

Risk Management and Biodiversity



...The Times They Are a-Changin'...

Risk assessment for pests

What is the risk of importing "live material"?

- What can be imported from the surrounding environment?
- What are the conditions for pest ingress and pest proliferation?
 - Outside?
 - Indoor?



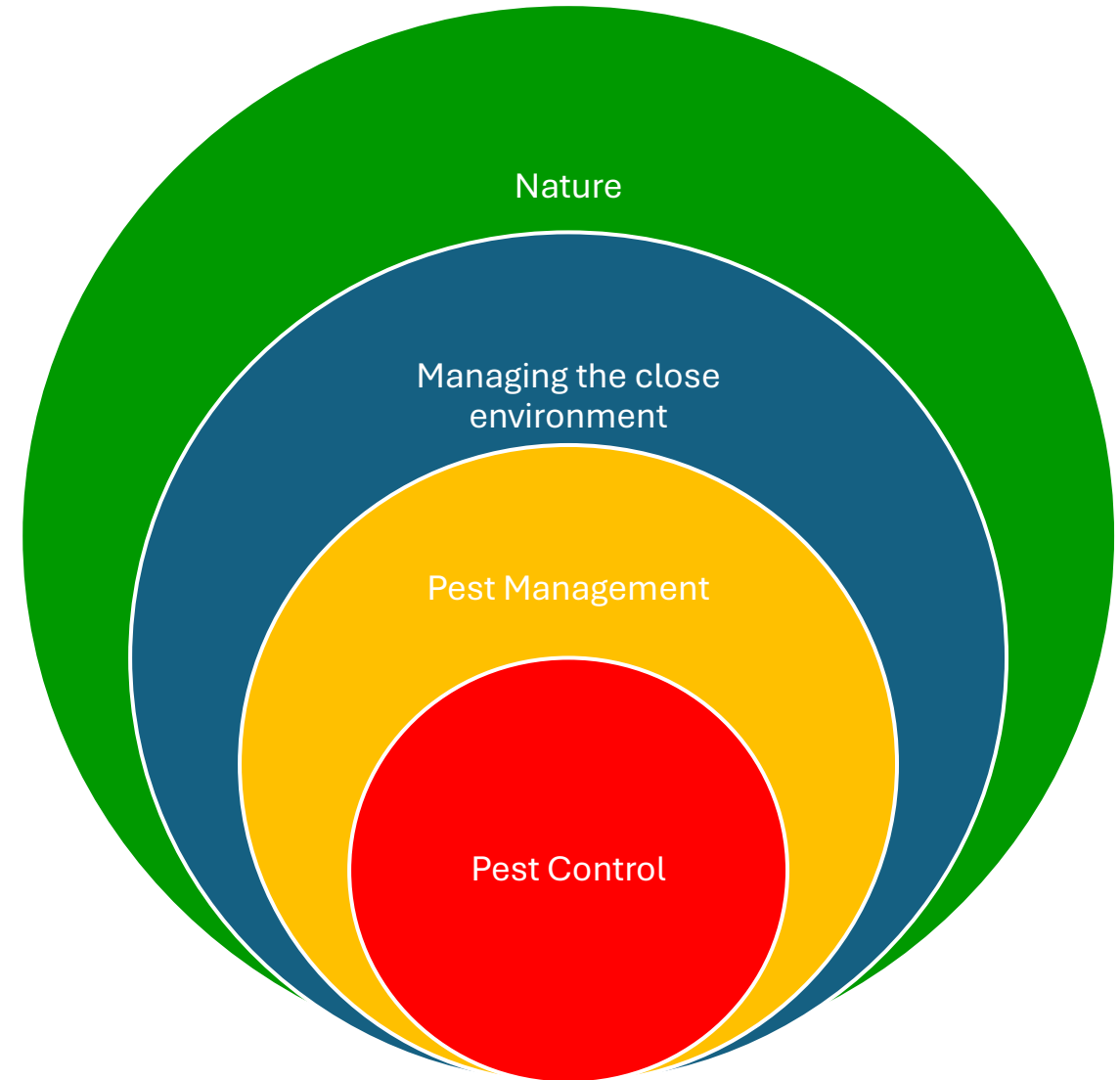
Risk management of pests

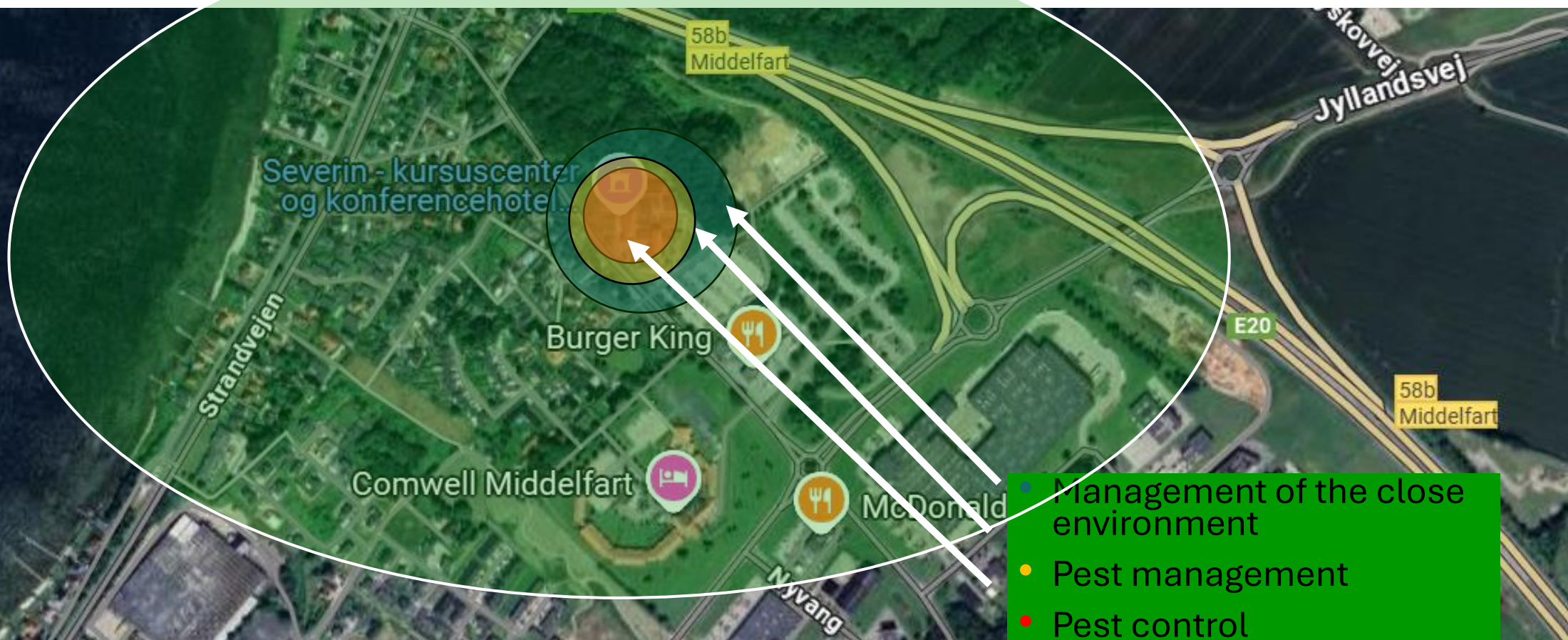
Produce considerations

vs.

View of Nature (more biodiversity)

- How close will we allow the pests to our buildings?
- Which control measures (biocides, traps, landscaping)
- What action indoor?
Building maintenance/indoor preventive spraying or trapping?





Risk management of pests



How to **NOT** manage the risk for rodents!

Cotoneaster is a widely used low-maintenance green "cover-all"



How to **NOT** manage the risk for rodents!











Risk Management of Pests



LANDSCAPE OF FEAR

A design approach that makes the environment unattractive, uncomfortable, and unsafe for pest animals—naturally directing them away from buildings.

- 1 VEGETATION CONTROL ZONE**
No dense plants next to the building.
Keeps pests from hiding and nesting.

- 2 UNCOMFORTABLE SURFACE ZONE**
Smooth, continuous concrete is hard to dig and burrow in.
Lacks cover and harborage.

- 3 LOW VEGETATION ZONE**
Low-growing, thorny, or aromatic plants create discomfort and lack of cover.
Open and exposed.

- 4 OPEN, EXPOSED ZONE**
Maintain open sightlines.
Short grass or groundcover keeps rodents and other pests vulnerable.
Predators can see them.

- 5 DISTANCE ZONE**
Keep food, water, wood piles, and trash containers far from the building.
Remove attractants.

RESULT: PEST ANIMALS ARE DISCOURAGED AND DIRECTED AWAY



No cover.
Feels exposed.
Moves on.



Smooth concrete.
Uncomfortable to dig or burrow.
Keeps going.



Thorny, aromatic,
and low cover.
Avoids the area.



Open and exposed.
Feels vulnerable.
Moves away.



No food or shelter
attractants near.
Nothing to stay for.



SUSTAINABLE DEVELOPMENT GOALS



DGNB – Sustainability certification

(Deutsche Gesellschaft für Nachhaltiges Bauen)

NR. UFRÆVIGELIGE KRAV OG MINIMUMSKRAV

Minimumskrav

M1 Basisdokumentation til biodiversitet on-site

Kontor Beboelse Børneinstitution Uddannelse Hotel Butik



Det er en forudsætning for at
underkriterie 2 Biodiversitet

- Bilag 1 Kompetence
- Der er udarbejdet en naturhistorie og der
- Der er foretaget regi
- Der er foretaget en c
- Der plantes ingen in
- Der er udarbejdet en
- I bygge- og anlægsf
- god jordkvalitet tilstrækkeligt beskyttet mod skader og forringelser

- on-site biodiversity
- Overview over former use of the location, natural history and biogeographical context
- Registration of existing trees and trees, that have been cut earlier. Overall registration of biodiversity.
- No planting of invasive species and control measures for existing invasive species.
- The habitat for existing plants should be adequately protected during the construction phase.

DGNB – Sustainability certification

“Urban Bioscore”

1 Biodiversitet on-site (UrbanBioScore)

1.1 UrbanBioScore – indledende registrering

Kontor Beboelse Børneinstitution Uddannelse Hotel Butik

Maks. 10



Der er udarbejdet en UrbanBioScore på baggrund af biodiversitetsregistreringen i M1. Denne indledende UrbanBioScore udgør baseline for projektet inden byggeprojekt igangsættes.

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DGNB – Sustainability certification (Deutsche Gesellschaft für Nachhaltiges Bauen)

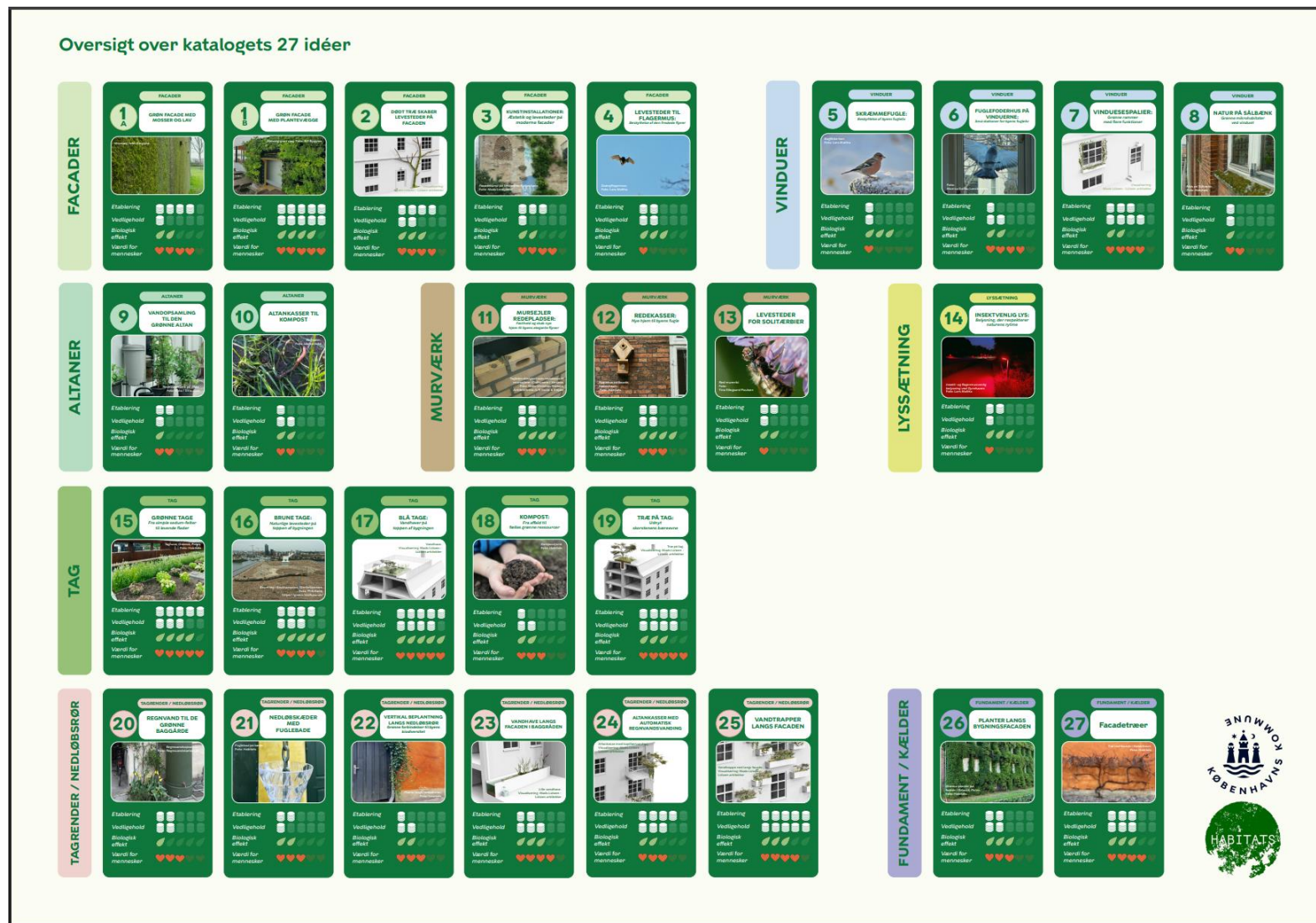
- How much pest risk management will we be able to do, if it reduces the urban bioscore ?
- Pest control will probably have only limited possibilities to regulate/control by means of pesticides and traps.
- If possible, our best shot is to participate in the planning of the new surroundings/landscape.
- Referring back to the “Landscape of Fear”!



Urban Biodiversity

The municipality of Copenhagen and "Habitats" show:

27 ideas to increase biodiversity when renovation urban properties



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MURVÆRK

12

REDEKASSER:
Nye hjem til byens fugle



*Fuglehus på facade, København.
Foto: Habitats*

Eablering	
Vedligehold	
Biologisk effekt	
Værdi for mennesker	

MURVÆRK

13

LEVESTEDER FOR SOLITÆRBIER



*Rød murerbi.
Foto: Tina Ellegaard Poulsen*

Eablering	
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VINDUER

8

NATUR PÅ SÅLBÆNK
Grønne mikrohabitater ved vinduet



Mos på Sålbank:
Foto: Habitats

Etablering

Vedligehold

Biologisk effekt

Værdi for mennesker

LYSSÆTNING

14

INSEKTVENLIG LYS:
Belysning, der respekterer naturens rytme



Insekt- og flagermusvenlig belysning ved Dyrehaven.
Foto: Lars Maltha

Etablering

Vedligehold

Biologisk effekt

Værdi for mennesker

Biodiversity, Pest Prevention and Control


MORTALIN



Sooo....how many bait/trap stations?

- The pest control industry is traditionally hardwired into thinking in number of outdoor bait stations.
- From a biodiversity point of view, we should not be catching the foundation of the food pyramid for the wildlife.
- Mice belongs in the nature
- In Denmark rats do not belong in the nature (regulated by law)
- Should we stop killing mice and refine the traps to take only rats ?
- Will future pest control be confined to indoor trapping?