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Glenn Ledder* (gledder@math.unl.edu), Department of Mathematics, 203 Avery Hall,
University of Nebraska-Lincoln, Lincoln, NE 68858-0130, and **J David Logan.** *Predator-prey
interaction in a size-structured model.*

The Holling type II functional response models the effect of predator satiation on the predation rate when prey is not scarce. Generalizing the Holling formula for the case of prey and predators structured by size is nontrivial. We derive an appropriate model equation for this case and consider its implications. (Received September 20, 2007)