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Katie Storey* (storeyk@carleton.edu), **May Boggess** and **Jay Walton**. *Eradicating Invasive Species through Sex Reversal*. Preliminary report.

An invasive species causes harm to the habitat in which it resides, and the Trojan Y Chromosome Model is a potential method for eradicating invasive species of fish. Feminized YY Supermales of the targeted invasive species are added to an ecosystem, causing the female XX fish to decrease in population until they reach a specified level. If the level of female fish is low enough when the addition of feminized supermales stops, the species will die out. An ordinary differential equation model, a stochastic model, and a spatial model were used to determine the level of female fish necessary to ensure the eradication of the species. (Received August 25, 2011)