

Table 1: Gulf of Mexico commercial reef fish IFQ species by share category.

IFQ Share Category	Species ¹
Red Grouper (RG)	Red grouper ²
Gag (GG)	Gag ²
	Black grouper
Shallow-water	Scamp ³
Grouper (SWG)	Yellowfin grouper
	Yellowmouth grouper
	Snowy grouper
Deep-water	Speckled hind ³
Grouper (DWG)	Warsaw grouper ³
	Yellowedge grouper
	Blueline tilefish
Tilefishes (TF)	Golden tilefish
	Goldface Tilefish

¹ The following species were removed in 2012: rock hind (SWG), red hind (SWG), misty grouper (DWG), anchor tilefish (TF), and blackline tilefish (TF).

² RG or GG can be landed under multi-use allocation.

³ Flexibility measures present. Species can be landed under either SWG or DWG once all allocation is exhausted in one category.

Table 2: The number of captures and percentage for each disposition observed by the RFOP from 2010 through 2017 for GT-IFQ species by share category.

	Number Observed	Kept	Discarded	Unknown
Red Grouper	444,183	60.3%	39.7%	0.0%
Gag	19,177	71.6%	28.3%	0.0%
Shallow-water Grouper				
Scamp	14,940	94.5%	5.4%	0.1%
Black Grouper	387	91.0%	9.0%	0.0%
Yellowmouth Grouper	55	100.0%	0.0%	0.0%
Yellowfin Grouper	9	100.0%	0.0%	0.0%
Deep-water Grouper				
Yellowedge Grouper	29,503	98.7%	1.3%	0.0%
Snowy Grouper	4,804	98.1%	1.9%	0.0%
Speckled Hind	2,000	74.1%	25.9%	0.0%
Warsaw Grouper	280	97.9%	2.1%	0.0%
Tilefishes				
Golden Tilefish	33,628	81.7%	18.3%	0.0%
Blueline Tilefish	9,885	55.3%	44.7%	0.0%
Goldface Tilefish	130	39.2%	60.8%	0.0%

Table 3. The percent of deviance explained, adjusted R^2 , the area under the receiver operating characteristic curve (AUC), and significant ($P < 0.05$) variables remaining in each final logistic GAM model.

Species	Deviance Explained	Adjusted R^2	AUC	Significant Variables
Red Grouper	80.5%	0.84	0.99	Length, Allocation Bin, Year, Quarter, Gear
Gag	61.0%	0.65	0.96	Length, Allocation Bin, Year, Quarter, Gear
Black Grouper	85.6%	0.86	0.99	Length, Allocation Bin
Scamp	53.2%	0.49	0.95	Length, Allocation Bin, Year, Quarter, Gear
Snowy Grouper	18.0%	-0.05	0.90	Length, Allocation Bin, Quarter, Gear
Speckled Hind	40.4%	0.42	0.91	Length, Allocation Bin, Year, Quarter, Gear
Yellowedge Grouper	35.0%	0.23	0.90	Length, Allocation Bin, Year, Quarter, Gear
Blueline Tilefish	14.8%	0.19	0.75	Length, Allocation Bin, Year, Quarter, Gear
Golden Tilefish	38.8%	0.43	0.91	Length, Allocation Bin, Year, Quarter, Gear

Table 4. The percent of deviance explained and the AUC for each boosted logistic regression tree model.

Species	Deviance Explained	AUC
Red Grouper	82.4%	0.99
Gag	71.0%	0.97
Black Grouper	93.2%	0.97
Scamp	70.7%	0.97
Snowy Grouper	76.0%	0.97
Speckled Hind	59.5%	0.93
Yellowedge Grouper	53.6%	0.94
Blueline Tilefish	53.5%	0.92
Golden Tilefish	55.6%	0.95

Table 5. The number of discards, number of trips reporting discards, and percentage of discards for each discard reason out of the total number for each GT-IFQ species reported to the SEFSC Supplemental Discard Logbook from 2010 through 2017.

IFQ Species	Number Reported	Number of Trips	Not Legal Size	Out of Season	Other Regulation	Market Conditions
Red Grouper	458,928	4,986	94.72%	0.10%	4.50%	0.69%
Gag	37,062	2,499	55.97%	2.06%	40.73%	1.24%
Black Grouper	1,516	123	40.96%	5.80%	52.90%	0.33%
Scamp	4,077	582	65.49%	0.29%	33.80%	0.42%
Snowy Grouper	512	18	67.77%	0.00%	12.70%	19.53%
Speckled Hind	234	18	16.67%	0.85%	53.85%	28.63%
Warsaw Grouper	18	10	27.78%	0.00%	61.11%	11.11%
Yellowedge Grouper	1,066	42	45.87%	0.00%	20.36%	33.77%
Blueline Tilefish	8,999	57	0.21%	0.32%	22.78%	76.69%
Golden Tilefish	2,725	37	50.46%	0.00%	20.11%	29.43%

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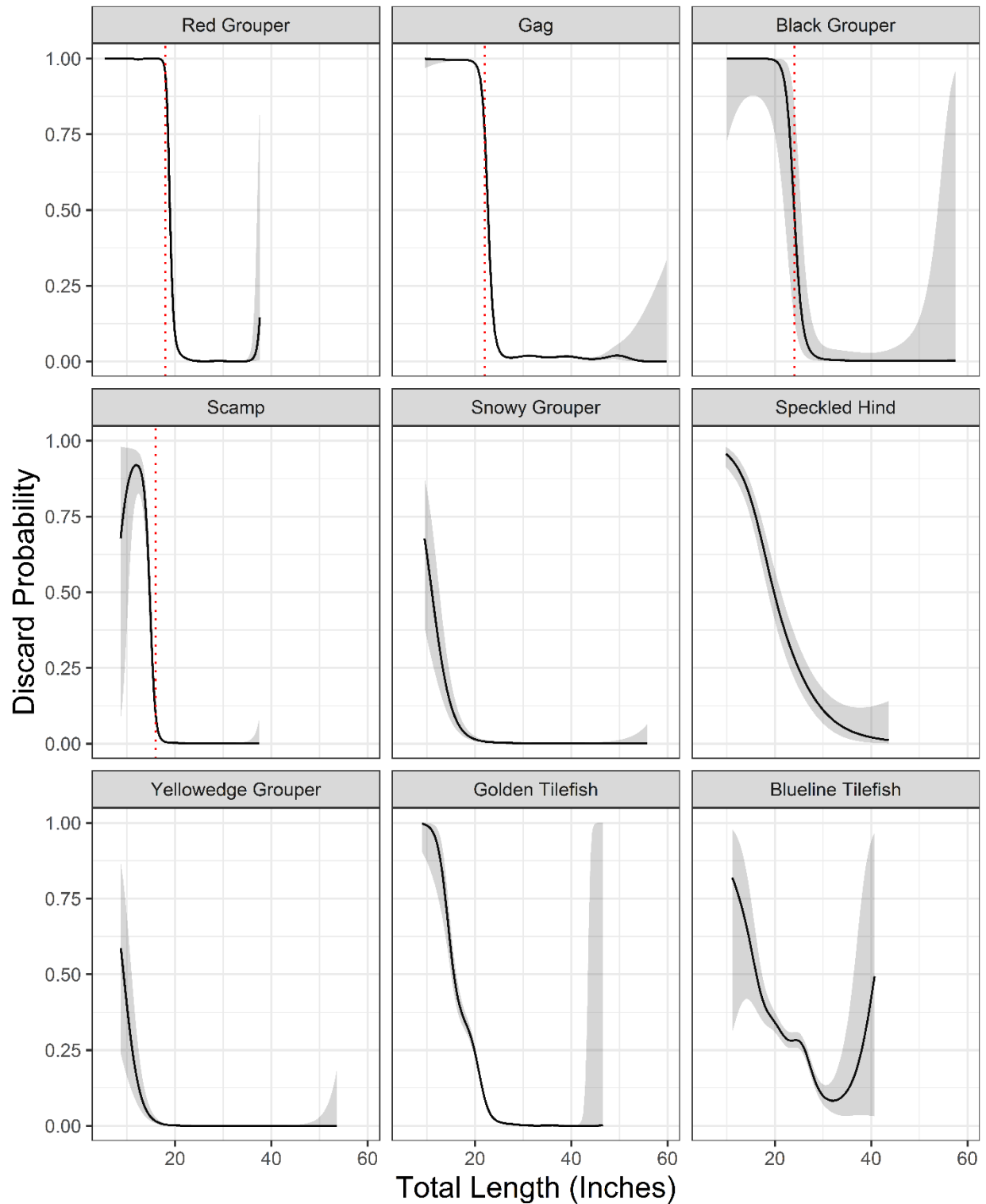


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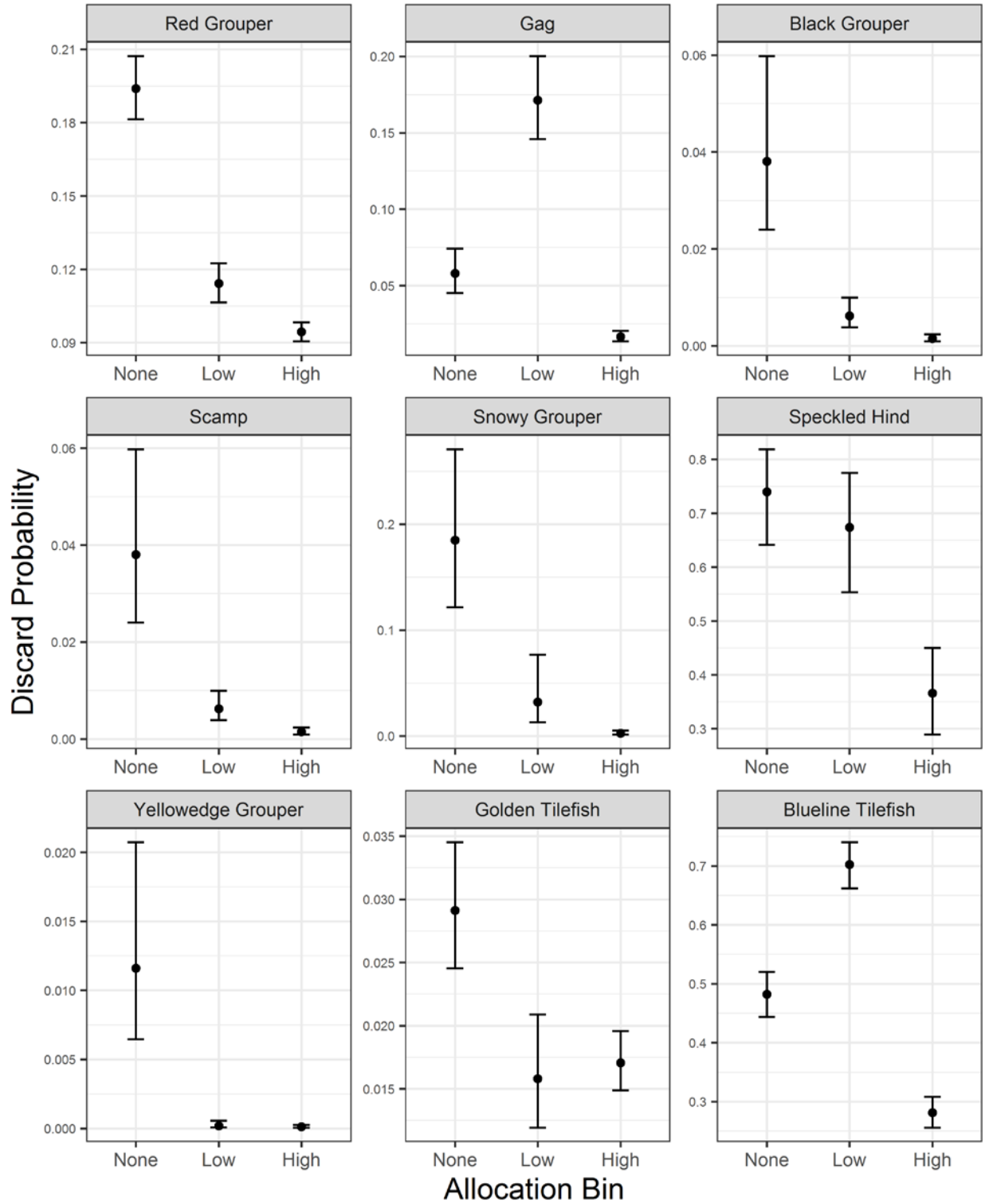


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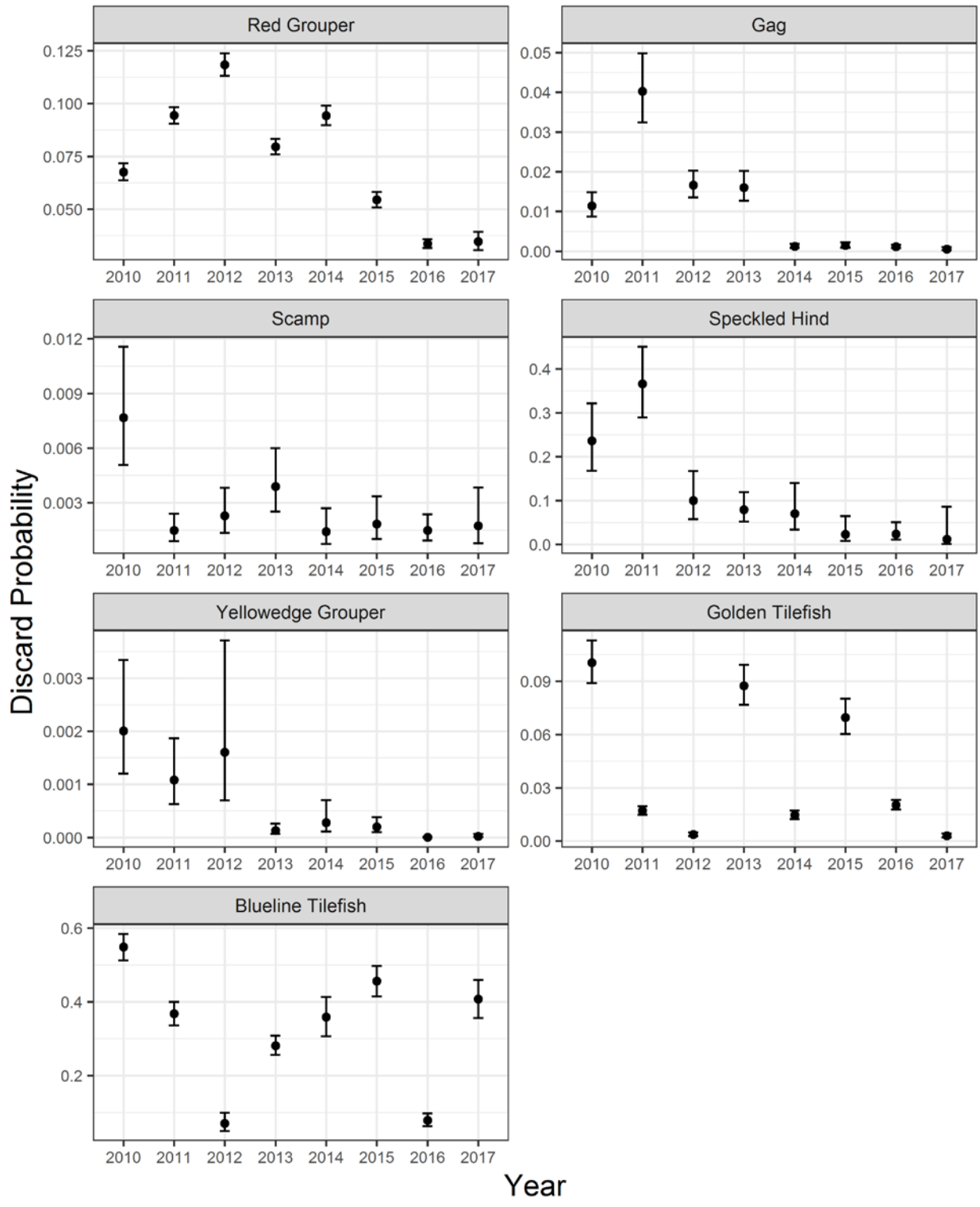


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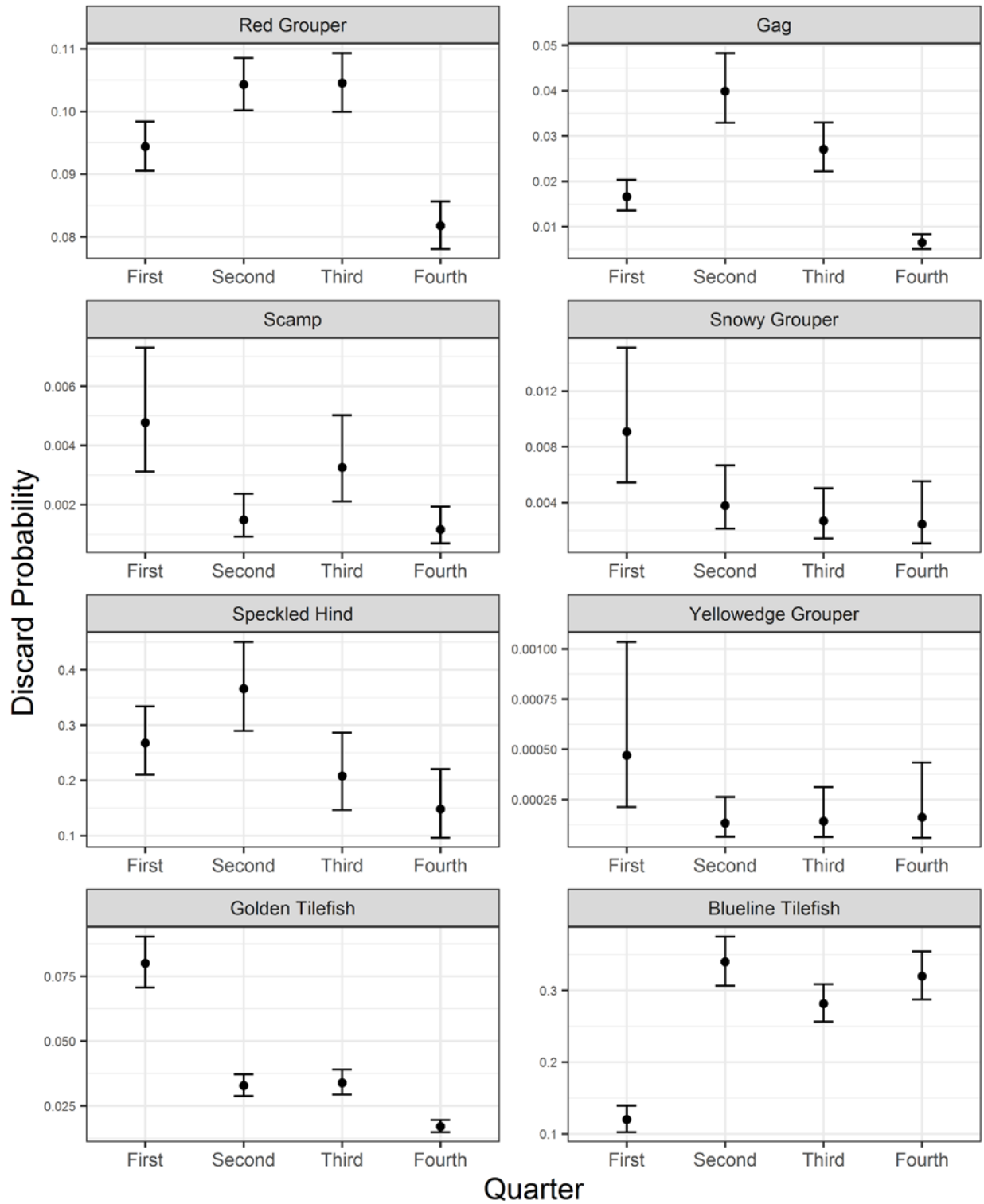


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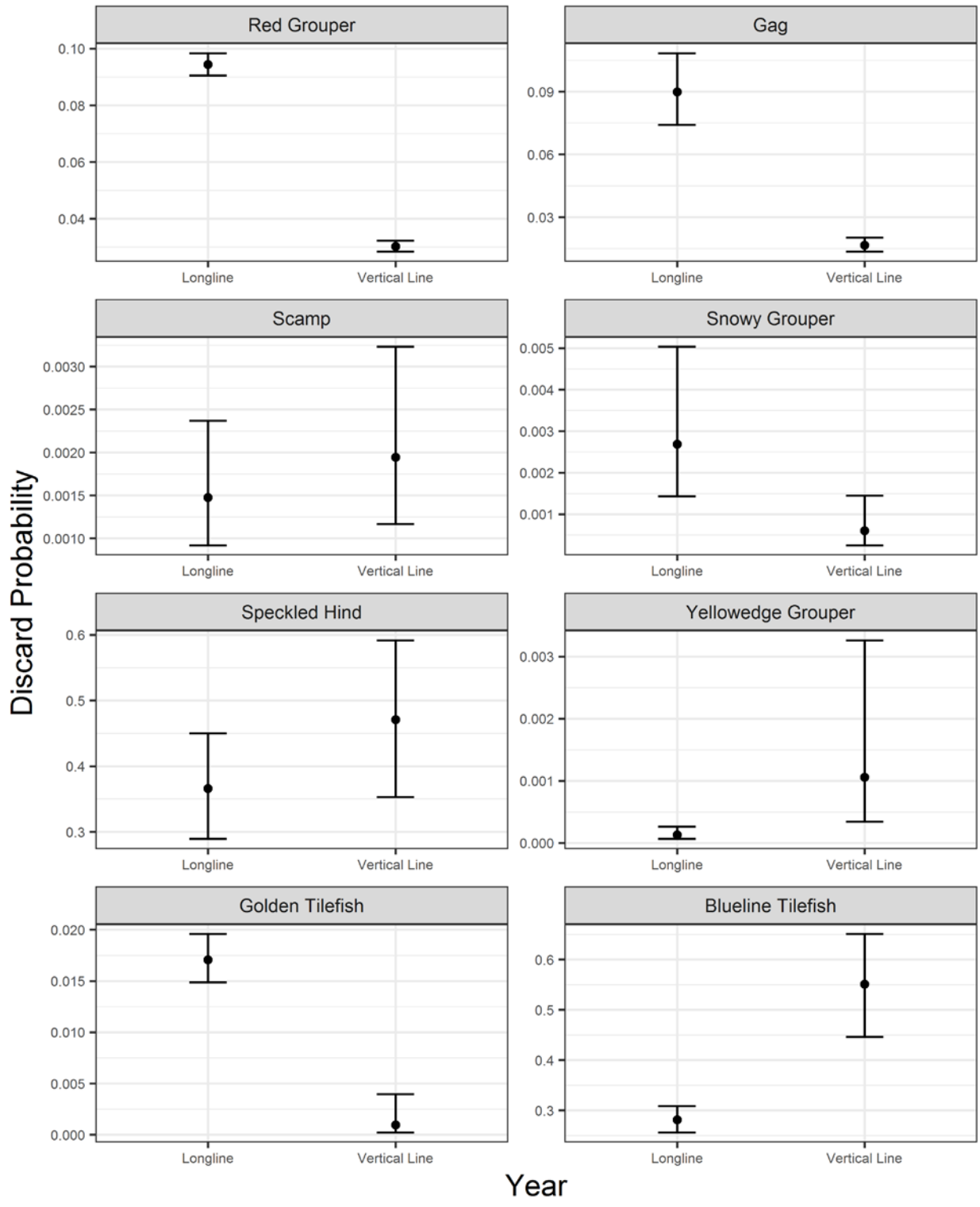


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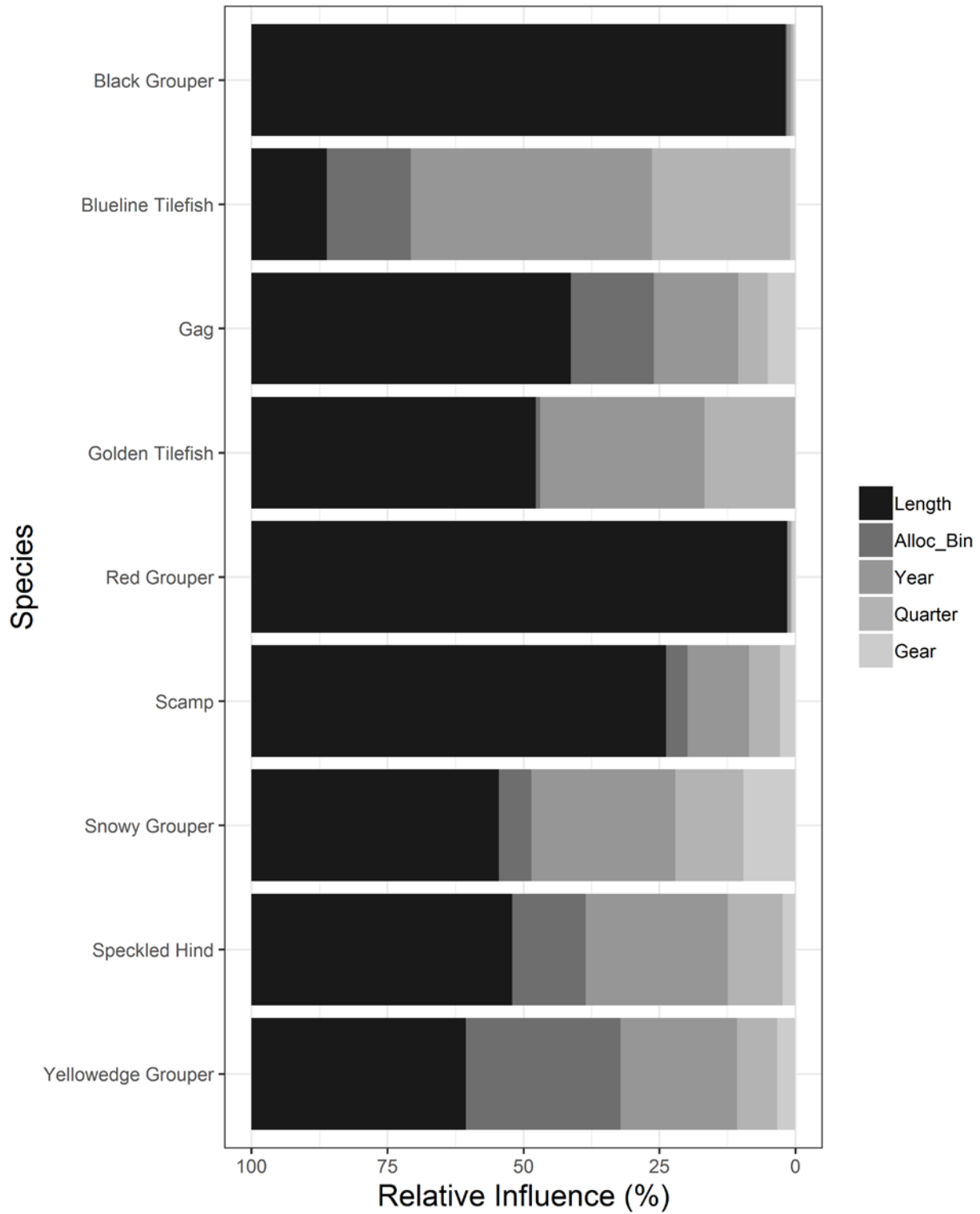


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