Supplementary Information for Sibly RM & Curnow RN ‘**How single-locus *F*ST** **varies with migration and selection for two populations in migration-selection balance’**

Table S1. Table of *F*ST vs. m values from which Figure 3 was constructed.

|  |  |  |
| --- | --- | --- |
| m | FST h=0.5 | FST h=1 |
| 0 | 1 | 1 |
| 0.01 | 0.923106 | 0.800333 |
| 0.02 | 0.852071 | 0.718404 |
| 0.03 | 0.786401 | 0.656263 |
| 0.04 | 0.725651 | 0.604571 |
| 0.05 | 0.669421 | 0.559696 |
| 0.1 | 0.444444 | 0.392047 |
| 0.15 | 0.289941 | 0.276119 |
| 0.2 | 0.183673 | 0.190031 |
| 0.25 | 0.111111 | 0.125 |
| 0.3 | 0.0625 | 0.076356 |
| 0.35 | 0.031142 | 0.041224 |
| 0.4 | 0.012346 | 0.017661 |
| 0.45 | 0.00277 | 0.004271 |
| 0.5 | 0 | 0 |

Table S2. Table of values of *F*ST, m, h, s1 and s2 from which Figure 4 was constructed.

|  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- |
| s1 | s2 | m .01 h .5 | m .05 h .5 | m .1 h .5 | m .01 h 1 | m .05 h 1 | m .1 h 1 |
| -0.01 | 0.01 | 0.014536 | 8.36E-05 | 5.32E-06 | 0.022213 | 0.000848 | 0.000124 |
| -0.01 | 0.017783 | 0.007293 | 4.95E-08 | 2.71E-09 | 0.000297 | 6.61E-07 | 1.2E-07 |
| -0.01 | 0.031623 | 4.43E-06 | 7.7E-27 | 1.2E-28 | 2.15E-06 | 4.21E-08 | 8.03E-09 |
| -0.01 | 0.056234 | 1.08E-13 | -8.4E-46 | 0 | 3.95E-07 | 9.57E-09 | 1.84E-09 |
| -0.01 | 0.1 | 2.43E-22 | 0 | 0 | 1.36E-07 | 3.49E-09 | 6.73E-10 |
| -0.01 | 0.177828 | 3.85E-27 | 2.1E-105 | 0 | 6.22E-08 | 1.63E-09 | 3.14E-10 |
| -0.01 | 0.316228 | -1.5E-29 | -1E-136 | 0 | 3.38E-08 | 8.89E-10 | 1.71E-10 |
| -0.01 | 0.562341 | -2.8E-30 | 4.2E-161 | 0 | 2.09E-08 | 5.5E-10 | 1.06E-10 |
| -0.01 | 1 | -7.6E-31 | -9E-177 | 0 | 1.45E-08 | 3.79E-10 | 7.29E-11 |
| -0.01778 | 0.01 | 0.002294 | 7.78E-14 | -5.5E-10 | 0.032601 | 5.55E-19 | 5.55E-10 |
| -0.01778 | 0.017783 | 0.04326 | 0.001493 | 0.000101 | 0.06138 | 0.002596 | 0.00053 |
| -0.01778 | 0.031623 | 0.053841 | 2.12E-10 | 9.39E-16 | 0.066694 | 3.63E-07 | 6.11E-08 |
| -0.01778 | 0.056234 | 0.043808 | 5.74E-35 | 0 | 2.81E-06 | 2.4E-08 | 4.5E-09 |
| -0.01778 | 0.1 | 0.023659 | 1.48E-60 | -5.3E-75 | 2.91E-07 | 5.69E-09 | 1.09E-09 |
| -0.01778 | 0.177828 | 0.005247 | 0 | 0 | 9.51E-08 | 2.16E-09 | 4.15E-10 |
| -0.01778 | 0.316228 | 0.000471 | 2.3E-121 | 0 | 4.43E-08 | 1.06E-09 | 2.04E-10 |
| -0.01778 | 0.562341 | 6.77E-05 | -8E-145 | 5.6E-243 | 2.52E-08 | 6.18E-10 | 1.19E-10 |
| -0.01778 | 1 | 1.99E-05 | 6.8E-160 | -2E-292 | 1.67E-08 | 4.12E-10 | 7.91E-11 |
| -0.03162 | 0.01 | 2.25E-08 | 9.47E-23 | 7.89E-24 | 0.030581 | -5.6E-10 | 5.55E-10 |
| -0.03162 | 0.017783 | 0.051389 | 2.02E-18 | 1.58E-23 | 0.092002 | 4.45E-14 | 1.58E-23 |
| -0.03162 | 0.031623 | 0.115975 | 0.004951 | 0.000948 | 0.142991 | 0.008045 | 0.001662 |
| -0.03162 | 0.056234 | 0.159687 | 1.05E-07 | 3.16E-23 | 0.182168 | 2.69E-07 | 3.92E-08 |
| -0.03162 | 0.1 | 0.186661 | -5.6E-38 | 9.72E-56 | 0.208786 | 1.55E-08 | 2.83E-09 |
| -0.03162 | 0.177828 | 0.202264 | -5.7E-66 | 0 | 0.22259 | 3.73E-09 | 7.02E-10 |
| -0.03162 | 0.316228 | 0.21099 | 1.14E-93 | 2.7E-159 | 0.223259 | 1.47E-09 | 2.8E-10 |
| -0.03162 | 0.562341 | 0.215818 | 0 | -9E-217 | 0.207609 | 7.67E-10 | 1.46E-10 |
| -0.03162 | 1 | 0.21849 | 4.3E-130 | 0 | 6.52E-08 | 4.82E-10 | 9.2E-11 |
| -0.05623 | 0.01 | 1.06E-18 | 3.16E-23 | 0 | 0.022965 | 5.52E-23 | 9.86E-25 |
| -0.05623 | 0.017783 | 0.038134 | 5.55E-10 | 7.89E-24 | 0.110522 | 2.52E-22 | 5.55E-10 |
| -0.05623 | 0.031623 | 0.156964 | 5.55E-10 | 5.55E-10 | 0.191934 | 0.006197 | 6.31E-23 |
| -0.05623 | 0.056234 | 0.255563 | 0.015263 | 0.003008 | 0.265026 | 0.02396 | 0.005177 |
| -0.05623 | 0.1 | 0.329521 | 0.013695 | 4.98E-16 | 0.32824 | 0.006146 | 3.56E-08 |
| -0.05623 | 0.177828 | 0.380179 | 7.3E-13 | -2.3E-62 | 0.380749 | 1.22E-08 | 2.1E-09 |
| -0.05623 | 0.316228 | 0.412507 | -1.7E-42 | 4.8E-115 | 0.422461 | 2.84E-09 | 5.23E-10 |
| -0.05623 | 0.562341 | 0.432145 | 1.85E-61 | 0 | 0.453982 | 1.17E-09 | 2.18E-10 |
| -0.05623 | 1 | 0.443704 | 5.27E-75 | 0 | 0.476526 | 6.47E-10 | 1.22E-10 |
| -0.1 | 0.01 | 2.27E-21 | 3.94E-23 | 0 | 0.014439 | 3.94E-23 | -5.6E-10 |
| -0.1 | 0.017783 | 0.013341 | 3.94E-23 | 0 | 0.121485 | -5.6E-10 | -5.6E-10 |
| -0.1 | 0.031623 | 0.181345 | 2.37E-22 | 5.55E-10 | 0.22357 | 2.87E-21 | 3.94E-24 |
| -0.1 | 0.056234 | 0.327464 | 0.005911 | 4.73E-23 | 0.317145 | 0.033802 | 0.000492 |
| -0.1 | 0.1 | 0.440267 | 0.044782 | 0.009333 | 0.399383 | 0.064557 | 0.015639 |
| -0.1 | 0.177828 | 0.51857 | 0.062673 | 0.008683 | 0.468508 | 0.079233 | 0.007669 |
| -0.1 | 0.316228 | 0.568812 | 0.065252 | -3.8E-30 | 0.523885 | 0.072326 | 2.15E-09 |
| -0.1 | 0.562341 | 0.599394 | 0.059977 | 0 | 0.565973 | 3.12E-09 | 5.01E-10 |
| -0.1 | 1 | 0.617408 | 0.052732 | -1E-114 | 0.596189 | 1.22E-09 | 2.15E-10 |
| -0.17783 | 0.01 | 2.68E-21 | 5.55E-10 | 0 | 0.007314 | 1.18E-23 | -5.6E-10 |
| -0.17783 | 0.017783 | 0.00021 | 3.94E-23 | 0 | 0.127827 | 1.1E-22 | -5.6E-10 |
| -0.17783 | 0.031623 | 0.194816 | 8.68E-23 | -5.6E-10 | 0.243137 | -5.6E-10 | -5.6E-10 |
| -0.17783 | 0.056234 | 0.376775 | 1.2E-21 | -5.6E-10 | 0.348976 | 0.032628 | -5.6E-10 |
| -0.17783 | 0.1 | 0.517475 | 0.051753 | 6.31E-12 | 0.441918 | 0.092963 | 0.018564 |
| -0.17783 | 0.177828 | 0.61487 | 0.116551 | 0.027872 | 0.519882 | 0.144023 | 0.043559 |
| -0.17783 | 0.316228 | 0.677147 | 0.164089 | 0.041658 | 0.582187 | 0.184748 | 0.054778 |
| -0.17783 | 0.562341 | 0.714954 | 0.196272 | 0.043183 | 0.629426 | 0.215152 | 0.050234 |
| -0.17783 | 1 | 0.737183 | 0.216706 | 0.038446 | 0.663272 | 0.23634 | 9.11E-10 |
| -0.31623 | 0.01 | -5.6E-10 | 1.18E-23 | -5.6E-10 | 0.003024 | -5.6E-10 | 5.55E-10 |
| -0.31623 | 0.017783 | 3.79E-06 | 1.18E-23 | -5.6E-10 | 0.131445 | 4.73E-23 | 5.55E-10 |
| -0.31623 | 0.031623 | 0.201994 | -5.6E-10 | -5.6E-10 | 0.25481 | -5.6E-10 | 5.55E-10 |
| -0.31623 | 0.056234 | 0.408291 | -5.6E-10 | 5.55E-10 | 0.367825 | 0.026385 | 5.55E-10 |
| -0.31623 | 0.1 | 0.567184 | 0.040708 | 5.55E-10 | 0.466822 | 0.110611 | 0.010509 |
| -0.31623 | 0.177828 | 0.676684 | 0.152746 | 0.025003 | 0.549654 | 0.187422 | 0.060958 |
| -0.31623 | 0.316228 | 0.746456 | 0.245523 | 0.07549 | 0.615692 | 0.2537 | 0.102531 |
| -0.31623 | 0.562341 | 0.788713 | 0.31425 | 0.112546 | 0.665664 | 0.307362 | 0.13444 |
| -0.31623 | 1 | 0.813521 | 0.360622 | 0.13757 | 0.701414 | 0.347867 | 0.157145 |
| -0.56234 | 0.01 | -5.6E-10 | 1.18E-23 | 5.55E-10 | 0.001365 | 1.58E-23 | 4.93E-25 |
| -0.56234 | 0.017783 | 2.53E-07 | 1.18E-23 | 5.55E-10 | 0.133494 | -5.6E-10 | 4.93E-25 |
| -0.56234 | 0.031623 | 0.205798 | 5.55E-10 | 5.55E-10 | 0.26161 | 1.81E-22 | 4.93E-25 |
| -0.56234 | 0.056234 | 0.42746 | 8.68E-23 | 5.55E-10 | 0.378754 | 0.019267 | -5.6E-10 |
| -0.56234 | 0.1 | 0.597513 | 0.020744 | -5.6E-10 | 0.481172 | 0.12125 | 9.56E-17 |
| -0.56234 | 0.177828 | 0.714304 | 0.174868 | 0.004394 | 0.566713 | 0.215613 | 0.069805 |
| -0.56234 | 0.316228 | 0.788541 | 0.306285 | 0.09357 | 0.634808 | 0.297775 | 0.135365 |
| -0.56234 | 0.562341 | 0.83343 | 0.404725 | 0.169103 | 0.686273 | 0.364623 | 0.190547 |
| -0.56234 | 1 | 0.859759 | 0.471307 | 0.225986 | 0.723056 | 0.415195 | 0.233555 |
| -1 | 0.01 | -5.6E-10 | -5.6E-10 | 4.93E-25 | 0.00079 | 1.97E-24 | -5.6E-10 |
| -1 | 0.017783 | 3.31E-08 | -5.6E-10 | 4.93E-25 | 0.134651 | 1.97E-24 | -5.6E-10 |
| -1 | 0.031623 | 0.207836 | 5.55E-10 | 4.93E-25 | 0.265513 | 1.97E-23 | -5.6E-10 |
| -1 | 0.056234 | 0.438753 | 1.03E-22 | 4.93E-25 | 0.385011 | 0.013394 | 5.55E-10 |
| -1 | 0.1 | 0.615404 | 0.000593 | -5.6E-10 | 0.489357 | 0.127489 | 5.55E-10 |
| -1 | 0.177828 | 0.736458 | 0.187525 | 5.55E-10 | 0.576414 | 0.233054 | 0.073824 |
| -1 | 0.316228 | 0.813287 | 0.34776 | 0.100066 | 0.645652 | 0.324792 | 0.157145 |
| -1 | 0.562341 | 0.8597 | 0.467283 | 0.211245 | 0.697943 | 0.399229 | 0.228062 |
| -1 | 1 | 0.886906 | 0.547708 | 0.296296 | 0.735298 | 0.455388 | 0.283659 |