# **Veteranisation**

**Green Infrastructure in time and space** 

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## **Old trees are popular habitats**

- A lot of rare species
  - 700 -800 redlisted species
  - 1300 species
- Every tree has many different habitats
  - Holes and cavities
  - Sunlit bark
  - Damp areas
  - Dead wood
  - Branches in the crown
  - Sap flows

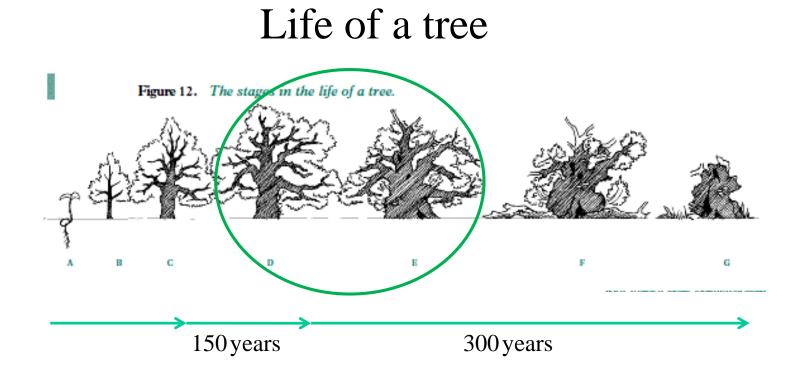


Bats











18% of wood living beetles are threatened

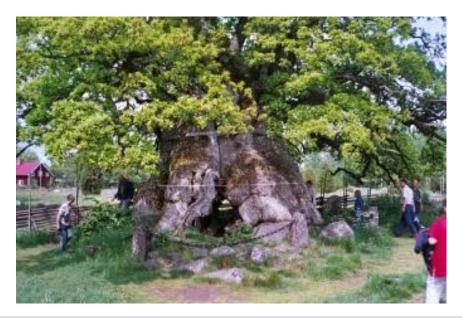
Need more habitats!





### **Common situations**

- Too small population of old trees
- Need to connect populations of old trees
- Generation gap





### A tree is not just a tree

- Habitats appears at 200-250 years old trees
- Takes 250 years to create an old tree





# Veteranisation

Making the structures naturally created by:

- storm
- lightning
- grazing animals
- woodpeckers
- Making structures of old trees in young trees = creating habitats



Photo: Annika Lydäng



#### How it is done

- Usually arborists
- Young trees, 25-40 cm diameter
- Same tree species
- Avoid trees close to paths, houses etc









Photo: Kenneth Claesson



Photo: Annika Lydäng





Photo: Henrik Malm

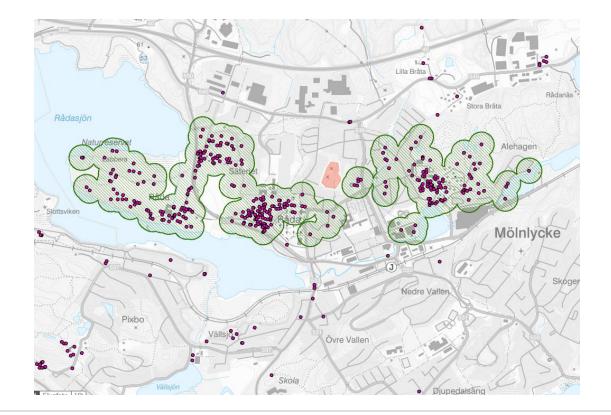


Photo: Vikki Bengtsson



VÄSTRA GÖTALANDS LÄN

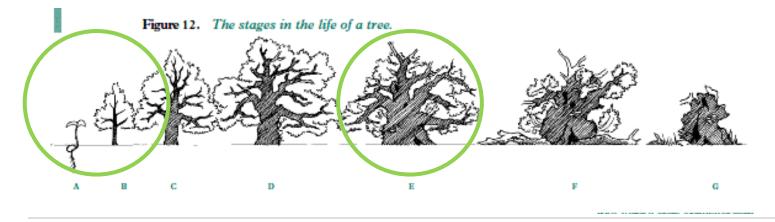
#### **Green Infrastructure**





#### **Green Infrastructure in time**

- Common situation i protected areas in Sweden.
- Old trees are protected, but no medium aged trees.
- The old trees will die before the next generation have the habitats.





# **Does it work?**

- More bats
- More hole-nesting birds
- More redlisted beetles
- More social hymenoptera
- Succession of species, need monitoring after 50+ years



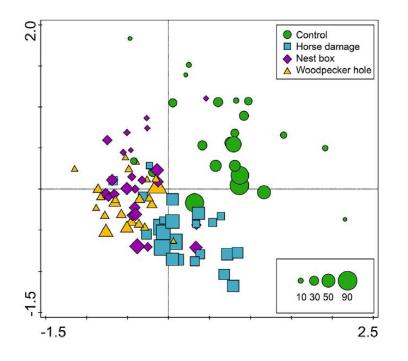
Photo: Vikki Bengtsson



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# Wood fungi

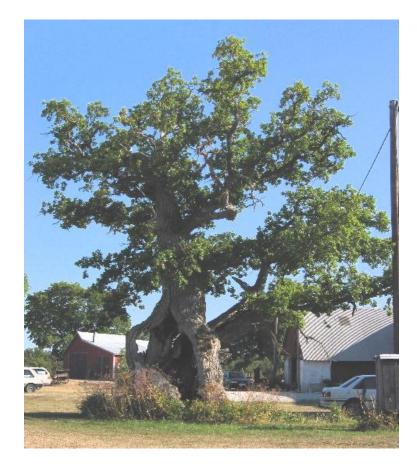


- 20 most abundant 78%
- 700 species
- Control trees 8 times less sequences
- Menkis et al (2022). Endophytes dominate fungal communities in six-year-old veteranisation wounds in living oak trunks. Fungal Ecology. https://doi.org/10.1016/j.funeco.2020.101 020.



# When do we not do it?

- Few young trees
- Permission of the landowner
- Can not create all habitats
- Never a replacement for old trees!





### Thank you for listening



