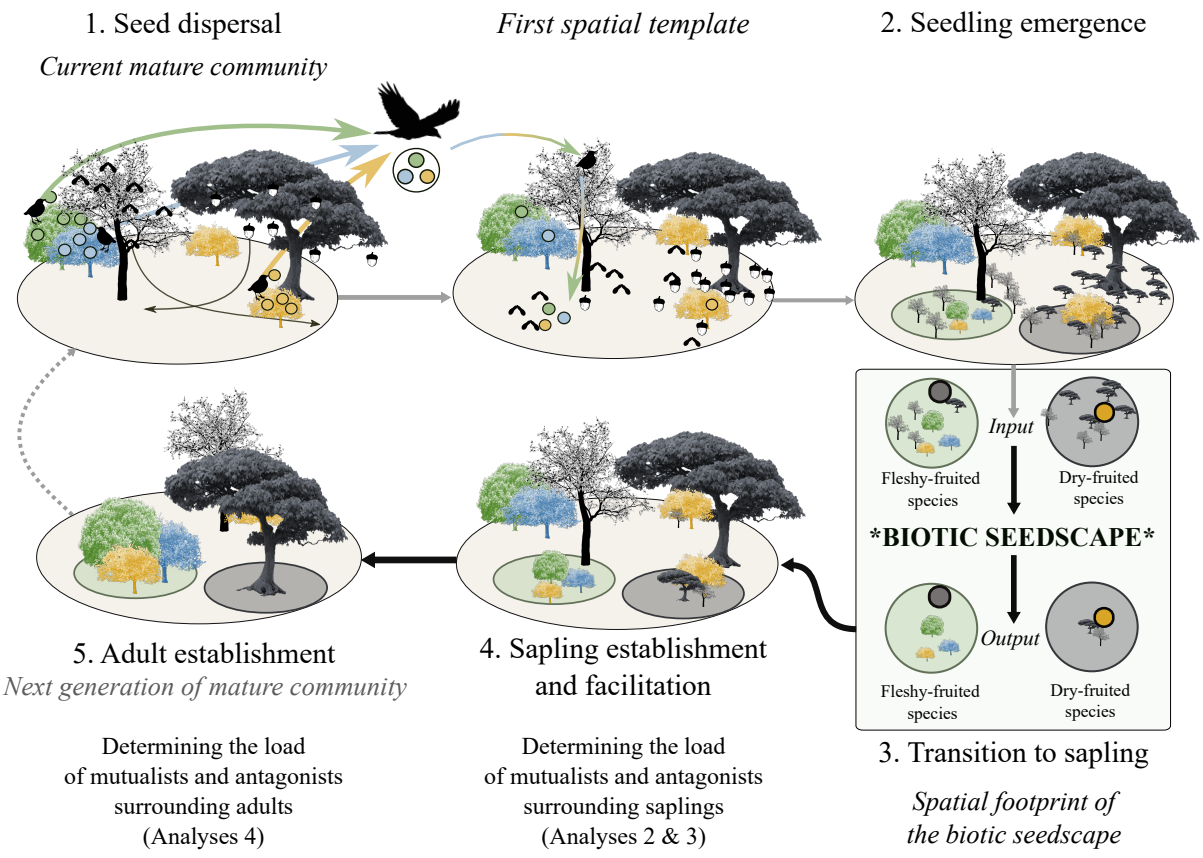
GENERAL FRAMEWORK

We analyse the biotic seedscape, i.e., the environment of mutualists and antagonists that surround the locations of plants of a given type f (i.e., fleshy- or dry-fruited). For each plant, we estimate the mean number of organisms it shares with its neighbours, and this is averaged over all plants of the given type. This results in our spatial summary function ***$\alpha_{f,phy}$ (r)***, the expected number of organisms shared between plants of type f and its neighbours that are located within distance r. Our interest is to determine if plants of type f share more or less organisms with their neighbours than expected.



BIOTIC SEEDSCAPE

Shared-chewer insects

17	3	3	2	1
3	**10**	2	5	1
3	2	**7**	2	0
2	5	2	**6**	0
1	1	0	0	**5**

Shared-sucker insects

30	5	9	6	6
5	**9**	5	6	3
9	5	**27**	7	4
6	6	7	**20**	6
6	3	4	6	**15**

Shared-pathogens

11	6	9	1	2
6	**9**	7	2	1
9	7	**16**	1	3
1	2	1	**2**	1
2	1	3	1	**4**

Shared-epiphytes

2	1	1	1	1
1	**8**	2	4	3
1	2	**2**	1	1
1	4	1	**5**	4
1	3	1	4	**6**

Shared-pathogens with the sapling neighbours

Example of the biotic seedscape of shared-pathogens for fleshy- and dry-fruited species at 1m from the focal species (αf,phy). Note that, the above cells correspond to the sapling-sapling scenario.

$$\alpha_{f,phy}(r) = \sum_{i=1}^{S} \delta_{fi} \frac{\lambda_i K_{fi}(r)}{\lambda K(r)}$$

$\boldsymbol{\delta_{fi}}$	Shared organisms between species *f* (focal) and *i*
λ_i/λ	Relative abundance of species *i* in the community
$K_{fi}(r)$	Bivariate K-function of species with *i* respect to species *f*
$K(r)$	Univariate K-function of the entire community

The biotic seedscape of the individuals depends on the host-specificity of mutualists and antagonist of the surrounding species, likely determining it success at long terms (Analysis 1).