

# Jens Mogens Olesen

## Personal information

Position: Professor emeritus  
Name: Jens Mogens Olesen  
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## Education

1977 M.Sc. (Cand. Scient.), Aarhus Univ., Plant evolutionary biology  
1984 Ph.D., Aarhus Univ., Population ecology  
1986 M.Hort. (Cand. Hort., Royal School of Agriculture, Insect ecology)

## Employment

2018– Professor Emeritus, Aarhus University.  
2010–2018 Full Professor in Ecology, Aarhus University.  
1994–2010 Associate Professor in Population ecology, Aarhus University.  
1990–1994 Assistant professor in Population ecology, Aarhus University  
1986–1990 Research manager, Danfoss  
1977–1986 Research fellow, Royal School of Education

## Awards

2000 WWW/Novozymes Biodiversity Award.  
2006 Charles Mercer award for best paper in ecology (*Ecological Society of America*), together with J. Bascombe & P. Jordano.

## Research skills and experience

### ● Research fields:

- *Island ecology*: Studies of the dynamics of biotic interactions on islands, especially pollination.
- *Ecological network science*: Studies of ecological interaction networks.

### ● Student training (1990–2018):

8 Postdocs/15 PhD students/ 1 Marie Curie stipend/~150 MSc students/~100 BSc students. p.t. co-supervisor of one Portuguese PhD-student and one Spanish.

### ● Member of European Research Council board 26, Bruxelles 2016–2020 (Ecology & Evolution)

## ● Projects

- Island biology: Studies of the dynamics of biotic interactions on islands.
  - A) Frugivory in Tenerife and continental Europe (co-supervision of PhD-student Sara Mendes, Univ. Coimbra, main supervisor Ruben Heleno and Manuel Nogales, CSIC-IPNA).
  - B) Pollination of Canary red-flowered Lotus by birds and lizards (coll. with Alfredo Valido PI, CSIC-IPNA, Tenerife).
  - C) General database construction of all mutualistic interactions on the Canary Islands (coll. with Alfredo Valido PI, CSIC-IPNA, Tenerife).
- Ecological network science: Studies of ecological interaction networks, including all kinds of interactions between species and individuals.
  - D) Hierarchical network theory (coll. with Markus Sydenham, PI, Oslo Univ., and Yoko Dupont, Aarhus Univ.).
  - E) Urban bee-flower networks and their beta diversity (coll. with Yoko Dupont, PI, Aarhus Univ.).

## ● Principal publications

Publication statistics: ~200 peer-reviewed publications, ~100 popular papers and books  
~15.300 citations/h-index 58 (*Web of Science*)–April 2024  
~24.600 citations/h-index 72 (*Google Scholar*)– April 2024

## ● Principal publications

- Dupont, Y. L., Madsen, H. B., Greve, M. B., Rasmussen, C., Timetéó, S. & **Olesen, J. M.** *in press*. Structure of a metacommunity of urban bees: Species diversity and spatio-temporal modularity. *Basic and Applied Ecology*.
- Delmas, E., Besson, M., Brice, M., Burkle, L., Riva, G., Fortin, M., Gravel, D., Guimarães, P., Hembry, D., Newman, E., **Olesen, J. M.**, Pires, M., Yeakel, J., Poisot, T. 2019. Analyzing ecological networks of species interactions. *Biological Reviews* 94: 16-36.
- Kantsa, A., Raguso, R. A., Dyer, A. G., **Olesen, J. M.**, Tscheulin, T., Petanidou, T. 2018. Disentangling the role of floral sensory stimuli in pollination networks. *Nature Communications* DOI: 10.1038/s41467-018-03448-w.
- **Olesen, J. M.**, Damgaard, C., Fuster, F., Heleno, R., Nogales, M., Rumeu, B., Trøjelsgaard, K., Vargas, P., Traveset, A. 2018. The disclosure of the double role of birds in the Galápagos. *Scientific Reports* 8: 57.
- Galetti, M., Moleón, M., Jordano, P., Pires, M. M., Guimaraes Jr, P. R., Pape, T., Nichols, E., Hansen, D., **Olesen, J. M.**, Munk, M., Mattos, J., Schweiger, A., Owen-smith, N., Johnson, C.,

- Marquis, R., Svenning, J. 2017. Ecological and evolutionary legacy of megafauna extinctions. *Biological Reviews* 10.1111/brv.12374.
- Kantsa, A., Raguso, R. A., Dyer, A. G., Sgardelis, S. P., **Olesen, J. M.**, Petanidou, T. 2017. Community-wide integration of floral colour and scent in a Mediterranean scrubland. *Nature Ecology & Evolution* DOI: 10.1038/s41559-017-0298-0.
  - Kaiser-Bunbury, C. N., Mougil, J., Whittington, A. E., Valentin, T., Gabriel, R., **Olesen, J. M.**, Blüthgen, N. 2017. Ecosystem restoration strengthens pollination network resilience and function. *Nature* 542: 223-227.
  - Toju, H., Yamamichi, M., Guimaraes Jr, P. R., **Olesen, J. M.**, Mougi, A., Yoshida, T., Thompson, J. N. 2017. Coevolutionary networks in metacommunities. *Nature Ecology & Evolution* 1. Article 0024.
  - Toju, H., Guimarães Jr, P. R., **Olesen, J. M.**, Thompson, J. N. 2015. Below-ground plant-fungus network topology is not congruent with above-ground plant-animal network topology. *Science Advances* 1:e1500291.
  - Traveset, A., **Olesen, J. M.**, Nogales, M., Vargas, P., Jaramillo, P., Antolín, E., Trigo, M., Heleno, R. 2015. Bird-flower visitation networks in the Galápagos unveil a widespread interaction release. *Nature Communications* 6. Article 6376.
  - Toju, H., Guimaraes, P. R., **Olesen, J. M.**, Thompson, J. N. 2014. Assembly of complex plant-fungus networks. *Nature Communications* 5: 5273.
  - **Olesen, J. M.**, Dupont, Y. L., O'Gorman, E., Ings, T. C., Layer, K., Melian, C. J., Trøjelsgaard, K., Pichler, D., Rasmussen, C., Woodward, G. (2010). From Broadstone to Zackenbergl: space, time, and hierarchies in ecological networks. *Advances in ecological research* 42: 1-69).
  - **Olesen, J. M.**, Bascompte, J., Dupont, Y. L., & Jordano, P. 2007. The modularity of pollination networks. *Proceedings of the National Academy of Sciences, U.S.* 104: 19891-19896.
  - Bascompte, J., Jordano, P. & **Olesen, J. M.** 2006. Asymmetric coevolutionary networks facilitate biodiversity maintenance. *Science* 312: 431-433.
  - Bascompte, J., Jordano, P., Melián, C. J., & **Olesen, J. M.** 2003. The nested assembly of plant-animal mutualistic networks. *Proceedings of the National Academy of Sciences, U.S.* 100: 9383-9387.