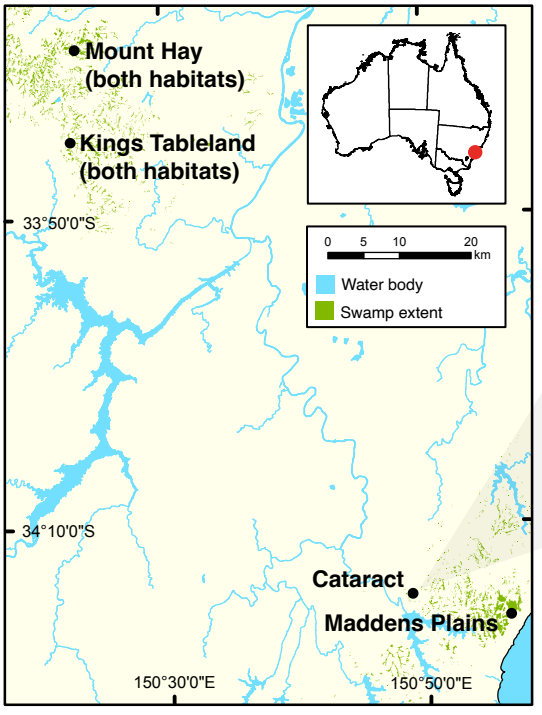
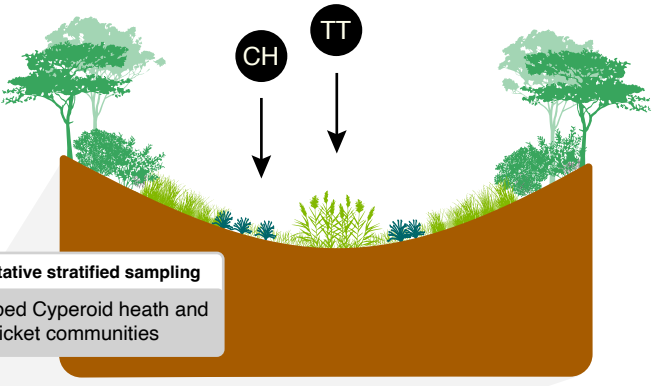
Population of interest

Swamp vegetation of the Sydney Basin





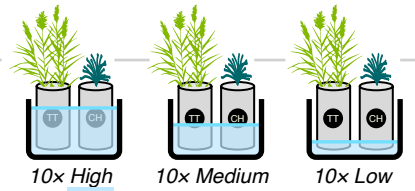
Representative stratified sampling

Undisturbed Cyperoid heath and Ti-tree thicket communities

Swamp	Number of replicates	
	Cyperoid heath CH	*Ti-tree thicket* TT
Mount Hay	30	30
Kings Tableland	30	30
Cataract	30	30
Maddens Plains	30	30

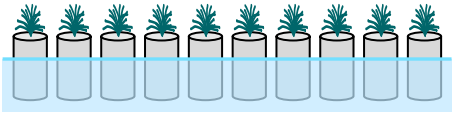
Dependencies in the data

- sods within swamps
- correlations among species

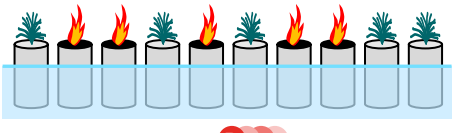


Water availability R

*(example of **High-CH** group)*

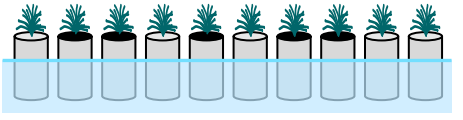


day 1



day 587

R *burning assignment*



day 1261

R random assignment of sods to treatments using R

(Treatment) control group in a given treatment

* biomass estimation at 7 timepoints

burning treatment

biomass harvesting and measurement

Experiment outcome

For each water treatment:
- CH burnt replicates = 5 / site
- CH unburnt replicates = 5 / site
- TT burnt replicates = 5 / site
- TT unburnt replicates = 5 / site

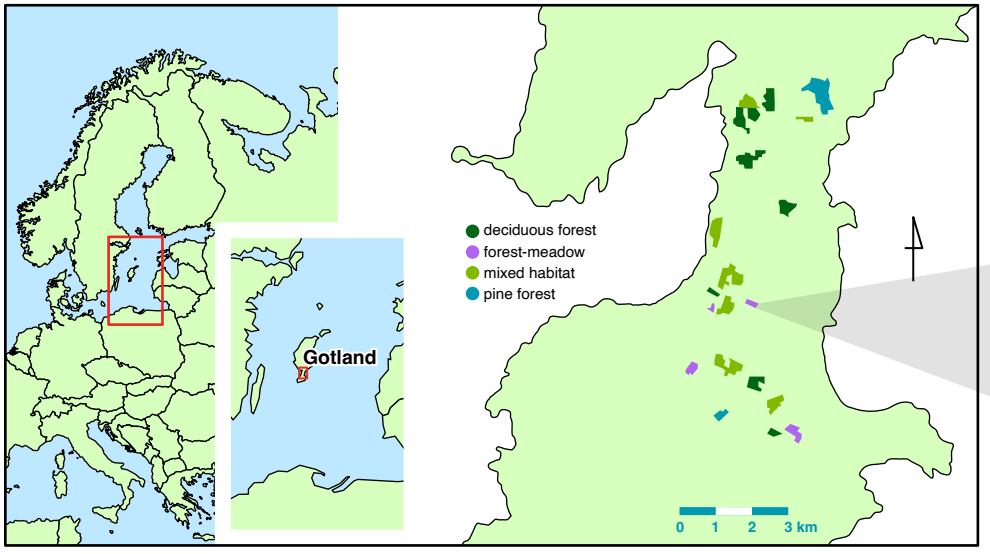
Total of 9 time points per replicate

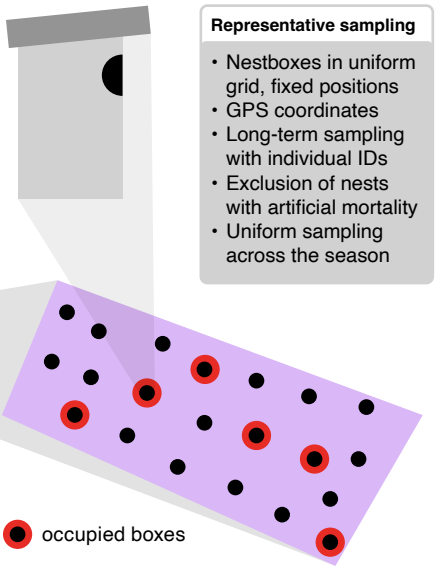
Field sampling

Glasshouse experiment

Population of interest

Deciduous forests on the Swedish island of Gotland (managed study plots)



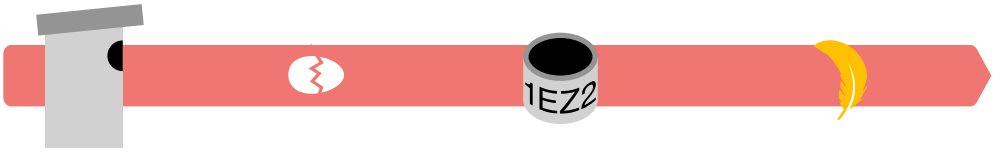


Representative sampling

- Nestboxes in uniform grid, fixed positions
- GPS coordinates
- Long-term sampling with individual IDs
- Exclusion of nests with artificial mortality
- Uniform sampling across the season

Field sampling

day -14 (eggs laid) | day 0 (hatching) | day 8 (chicks' ringing) | day 14 (feather sampling)

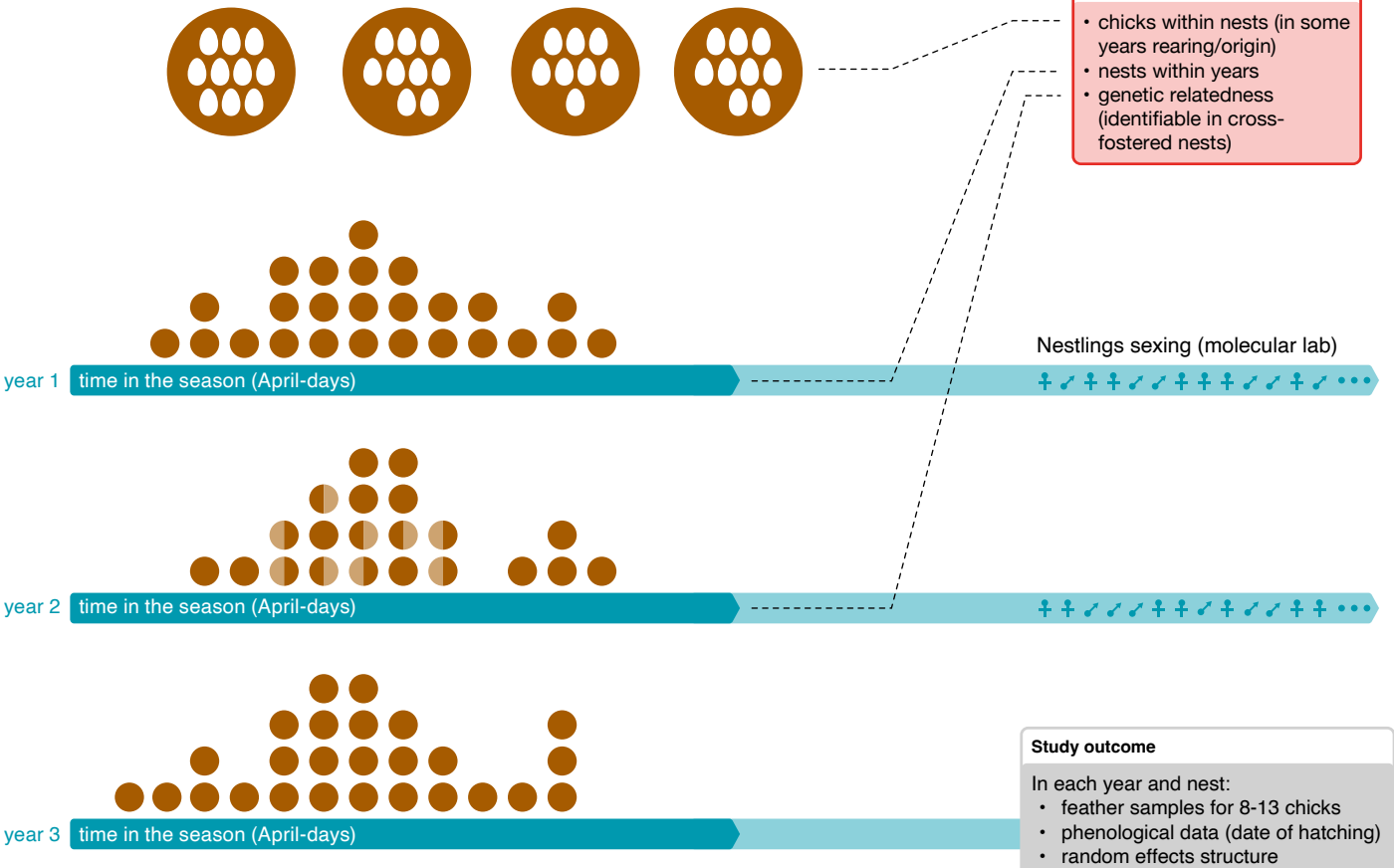


Timeline of a nest-box

80-120 nests per season
8-13 chicks per nest
3-5 feathers per bird

Dependencies in the data

- chicks within nests (in some years rearing/origin)
- nests within years
- genetic relatedness (identifiable in cross-fostered nests)



Study outcome

In each year and nest:

- feather samples for 8-13 chicks
- phenological data (date of hatching)
- random effects structure

individual nests
cross-fostered nests

Data structure