**Appendix 1**

**Table S1.** Locations of 12 source population planted into common gardens open to and excluding deer on Sidney Island, BC, percentage of plants in those populations bearing wingless fruits, and the number of families collected from each by fruit phenotype (see Methods).

|  |  |  |  |
| --- | --- | --- | --- |
| Population | UTM (N, E) | Percentage of Plants with Wingless Fruits | Families Collected (wingless, winged) |
| With Deer |  |  |  |
| Crow’s Nest (Salt Spring Island) | 5403824, 466848 | 94% | 6, 8 |
| Dean Park (Vancouver Island) | 5384977, 467621 | 93% | 6, 7 |
| Moresby Island | 5397061, 477525 | 98% | 7, 6 |
| Pender Island | 5401676, 478716 | 94% | 11, 7 |
| Piers Island | 5394805, 469211 | 90% | 7, 8 |
| Prevost Island | 5409749, 470845 | 99% | 6, 8 |
| Without Deer |  |  |  |
| Chades Island | 5398192, 472230 | 3% | 6, 7 |
| Clive Island | 5394341, 470151 | 4% | 6, 6 |
| Musgrave Island | 5399003, 460040 | 1% | 2, 14 |
| Owl Island | 5408240, 470681 | 9% | 6, 7 |
| Shell Island | 5390933, 472504 | 3% | 6, 6 |
| Port Washington Island | 5406547, 476287 | 1% | 6, 8 |

**Appendix 2**

**Table S2**. Flowering phenology classes of *P. congesta*.

|  |  |
| --- | --- |
| **Stage Class** | **Description** |
| 1 | Only leaves present; no buds. |
| 2 | Inflorescence forming, but no definable pink buds |
| 3 | Pink buds present |
| 4 | Inflorescence: 75-90% budding and 10-25% blooming |
| 5 | Inflorescence: 50% budding and 50% has bloomed |
| 6 | Inflorescence:10-25% budding and 75-90% blooming |
| 7 | Inflorescence: 100% blooming |
| 8 | Inflorescence: 75-90% blooming and 10-25% fruiting |
| 9 | Inflorescence: 50% blooming and 50% fruiting |
| 10 | Inflorescence: 10-25% blooming and 75-90% fruiting |
| 11 | Inflorescence: 100% fruiting |

**Appendix 3**

**Model:** Plant Present (0 or 1) = (Measurement Date \* Browsing History \* Current Exposure to Browsing \* Fruit Phenotype of sown fruit) + (soil depth \* Current Exposure to Browsing) + (1| Substrate) + (1 | Exclosure ID) + (1 | Population/Family)

**Table S3a.** ANOVA results for Germination and Survival on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable/Interaction** | **Df** | **χ2** | **p-value** |
| **Single Fixed Effects Variables** |  |  |  |
| Intercept | 1 | 2.39 | 0.12 |
| Measurement Date | 2 | 4.43 | 0.11 |
| Browsing History | 1 | 0.02 | 0.90 |
| Current Exposure to Browsing | 1 | 0.29 | 0.59 |
| Fruit Phenotype of Sown Fruit | 1 | 2.86 | 0.09 |
| Soil depth | 1 | 0.92 | 0.34 |
| **Two-way Interactions of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History | 2 | 1.01 | 0.60 |
| Measurement Date\*Current Exposure to Browsing | 2 | 2.34 | 0.31 |
| Browsing History\*Current Exposure to Browsing | 1 | 0.30 | 0.59 |
| Measurement Date\*Fruit Phenotype of Sown Fruit | 2 | 0.16 | 0.92 |
| Browsing History\*Fruit Phenotype of Sown Fruit | 1 | 1.36 | 0.24 |
| Current Exposure to Browsing\*Fruit Phenotype of Sown Fruit | 1 | 3.34 | 0.07 |
| Current Exposure to Browsing\*Soil Depth | 1 | 3.92 | **0.048\*** |
| **Three-way Interactions of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History\*Current Exposure to Browsing | 2 | 13.03 | **0.001\*\*** |
| Measurement Date\*Browsing History\*Fruit Phenotype of Sown Fruit | 2 | 0.18 | 0.92 |
| Measurement Date\*Current Exposure to Browsing\* Fruit Phenotype | 2 | 0.64 | 0.72 |
| Browsing History\*Current Exposure to Browsing\*Fruit Phenotype | 1 | 3.34 | 0.07 |
| **Four-way Interaction of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History\*Current Exposure to  Browsing\*Fruit Phenotype of Sown Fruit | 2 | 3.19 | 0.20 |
| **Random Effects Variables** | **Variance** | | **SD** |
| Substrate | 0.33 | | 0.58 |
| Exclosure ID | 0.00 | | 0.00 |
| Population | 0.02 | | 0.15 |
| Population/Family | 0.42 | | 0.65 |

**Table S3b.** Back-transformed Model Predicted Values for Germination and Survival (%) on Sidney Island

|  |  |  |  |  |
| --- | --- | --- | --- | --- |
| **Browsing History** | **Current Exposure to Browsing** | **Measurement Date** | **Fruit Phenotype** | **Model Predicted Mean ± SD** |
| Historically Exposed | Inside | December | Wingless | 29.8 ± 3.3 |
|  |  |  | Winged | 20.6 ± 3.1 |
|  |  | March | Wingless | 24.9 ± 3.1 |
|  |  |  | Winged | 17.8 ± 2.9 |
|  |  | May | Wingless | 22.8 ± 3.0 |
|  |  |  | Winged | 16.7 ± 2.9 |
| Historically Exposed | Outside | December | Wingless | 21.6 ± 2.9 |
|  |  |  | Winged | 24.2 ± 3.3 |
|  |  | March | Wingless | 20.1 ± 2.9 |
|  |  |  | Winged | 19.3 ± 3.1 |
|  |  | May | Wingless | 9.9 ± 2.1 |
|  |  |  | Winged | 10.0 ± 2.3 |
| Historically Naïve | Inside | December | Wingless | 30.6 ± 3.7 |
|  |  |  | Winged | 30.3 ± 3.2 |
|  |  | March | Wingless | 22.6 ± 3.3 |
|  |  |  | Winged | 20.4 ± 2.8 |
|  |  | May | Wingless | 18.9 ± 3.1 |
|  |  |  | Winged | 19.4 ± 2.7 |
| Historically Naïve | Outside | December | Wingless | 25.7 ± 3.5 |
|  |  |  | Winged | 20.9 ± 2.8 |
|  |  | March | Wingless | 8.4 ± 2.2 |
|  |  |  | Winged | 9.3 ± 2.0 |
|  |  | May | Wingless | 2.0 ± 1.1 |
|  |  |  | Winged | 3.4 ± 1.2 |

**Appendix 4**

**Model:** Fecundity (# florets) = (Browsing History \* Current Exposure to Browsing \* Fruit Phenotype of Surviving Plant) + (1| Substrate) + (1 | Exclosure ID) + (1 | Population)

**Table S4a**. ANOVA Results for Fecundity on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable/Interaction** | **Df** | **χ2** | **p-value** |
| **Single Fixed Effects Variables** |  |  |  |
| Intercept | 1 | 128.77 | **<0.001\*\*\*** |
| Browsing History | 1 | 3.48 | 0.06 |
| Current Exposure to Browsing | 1 | 100.42 | **<0.001\*\*\*** |
| Fruit Phenotype of Surviving Plant | 1 | 34.15 | **<0.001\*\*\*** |
| **Two-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing | 1 | 4.10 | **0.04\*** |
| Browsing History\*Fruit Phenotype of Surviving Plant | 1 | 0.20 | 0.66 |
| Current Exposure to Browsing\*Fruit Phenotype of Surviving Plant | 1 | 27.98 | **<0.001\*\*\*** |
| **Three-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing\*Fruit Phenotype | 1 | 6.23 | **0.1\*** |
| **Random Effects Variables** | **Variance** | | **SD** |
| Substrate | 0.17 | | 0.41 |
| Exclosure ID | 0.00 | |  |
| Population | 0.07 | | 0.26 |

**Table S4b**. Back-transformed Model Predictions for Fecundity (number of florets/fruits) on Sidney Island

|  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- |
| **Browsing History** | **Current Exposure to Browsing** | **Fruit Phenotype** | **Model Predicted Mean** | **SE lower** | **SE upper** |
| Historically Exposed | Inside | Wingless | 15 | 11 | 20 |
|  |  | Winged | 21 | 16 | 27 |
|  | Outside | Wingless | 9 | 7 | 13 |
|  |  | Winged | 6 | 5 | 9 |
| Historically Naïve | Inside | Wingless | 11 | 8 | 15 |
|  |  | Winged | 15 | 11 | 21 |
|  | Outside | Wingless | 5 | 3 | 9 |
|  |  | Winged | 7 | 5 | 10 |

**Appendix 5**

**Model:** Log(Inflorescence Volume) = (Browsing History \* Current Exposure to Browsing \* Fruit Phenotype of Surviving Plant) + (1| Substrate) + (1 | Population)

**Table S5a.** ANOVA Results for Inflorescence Volume on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable/Interaction** | **Df** | **χ2** | **p-value** |
| **Single Fixed Effects Variables** |  |  |  |
| Intercept | 1 | 4.52 | **0.03\*** |
| Browsing History | 1 | 3.89 | **0.049\*** |
| Current Exposure to Browsing | 1 | 0.02 | 0.88 |
| Fruit Phenotype of Surviving Plant | 1 | 0.13 | 0.72 |
| **Two-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing | 1 | 0.21 | 0.65 |
| Browsing History\*Fruit Phenotype of Surviving Plant | 1 | 2.93 | 0.09 |
| Current Exposure to Browsing\*Fruit Phenotype of Surviving Plant | 1 | 0.38 | 0.54 |
| **Three-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing\*Fruit Phenotype | 1 | 0.05 | 0.82 |
| **Random Effects Variables** | **Variance** | | **SD** |
| Substrate | 0.19 | | 0.44 |
| Population | 0.03 | | 0.16 |
| Residual | 1.77 | | 0.09 |

**Table S5b.** Raw Means and Standard Errors for Inflorescence Volume (cm3) on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Browsing History** | **Current Exposure to Browsing** | **Fruit Phenotype** | **Model Predicted Mean ± SE** |
| Historically Exposed | Inside | Wingless | 2.67 ± 0.10 |
|  |  | Winged | 1.45 ± 0.16 |
|  | Outside | Wingless | 0.44 ± 0.01 |
|  |  | Winged | 0.91 ± 0.26 |
| Historically Naïve | Inside | Wingless | 3.16 ± 0.26 |
|  |  | Winged | 7.78 ± 0.38 |
|  | Outside | Wingless | 0.31 ± 0.08 |
|  |  | Winged | 0.75 ± 0.19 |

**Appendix 6**

**Model:** Log(Exponential Power Function) = (Browsing History \* Current Exposure to Browsing \* Fruit Phenotype of Surviving Plant) + (Soil Depth \* Current Exposure to Browsing) + (1| Substrate) + (1 | Exclosure ID) + (1 | Population/Family)

**Table S6**. ANOVA Results for Bolting Phenology on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable/Interaction** | **Df** | **χ2** | **p-value** |
| **Single Fixed Effects Variables** |  |  |  |
| Browsing History | 1 | 8.49 | **0.004\*\*** |
| Current Exposure to Browsing | 1 | 4.89 | **0.03\*** |
| Fruit Phenotype of Surviving Plant | 1 | 0.12 | 0.73 |
| Soil Depth | 1 | 3.39 | 0.07 |
| **Two-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing | 1 | 0.11 | 0.75 |
| Browsing History\*Fruit Phenotype of Surviving Plant | 1 | 2.51 | 0.11 |
| Current Exposure to Browsing\*Fruit Phenotype of Surviving Plant | 1 | 3.96 | **0.047\*** |
| Soil Depth \* Current Exposure to Browsing | 1 | 0.02 | 0.89 |
| **Three-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing\*Fruit Phenotype | 1 | 0.02 | 0.88 |
| **Random Effects Variables** | **Variance** | | **SD** |
| Substrate | <0.001 | | 0.01 |
| Exclosure | <0.001 | | <0.001 |
| Population | <0.001 | | 0.02 |
| Population/Family | <0.001 | | <0.001 |
| Residual | 0.07 | | 0.00 |

**Appendix 7**

**Model:** Log (Plant Height) = (Measurement Date \* Browsing History \* Current Exposure to Browsing \* Fruit Phenotype of Sown Fruit) + (Soil Depth \* Current Exposure to Browsing) + (1| Substrate) + (1 | Exclosure ID) + (1 | Population/Family)

**Table S7a**. ANOVA Results for Plant Height on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable/Interaction** | **Df** | **χ2** | **p-value** |
| **Single Fixed Effects Variables** |  |  |  |
| Intercept | 1 | 0.02 | 0.88 |
| Measurement Date | 2 | 937.06 | **<0.0001\*\*\*** |
| Browsing History | 1 | 1.52 | 0.22 |
| Current Exposure to Browsing | 1 | 0.02 | 0.88 |
| Fruit Phenotype of Sown Fruit | 1 | 0.00 | 0.99 |
| Soil depth | 1 | 3.87 | **0.049\*** |
| **Two-way Interactions of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History | 2 | 3.23 | 0.20 |
| Measurement Date\*Current Exposure to Browsing | 2 | 28.79 | **<0.0001\*\*\*** |
| Browsing History\*Current Exposure to Browsing | 1 | 0.99 | 0.32 |
| Measurement Date\*Fruit Phenotype of Sown Fruit | 2 | 0.19 | 0.91 |
| Browsing History\*Fruit Phenotype of Sown Fruit | 1 | 2.82 | 0.09 |
| Current Exposure to Browsing\*Fruit Phenotype of Sown Fruit | 1 | 2.95 | 0.09 |
| Current Exposure to Browsing\*Soil Depth | 1 | 0.16 | 0.69 |
| **Three-way Interactions of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History\*Current Exposure to Browsing | 2 | 1.31 | 0.52 |
| Measurement Date\*Browsing History\*Fruit Phenotype of Sown Fruit | 2 | 0.75 | 0.69 |
| Measurement Date\*Current Exposure to Browsing\* Fruit Phenotype | 2 | 3.17 | 0.20 |
| Browsing History\*Current Exposure to Browsing\*Fruit Phenotype | 1 | 0.19 | 0.66 |
| **Four-way Interaction of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History\*Current Exposure to  Browsing\*Fruit Phenotype of Sown Fruit | 2 | 1.05 | 0.59 |
| **Random Effects Variables** | **Variance** | | **SD** |
| Substrate | 0.002 | | 0.047 |
| Exclosure ID | <0.001 | | <0.001 |
| Population | 0.009 | | 0.095 |
| Population/Family | 0.014 | | 0.117 |

**Table S7b**. Back-transformed Model Predictions for Plant Height (cm) on Sidney Island

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Browsing History** | **Current Exposure to Browsing** | **Measurement Date** | **Fruit Phenotype** | **Model Predicted Mean** | **SE Lower limit** | **SE Upper Limit** |
| Historically Exposed | Inside | December | Wingless | 1.13 | 0.99 | 1.29 |
|  |  |  | Winged | 1.13 | 0.96 | 1.34 |
|  |  | March | Wingless | 2.29 | 1.95 | 2.68 |
|  |  |  | Winged | 2.32 | 1.85 | 2.92 |
|  |  | May | Wingless | 15.71 | 13.41 | 18.40 |
|  |  |  | Winged | 14.82 | 11.74 | 18.70 |
| Historically Exposed | Outside | December | Wingless | 1.17 | 0.91 | 1.50 |
|  |  |  | Winged | 0.93 | 0.69 | 1.26 |
|  |  | March | Wingless | 1.77 | 1.31 | 2.37 |
|  |  |  | Winged | 1.86 | 1.23 | 2.80 |
|  |  | May | Wingless | 8.08 | 5.96 | 10.95 |
|  |  |  | Winged | 7.74 | 5.03 | 11.91 |
| Historically Naïve | Inside | December | Wingless | 1.30 | 1.10 | 1.53 |
|  |  |  | Winged | 1.63 | 1.28 | 2.06 |
|  |  | March | Wingless | 3.27 | 2.60 | 41.0 |
|  |  |  | Winged | 3.82 | 2.66 | 5.50 |
|  |  | May | Wingless | 16.65 | 13.25 | 20.93 |
|  |  |  | Winged | 17.08 | 11.81 | 24.70 |
| Historically Naïve | Outside | December | Wingless | 1.52 | 1.13 | 2.06 |
|  |  |  | Winged | 1.40 | 0.93 | 2.13 |
|  |  | March | Wingless | 2.34 | 1.54 | 3.55 |
|  |  |  | Winged | 2.03 | 1.05 | 3.92 |
|  |  | May | Wingless | 8.33 | 5.23 | 13.28 |
|  |  |  | Winged | 6.63 | 3.18 | 13.81 |

**Appendix 8**

**Model:** Log (Plant Height) = (Measurement Date \* Browsing History \* Current Exposure to Browsing \* Fruit Phenotype of Sown Fruit) + (Soil Depth \* Current Exposure to Browsing) + (1| Substrate) + (1 | Exclosure ID) + (1 | Population)

**Table S8a.** ANOVA Results for Growth Form (H:W Ratio) on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable/Interaction** | **Df** | **χ2** | **p-value** |
| **Single Fixed Effects Variables** |  |  |  |
| Intercept | 1 | 0.35 | 0.56 |
| Measurement Date | 2 | 882.81 | **<0.0001\*\*\*** |
| Browsing History | 1 | 0.57 | 0.45 |
| Current Exposure to Browsing | 1 | 0.25 | 0.62 |
| Fruit Phenotype of Sown Fruit | 1 | 0.00 | 0.98 |
| Soil depth | 1 | 5.94 | **0.01\*** |
| **Two-way Interactions of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History | 2 | 8.97 | **0.01\*** |
| Measurement Date\*Current Exposure to Browsing | 2 | 4.76 | 0.09 |
| Browsing History\*Current Exposure to Browsing | 1 | 0.01 | 0.92 |
| Measurement Date\*Fruit Phenotype of Sown Fruit | 2 | 0.30 | 0.86 |
| Browsing History\*Fruit Phenotype of Sown Fruit | 1 | 0.72 | 0.40 |
| Current Exposure to Browsing\*Fruit Phenotype of Sown Fruit | 1 | 0.90 | 0.34 |
| Current Exposure to Browsing\*Soil Depth | 1 | 0.35 | 0.55 |
| **Three-way Interactions of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History\*Current Exposure to Browsing | 2 | 1.87 | 0.39 |
| Measurement Date\*Browsing History\*Fruit Phenotype of Sown Fruit | 2 | 0.67 | 0.72 |
| Measurement Date\*Current Exposure to Browsing\* Fruit Phenotype | 2 | 1.46 | 0.48 |
| Browsing History\*Current Exposure to Browsing\*Fruit Phenotype | 1 | 0.05 | 0.82 |
| **Four-way Interaction of Fixed Effects** |  |  |  |
| Measurement Date\*Browsing History\*Current Exposure to  Browsing\*Fruit Phenotype of Sown Fruit | 2 | 3.35 | 0.19 |
| **Random Effects Variables** | **Variance** | | **SD** |
| Substrate | 0.006 | | 0.075 |
| Exclosure ID | 0.003 | | 0.058 |
| Population | 0.001 | | 0.034 |
| Residual | 0.557 | | 0.012 |

**Table S8b**. Back-transformed Model Predictions for Growth Form (H:W Ratio) on Sidney Island

|  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- |
| **Browsing History** | **Current Exposure to Browsing** | **Measurement Date** | **Fruit Phenotype** | **Model Predicted Mean** | **SE Lower limit** | **SE Upper Limit** |
| Historically Exposed | Inside | December | Wingless | 0.77 | 0.66 | 0.89 |
|  |  |  | Winged | 0.76 | 0.63 | 0.92 |
|  |  | March | Wingless | 1.02 | 0.86 | 1.23 |
|  |  |  | Winged | 1.08 | 0.83 | 1.41 |
|  |  | May | Wingless | 17.01 | 14.19 | 20.40 |
|  |  |  | Winged | 18.14 | 13.86 | 23.73 |
| Historically Exposed | Outside | December | Wingless | 0.76 | 0.57 | 1.02 |
|  |  |  | Winged | 0.66 | 0.47 | 0.93 |
|  |  | March | Wingless | 0.89 | 0.64 | 1.26 |
|  |  |  | Winged | 0.95 | 0.59 | 1.53 |
|  |  | May | Wingless | 12.14 | 8.54 | 17.26 |
|  |  |  | Winged | 14.37 | 8.71 | 23.71 |
| Historically Naïve | Inside | December | Wingless | 0.83 | 0.69 | 0.99 |
|  |  |  | Winged | 0.94 | 0.72 | 1.22 |
|  |  | March | Wingless | 1.65 | 1.27 | 2.14 |
|  |  |  | Winged | 1.66 | 1.09 | 2.52 |
|  |  | May | Wingless | 14.45 | 11.11 | 18.79 |
|  |  |  | Winged | 18.05 | 11.79 | 27.63 |
| Historically Naïve | Outside | December | Wingless | 0.84 | 0.60 | 1.18 |
|  |  |  | Winged | 0.86 | 0.54 | 1.38 |
|  |  | March | Wingless | 1.20 | 0.74 | 1.95 |
|  |  |  | Winged | 1.35 | 0.63 | 2.89 |
|  |  | May | Wingless | 15.21 | 8.82 | 26.22 |
|  |  |  | Winged | 10.05 | 4.29 | 23.58 |

**Appendix 9**

**Model:** Flowering Class = (Browsing History \* Current Exposure to Browsing \* Fruit Phenotype of Surviving Plant) + (1| Substrate)

**Table S9a.** ANOVA Results for Flowering Phenology in March on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable/Interaction** | **Df** | **χ2** | **p-value** |
| **Single Fixed Effects Variables** |  |  |  |
| Browsing History | 7 | 1.76 | 0.42 |
| Current Exposure to Browsing | 7 | 0.83 | 0.66 |
| Fruit Phenotype of Surviving Plant | 7 | 3.95 | 0.14 |
| **Two-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing | 7 | 1.29 | 0.53 |
| Browsing History\*Fruit Phenotype of Surviving Plant | 7 | 1.12 | 0.57 |
| Current Exposure to Browsing\*Fruit Phenotype of Surviving Plant | 7 | 6.72 | **0.03\*** |
| **Three-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing\*Fruit Phenotype | 7 | 1.54 | 0.46 |

**Table S9b**. ANOVA Results for Flowering Phenology in May on Sidney Island

|  |  |  |  |
| --- | --- | --- | --- |
| **Variable/Interaction** | **Df** | **χ2** | **p-value** |
| **Single Fixed Effects Variables** |  |  |  |
| Browsing History | 7 | 11.23 | 013 |
| Current Exposure to Browsing | 7 | 11.59 | 0.11 |
| Fruit Phenotype of Surviving Plant | 7 | 11.45 | 0.12 |
| **Two-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing | 7 | 7.09 | 0.42 |
| Browsing History\*Fruit Phenotype of Surviving Plant | 7 | 7.37 | 0.39 |
| Current Exposure to Browsing\*Fruit Phenotype of Surviving Plant | 7 | 11.49 | 0.12 |
| **Three-way Interactions of Fixed Effects** |  |  |  |
| Browsing History\*Current Exposure to Browsing\*Fruit Phenotype | 7 | 6.19 | 0.52 |

**Appendix 10**

Regression equation for estimating the number of florets produced per plant by height, n = 242, R2 = 0.73, using the 2013-2014 exclosure data on all surviving plants in May 2014 on Sidney Island. Fruit phenotype was not included in the final predictive model (P > 0.05).

**Appendix 11**

Distributions of predicted population growth rates (λ) inside (A-D) and outside (E-H) exclosures on Sidney Island for historically exposed (deer) and naïve (no deer) populations bearing winged and wingless fruits. Vertical lines represent mean predicted population growth rates (λ).

