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Food web including metazoan parasites for a brackish shallow water ecosystem in Germany and Denmark

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Abstract. This data set presents a food web for the Flensburg Fjord, a brackish shallow water inlet on the Baltic Sea, between Germany and Denmark. The system has a benthic and shallow water pelagic component. This food web has two noteworthy attributes: (1) inclusion of metazoan parasites and other infectious agents and (2) inclusion of ontogenetic stages of parasites with complex life cycles. Data on the free-living assemblages and parasitism were gathered during original field sampling and supplemented with information from additional published sources and local expert knowledge. Taxonomic resolution is generally high, although some functional or taxonomic groups (e.g., phytoplankton, macroalgae, and several groups of birds) are lumped into single nodes. Each ontogenetic stage of parasites with complex life cycles is treated separately and coded accordingly. For each node, we have included additional information such as taxonomy, life history, residency, and seasonality. Further, for each link, we define a specific interaction type. The web contains 180 nodes, 123 species/assemblages, and 1577 realized links. Of the 123 species/assemblages, 6 are basal, 70 are free-living, and 45 are infectious. We present the data and metadata in the system-neutral format standardized by R. F. Hechinger and colleagues, and thus we recognize variables that are not represented in our data set but may be added by further study.

Key words: brackish; complex life cycles; consumer–resource; Flensburg Fjord; food webs; infectious agents; inlet; parasites; shallow water; trematodes; trophic interactions.

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