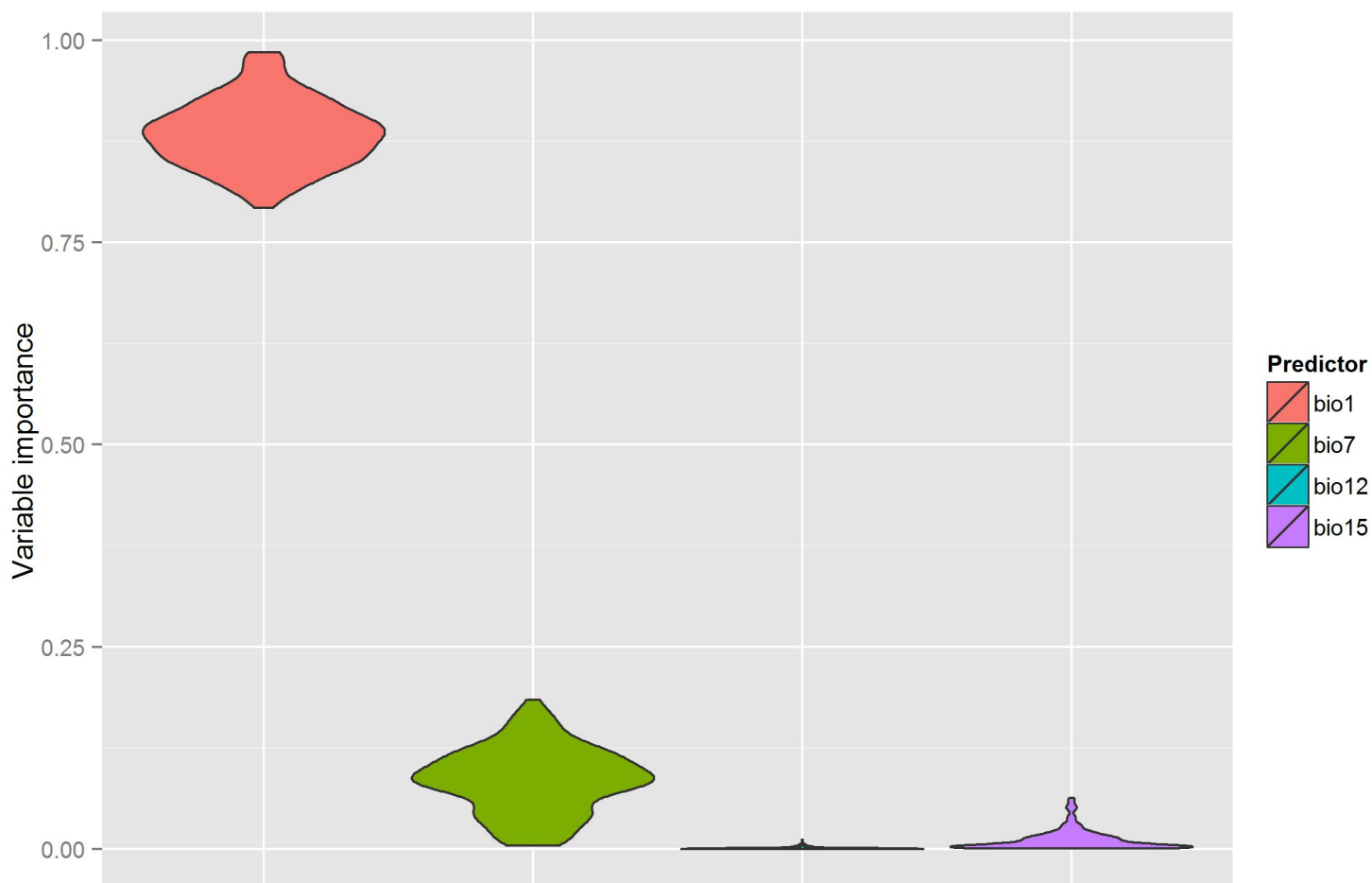
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Kauai Amakihi MAXENT variable importance violin plot



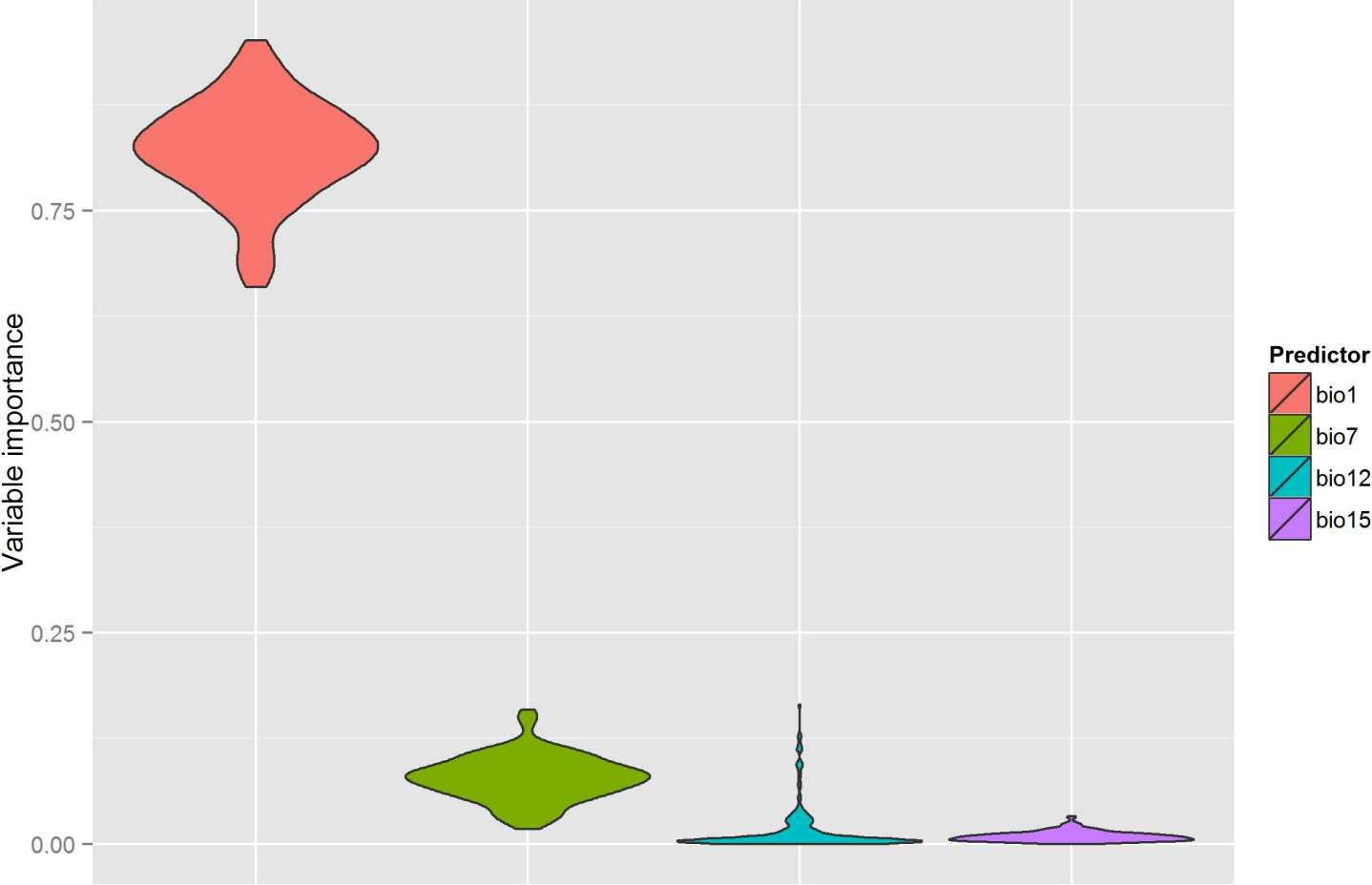
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Kauai Elepaio GBM variable importance violin plot



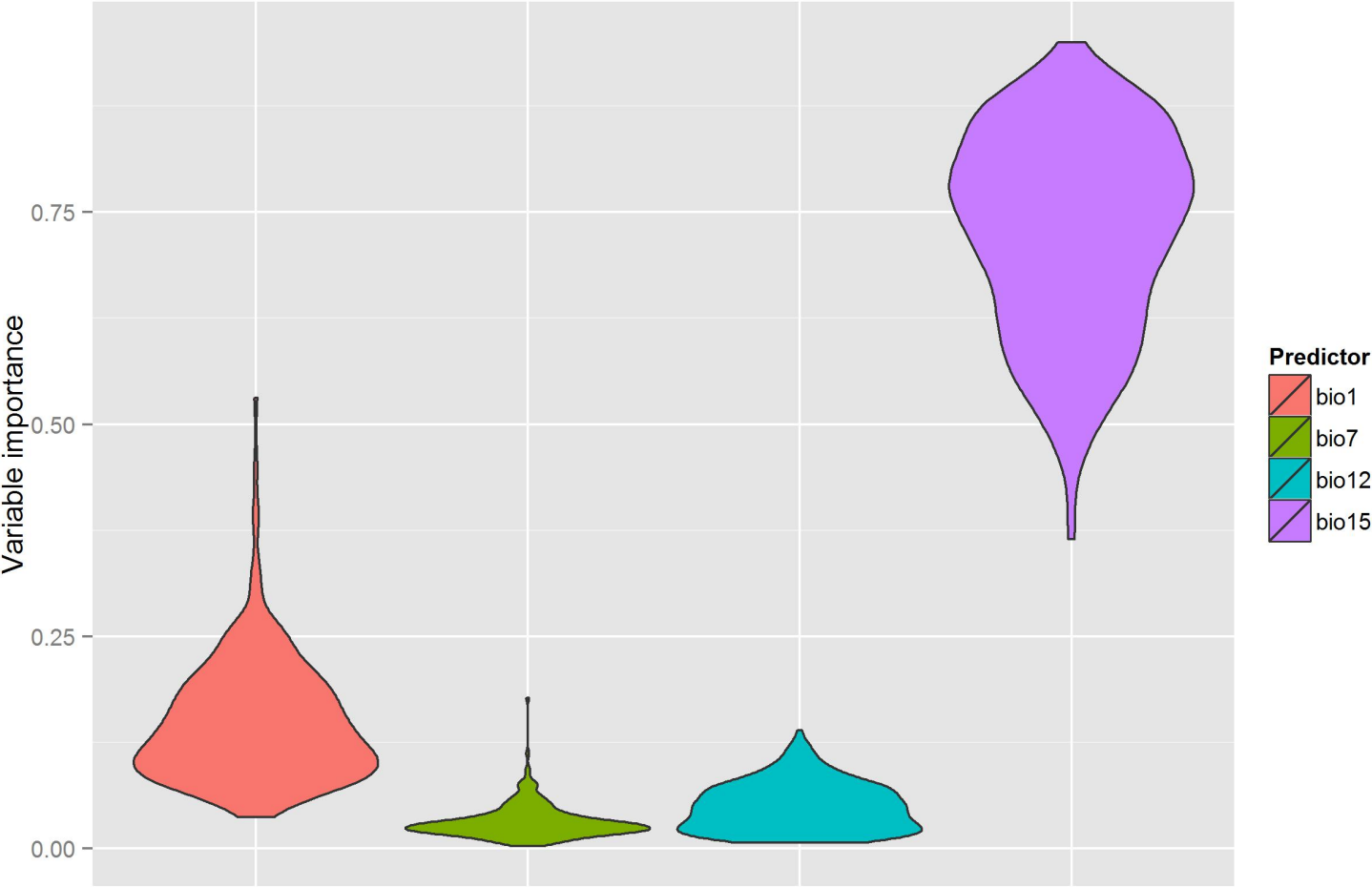
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Kauai Elepaio MAXENT variable importance violin plot



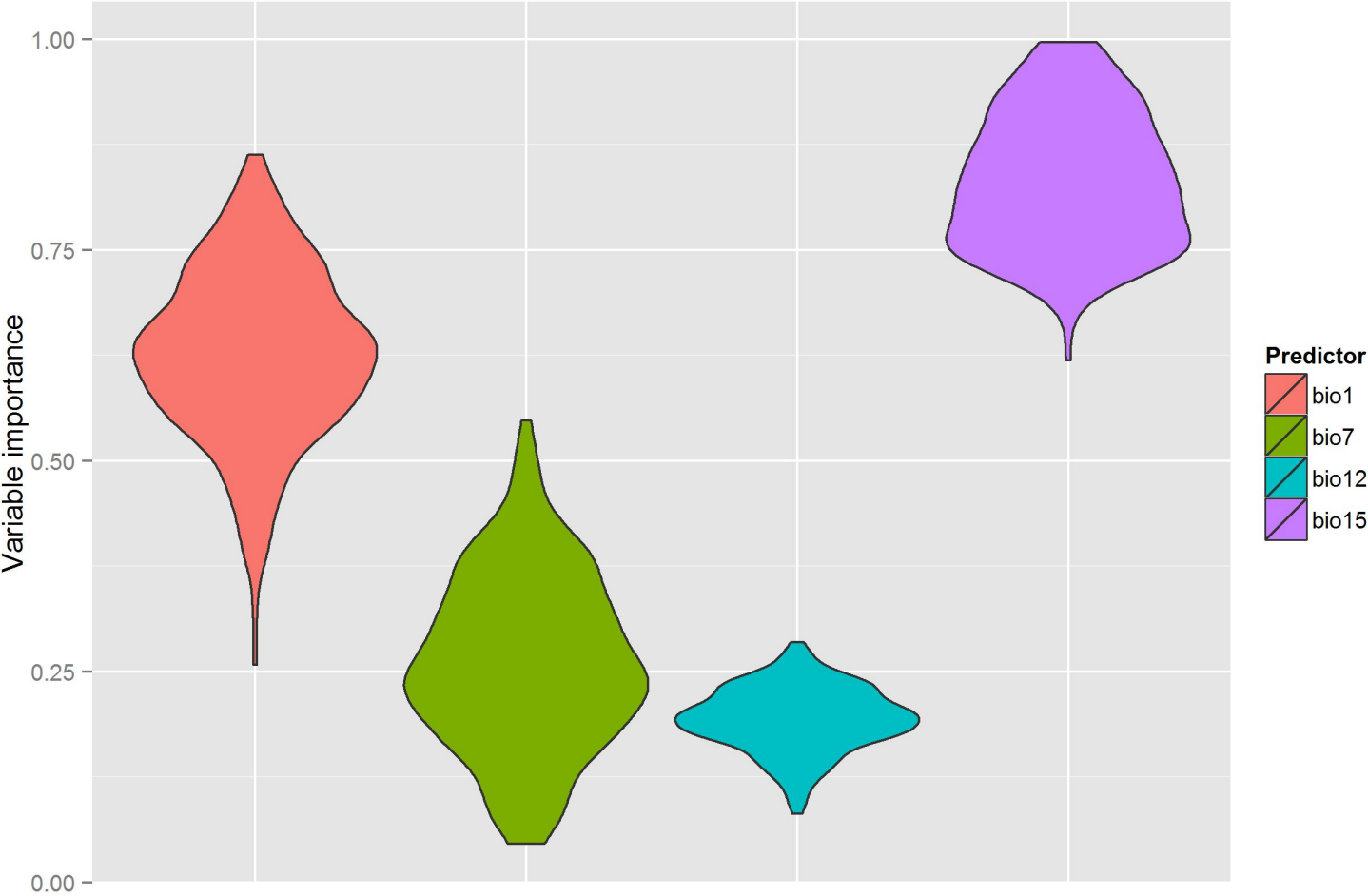
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Oahu Amakihi GBM variable importance violin plot



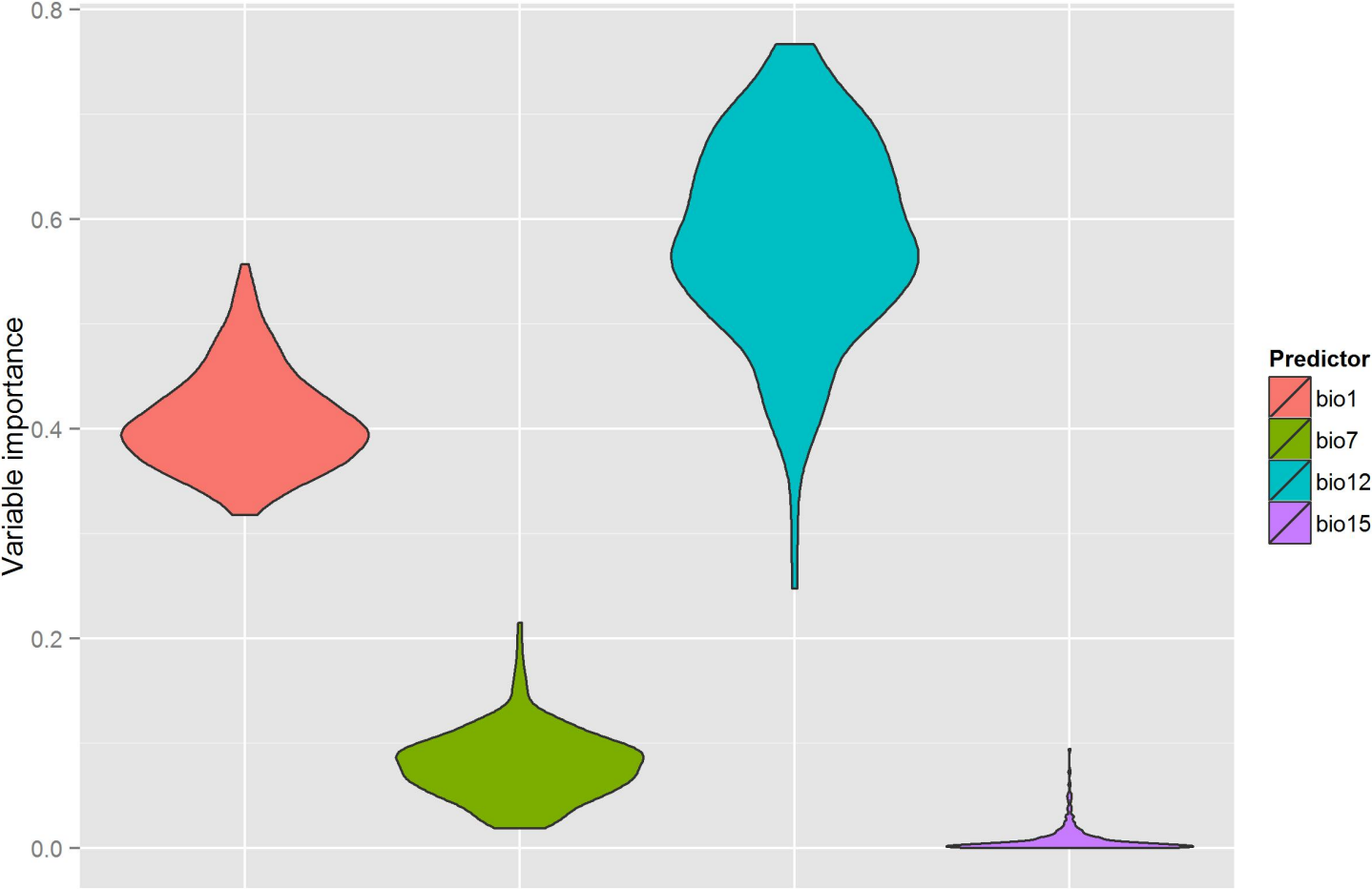
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Oahu Amakihi MAXENT variable importance violin plot



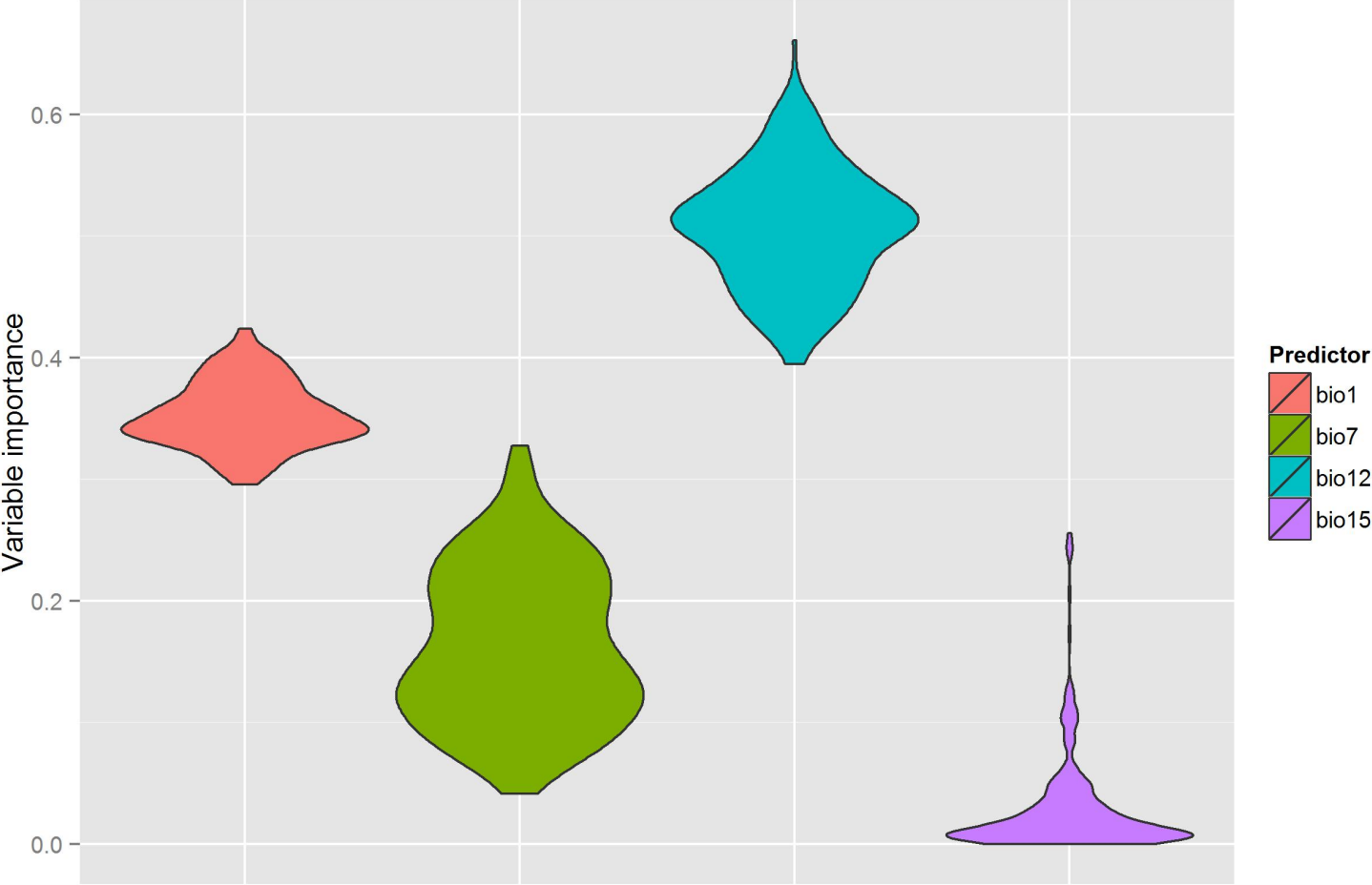
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Oahu Elepaio GBM variable importance violin plot



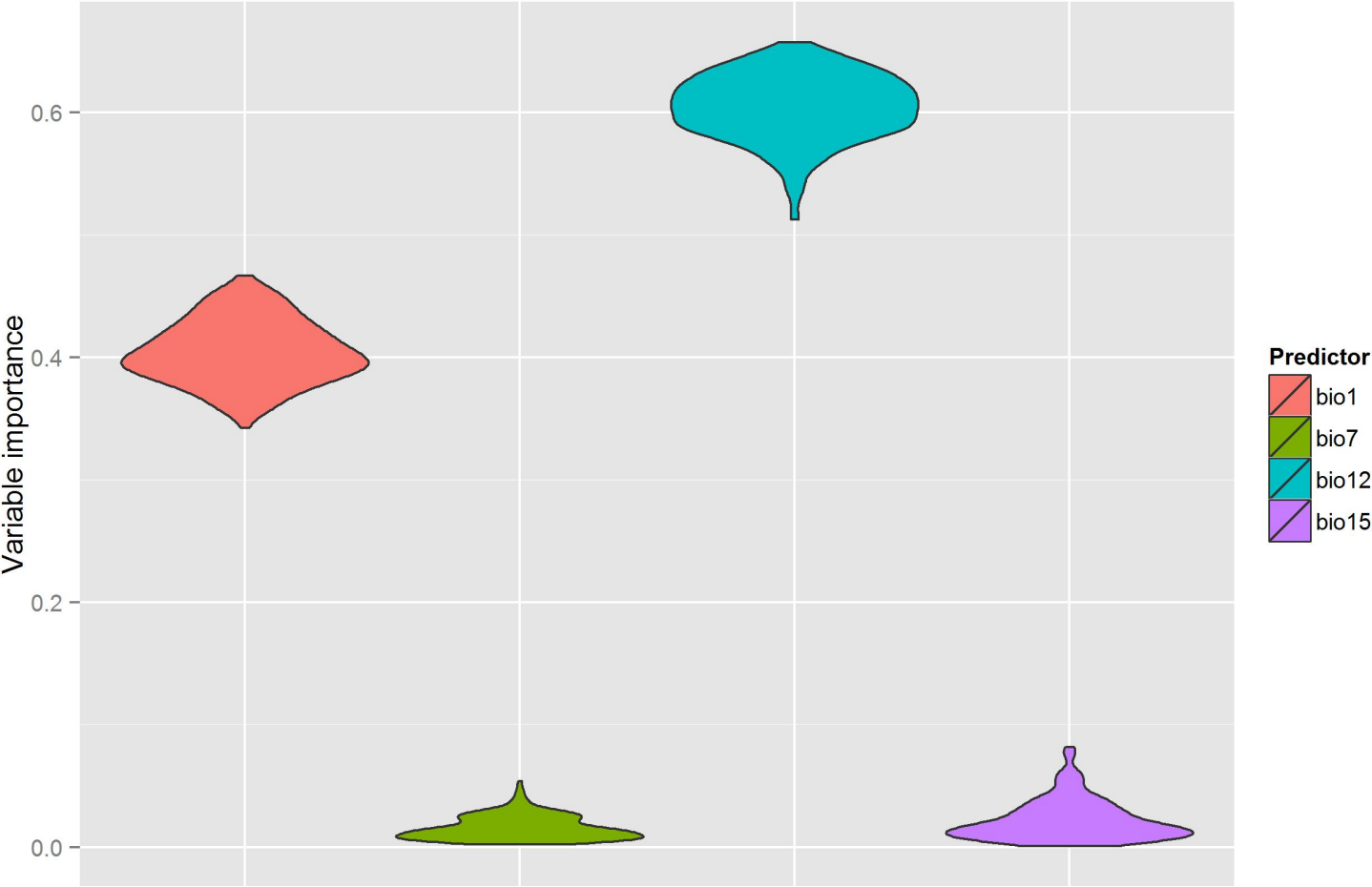
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Oahu Elepaio MAXENT variable importance violin plot



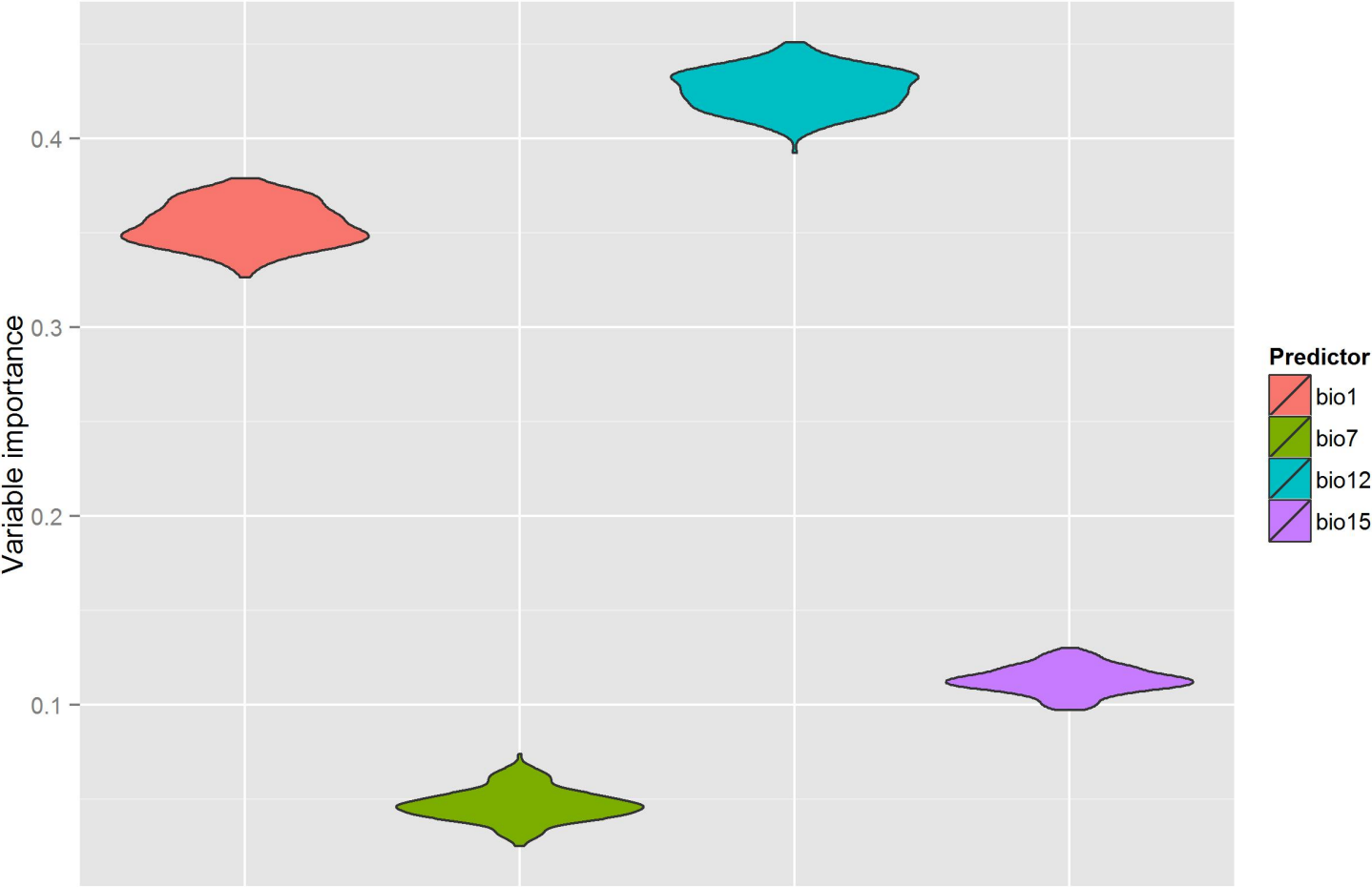
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Omao GBM variable importance violin plot



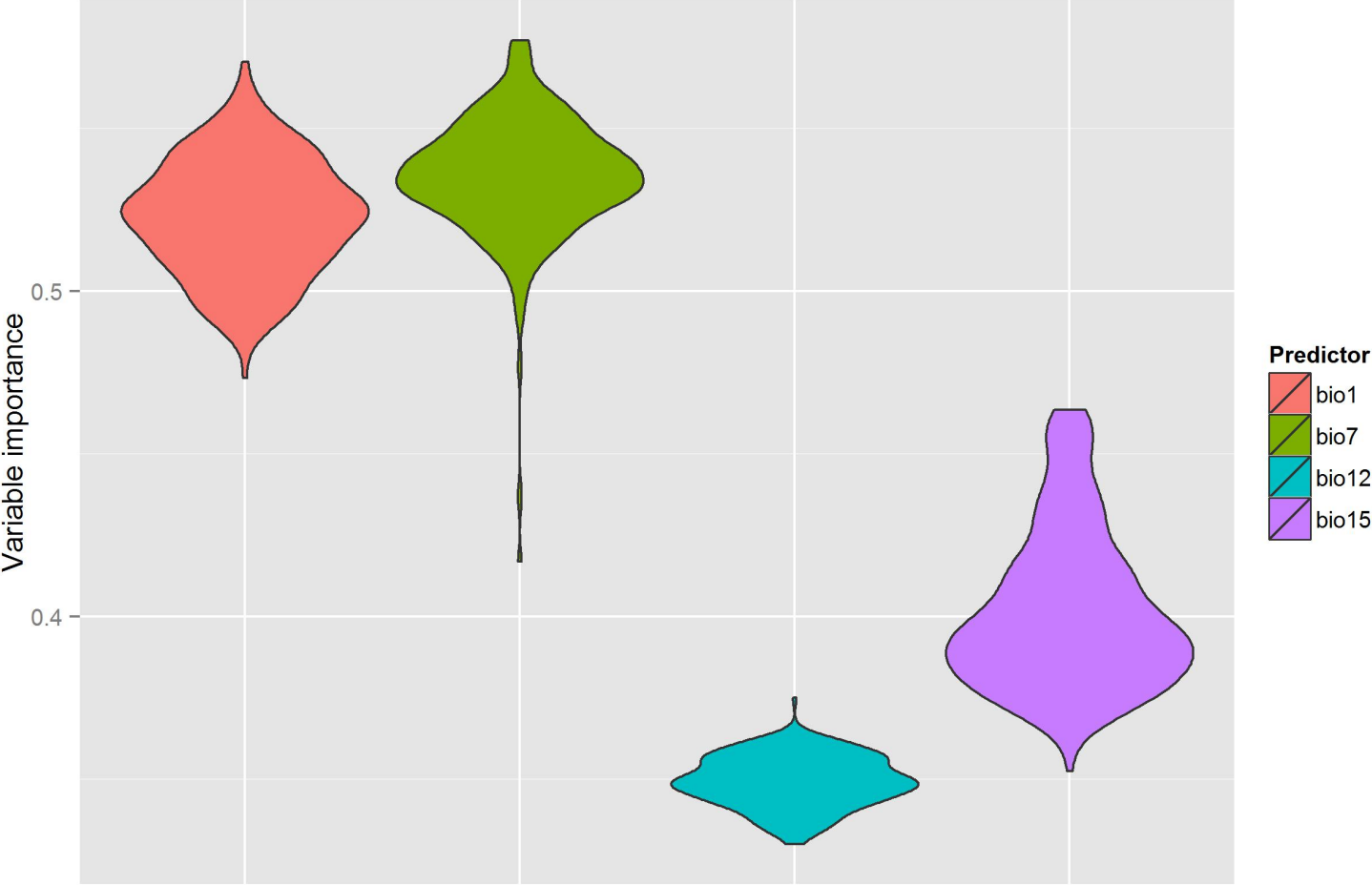
S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Omao MAXENT variable importance violin plot



S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Palila GBM variable importance violin plot



S3: VARIABLE IMPORTANCE GRAPHS
REDUCED MODEL RELIABILITY SPECIES

Palila MAXENT variable importance violin plot

