

Food web including infectious agents for a California freshwater pond

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Abstract. This data set presents a comprehensive food web for Quick Pond, a northern California pond ecosystem. The web includes organisms from all regions of the pond (i.e., littoral, limnetic, profundal, and benthic zones) as well as terrestrial organisms that interact with the aquatic community or have aquatic life-stages. The food web has three attributes that are often omitted from freshwater food webs: inclusion of (1) parasites and other infectious agents, (2) ontogenetic stages of most animals with complex life cycles, and (3) biomass information for many animals. Data on species presence was obtained over three years using field sampling techniques (i.e., seine- and D-nets, stove-pipe samplers, and visual encounter surveys) and laboratory examinations of free-living organisms for infectious agents (primarily metazoan parasites, but also some microbes). We collected body size and biomass data for abundant aquatic animals >1 mm and for trematode parasites, which were the most abundant parasitic group. Information on trophic interactions was obtained from direct observations and published literature sources. Within the food-web data we include supporting information for each node on taxonomy, lifestyle, and residency; and for each link we include information on type of interaction and the source of evidence (e.g., direct observation, literature, or inferred). The food web contains 113 nodes, 1905 links, and 63 species. To facilitate comparisons between food webs from different ecosystems we present the data in a system-neutral format.

Key words: *biomass; complex life cycles; food webs, freshwater; infectious agents; parasites; pond; Quick Pond; trophic interactions; wetland.*

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