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**Sara A Reynolds\*** (s-sreynol5@math.unl.edu). *Pre-Copulatory Sexual Cannibalism: effects of voracity, growth, and maturation time.* Preliminary report.

The existence of high levels of pre-copulatory sexual cannibalism in some female fishing spider species is particularly perplexing, as it poses no benefit to the male and leaves the female at risk of remaining unmated. One proposed explanation for this behavior is the aggressive spillover hypothesis, where a female's propensity to cannibalize a mate is linked to her aggression towards prey. Higher levels of aggression lead to higher food consumption rates, larger adult size, and lower mating rates, a trade-off in fitness. We compare a model of the aggressive spillover hypothesis with another model that includes effects of food consumption on maturation time. We find optimal aggression levels and evolutionary stable strategies for each model, allowing a comparison of the effects of growth and maturation time on the frequency of pre-copulatory sexual cannibalism. (Received September 16, 2014)