

SI 4. Overview of SNPs under selection detected with demographic and time-series methods. SNPs under selection for each year (1999, 2004, 2009 and 2013) as identified with BAYESCAN and in individual populations assuming a) a small ($N_e=50$) and b) a large ($N_e=500$) effective population size identified with WFABC. For each SNP chromosome (Chr.), super-contig and position in super-contig are given. Direction of selection is given as positive (P) and negative (N). Only SNPs identified as being under selection with both methods are included.

| Chr. | Super-contig | SNP position | 1999 | 2004 | 2009 | 2013 | Woolnorth | Arthur River | Narawntapu | Mt William | Freyenet | Forester |
|-----------|--------------|--------------|------|------|------|------|-----------|--------------|------------|------------|----------|----------|
| | | | | | | | | | | | | |
| a) | | | | | | | | | | | | |
| 2 | 67 | 673351 | - | - | P | - | N | N | - | N | N | N |
| 5 | 43 | 1194068 | - | - | P | - | - | - | P | - | - | - |
| b) | | | | | | | | | | | | |
| 1 | 2 | 960133 | - | P | P | - | - | - | - | P | - | - |
| 1 | 5 | 3478545 | - | P | - | P | - | - | - | P | - | P |
| 1 | 12 | 876195 | - | P | P | - | - | N | - | - | - | - |
| 1 | 34 | 2090729 | - | - | P | - | - | - | - | N | - | - |
| 1 | 54 | 1481620 | - | - | - | P | - | - | - | - | N | - |
| 1 | 124 | 537278 | - | - | - | P | P | - | - | - | N | - |
| 1 | 259 | 73417 | P | - | - | P | - | - | - | - | - | P |
| 1 | 259 | 2775110 | P | P | P | P | - | - | - | - | P | - |
| 1 | 289 | 1692290 | P | P | P | P | - | - | N | - | - | - |
| 1 | 297 | 1446547 | - | - | - | P | - | - | N | - | - | - |
| 1 | 375 | 696764 | - | - | P | P | - | - | - | - | - | N |
| 1 | 381 | 278795 | - | - | - | P | - | - | - | P | - | - |
| 1 | 445 | 71025 | - | P | P | P | - | - | - | - | - | N |
| 1 | 445 | 75680 | - | P | P | P | - | - | - | - | - | N |
| 1 | 446 | 132042 | - | - | - | P | - | - | - | N | - | - |
| 1 | 446 | 133260 | - | - | - | P | - | - | - | N | - | - |
| 1 | 630 | 3069 | P | P | P | P | - | N | - | - | - | - |
| 1 | 643 | 103647 | - | P | P | P | - | - | - | N | - | - |
| 1 | 788 | 56371 | - | - | - | P | - | - | - | - | - | P |
| 1 | 1246 | 33567 | - | - | P | P | - | - | P | - | - | - |
| 1 | 1370 | 3906 | - | - | P | P | - | - | - | - | P | - |
| 2 | 67 | 673351 | - | - | P | - | - | P | N | P | - | N |
| 2 | 122 | 525086 | - | - | P | - | - | - | N | - | - | - |
| 2 | 185 | 258819 | - | - | P | - | - | - | P | - | - | - |
| 2 | 233 | 676222 | - | - | P | - | - | - | P | - | - | - |
| 2 | 235 | 2941774 | - | - | P | P | - | - | P | - | - | - |
| 2 | 254 | 173178 | - | - | P | P | - | - | P | - | - | P |
| 2 | 256 | 209544 | - | - | P | - | P | - | - | - | - | - |
| 2 | 279 | 1962190 | P | - | - | - | - | - | N | - | - | - |
| 2 | 313 | 1149368 | - | - | P | - | - | - | - | - | - | N |
| 2 | 451 | 570671 | - | - | P | - | - | - | - | - | - | N |
| 3 | 93 | 249731 | P | P | P | P | - | - | - | - | P | - |
| 3 | 109 | 1363279 | - | P | - | - | - | - | P | - | - | - |
| 3 | 137 | 836212 | - | - | P | - | P | - | - | - | - | - |
| 3 | 260 | 2537254 | - | - | P | - | - | - | - | - | N | - |
| 3 | 310 | 1770399 | - | - | P | P | - | - | - | - | - | N |
| 3 | 314 | 2784883 | - | - | P | - | - | - | - | - | P | - |
| 3 | 357 | 217434 | - | - | P | - | P | - | - | N | - | - |

| | | | | | | | | | | | | |
|---|------|---------|---|---|---|---|---|---|---|---|---|---|
| 3 | 390 | 2536138 | P | - | P | P | - | - | - | - | - | N |
| 3 | 1483 | 4552 | - | - | P | - | - | N | - | - | - | - |
| 4 | 4 | 597847 | - | - | P | - | - | - | - | N | - | - |
| 4 | 15 | 1005633 | - | - | P | P | - | - | - | - | - | N |
| 4 | 15 | 1523425 | - | - | P | P | - | - | - | P | - | - |
| 4 | 17 | 3632032 | - | P | P | - | - | - | - | P | - | - |
| 4 | 60 | 1569690 | - | - | P | - | - | - | - | - | - | P |
| 4 | 77 | 2113411 | - | P | P | P | - | - | - | - | - | - |
| 4 | 103 | 1133697 | - | P | P | - | - | - | - | N | - | - |
| 4 | 127 | 1864609 | P | - | - | - | - | - | - | - | P | - |
| 4 | 155 | 685114 | - | - | P | P | - | N | - | - | - | - |
| 4 | 251 | 828774 | - | P | - | - | - | - | - | - | N | - |
| 4 | 298 | 71438 | - | - | P | P | - | N | - | - | - | - |
| 4 | 657 | 33346 | - | - | P | P | - | - | N | - | - | - |
| 4 | 657 | 127489 | - | - | P | P | - | - | N | - | - | - |
| 4 | 1826 | 196 | - | P | - | P | - | - | P | - | - | - |
| 5 | 43 | 1194068 | - | - | P | - | - | - | P | - | - | - |
| 5 | 50 | 1376047 | - | - | P | - | - | - | - | P | - | - |
| 5 | 63 | 1205307 | - | - | P | - | - | - | - | - | - | N |
| 5 | 464 | 46402 | - | - | P | - | - | - | P | - | - | - |
| 6 | 82 | 187751 | - | - | P | P | - | - | P | - | - | - |
| 6 | 94 | 165143 | - | - | P | P | - | - | P | - | - | - |
| 6 | 106 | 775062 | - | - | P | - | - | - | P | - | - | - |
| 6 | 145 | 2409985 | - | P | - | P | - | N | - | - | - | - |
| 6 | 156 | 2519435 | - | - | P | P | - | - | - | - | N | - |
| 6 | 728 | 9316 | - | - | P | - | N | - | - | - | - | - |