Table S3. Traits that were identified as significant from generalised linear models for each different combination of the modelled bird dataset (i.e. using all birds or only those within the distributional range of the fox), when excluding different groups of birds (i.e. including or excluding seabirds, vagrants and non-breeding visitors) for each predator a bird was recorded as killed by (i.e. all cats including pet and feral cats, only feral cats or foxes). + indicates variables that significantly increased the risk of predation; - indicates variables that significantly decreased the risk of predation; blank predictor variables were not significant based on model averaging; NA indicates predictor variables that were not included in the model; significant term/s for categorical variables are specified in brackets. Grey highlighting indicates those models that are reported in Table 2. All models include the offset terms for the number of ALA records for each bird species (records were limited to the distributional range of foxes for fox-eaten models), and the number of fox- or cat-diet studies that have occurred within the distributional range of each species. Whether or not a bird was considered aggregating at water points was never a significant term so is not included here. For definition of predictor variables see Table 1.

|  |  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- | --- |
| Data used for model | | | Predictor variables | | | | | | |
| Dataset | Exclusions | Predator | Body mass | Body mass2 | Ground foraging | Ground nesting | Habitat | Urban | Island endemics |
| All birds | Vagrants | All cats | - | - | + | + (Yes; No) | - (RF) |  | + (Yes) |
| All birds | Vagrants; Non-breeding visitors | All cats | - | - | + | + (Yes) | - (RF) |  | + (Yes) |
| All birds | Vagrants; Seabirds | All cats | - | - | + | + (Yes) | - (RF) | + (Yes) | + (Yes) |
| All birds | Vagrants; Seabirds; Non-breeding vagrants | All cats | - | - | + | + (Yes) | - (RF) |  | + (Yes) |
| All birds | Vagrants | Feral cats |  |  | + | + (Yes; No) | - (RF; FW) |  | + (Yes) |
| All birds | Vagrants; Non-breeding visitors | Feral cats |  |  | + | + (Yes) | - (RF; FW) + (CM) |  | + (Yes) |
| All birds | Vagrants; Seabirds | Feral cats |  |  | + | + (Yes) | - (RF; FW) |  | + (Yes) |
| All birds | Vagrants; Seabirds; Non-breeding vagrants | Feral cats |  |  | + | + (Yes) | - (RF; FW) |  | + (Yes) |
| Within fox range | Vagrants | All cats | - | - | + | + (Yes; No) |  |  | NA |
| Within fox range | Vagrants; Non-breeding visitors | All cats | - | - | + | + (Yes) |  |  | NA |
| Within fox range | Vagrants; Seabirds; Non-breeding vagrants | All cats | - |  | + | + (Yes) |  | + (Yes) | NA |
| Within fox range | Vagrants; Seabirds | All cats | - |  | + | + (Yes; No) |  | + (Yes) | NA |
| Within fox range | Vagrants | Feral cats |  |  | + | + (Yes; No) | - (RF) |  | NA |
| Within fox range | Vagrants; Non-breeding visitors | Feral cats |  |  | + | + (Yes) | - (FW) |  | NA |
| Within fox range | Vagrants; Seabirds; Non-breeding vagrants | Feral cats | - |  | + | + (Yes) |  |  | NA |
| Within fox range | Vagrants; Seabirds | Feral cats | - |  | + | + (Yes) |  |  | NA |
| Within fox range | Vagrants | Foxes | + |  | + | + (Yes) |  |  | NA |
| Within fox range | Vagrants; Non-breeding visitors | Foxes | + |  | + | + (Yes) |  |  | NA |
| Within fox range | Vagrants; Seabirds; Non-breeding vagrants | Foxes | + |  | + | + (Yes) |  |  | NA |
| Within fox range | Vagrants; Seabirds | Foxes | + |  | + | + (Yes) |  |  | NA |