



Beetle mania at Copenhagen Zoo

European Species Initiative Workshop, September 16th 2023

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ZOO
COPENHAGEN



Approx. 18% of European
saproxylc coleoptera
threatened

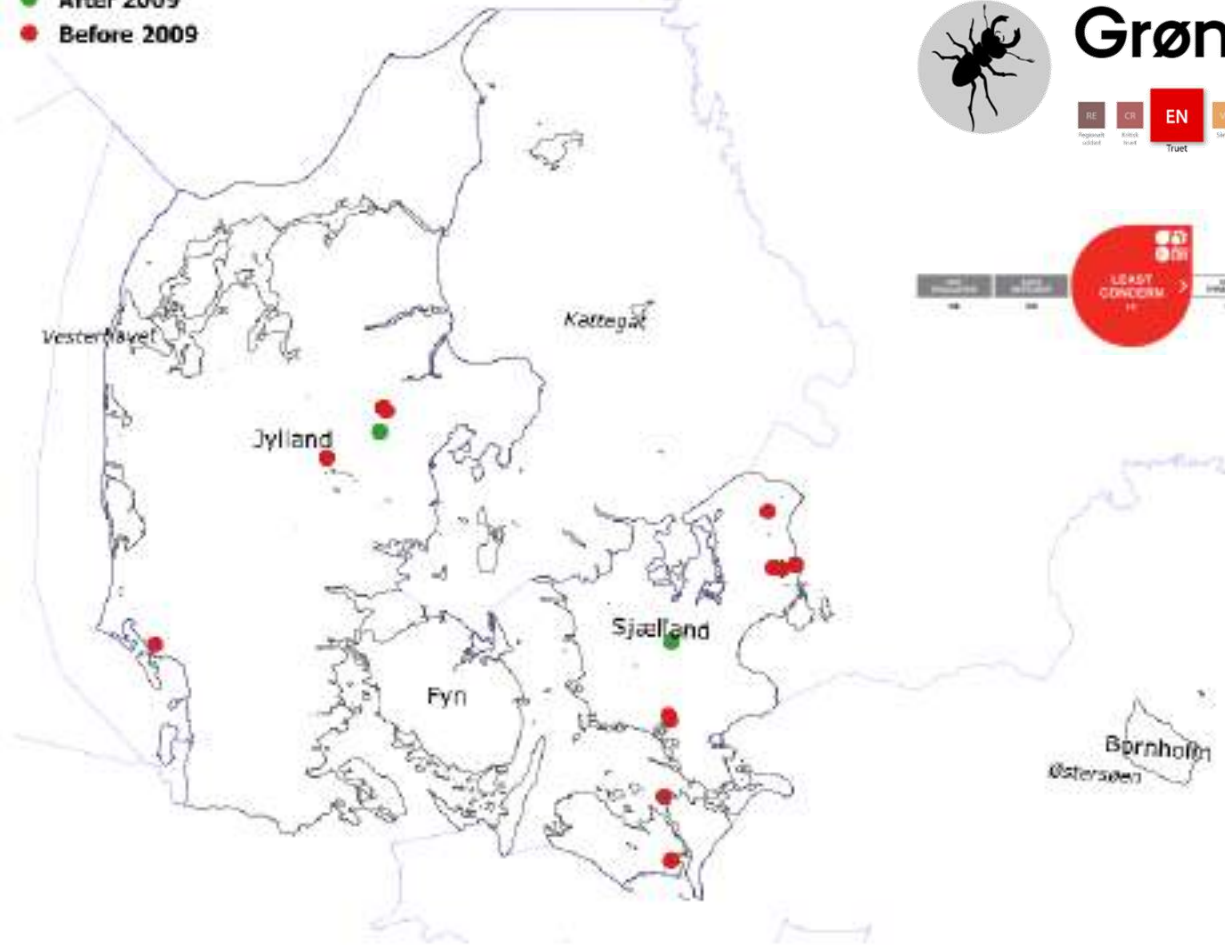
Biggest threats: Logging, tree
loss and wood harvesting



The noble chafer *Gnorimus nobilis*

Observations of *Gnorimus nobilis* registered on fugleognatur.dk

- After 2009
- Before 2009



Grøn pragttorbist



Variable chafer *Gnorimus variabilis*



Sort pragttorbist



Hermit beetle *Osmoderma eremita*



Project aims



Breeding and release of larvae

Habitat restoration

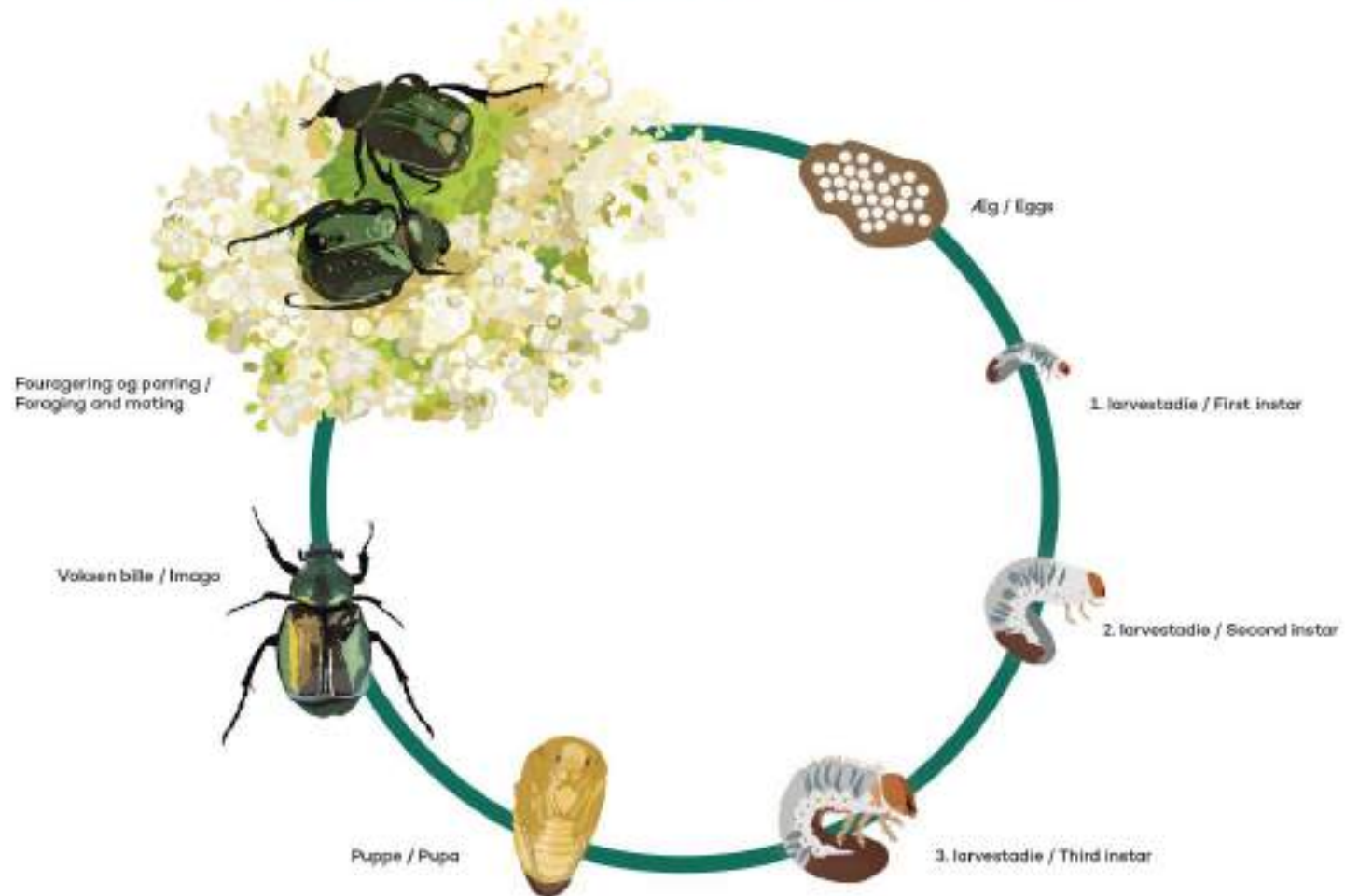


Monitoring

Education



GRØN PRAGTTORBIST - LIVSCYKLUS / NOBLE CHAFER LIFE CYCLE



Breeding setup



Gnorimus nobilis

	2016	2017	2018	2019	2020	2021	2022	2023
Collected	1.1 imagoes		1.0 imago					
Bred			10 imagoes -> 89 larvae	65 imagoes -> 764 larvae	164 imagoes -> 2618 larvae	128 imagoes -> 1905 larvae	? -> 516 larvae	X -> 163 larvae
Released				451 larvae	2108 larvae	1841 larvae	476 larvae	X



Gnorimus variabilis

	2022	2023
Collected	8 imagoes + 14 larvae	
Bred	138 larvae	X
Released	108 larvae	X

Osmoderma eremita

	2022	2023
Collected	11 larvae	
Bred		? Imagoes -> 4+ larvae*
Released		

*longer life cycle, more larvae expected to pupate next season

Release of larvae

Larvae are released in nest boxes (or natural cavities)
in October



Veteranisation





Pheromone traps did not work...



- Visual encounter survey
- Capture-mark-recapture
- 40+ imagoes found



Dissemination



Stag beetle *Lucanus cervus*



Extinct from Denmark since 1970'ies, but reintroduced in 2013
-> Survey in 2023



- Easy to breed, more challenging to survey
- Time and funding for monitoring is often limited – difficult to evaluate the progress
- Inbreeding seems not to be a problem – but needs investigation!
- Need more information on inter-specific relationships with *G. variabilis* and *O. eremita*

Thank you!

