Results of the model selection procedure. Zero-truncated GAMs were fitted on the number of waterfowl species that consumed each seed species (hereafter number of vector species) against the predictor variables of soil moisture, nutrient, salinity, temperature and light exposure EIVs, and seed roundness, mass and density.

| Model                                                                 | ΔAIC  |
|----------------------------------------------------------------------|-------|
| EIV T + EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) + s(Roundness) | 0     |
| EIV T + EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) | 0.22  |
| EIV T + EIV L + EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) + s(Roundness) | 1.52  |
| EIV T + EIV L + EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) | 1.74  |
| EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) + s(Roundness) | 2.05  |
| EIV T + EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) | 2.47  |
| EIV L + EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) + s(Roundness) | 3.08  |
| EIV T + EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) | 3.43  |
| EIV F + s(EIV S) + s(Seed mass) + s(Seed density) + s(Roundness) | 4.48  |
| EIV T + EIV F + s(EIV S) + s(Seed mass) + s(Seed density) + s(Roundness) | 4.62  |
| EIV T + EIV F + s(EIV S) + s(Seed mass) + s(Seed density) | 4.83  |
| **EIV F + s(EIV S) + s(Seed mass) + s(Seed density)** | **4.92** |
| EIV L + EIV F + s(EIV S) + s(Seed mass) + s(Seed density) + s(Roundness) | 5.22  |
| EIV L + EIV F + s(EIV N) + s(EIV S) + s(Seed mass) + s(Seed density) | 5.48  |
| EIV T + EIV L + EIV F + s(EIV S) + s(Seed mass) + s(Seed density) + s(Roundness) | 5.62  |
| EIV T + EIV L + EIV F + s(EIV S) + s(Seed mass) + s(Seed density) | 5.7   |
| Null model                                                           | 34.6  |

Table 1. Fitted models with ΔAIC < 6 and null model ΔAIC. The selected final model is highlighted in bold.

| Coefficient | Standard error | Chi squared | P (Chi)       |
|-------------|----------------|-------------|---------------|
| Intercept 1 | -0.9568        | 0.2694      |               |
| Intercept 2 | -0.0125        | 0.2881      |               |
| EIV F       | 0.1666         | 0.0273      |               |
| s(EIV S)    | 0.1047         | 0.0317      | 23.4          | <0.0001|
| s(Seed mass)| 0.1045         | 0.0471      | 13.58         | 0.003 |
| s(Seed density) | 0.0607        | 0.0884      | 22.11         | <0.0001|
Table 2. Coefficients and standard errors of the seed/plant traits used as predictors of the number of waterfowl species consuming each seed in the final model and results of the chi-squared tests for linearity of each predictor.