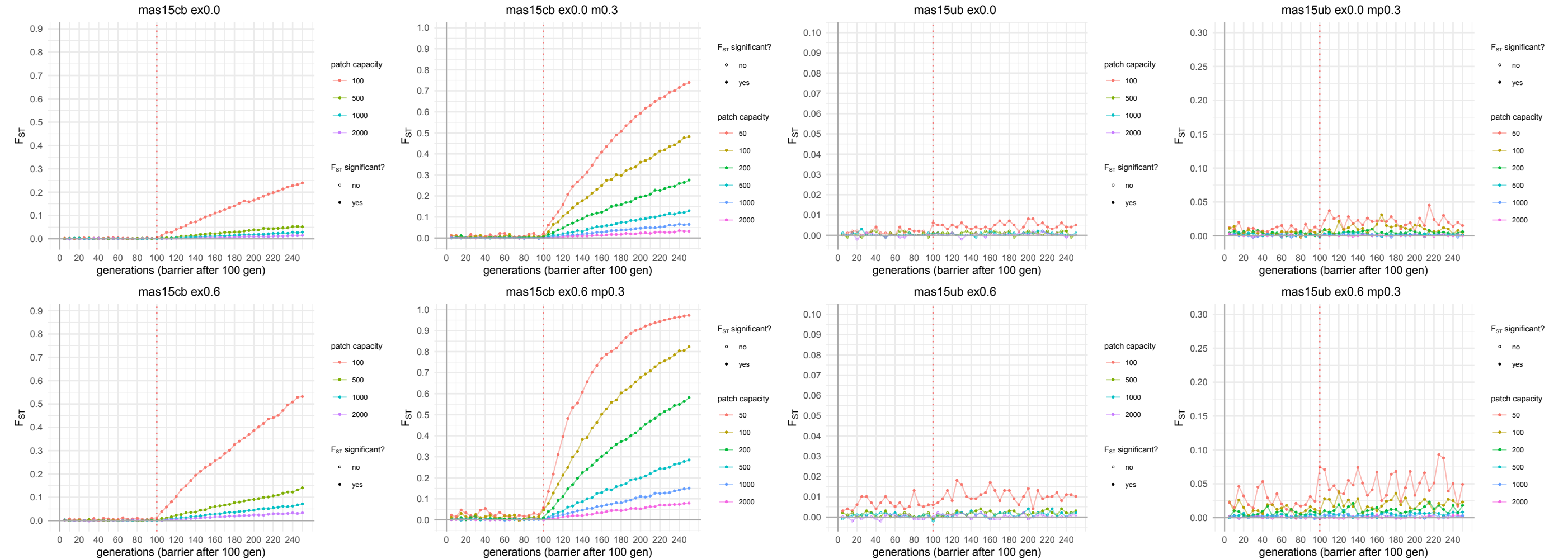
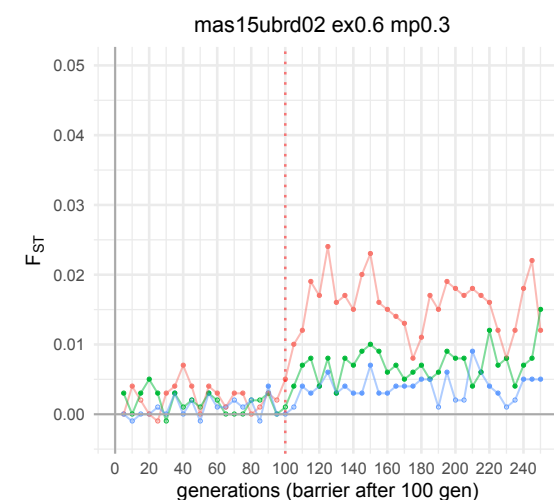
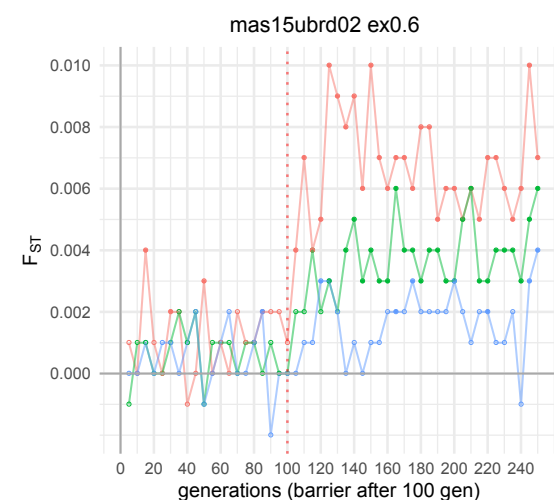
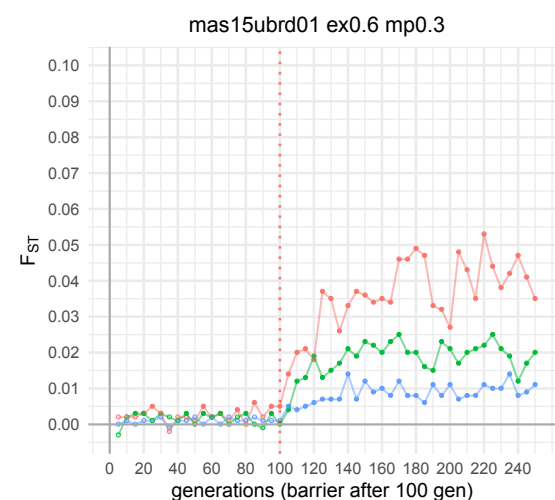
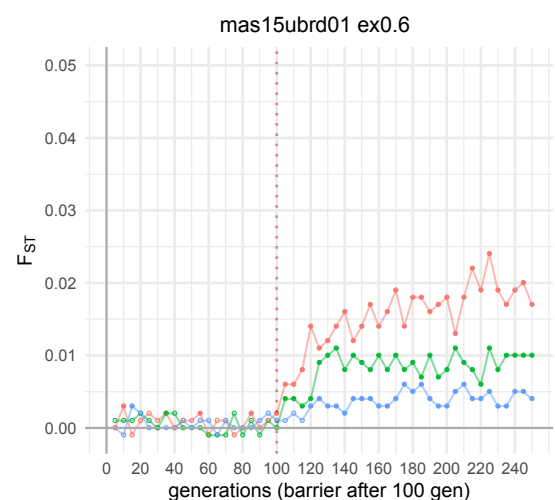
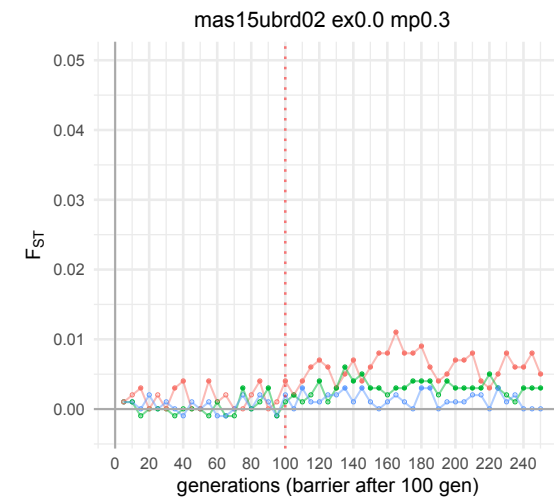
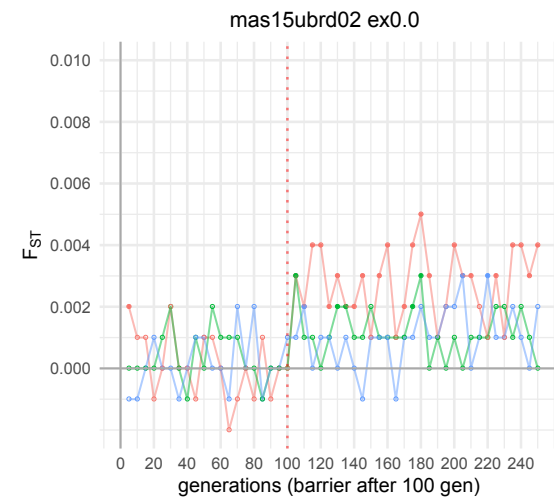
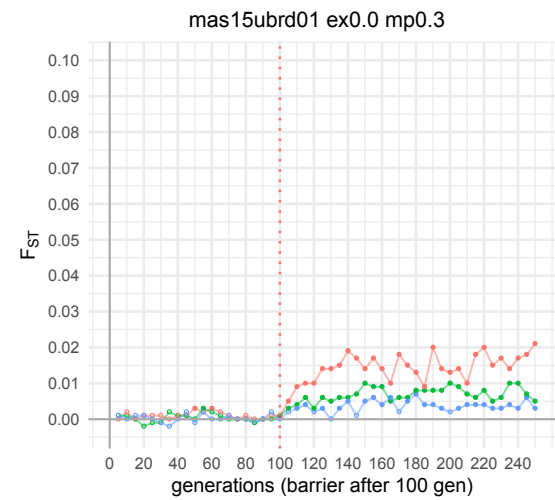
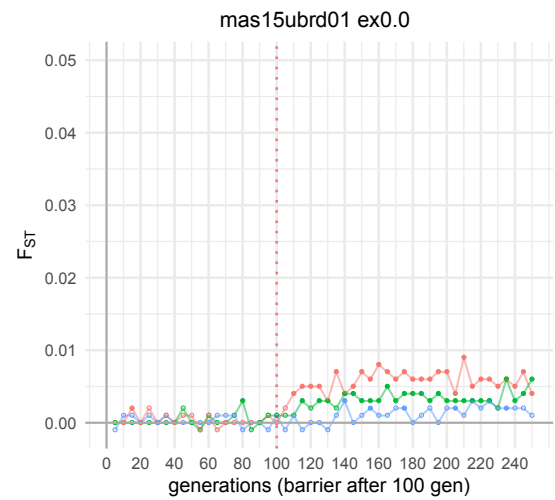
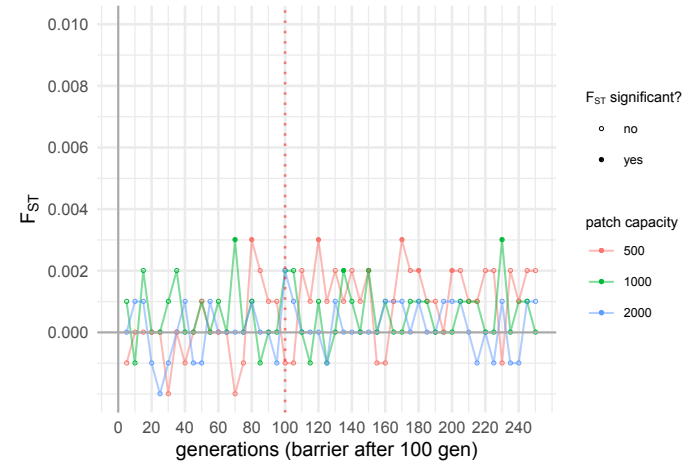


**Figure S6:** Plots showing changes in population differentiation ( $F_{ST}$ ) among populations over generations for different Nemo simulation scenarios. The barrier, introduced after 100 generations is indicated by a red line. A representative subset of simulations is shown. Results were similar for all migration matrices and are only shown for *asymmetric15* (mas15), but all barrier models (cb = complete barrier, ub = upstream barrier, ubrd01/ 02/ 05 = upstream barrier + reduced downstream migration to 1%/ 2% / or 5%). Simulations without extinction (ex0.0) and an extinction rate of 60% per generation (ex0.6) are shown either for random mating populations or for hermaphrodites (indicated by mp0.3 for mating proportion/selfing rate). In plots on first 3 pages, populations on each site of the barrier were pooled and  $F_{ST}$  was calculated among these two populations. In these plots, all simulated patch capacities are shown. In plots on pages 4 - 6,  $F_{ST}$  values were calculated among all four single populations and colored according to the presence of a barrier. Here, all barrier models, ex0.0 and ex0.6, random mating populations and hermaphrodites (mp0.3) are shown for patch capacities 500 and 2000.

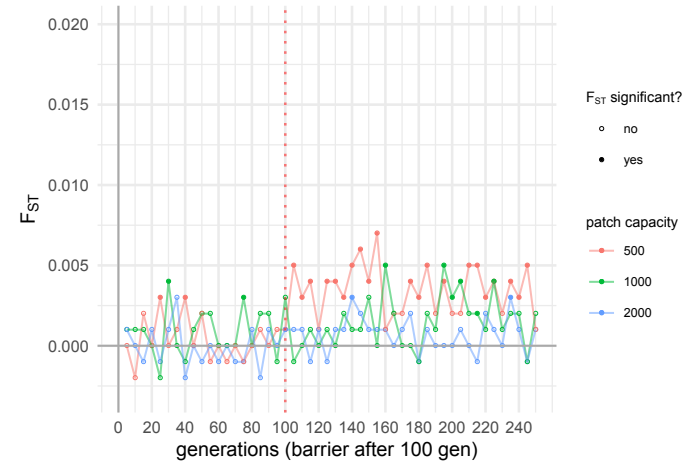




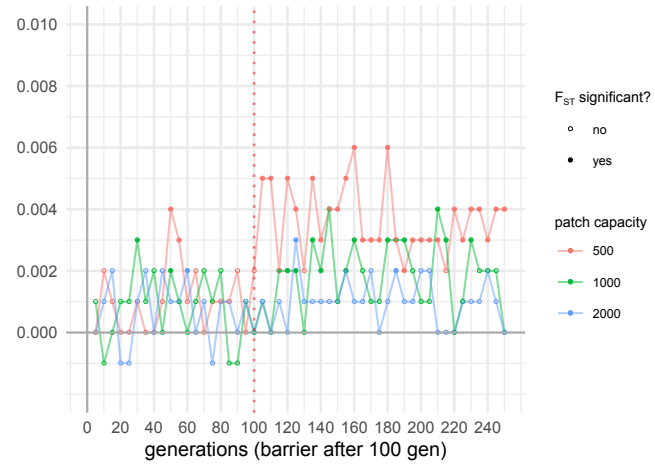
mas15ubrd05 ex0.0



mas15ubrd05 ex0.0 mp0.3



mas15ubrd05 ex0.6



mas15ubrd05 ex0.6 mp0.3

