

Supplementary material part 2

Information use during movement regulates how fragmentation and loss of habitat affect body size

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Table 2.1: Overview of default total runtime per simulation. P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	11000	11000	11000	11000	11000	4900	2400
PI	20000	20000	20000	20000	20000	13000	13000
UI	20000	20000	20000	20000	20000	19000	19000

Table 2.2: Overview of total runtime per simulation when testing effect higher carrying capacity of the resource ($K=3000$). P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	10000	10000	10000	8000	8000	3000	2000
PI	20000	20000	20000	20000	20000	10000	10000
UI	20000	20000	20000	20000	20000	15000	15000

Table 2.3: Overview of total runtime per simulation when testing effect higher growth speed of the resource ($r=0.9$). P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	10000	10000	10000	7000	7000	2500	1500
PI	20000	20000	20000	20000	20000	10000	9000
UI	20000	20000	20000	20000	20000	15000	15000

Table 2.4: Overview of total runtime per simulation when testing effect higher maximum movement time per day (t_m maximally 2 hours per day). P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	11000	11000	11000	10000	10000	4000	2400
PI	20000	20000	20000	20000	20000	13000	12000
UI	20000	20000	20000	20000	20000	18000	14000

Table 2.5: Overview of total runtime per simulation when testing effect higher maximum consumption time per day (t_f maximally 20 hours per day). P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	11000	11000	11000	11000	11000	4900	2400
PI	20000	20000	20000	20000	20000	13000	13000
UI	20000	20000	20000	20000	20000	19000	15000

Table 2.6: Overview of total runtime per simulation when testing effect higher number of eggs per clutch ($N=50$). P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	11000	11000	11000	9000	9000	3000	2000
PI	20000	20000	20000	20000	20000	13000	13000
UI	20000	20000	20000	20000	20000	19000	19000

Table 2.7: Overview of total runtime per simulation when immigration from outside the landscape is turned off ($q=0$). P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	11000	11000	11000	11000	11000	4900	2400
PI	20000	20000	20000	20000	20000	20000	13000
UI	20000	20000	20000	20000	20000	20000	19000

Table 2.8: Overview of total runtime per simulation when immigration from outside the landscape occurs every ten days. P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement) ($q=0.1$)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	11000	11000	11000	11000	11000	4900	2400
PI	20000	20000	20000	20000	20000	20000	20000
UI	20000	20000	20000	20000	20000	20000	20000

Table 2.9: Overview of total runtime per simulation when perceptual range of the smallest individuals equals 0.1m and the perceptual range of the largest individuals equals 0.5m. P refers to the level percentage of suitable habitat within a landscape and H to the level of spatial autocorrelation. (I: scenario with informed movement, PI: scenario with partially informed movement and UI: scenario with uninformed movement)

	P 0.05 H0	P0.05 H0.5	P0.05 H1	P0.20 H0.5	P0.20 H1	P0.50 H1	P0.90 H1
I	11000	11000	11000	11000	11000	4000	2400
PI	20000	20000	20000	20000	20000	13000	13000
UI	20000	20000	20000	20000	20000	19000	19000