**A comparison of three statistical methods for analysing extinction threat status**

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**APPENDIX 2**

Classification of threatened and non-threatened species by regression tree analysis, logistic regression, and discriminant analysis for the butterfly data when abundance is included in the analysis. When multiple analyses were performed, such as when different structures were used for discriminant analysis, only the analysis with the best result is given. \*Probability of correctly predicting by chance alone at least as many as observed by a given method.

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| *Analysis* | *Threatened* | | *Non-threatened* | |
| *Predicted* | *p\** | *Predicted* | *p* |
| Regression tree | 14/18 | < 0.0001 | 60/62 | < 0.0001 |
| Logistic regression, 0.5 cutoff | 13/18 | < 0.0001 | 61/62 | < 0.0001 |
| Stepwise logistic regression | 9/18 | 0.0027 | 61/62 | < 0.0001 |
| Discriminant function analysis (spherical) | 13/18 | < 0.0001 | 58/62 | < 0.0001 |