|  |  |  |  |  |  |  |  |  |
| --- | --- | --- | --- | --- | --- | --- | --- | --- |
| **Parameter** | **Based on trait** | | **Model parameter value** | | | | | |
| **Growth rate** | Foraging distance | Parasite | ***r*** | | | | | |
|  | long | y | 2.5 | | | | | |
|  | long | n | 3 | | | | | |
|  | medium | y | 3.5 | | | | | |
|  | medium | n | 4 | | | | | |
|  | short | y | 4.5 | | | | | |
|  | short | n | 5 | | | | | |
| **Competition effect** | Diet breadth | Foraging distance | ***c*** | | | | | |
|  | long | polylectic | 0 | | | | | |
|  | long | oligolectic | 1 | | | | | |
|  | medium | polylectic | 2 | | | | | |
|  | medium | oligolectic | 3 | | | | | |
|  | short | polylectic | 4 | | | | | |
|  | short | oligolectic | 5 | | | | | |
| **Land use suitability**  ***for foraging*** | Diet breadth | Flying periods | ***LU\_suitability\_forage*** | | | | | |
| bare | arable | forest | grassland | urban | water |
|  | Oligolectic | 1 | 0 | 0.4 | 0.4 | 1 | 0.4 | 0 |
|  | Polylectic | 1 | 0 | 0.7 | 0.6 | 1 | 0.6 | 0 |
|  | Oligolectic | 2 | 0 | 0.6 | 0.6 | 1.5 | 0.6 | 0 |
|  | Polylectic | 2 | 0 | 1.05 | 0.9 | 1.5 | 0.9 | 0 |
| **Land use suitability**  ***for nesting*** | Nesting preference | | ***LU\_suitability\_nest*** | | | | | |
| bare | arable | forest | grassland | urban | water |
|  | cavity | | 0 | 0.1 | 1 | 0.3 | 0.7 | 0 |
|  | soil | | 1 | 0.3 | 0.1 | 0.7 | 0.1 | 0 |
| **Dispersal distance** | Foraging distance | | ***dispmean*** | ***dispsd*** | | | | |
|  | long | | 600 | 60 | | | | |
|  | medium | | 300 | 30 | | | | |
|  | short | | 100 | 10 | | | | |
| **Flying periods** | Flying period | | ***flying\_period*** | | | | | |
|  | First half of the year | | 1 | | | | | |
|  | Second half of the year | | 2 | | | | | |
|  | Two times a year | | 3 | | | | | |
| **Disturbance impact** | Nesting preference | | ***dist\_eff*** | | | | | |
|  | cavity | | 0.3 | | | | | |
|  | soil | | 0.9 | | | | | |