

Figure 3. Temporal changes in correlation coefficient (Mantel's r) between genetic distance (i.e. relatedness among individuals) and geographical distance. Plots of genetic relatedness (Lynch & Ritland [25] relationship coefficient) against geodesic distance, least-cost path and circuit theory for the whole dataset and for the sexes separated. Grey boxes delimit the calving period (Julian days 155–190) and the rut period (Julian days 260–300) for forest-dwelling caribou [45] and migratory caribou [18]. Dark grey box shows the rutting peak for migratory caribou (Julian days 285–300; [18]).

Population Time Lags

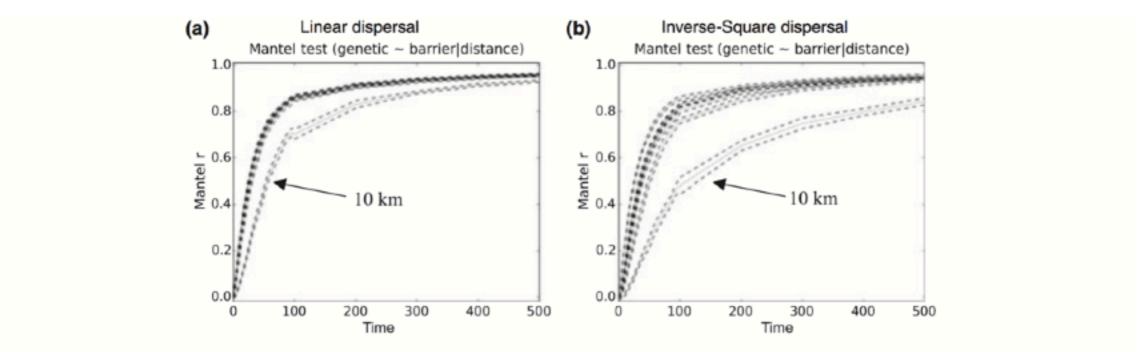


Fig. 2 Time (in generations) for barrier signal establishment based on significance of Mantel's r where we examined the correlation of genetic distance to barrier-cost distance over time factoring out Euclidean distance for the partial tests. Mantel's r values for the barrier appearance scenarios for (a) linear dispersal and (b) inverse-square dispersal over the seven maximal dispersal distances (10, 20, 30, 40, 50 and 60 km, panmictic). Dashed lines are confidence intervals for the averaged 10 replicates (dotted lines). The notably different scenario (movement threshold 10 km) is indicated in both graphs.