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2022

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Uiterwaal, Stella; Lagerstrom, Ian T.; Lyon, Shelby R.; and DeLong, John, "ForAGE database: A compilation of functional responses for consumers and parasitoids" (2022). *Faculty Publications in the Biological Sciences*. 968.

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# FoRAGE database: A compilation of functional responses for consumers and parasitoids

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## Funding information

James S. McDonnell Foundation; National Science Foundation, Grant/Award Number: DGE-1610400; United States-Israel Binational Science Foundation, Grant/Award Number: 2014295

**Handling Editor:** William K. Michener

## Abstract

Functional responses, the relationships between consumer foraging rate and resource (prey) density, provide key insights into consumer–resource interactions while also being a major driver of population dynamics and food web structure. We present a global database of 2598 standardized functional responses and parameters extracted from the published literature. We refit the functional responses with a Type II model using standardized methods and report the fitted parameters along with data on experimental conditions, consumer and resource taxonomy and type, as well as the habitat and dimensionality of the foraging interaction. The consumer and resource species covered here are taxonomically diverse, from protozoans filtering algae to wasps parasitizing moth larvae to wolves hunting moose. The FoRAGE (Functional Responses from Around the Globe in all Ecosystems) database (doi: 10.5063/DB807S) is a living data set that will be updated periodically as new functional responses are published. Data are released under a CC-BY-NC-SA license, and credit should be given to this paper when referring to this specific version of the data release.

## KEYWORDS

consumer–resource interactions, functional response, parasitism, predation, predator–prey, species interactions


## CONFLICT OF INTEREST

The authors declare no conflict of interest.

## DATA AVAILABILITY STATEMENT

Data and code are provided as Supporting Information. Data are also available in the Knowledge Network for Biocomplexity at <https://doi.org/10.5063/DB807S>, and code is also available in Zenodo at <https://doi.org/10.5281/zenodo.5979425>.

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## SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

**How to cite this article:** Uiterwaal, Stella F., Ian T. Lagerstrom, Shelby R. Lyon, and John P. DeLong. 2022. “FoRAGE Database: A Compilation of Functional Responses for Consumers and Parasitoids.” *Ecology* 103(7): e3706. <https://doi.org/10.1002/ecy.3706>