

Figure a. Extract of a simulated trajectory with a time step of 1 minute. The trajectories are built point by point by taking into account the agent (fox) movement behavior. Here, the probability of crossing the constructed highway is 10 %.

Tested developments	Average total distances, per day	Movement index
initial landscape	6.9 km	0.42
1 road construction	6.5 km	0.55
1 road and 3 wildlife crossings	6.5 km	0.50
1 road, 3 wildlife crossings and ecological corridor	6.8 km	0.41

Figure b. Analyses of the simulated trajectories in the three scenarios: the average distances covered by red fox movement over one day, and the index defined by the number of localizations on the same side of the road divided by the total number of localizations. These results correspond to the crossing probability of the highway set at 10 %.

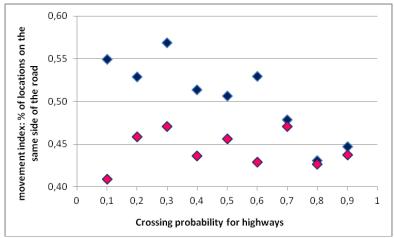


Figure c. Movement index depending on the crossing probability (0: no crossings, 1: highway has no influence on crossings). For case (a) with the highway (blue), the value of the index increases while the crossing probability decreases. For case (c) (red), the values of the index stays below the ones for case a, and close to the results in the initial space (index equal to 0.42).