

Insecta Services and Disservices

Kaylyn Flanigan

Common Services?

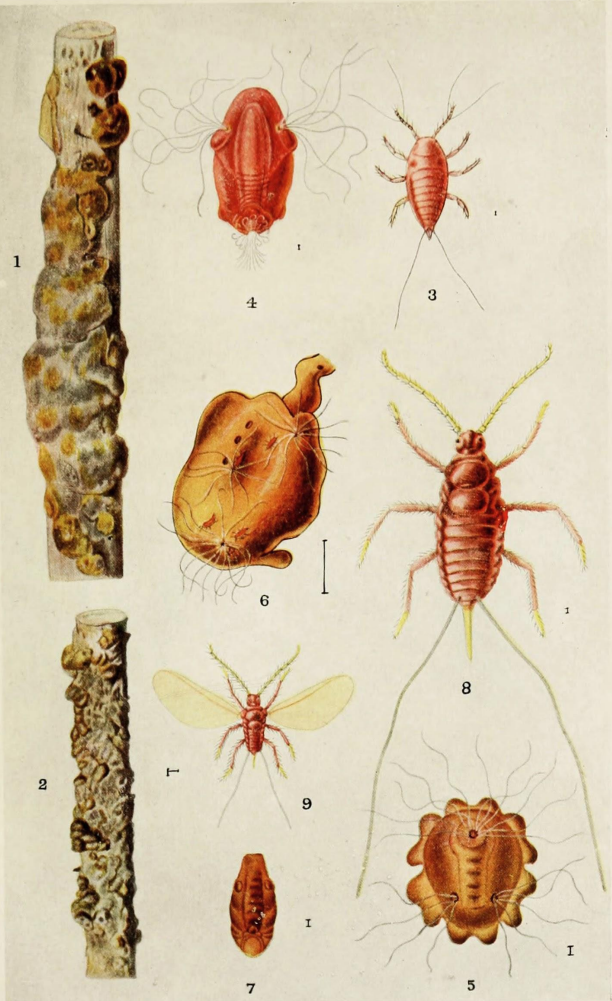
- Produce useful substances



<https://www.youtube.com/watch?v=77ktNSPFbwQ>



<https://www.youtube.com/watch?v=nZIEjDLJCfg>



TACHARDIA LACCA

W. & A. G. S. Engestr. del. et sculp.
A. THE CALCUTTA PHOTO



Harold Maxwell-Lefroy



- Produce useful substances
- Pollinate plants - including those we eat

This is what your grocery store looks like **WITHOUT BEES**

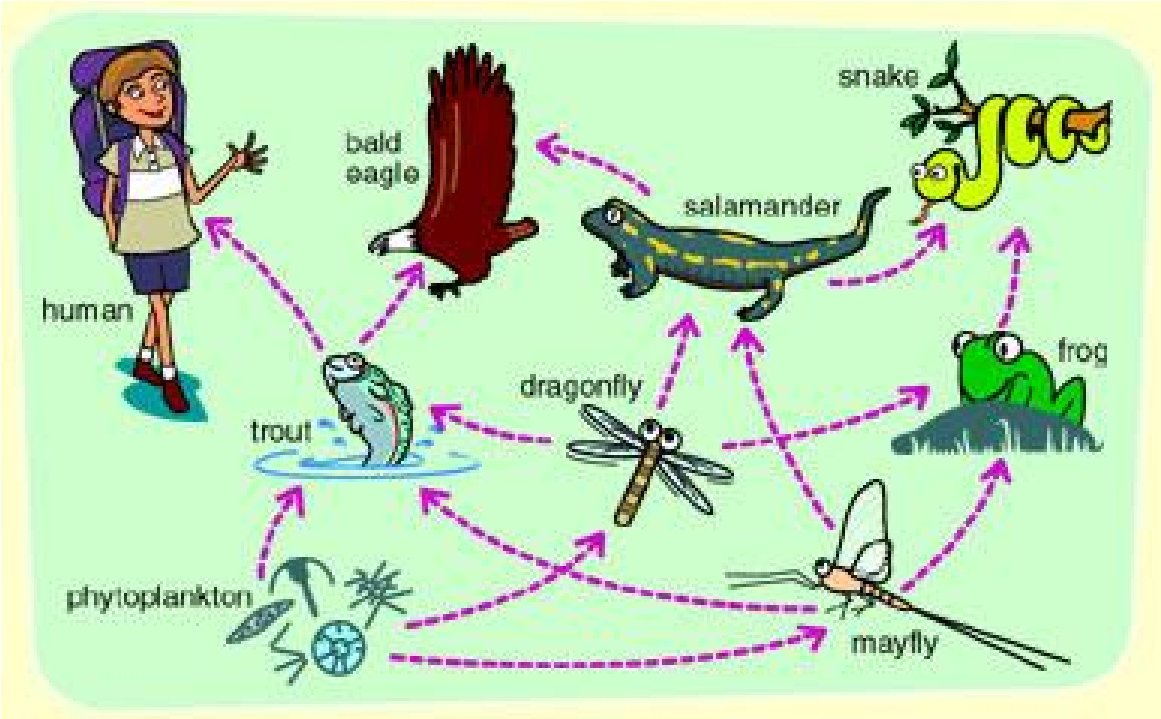


Your produce choices
with bees



Your produce choices
without bees

- Produce useful substances
- Pollinate plants - including those we eat
- Integral part of the food web



- Produce useful substances
- Pollinate plants - including those we eat
- Integral part of the food web
- Biocontrol for insects and weeds





Keith Weller

- Produce useful substances
- Pollinate plants - including those we eat
- Integral part of the food web
- Biocontrol for insects and weeds
- Research



The insect collection of 19th century Texas naturalist Ludolph Heiligbrodt is housed at the University of Texas at Austin.

Public domain image by Alex Wild, produced as part of the Insects Unlocked project at the University of Texas at Austin.

- Produce useful substances
- Pollinate plants - including those we eat
- Integral part of the food web
- Biocontrol for insects and weeds
- Research
- Aesthetic



Common Disservices

- Pests of valuable crops

San Jose scale
(*Quadraspidiotus perniciosus*)



female scale covering



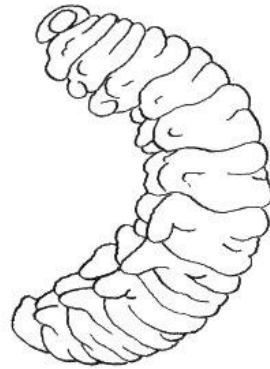
male

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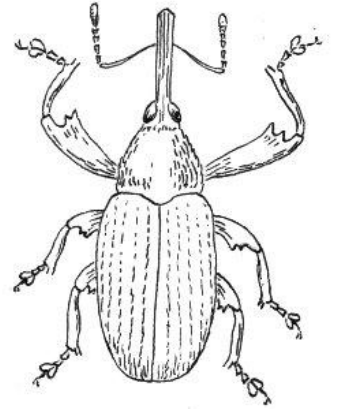




LARVA



PUPA



ADULT

- Pests of valuable crops
- Pests of commercial material



- Pests of valuable crops
- Pests of commercial material
- Vectors for plant and animal disease

Oriental Rat Flea



CDC, WHO, 2012

Tsetse Fly



Oregon State University, 2011.



J.J. Harrison, 2009

- Pests of valuable crops
- Pests of commercial material
- Vectors for plant and animal disease
- Pests that sting and bite

Giant Leopard Caterpillar



Jones, R.H., 2008

Bed Bug



Piotr Naskrecki, 2006

Alvesgaspar, 2009



- Pests of valuable crops
- Pests of commercial material
- Vectors for plant and animal disease
- Biting
- Annoyance



CBS



Gladson Machado, 2012



Ton Rulkens, 2012

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