The following supplement accompanies the article

Preference of invasive lionfish and native grouper between congeneric prey fishes

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Table S1. Quasi-Akaike Information Criterion (QIC) values of full and reduced Generalized Estimating Equation (GEE) models, where full models include all interactions among explanatory variables and reduced models are additive models. QIC values in bold and asterisked (*) are the lower QIC values between the full and reduced models of each response variable.

Response variable	Full GEE model	QIC values	
		Full model	Additive model
Initial preference *basslet species*	~ Predator size x Predator species	103.324	**101.286***
Initial preference *basslet size*	~ Predator size x Predator species	**134.34***	135.98
Number of strikes *basslet species*	~ Predator size x Predator species x Basslet size	**320.07***	321.91
Number of strikes *basslet size*	~ Predator size x Predator species x Basslet size	**271.72***	303.74
Lionfish strikes *basslet size*	~ Lionfish size x Basslet size	**148.41***	159.61
Graysby strikes *basslet size*	~ Graysby size x Basslet size	123.05	**122.21***
Hunting time *basslet species*	~ Predator size x Predator species x Basslet size	**-69559.80***	-68693.87
Hunting time *basslet size*	~ Predator size x Predator species x Basslet size	**-65091.26***	-63650.07
Lionfish hunting time *basslet size*	~ Lionfish size x Basslet size	**-54905.07***	-53933.97
Graysby hunting time *basslet size*	~ Graysby size x Basslet size	**-10183.24***	-10142.15

Table S2. Results of full Generalized Estimating Equation (GEE) models of the effect of predator species (invasive lionfish and native graysby), predator size, basslet species (fairy and blackcap), and basslet size (small and large) on the overall number of strikes and hunting time of predators. Full models were selected for both response variables based on Quasi-Akaike Information Criterion (QIC) values (see Table S1). P-values indicated none of the explanatory variables nor interactions among these variables had a significant effect on the response of predators.

Response variable	Explanatory variable (from full model)	Wald $\chi 2$	p-value
Number of strikes	Predator size	0.78	0.38
	Basslet species	0.42	0.52
	Predator species	0.23	0.64
	Predator size x Basslet species	0.74	0.39
	Predator size x Predator species	0.72	0.4
	Basslet species x Predator species	0.56	0.46
	Predator size x Basslet species x Predator species	0.5	0.48
Hunting time	Predator size	0.35	0.556
	Basslet species	0.77	0.379
	Predator species	2.96	0.085
	Predator size x Basslet species	0.24	0.622
	Predator size x Predator species	0.18	0.672
	Basslet species x Predator species	2.92	0.088
	Predator size x Basslet species x Predator species	1.89	0.17

Fig. S1. Two native prey fishes used in experiment (left to right): fairy basslet (*Gramma loreto*) and blackcap basslet (*Gramma melacara*). Photo credits: Emily R. Anderson left and unknown (Google Images) right.