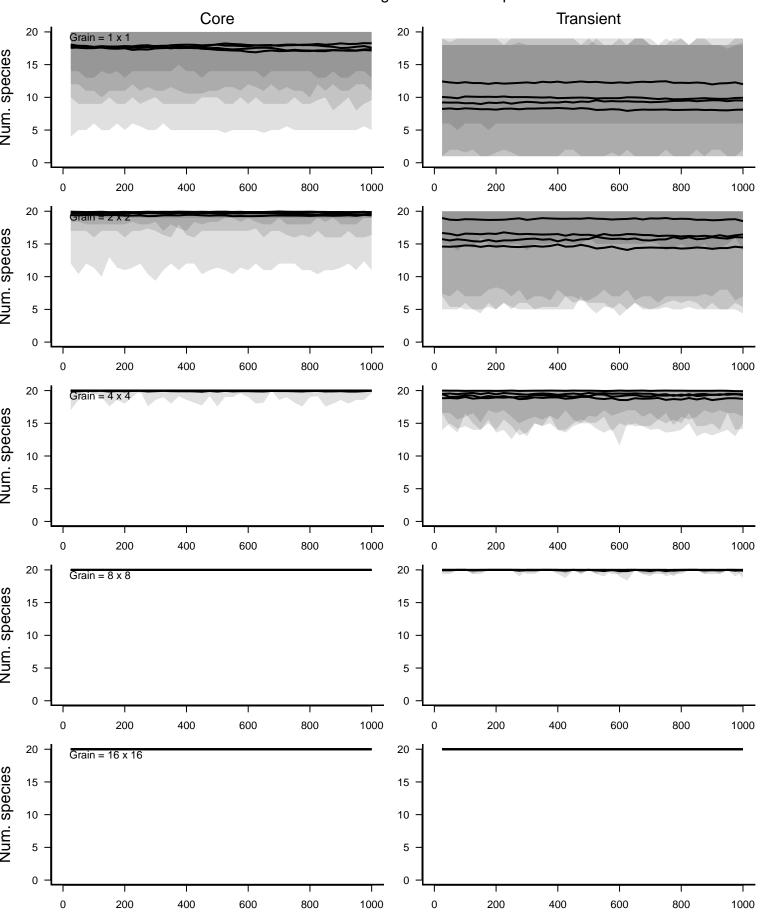
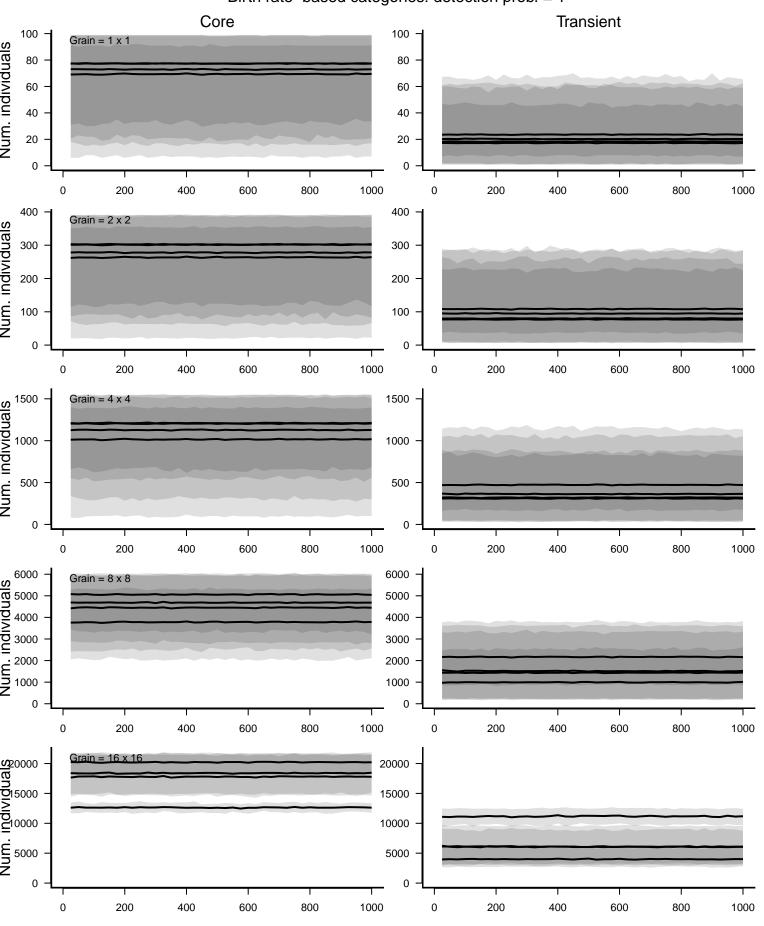
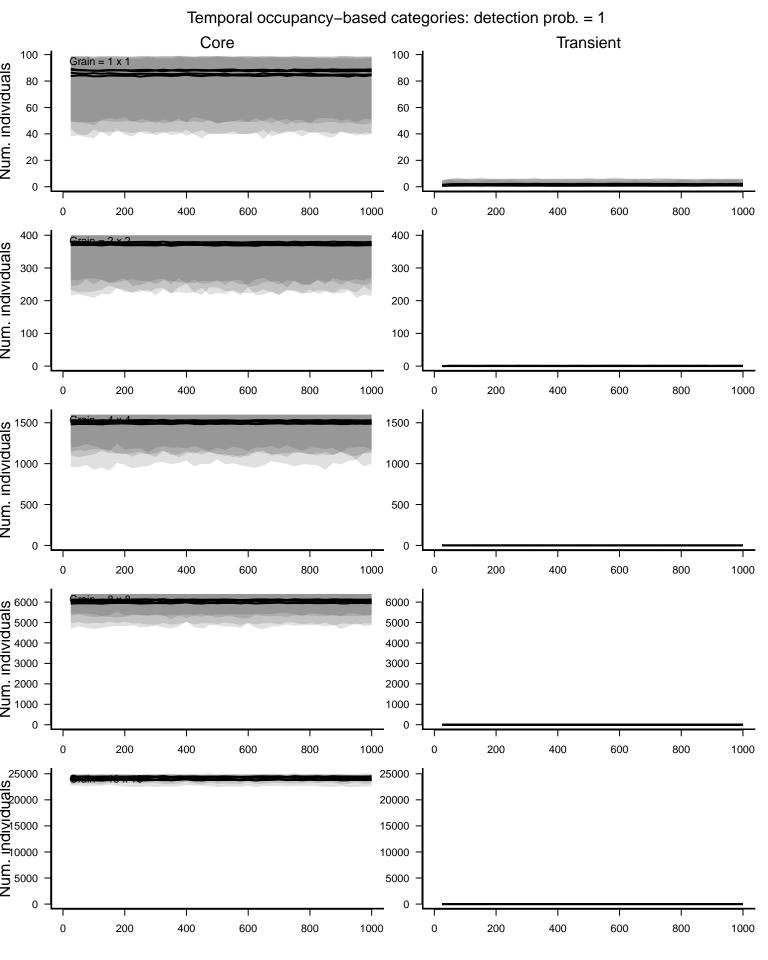
Birth rate-based categories: detection prob. = 1



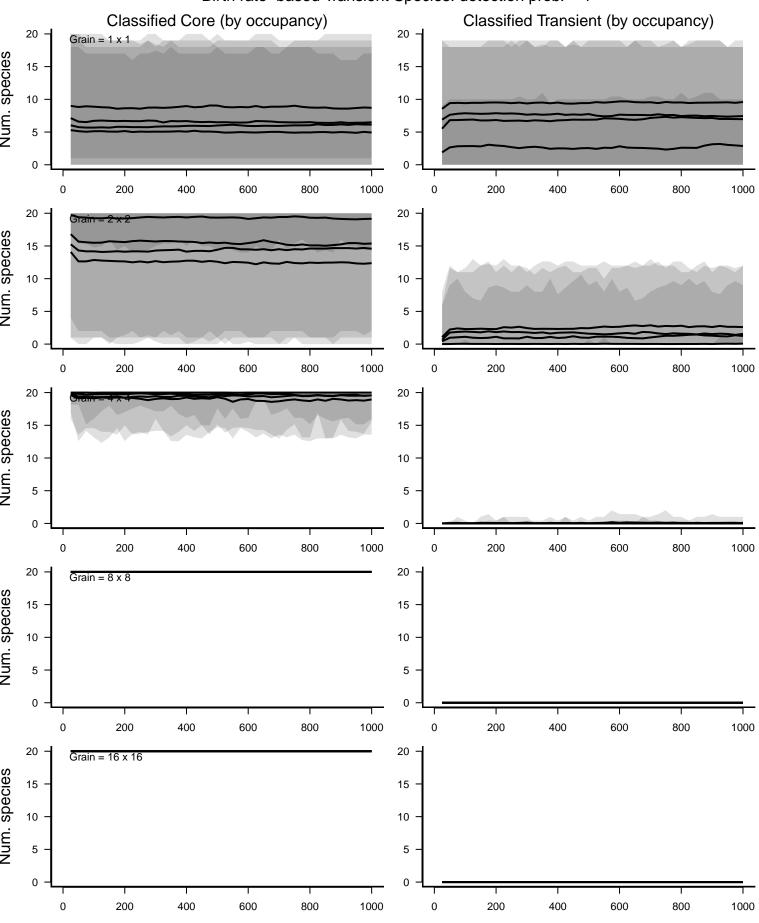
Birth rate-based categories: detection prob. = 1



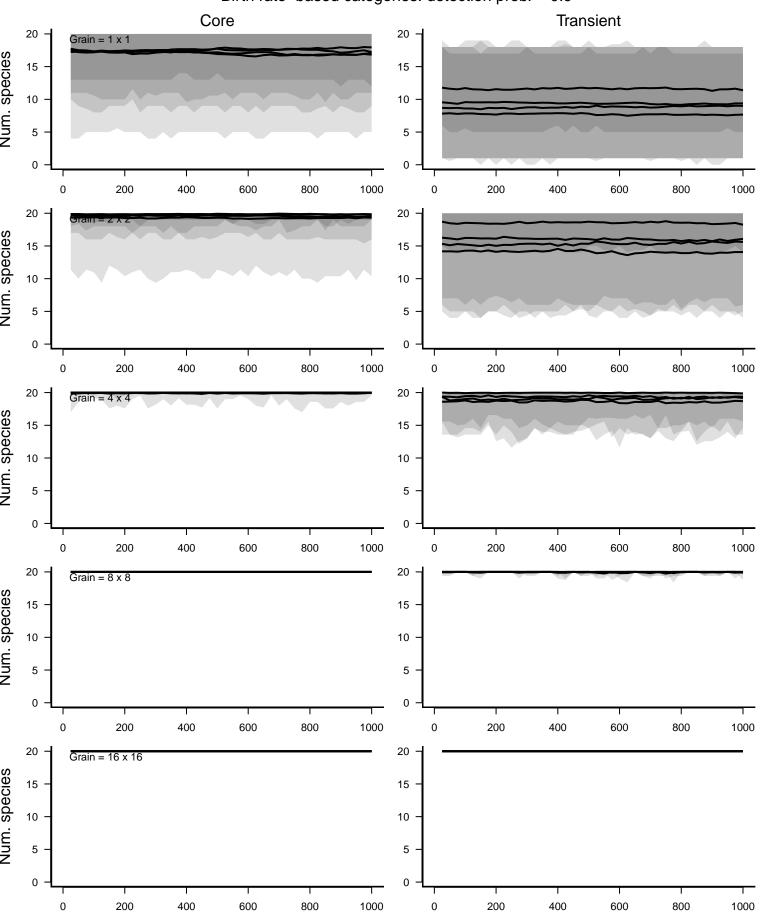


Birth rate-based Core Species: detection prob. = 1 Classified Core (by occupancy) Classified Transient (by occupancy) 20 - $Grain = 1 \times 1$ Num. species 20 -Num. species 20 -Grain =  $4 \times 4$ Num. species 20 -Grain =  $8 \times 8$ Num. species 20 -Grain = 16 x 16 Num. species 

Birth rate-based Transient Species: detection prob. = 1

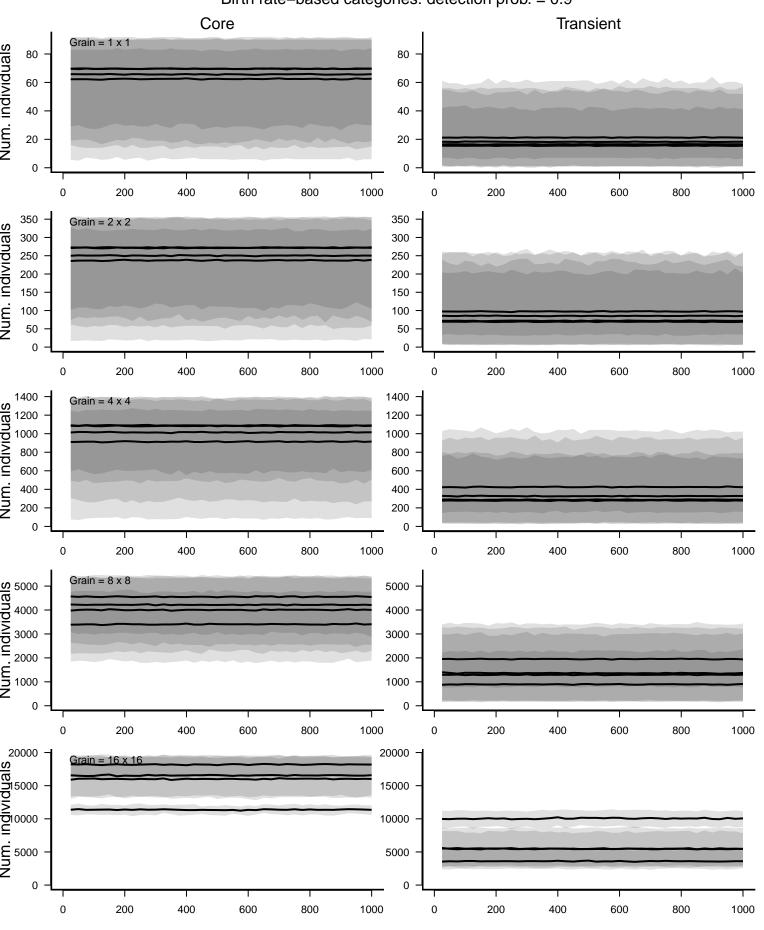


Birth rate-based categories: detection prob. = 0.9



Temporal occupancy-based categories: detection prob. = 0.9 Core Transient Grain =  $1 \times 1$ Num. species 40 -Num. species 40 -Num. species 40 -Grain = 8 x 8 Num. species 40 -Grain = 16 x 16 Num. species 

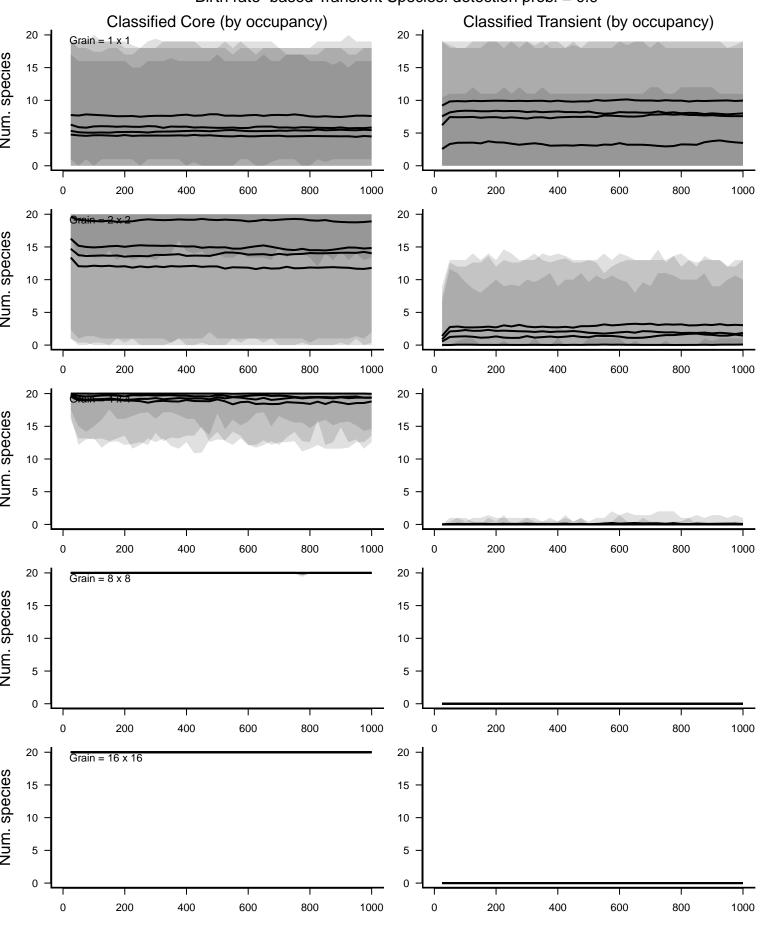
Birth rate-based categories: detection prob. = 0.9



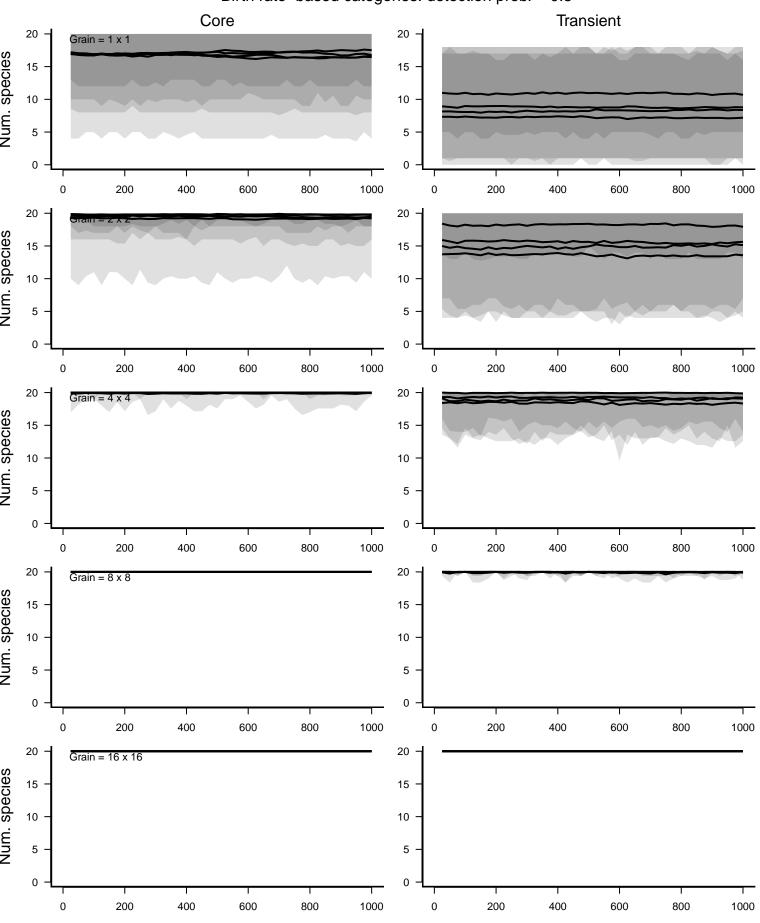
Temporal occupancy-based categories: detection prob. = 0.9 Core Transient  $Grain = 1 \times 1$ Num. Individuals  $Grain = 2 \times 2$ Num. Individuals Num. individuals 4000 3000 2000 1000 

Birth rate-based Core Species: detection prob. = 0.9 Classified Core (by occupancy) Classified Transient (by occupancy) 20 -Grain =  $1 \times 1$ Num. species 20 -Num. species 20 -Grain =  $4 \times 4$ Num. species 20 -Grain =  $8 \times 8$ Num. species 20 -Grain = 16 x 16 Num. species 

Birth rate-based Transient Species: detection prob. = 0.9

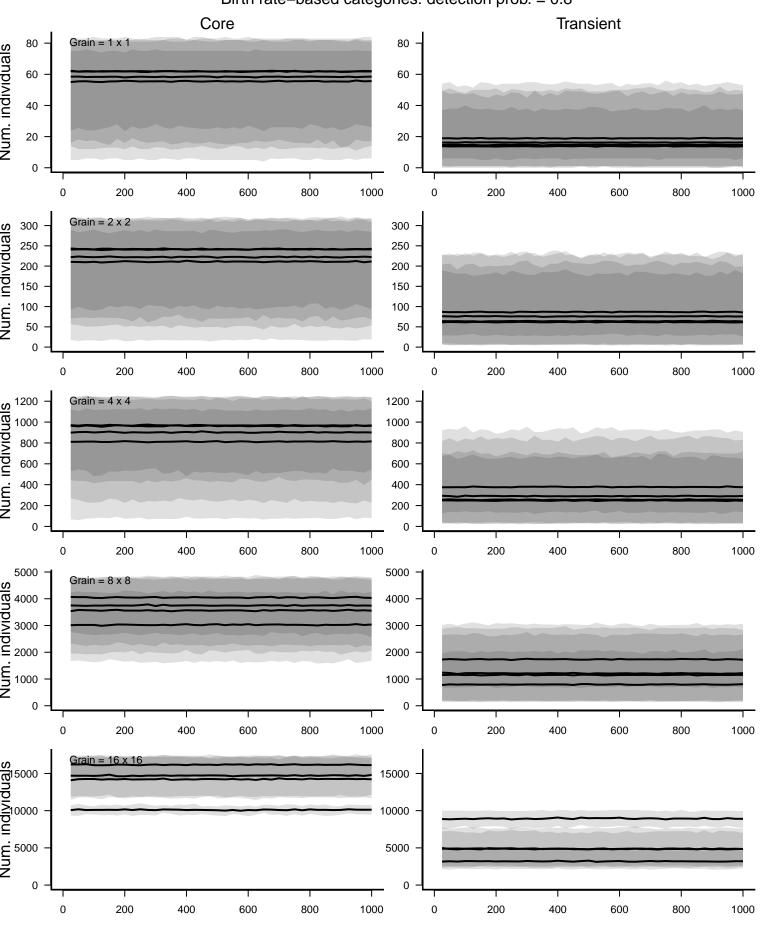


Birth rate-based categories: detection prob. = 0.8



Temporal occupancy-based categories: detection prob. = 0.8 Core Transient Grain =  $1 \times 1$ Num. species 40 -Num. species 40 -Num. species 40 -Grain =  $8 \times 8$ Num. species 40 -Grain = 16 x 16 Num. species 

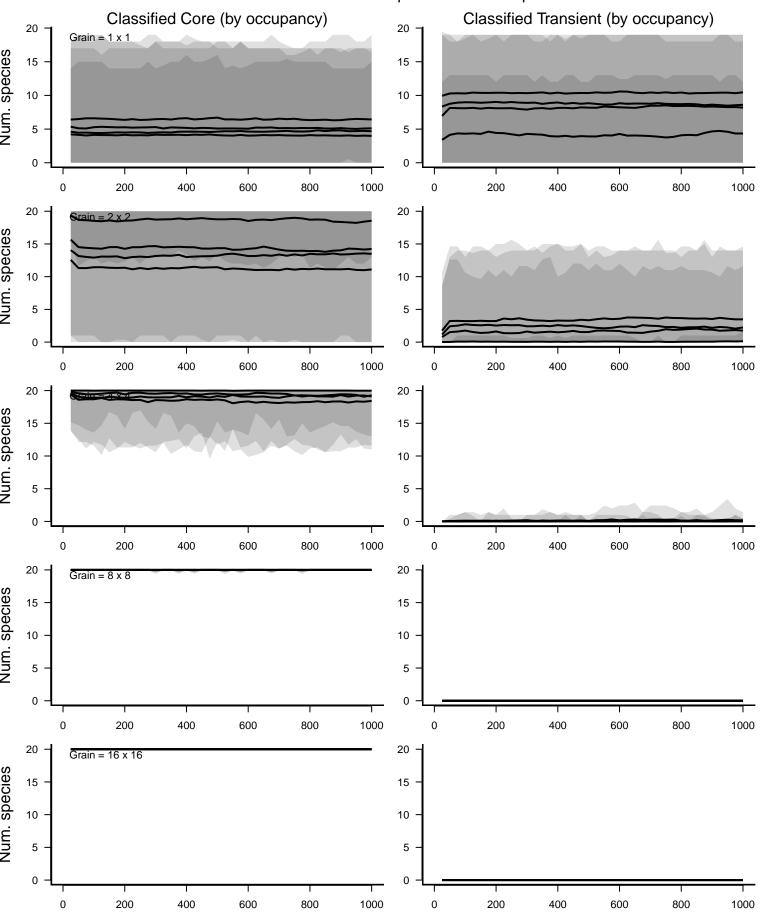
Birth rate-based categories: detection prob. = 0.8



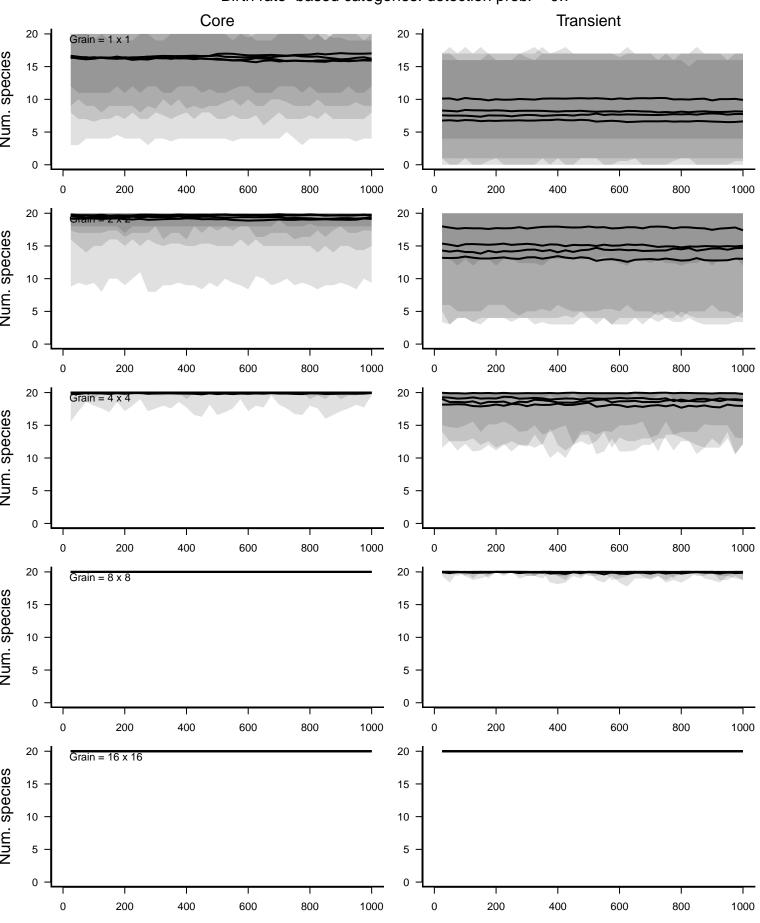
Temporal occupancy-based categories: detection prob. = 0.8 Core **Transient** Grain =  $1 \times 1$ Num. Individuals Grain =  $2 \times 2$ Num. Individuals Nam. Individuals 1000 800 600 400 200 5000 4000 3000 2000 1000 1000 15000 15000 0000 5000 20000 -

Birth rate-based Core Species: detection prob. = 0.8 Classified Core (by occupancy) Classified Transient (by occupancy) 20 -Grain = 1 x 1 Num. species 20 -Num. species 20 -Grain =  $4 \times 4$ Num. species 20 -Grain =  $8 \times 8$ Num. species 20 -Grain = 16 x 16 Num. species 

Birth rate-based Transient Species: detection prob. = 0.8

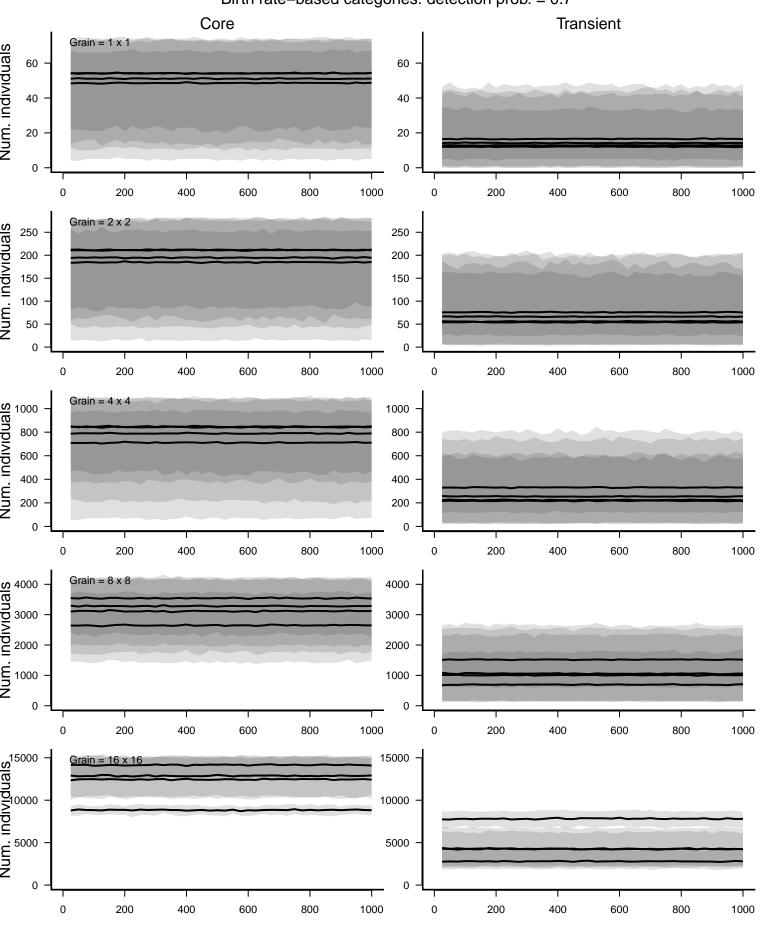


Birth rate-based categories: detection prob. = 0.7



Temporal occupancy-based categories: detection prob. = 0.7 Core Transient Grain =  $1 \times 1$ Num. species 40 - $Grain = 2 \times 2$ Num. species 40 -Num. species 40 -Grain =  $8 \times 8$ Num. species 40 -Grain = 16 x 16 Num. species 

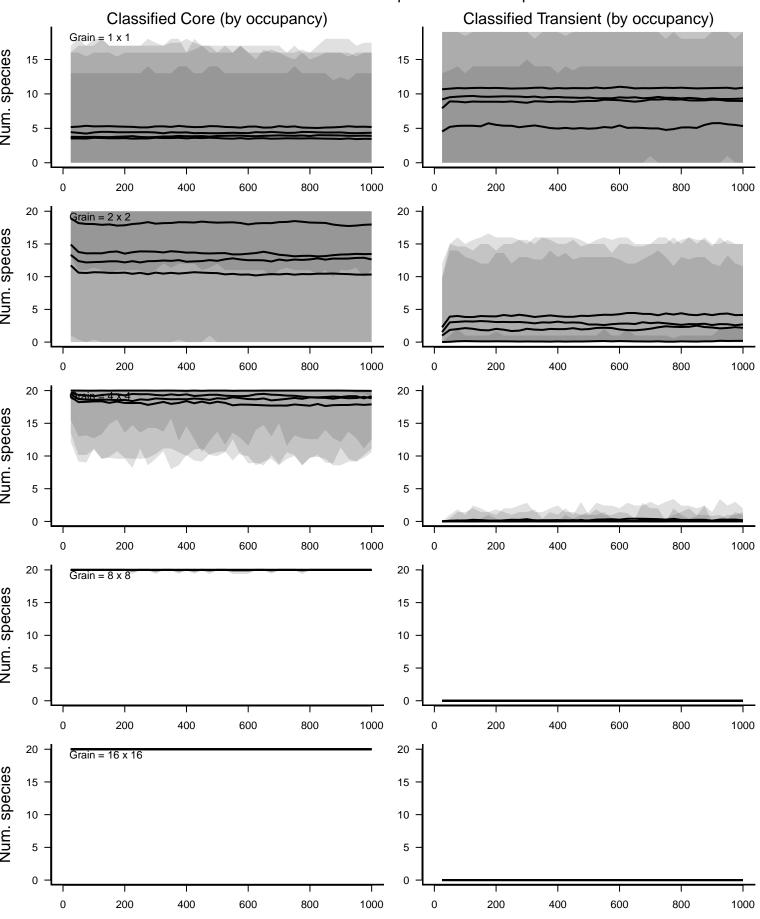
Birth rate-based categories: detection prob. = 0.7



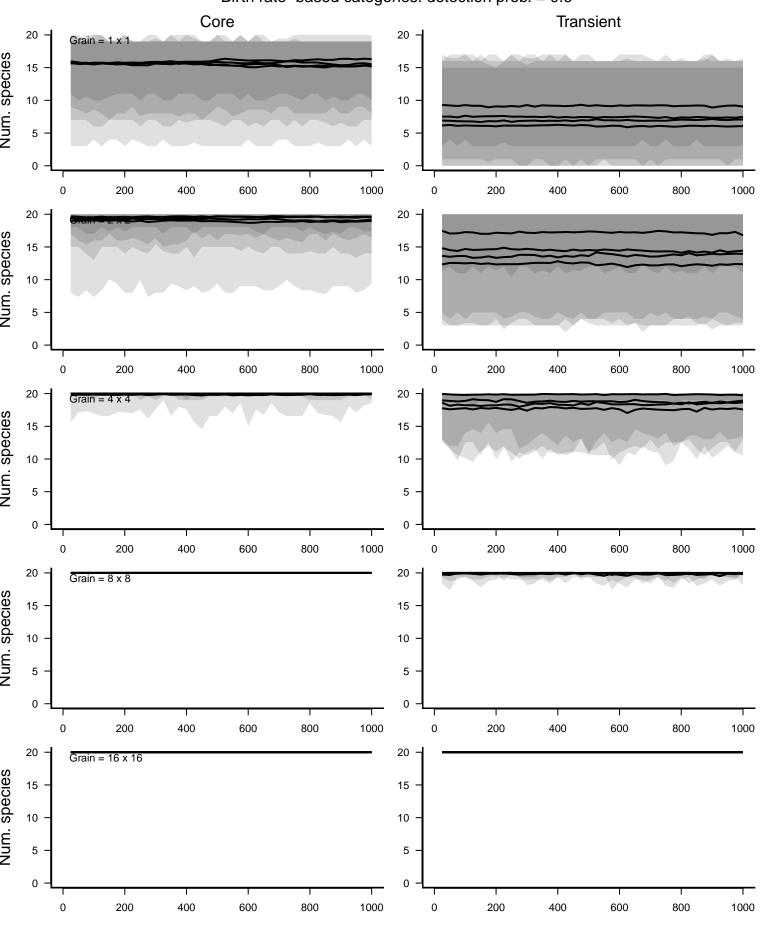
Temporal occupancy-based categories: detection prob. = 0.7 Core Transient  $Grain = 1 \times 1$ Num. Individuals Grain =  $2 \times 2$ Num. Individuals  $Grain = 4 \times 4$ Num. Individuals 3000 2000 1000 Num. Individuals 10000 5000 

Birth rate-based Core Species: detection prob. = 0.7 Classified Core (by occupancy) Classified Transient (by occupancy) 20 -Grain =  $1 \times 1$ Num. species 20 -Num. species 20 -Grain =  $4 \times 4$ Num. species 20 -Grain =  $8 \times 8$ Num. species 20 -Grain = 16 x 16 Num. species 

Birth rate-based Transient Species: detection prob. = 0.7

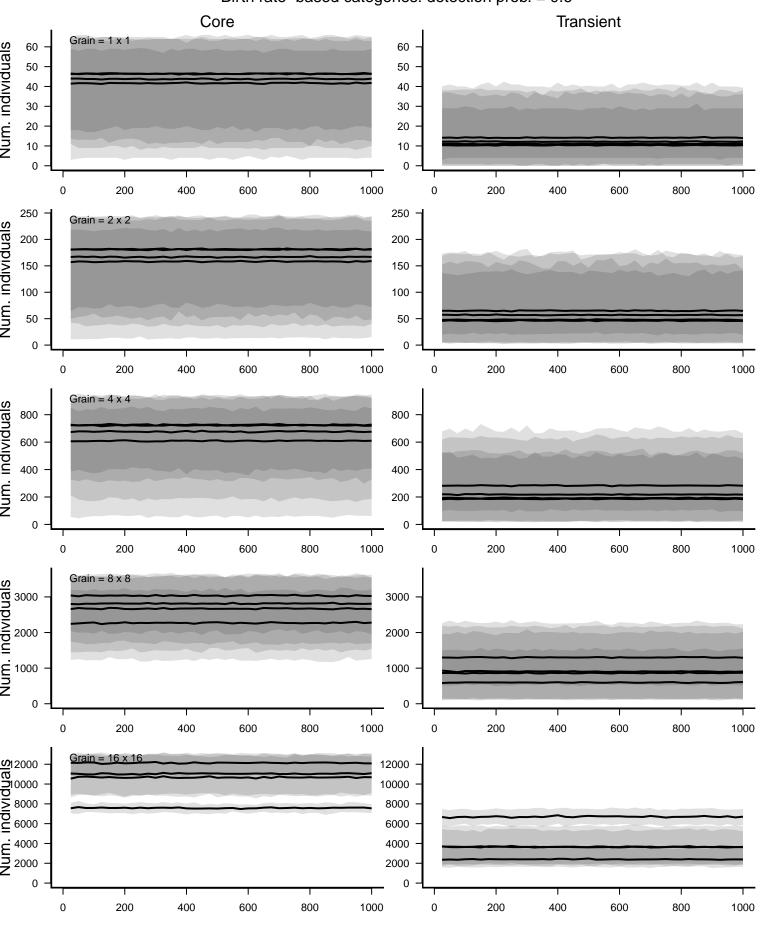


Birth rate-based categories: detection prob. = 0.6



Temporal occupancy-based categories: detection prob. = 0.6 Core Transient Grain =  $1 \times 1$ Num. species 40 - $Grain = 2 \times 2$ Num. species 40 -Num. species 40 -Grain = 8 x 8 Num. species 40 -Grain = 16 x 16 Num. species 

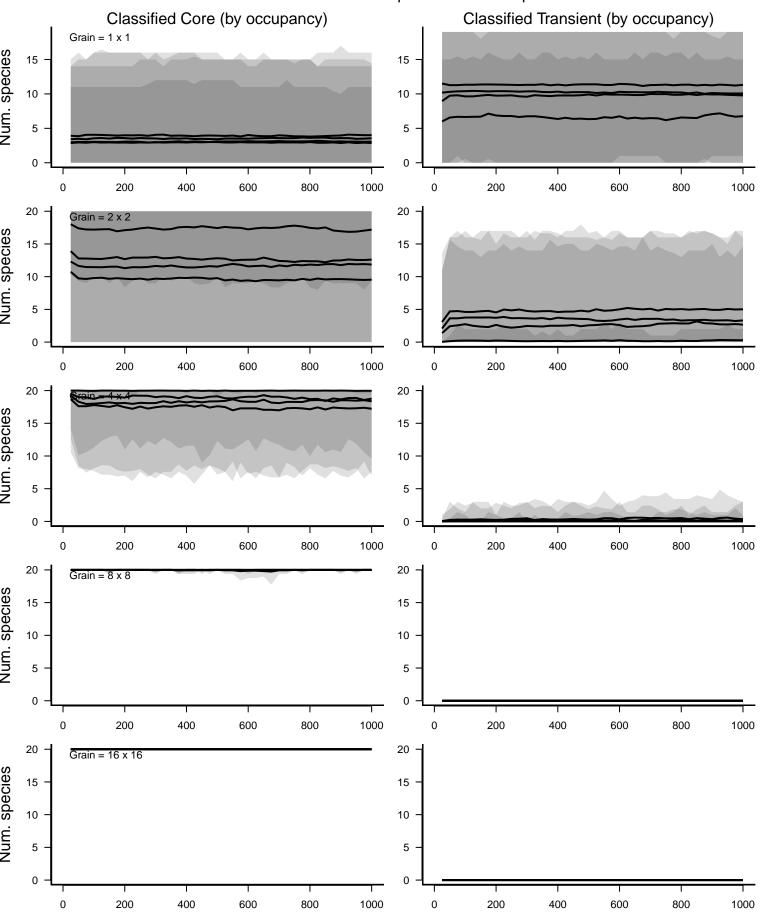
Birth rate-based categories: detection prob. = 0.6



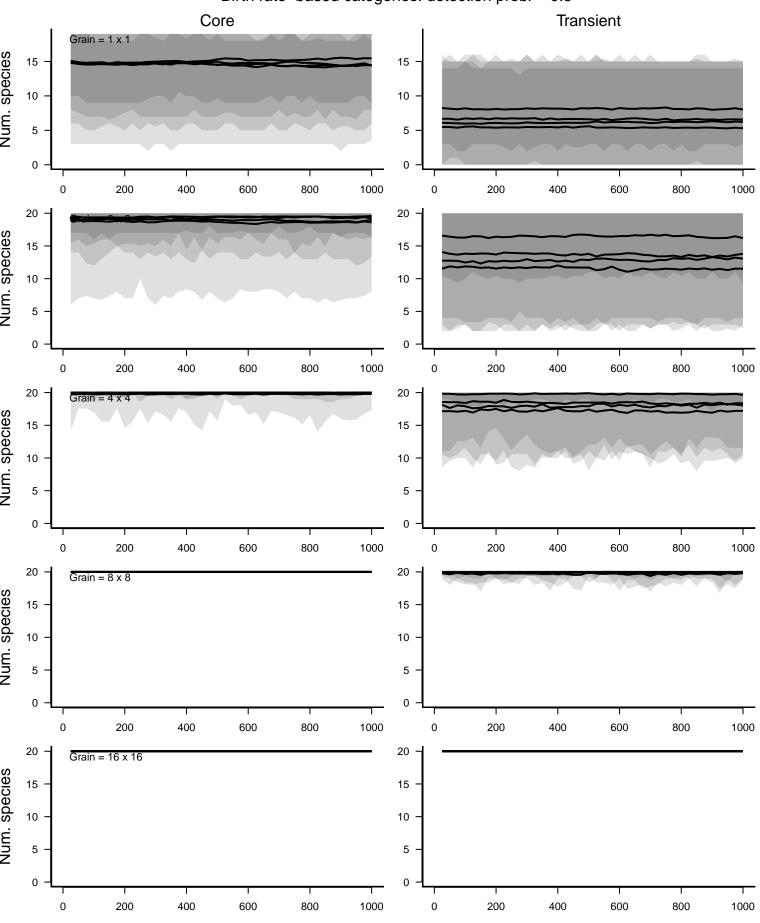
Temporal occupancy-based categories: detection prob. = 0.6 Transient Core  $Grain = 1 \times 1$ Num. Individuals 250 -Grain =  $2 \times 2$ Num. individuals 1000 -1000 - $Grain = 4 \times 4$ Num. Individuals Num. individuals 3000 2000 1000 1000 Num. individuals. 15000 -

Birth rate-based Core Species: detection prob. = 0.6 Classified Core (by occupancy) Classified Transient (by occupancy) 20 -Grain =  $1 \times 1$ Num. species 20 -Num. species 20 - $Grain = 4 \times 4$ Num. species 20 -Grain =  $8 \times 8$ Num. species 20 -Grain = 16 x 16 Num. species 

Birth rate-based Transient Species: detection prob. = 0.6

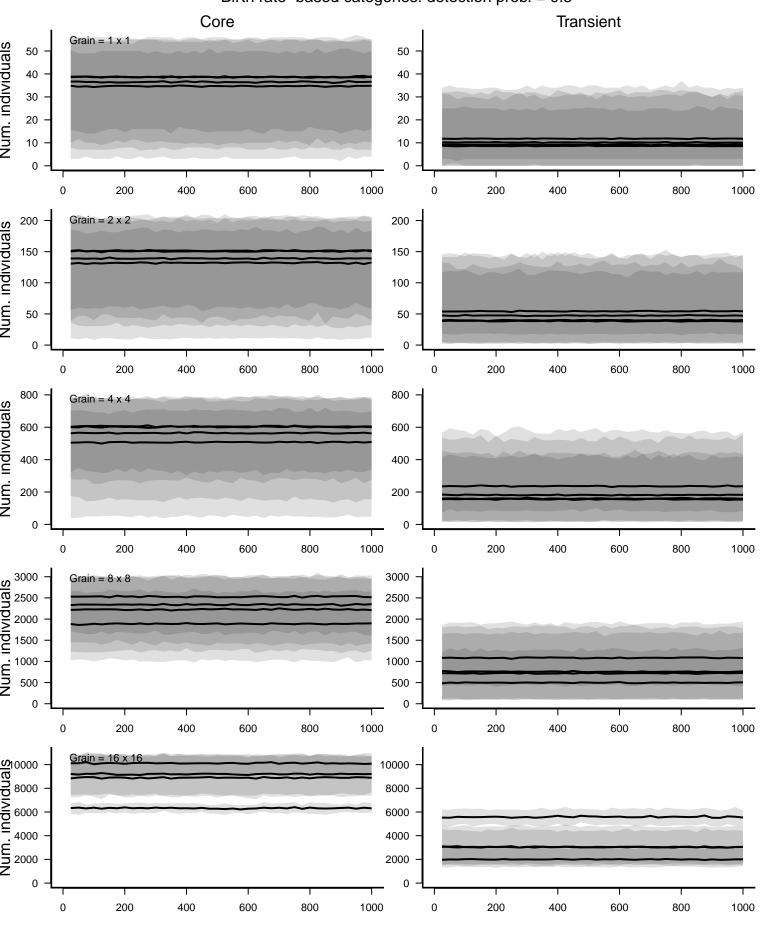


Birth rate-based categories: detection prob. = 0.5



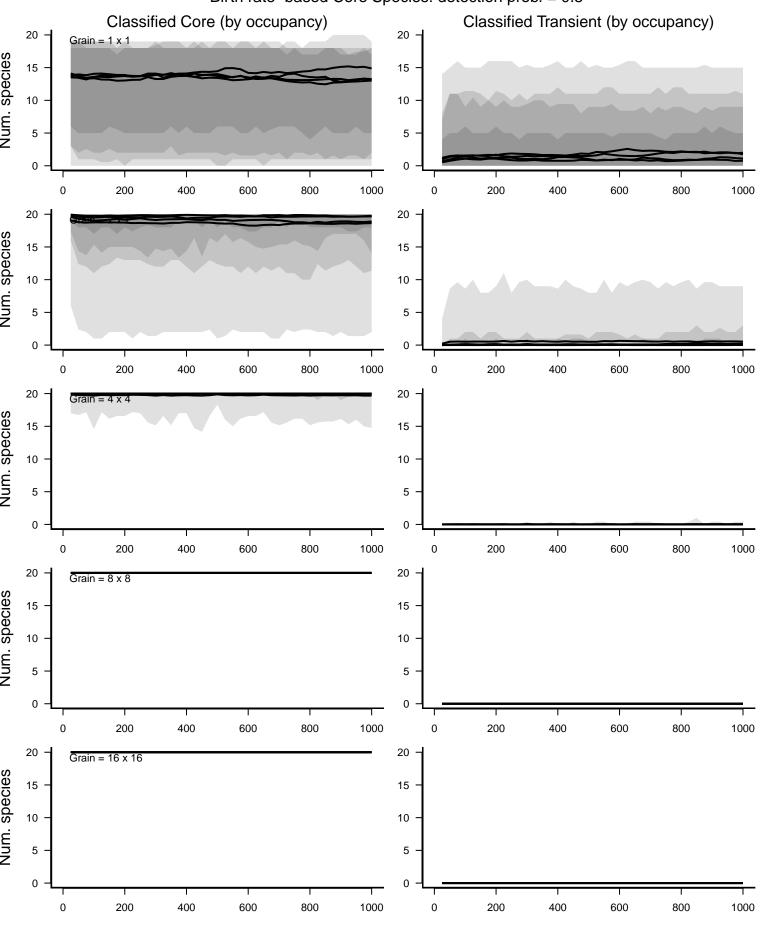
Temporal occupancy-based categories: detection prob. = 0.5 Core Transient Grain =  $1 \times 1$ Num. species 40 -Grain =  $2 \times 2$ Num. species 40 -Num. species 40 -Grain =  $8 \times 8$ Num. species 40 -Grain = 16 x 16 Num. species 

Birth rate-based categories: detection prob. = 0.5

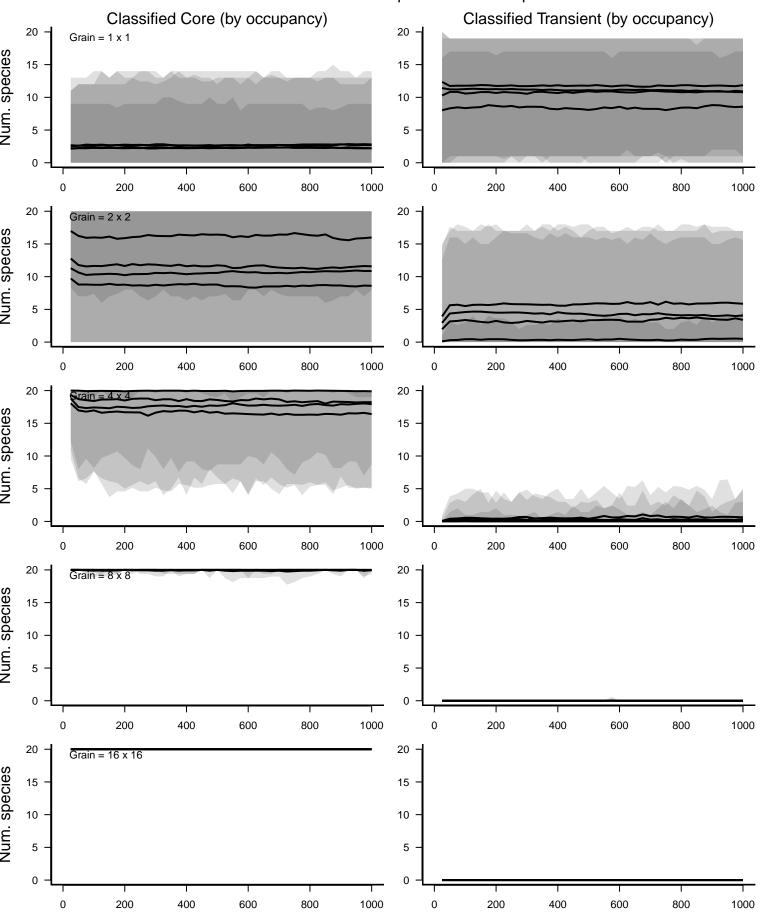


Temporal occupancy-based categories: detection prob. = 0.5 Core **Transient** Grain =  $1 \times 1$ Num. Individuals Grain =  $2 \times 2$ Num. individuals  $Grain = 4 \times 4$ 2500 2000 1500 1000 500 8000 6000 4000 2000 

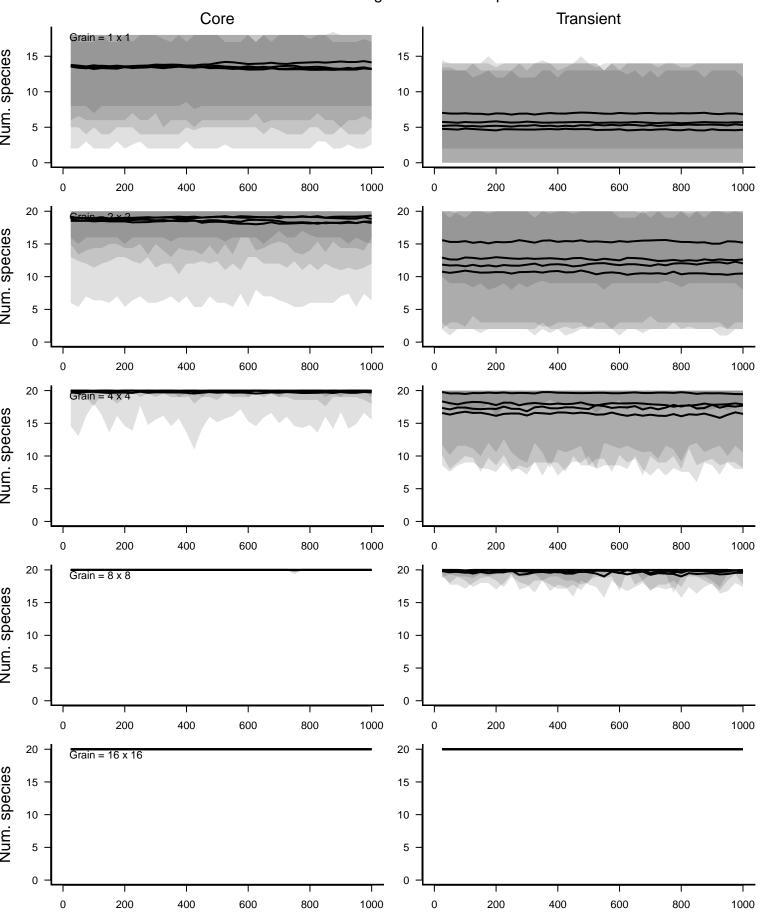
Birth rate-based Core Species: detection prob. = 0.5



Birth rate-based Transient Species: detection prob. = 0.5

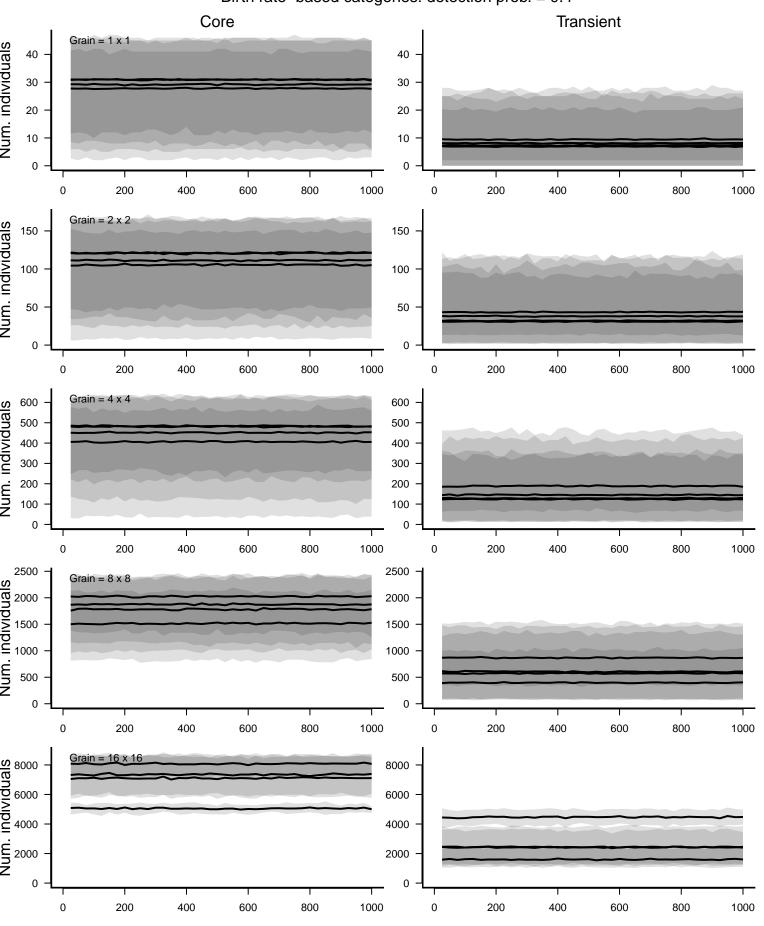


Birth rate-based categories: detection prob. = 0.4



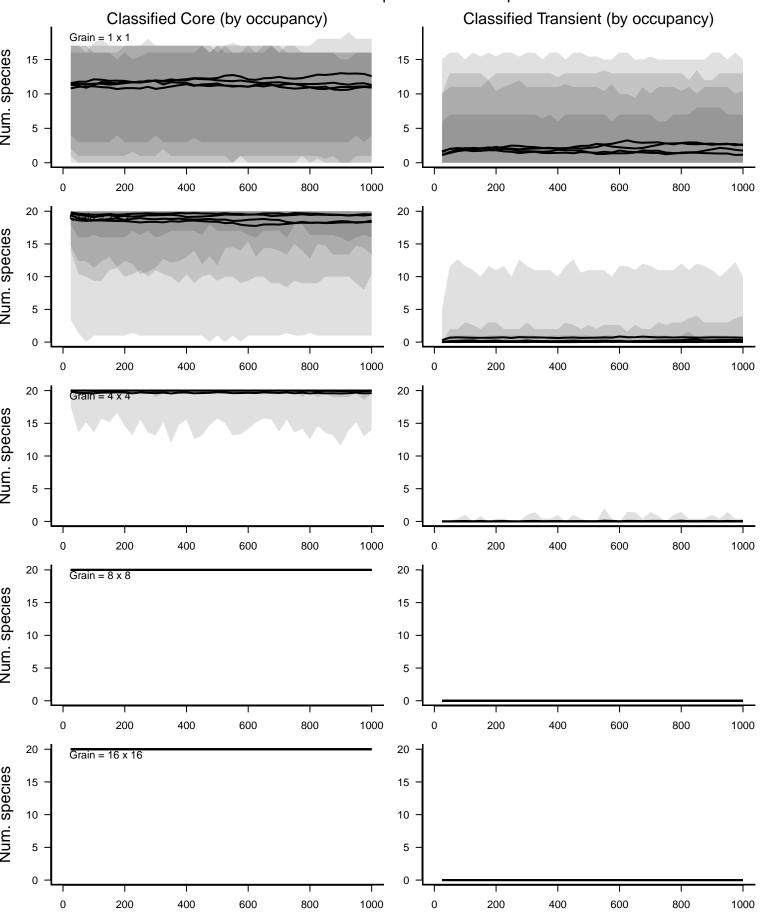
Temporal occupancy-based categories: detection prob. = 0.4 Core Transient Grain = 1 x 1 Num. species Grain =  $2 \times 2$ Num. species 40 -Num. species 40 -Num. species 40 -Grain = 16 x 16 Num. species 

Birth rate-based categories: detection prob. = 0.4

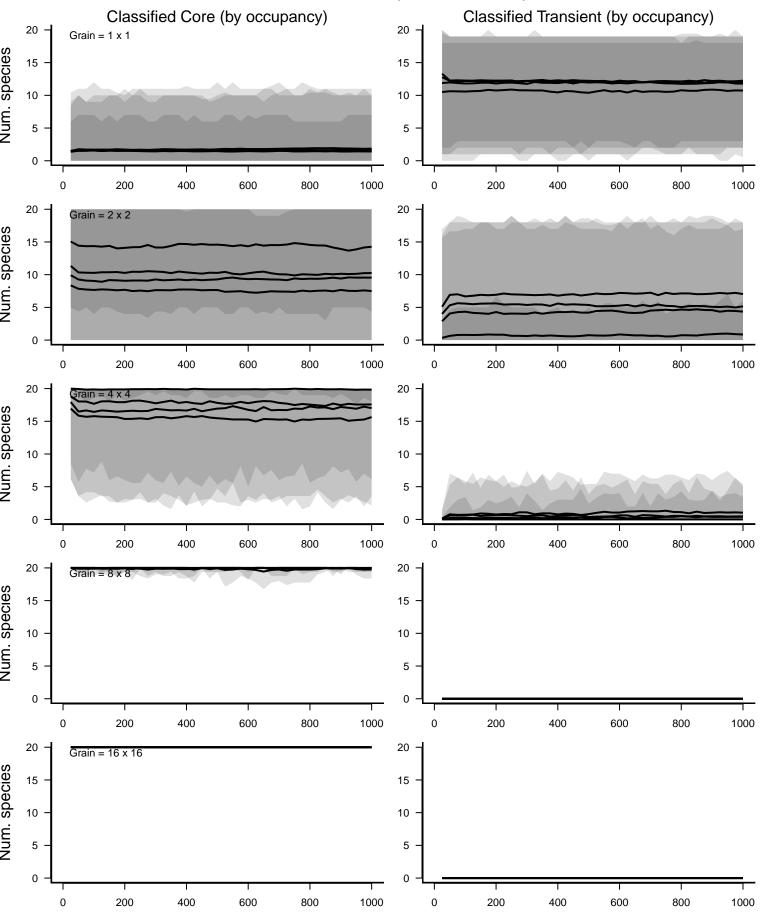


Temporal occupancy-based categories: detection prob. = 0.4 Core **Transient** Grain =  $1 \times 1$ Num. Individuals Grain =  $2 \times 2$ Num. Individuals Grain =  $4 \times 4$  $Grain = 8 \times 8$ 2000 1500 1000 500 8000 6000 4000 2000 10000 -

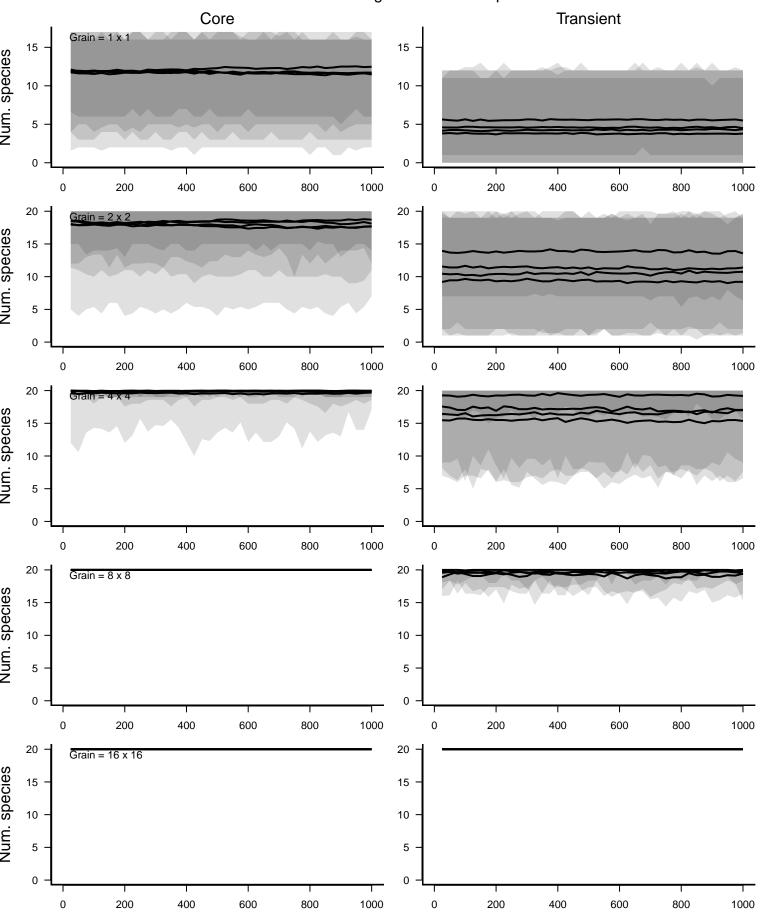
Birth rate-based Core Species: detection prob. = 0.4



Birth rate-based Transient Species: detection prob. = 0.4

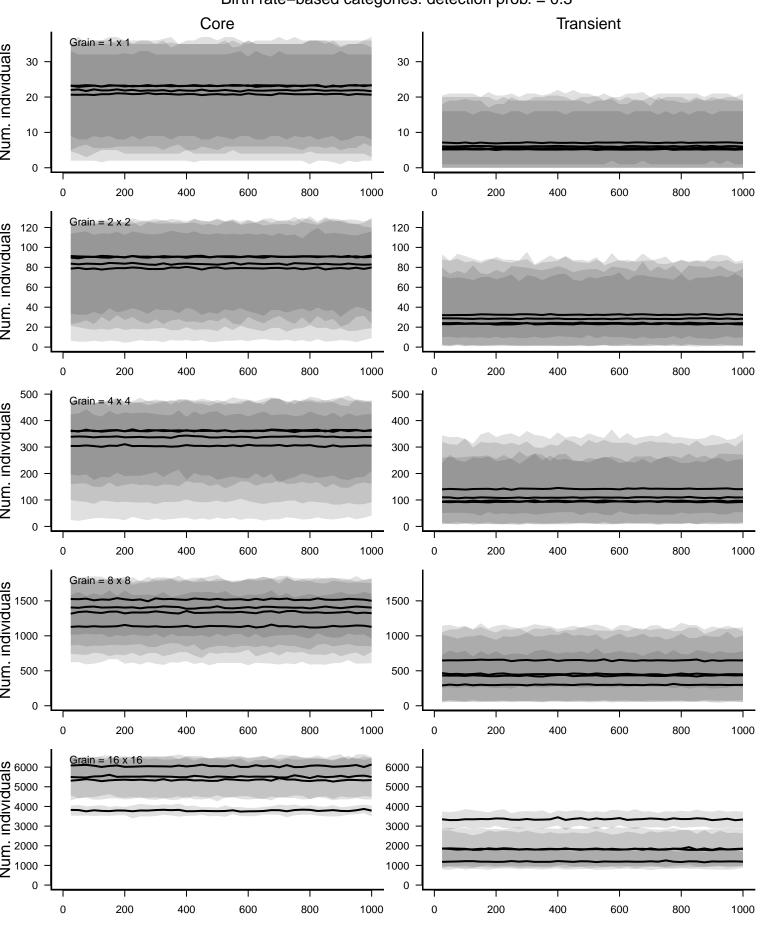


Birth rate-based categories: detection prob. = 0.3



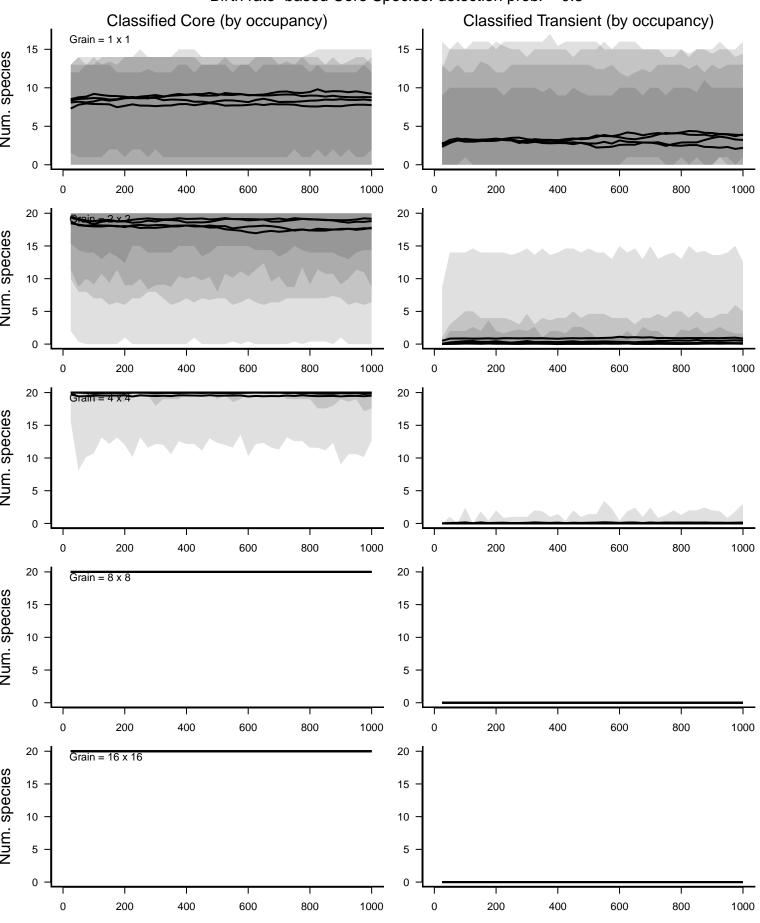
Temporal occupancy-based categories: detection prob. = 0.3 Core Transient 14 -Grain =  $1 \times 1$ Num. species Grain = 2 x 2 Num. species 40 -Num. species 40 -Num. species 40 -Grain = 16 x 16 Num. species 

Birth rate-based categories: detection prob. = 0.3

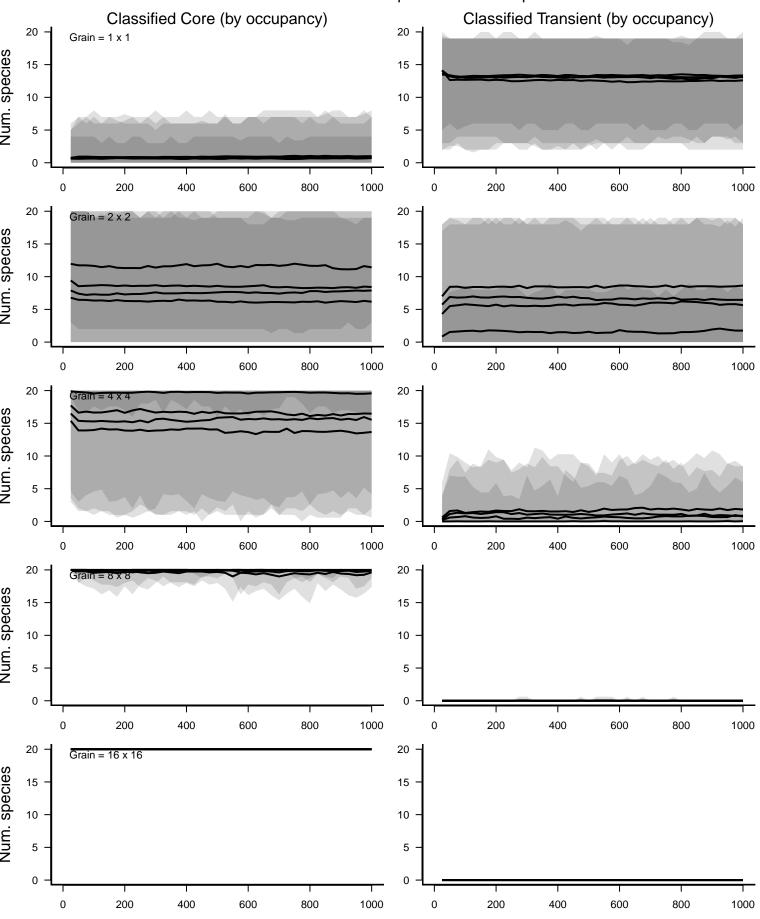


Temporal occupancy-based categories: detection prob. = 0.3 Core **Transient** Grain =  $1 \times 1$ Num. Individuals Grain =  $2 \times 2$ Num. individuals Grain =  $4 \times 4$ Num. individuals 2000 - $Grain = 8 \times 8$ Num. individuals 1500 1000 500 Num. individuals 4000 2000 

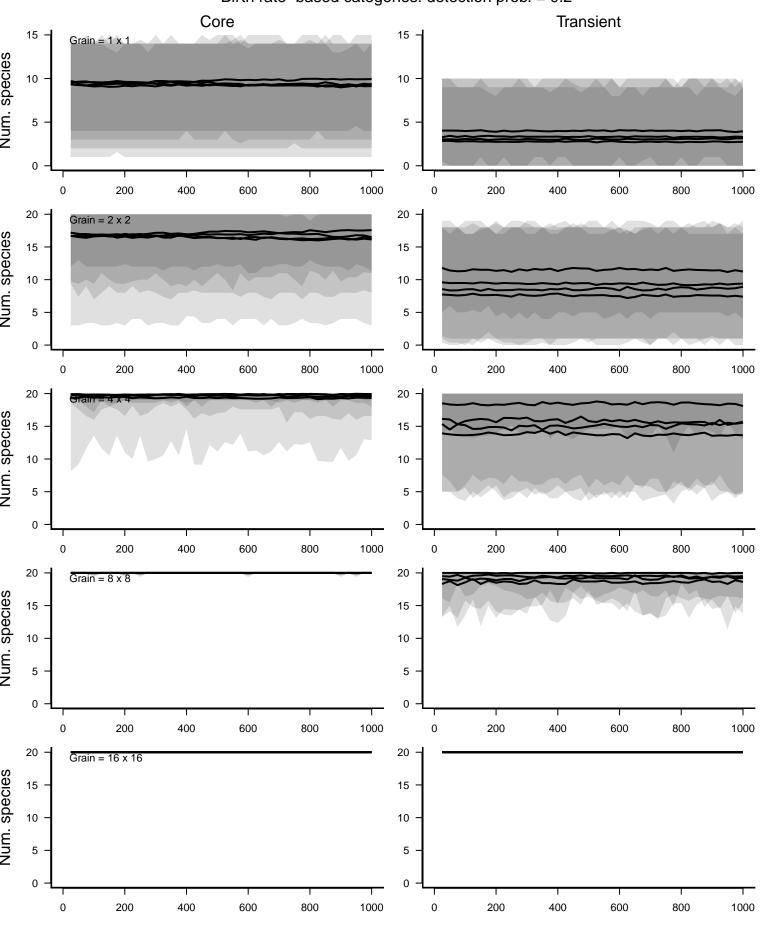
Birth rate-based Core Species: detection prob. = 0.3



Birth rate-based Transient Species: detection prob. = 0.3

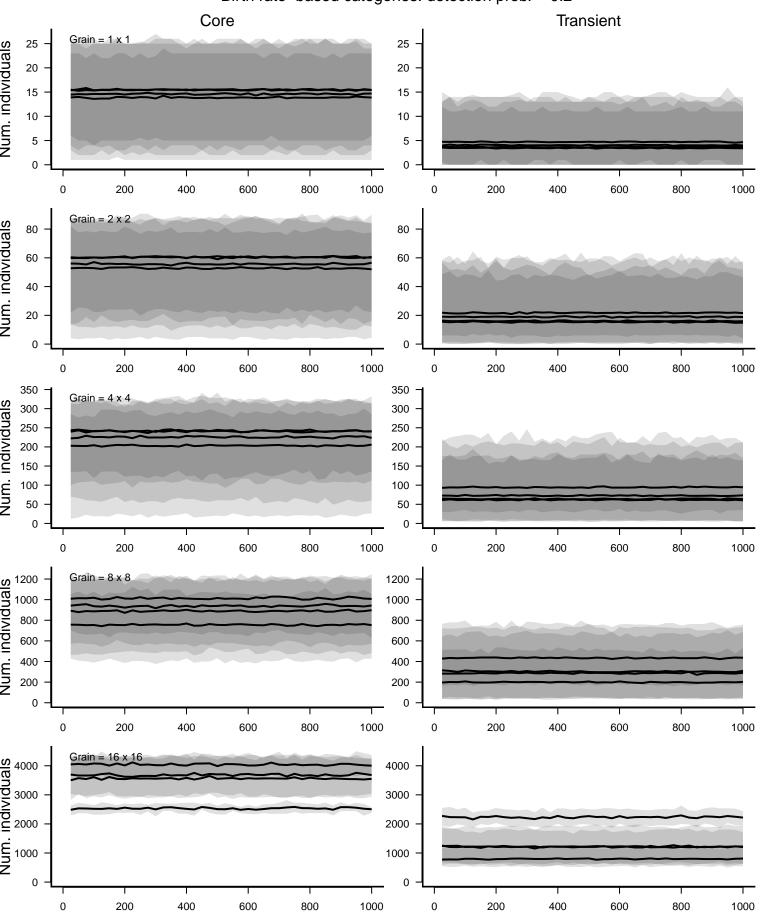


Birth rate-based categories: detection prob. = 0.2



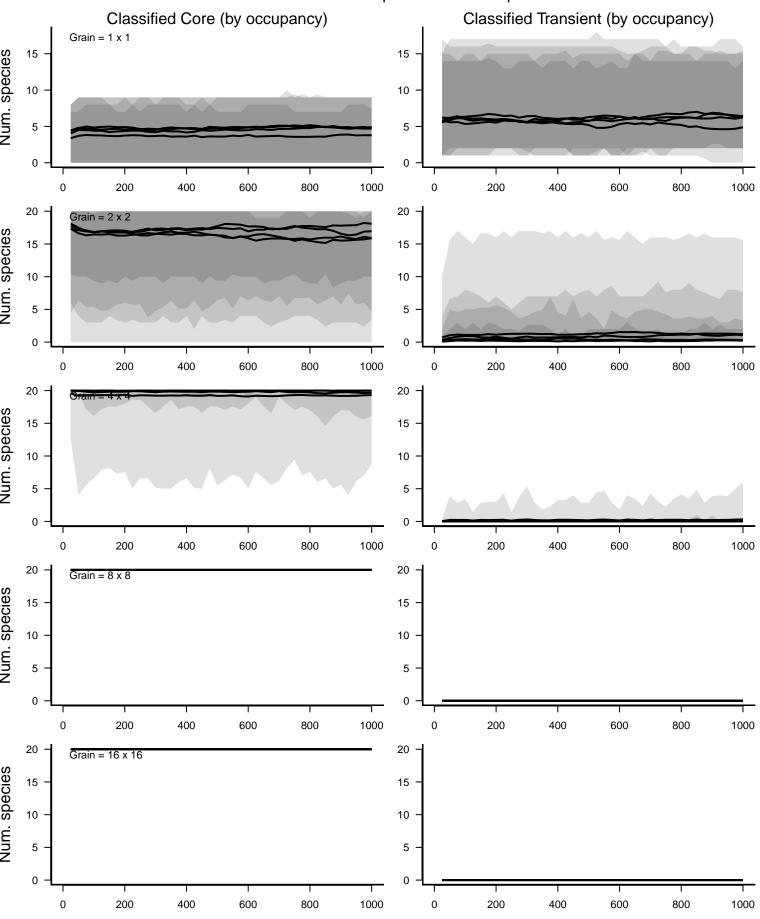
Temporal occupancy-based categories: detection prob. = 0.2 Core Transient 12 -12 -Grain =  $1 \times 1$ Num. species 30 -Grain =  $2 \times 2$ Num. species 40 -Num. species 40 -Num. species 40 -Grain = 16 x 16 Num. species 

Birth rate-based categories: detection prob. = 0.2

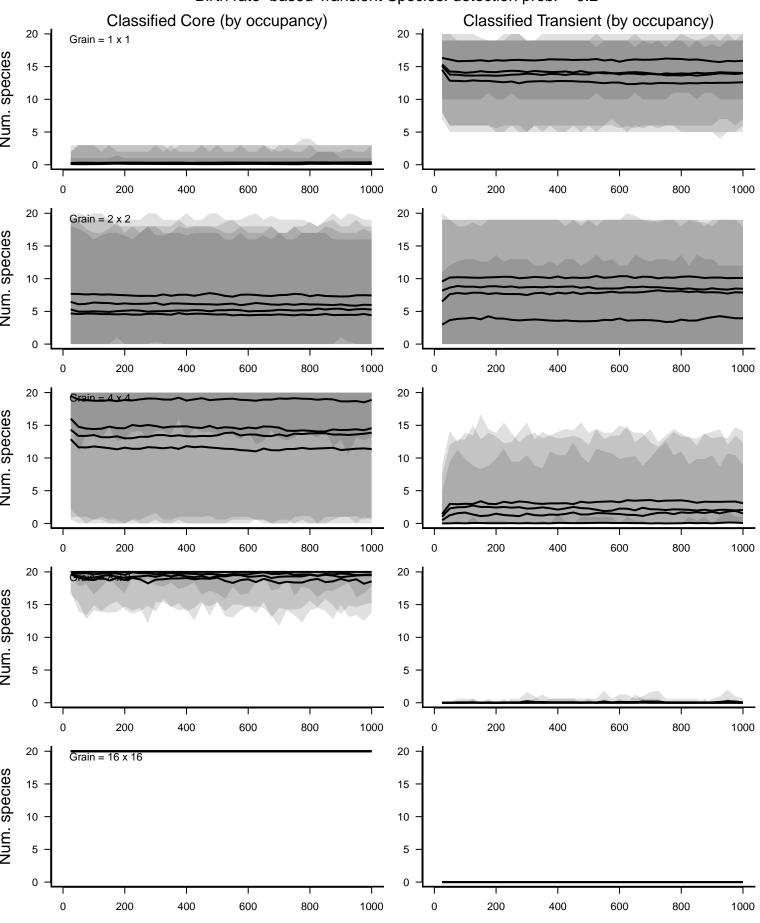


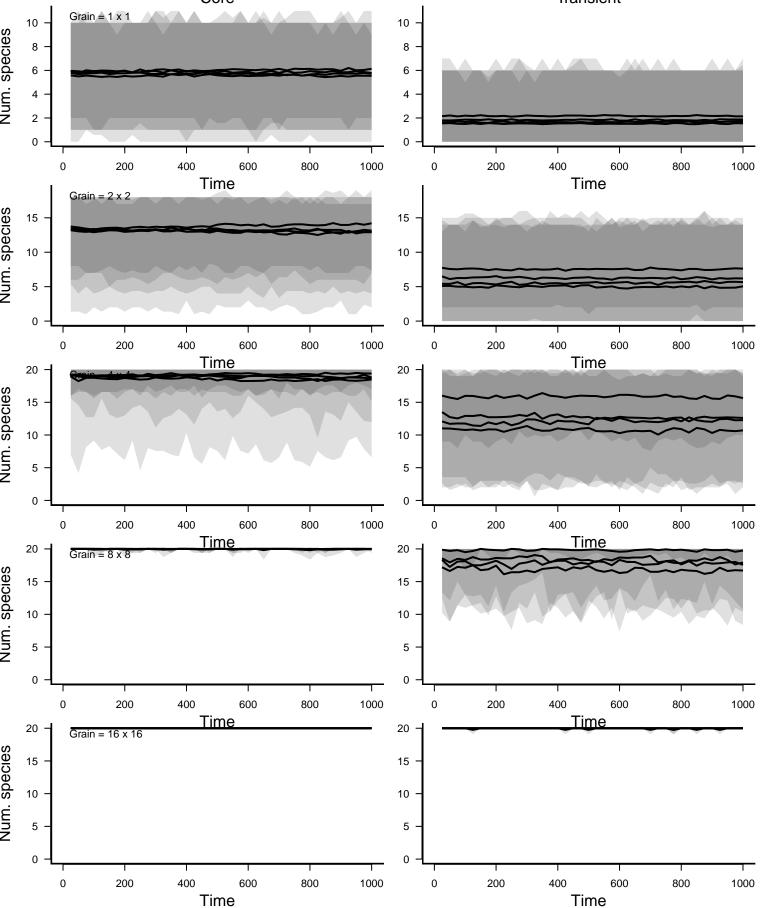
Temporal occupancy-based categories: detection prob. = 0.2 Transient Core Grain =  $1 \times 1$ Num. Individuals  $Grain = 2 \times 2$ Num. Individuals 350 - $Grain = 4 \times 4$  $Grain = 8 \times 8$ 1000 800 600 400 200 5000 4000 4000 3000 2000 1000 5000 -

Birth rate-based Core Species: detection prob. = 0.2



Birth rate-based Transient Species: detection prob. = 0.2





Birth rate-based categories: detection prob. = 0.1 **Transient** Core 15 -15 -Grain =  $1 \times 1$ 5 -Time Time 50 -Grain =  $2 \times 2$ Num. Individuals Time Time  $Grain = 4 \times 4$ Num. Individuals Time Time Grain =  $8 \times 8$ Time Time 2000 Individuals 2000 1500 1500 500 Time Time

Birth rate-based Core Species: detection prob. = 0.1 Classified Core (by occupancy) Classified Transient (by occupancy) Grain =  $1 \times 1$ Num. species Time Time Grain = 2 x 2 Num. species Time Time 20 -Num. species Time **Time** 20 - $Grain = 8 \times 8$ Num. species Time Time 20 - $Grain = 16 \times 16$ Num. species 

Time

Time

Birth rate-based Transient Species: detection prob. = 0.1

