

Demersal Fish Feeding Habits in Borrow Pits, Dredged Channels and Shoals in Lower Bay, NY Harbor

Gary L. Ray

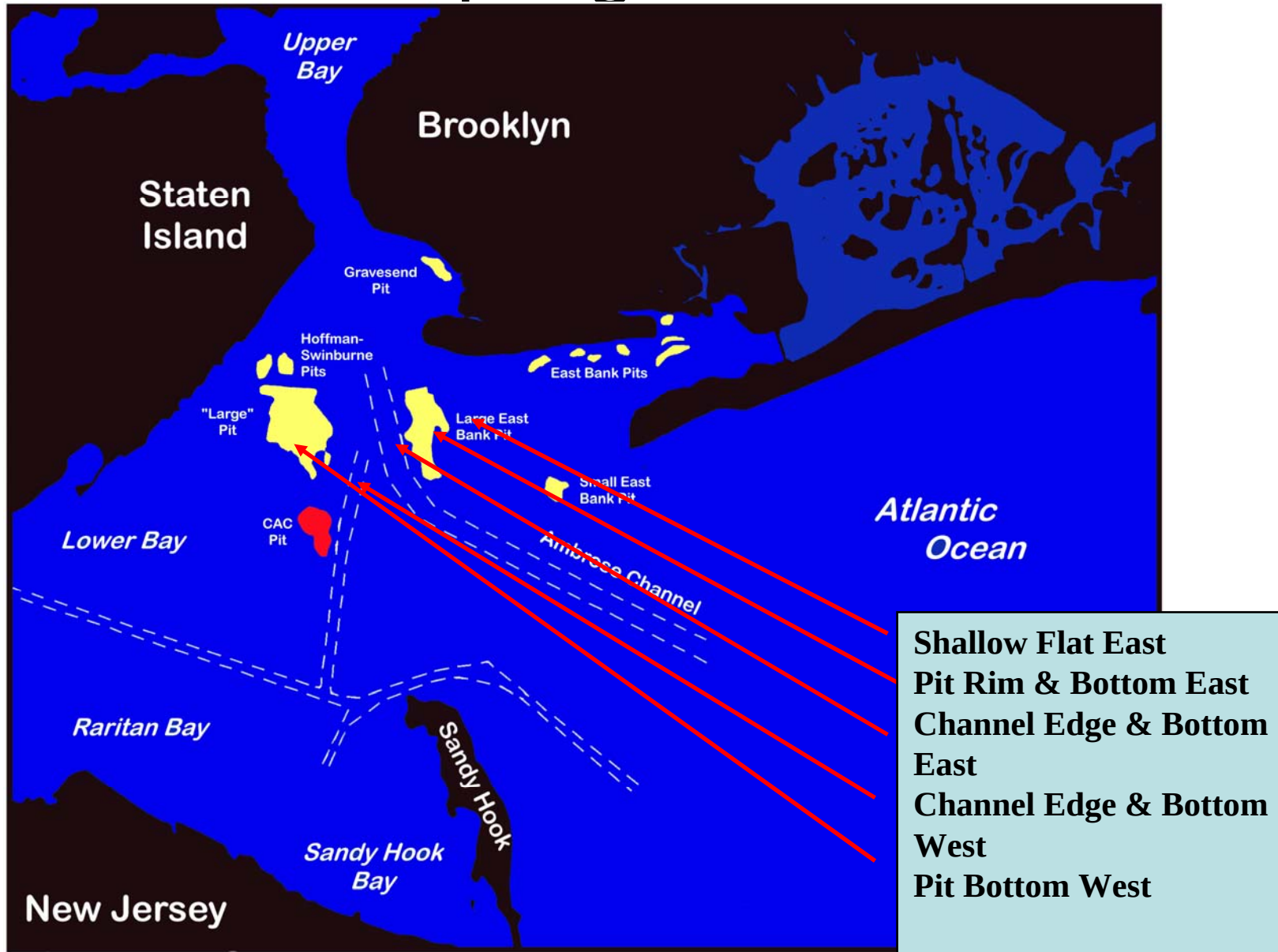
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And

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Sampling Area



Methods

- Selected demersal species were measured and their stomachs removed
- Fixed in 4% formaldehyde, then preserved in 70% ethanol
- Gut contents removed
- Volume of individual prey items estimated by grid count method



Sites

- SF Shallow Flat
- PR Pit Rim
- PB Pit Bottom
- CE Channel Edge
- MC Mid Channel
- E East
- W West

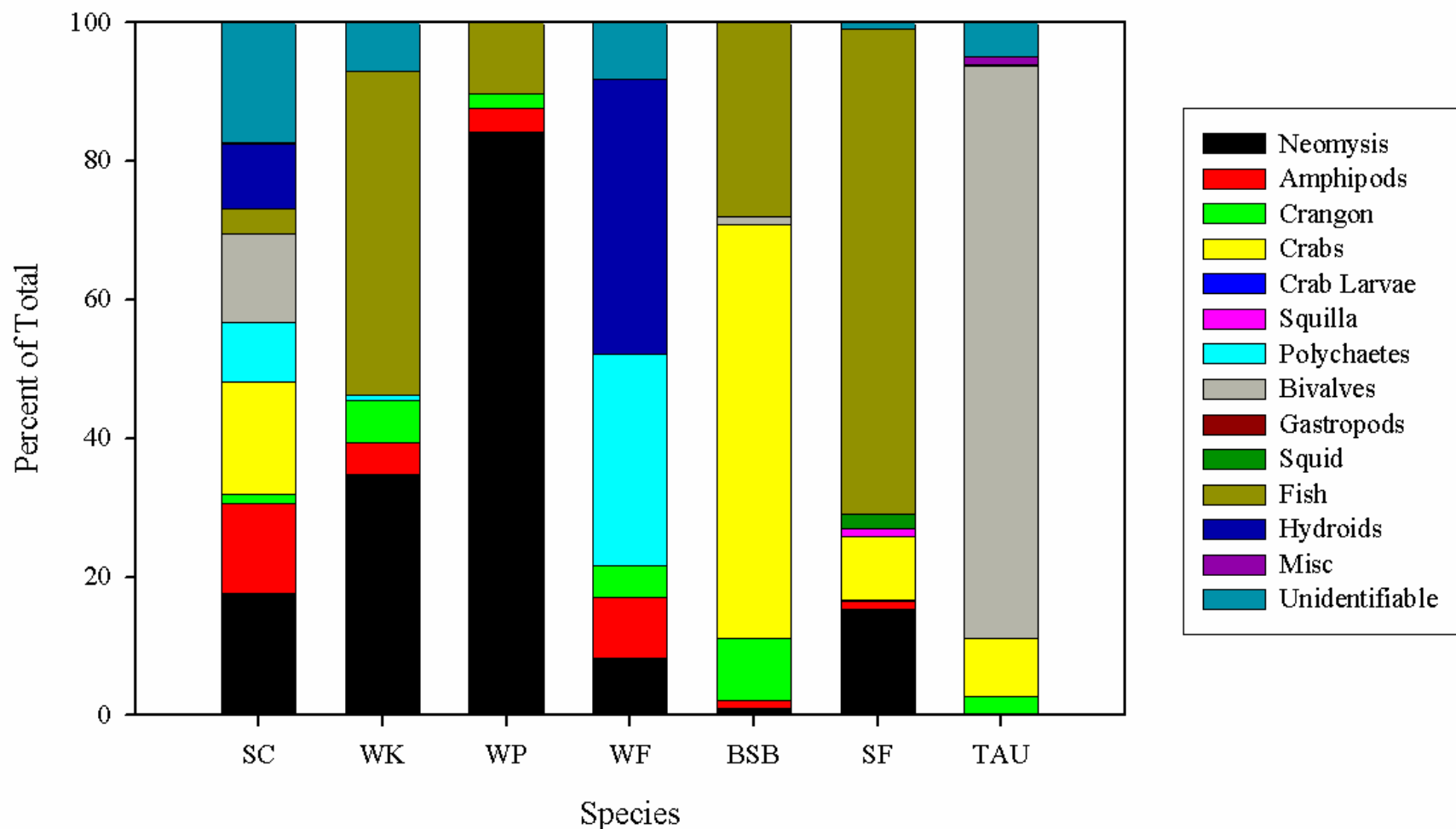
Taxa Examined

• Scup	515
• Weakfish	183
• Summer Flounder	85
• Windowpane	51
• Black Seabass	28
• Tautog	17
• Winter Flounder	12

Species Distribution by Site

Species	Size (mm)	S F E	P R E	P B E	C E E	M C E	S F W	P B W	C E W	M C W	Total
Scup	30-60	21	21	36	11	61	24	25	12	1	212
	61-90	28	28	6	3	30	38	25	5	3	166
	>90	6	3	29	9	71	10	2	3	4	137
Weakfish	50-75							50		1	51
	>75							95		37	132
Summer Flounder	<400	3	7	16	5	14	3	4	4	6	62
	>400	1	2	11	1	1		3		4	23
Windowpane			1	8	9	23				10	51
Black Sea Bass		1	1	2	2		16	2	1	3	28
Tautog						8			9		17
Winter Flounder				2	2	6		1		1	12

Comparison of Fish Feeding Habits

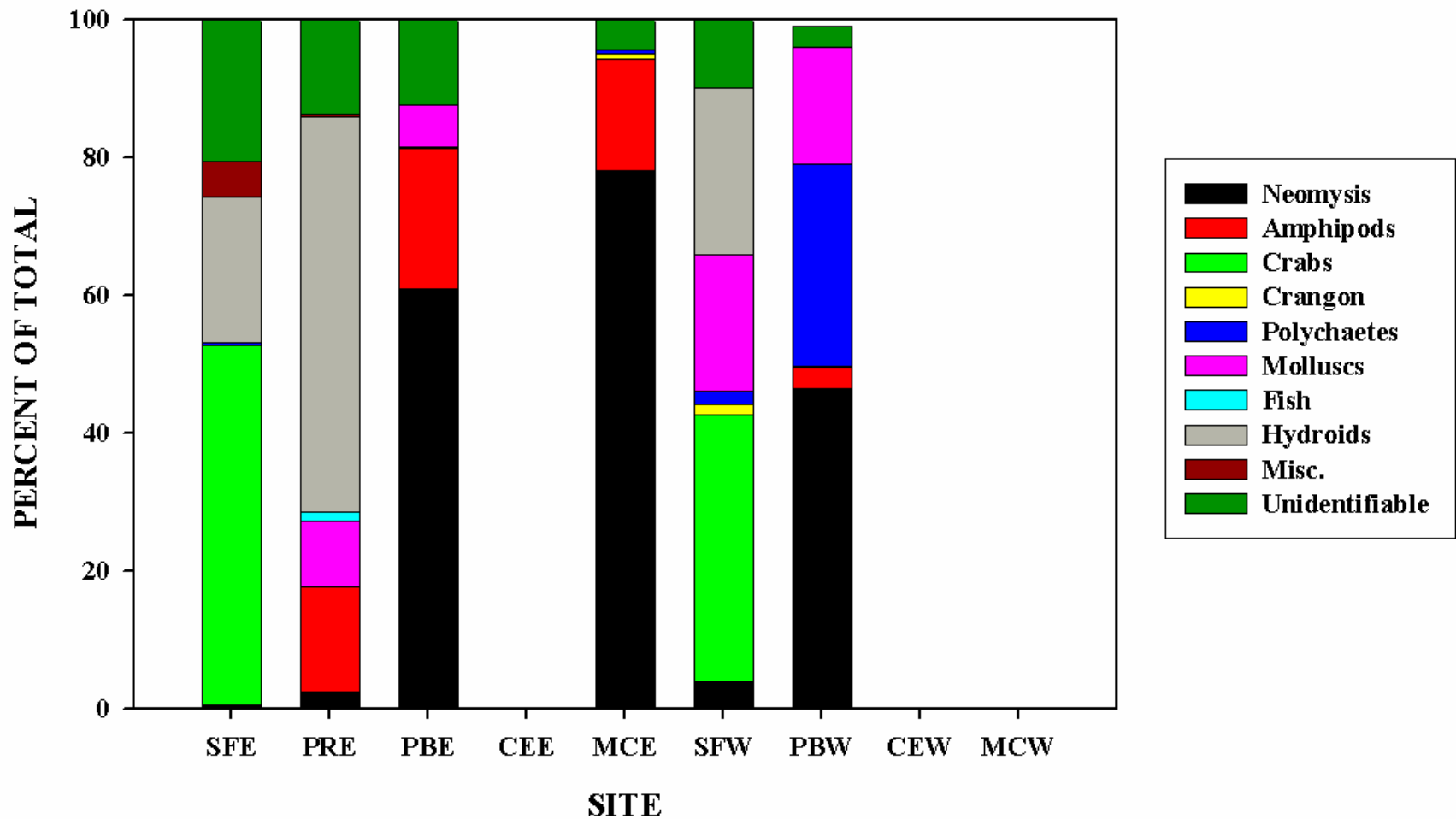


SC = Scup; WK = Weakfish; WP Windowpane; WF = Winter Flounder
BSB = Black Seabass; SF = Summer Flounder; TAU = Tautog

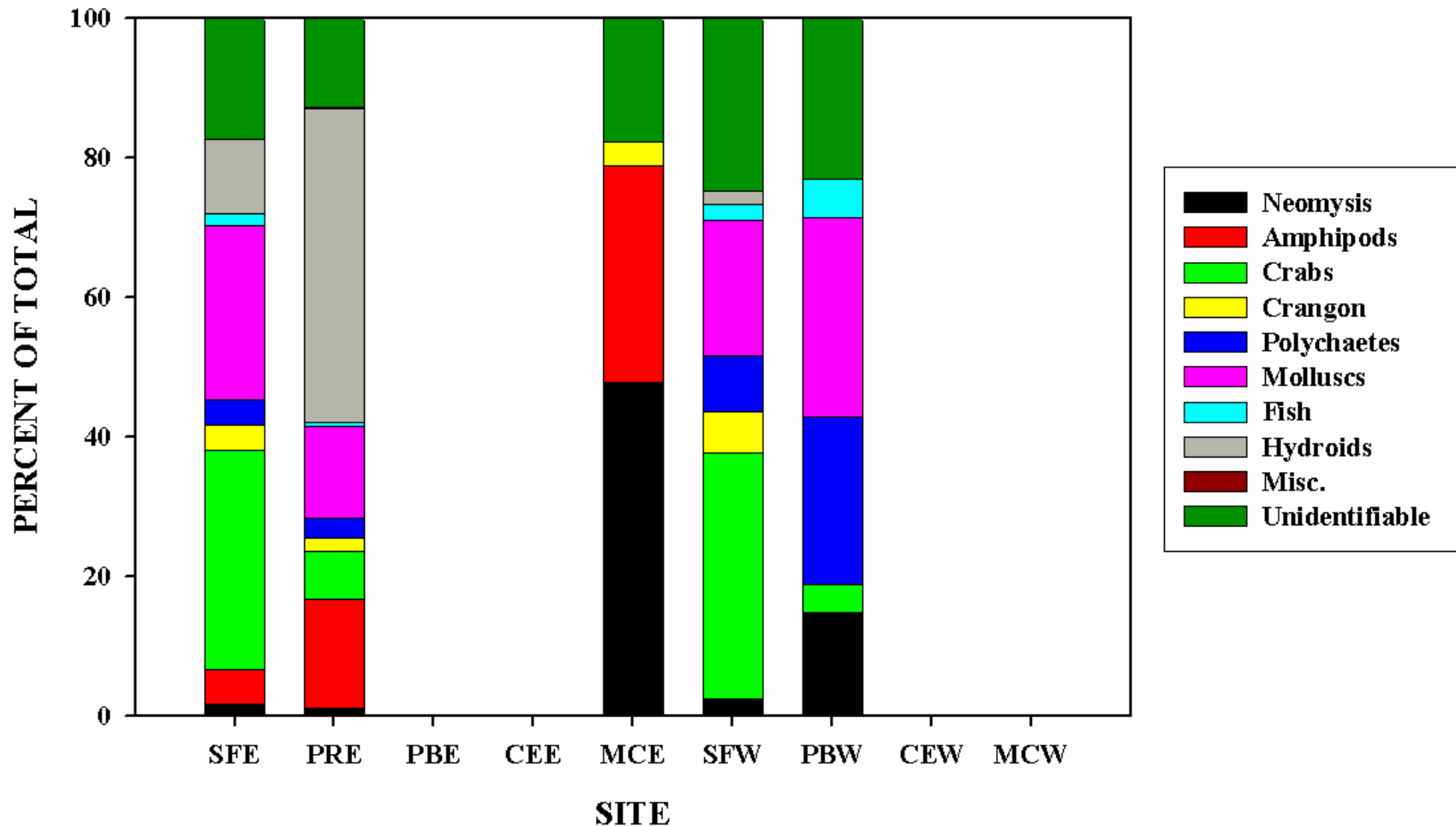
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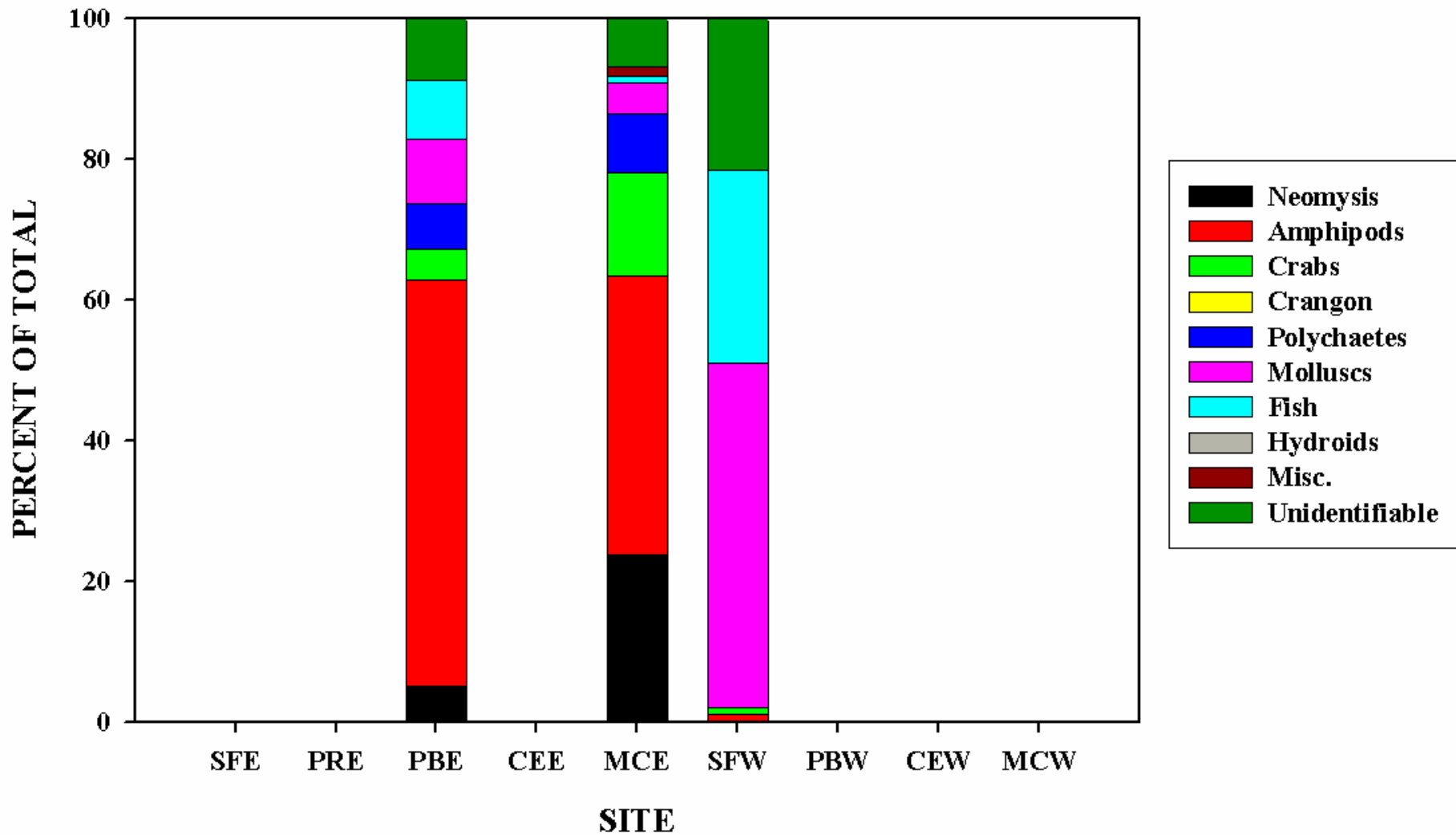
Scup Size Class 1 (30-50 mm)



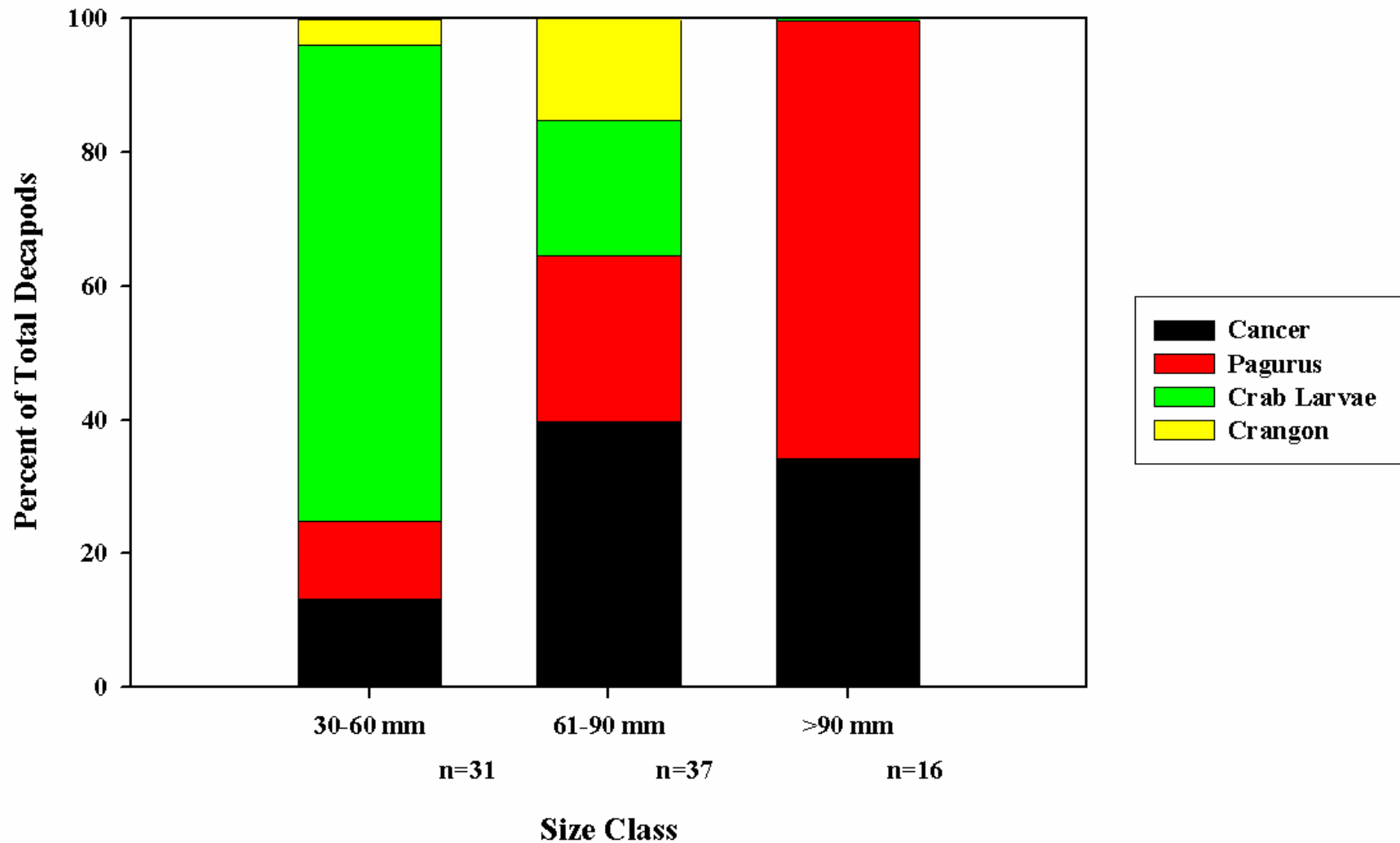
Scup Size Class 2 (60-90 mm)



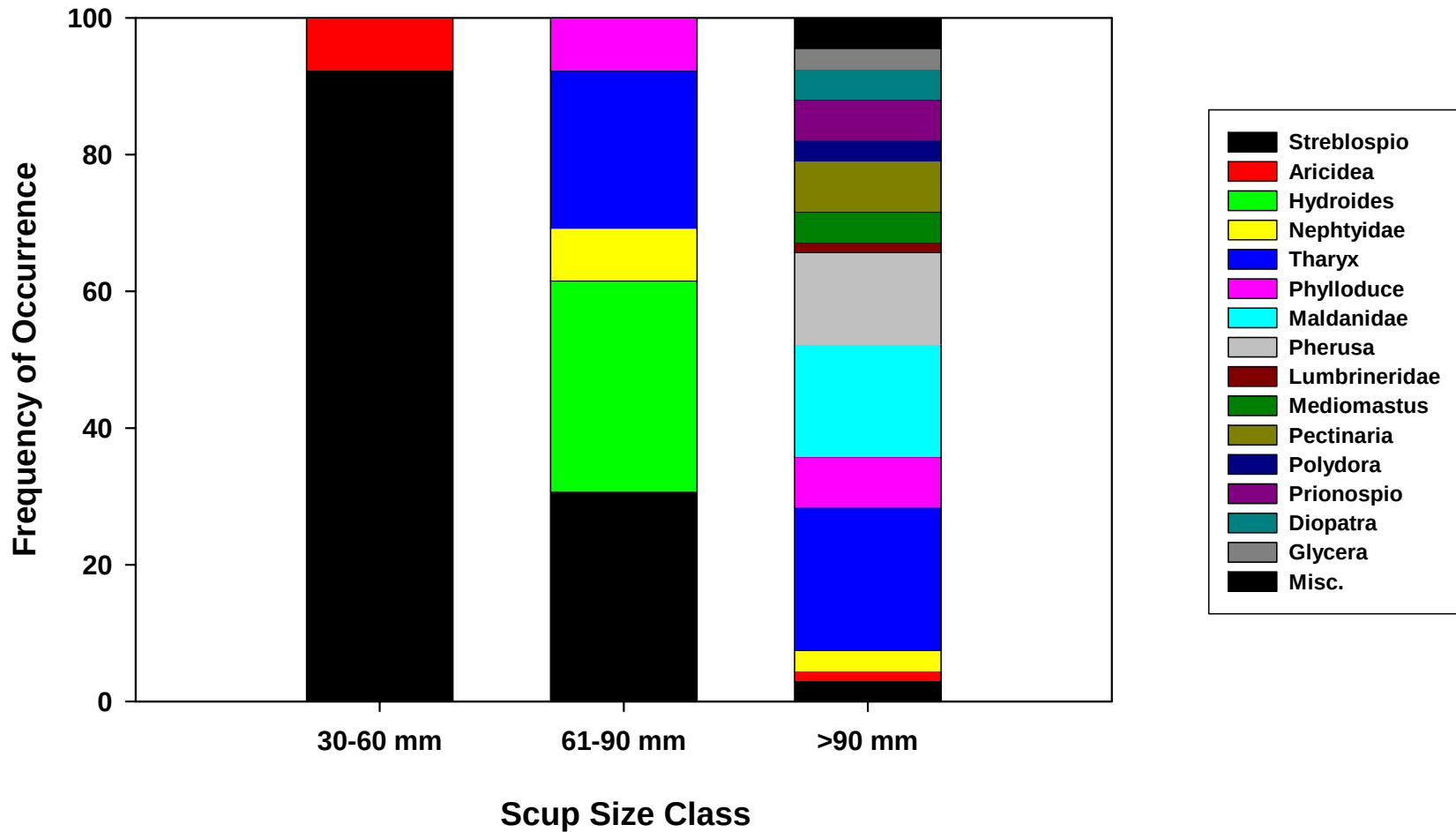
Scup >90 mm



Scup – Crabs in Diet



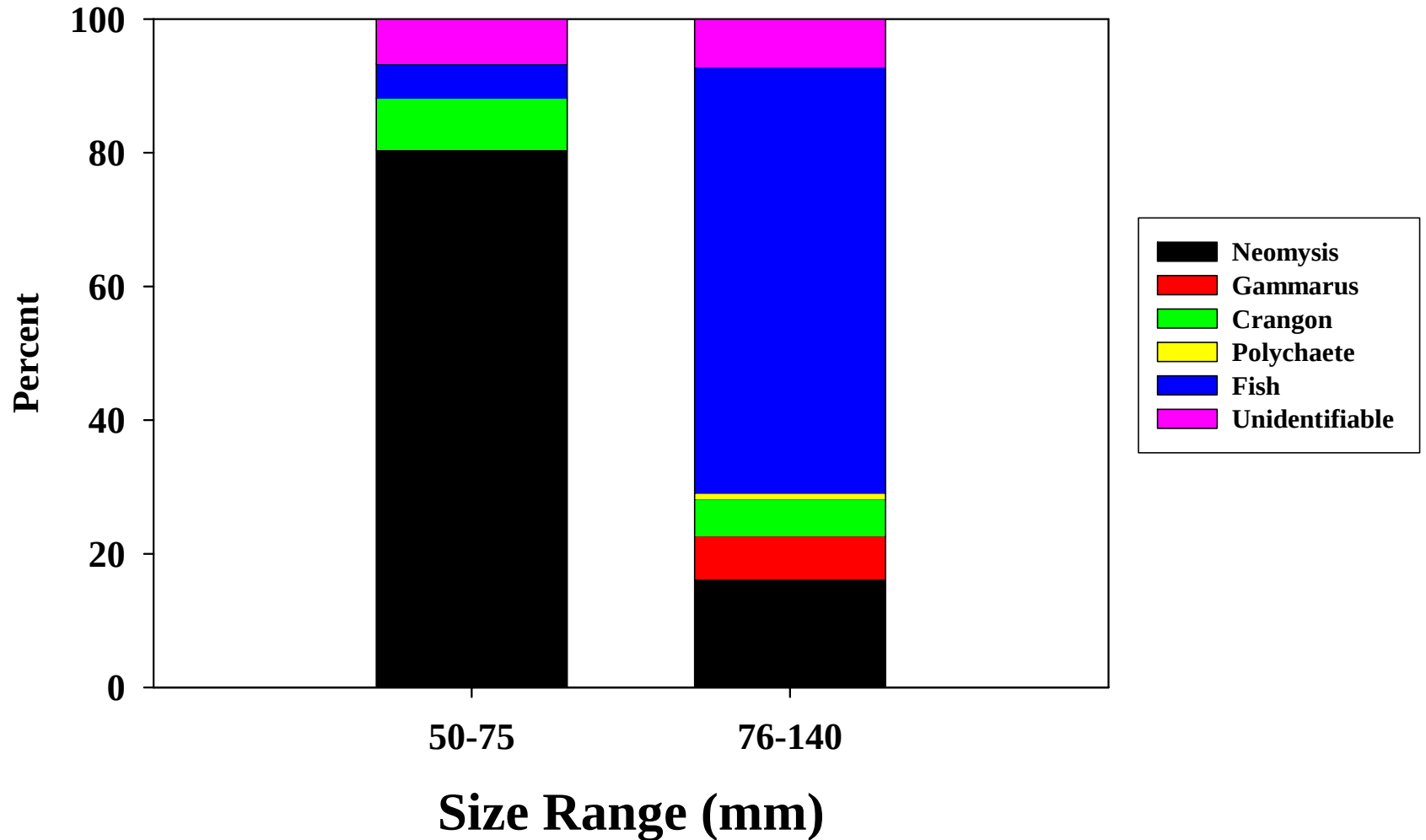
Scup – Polychaetes in Diet



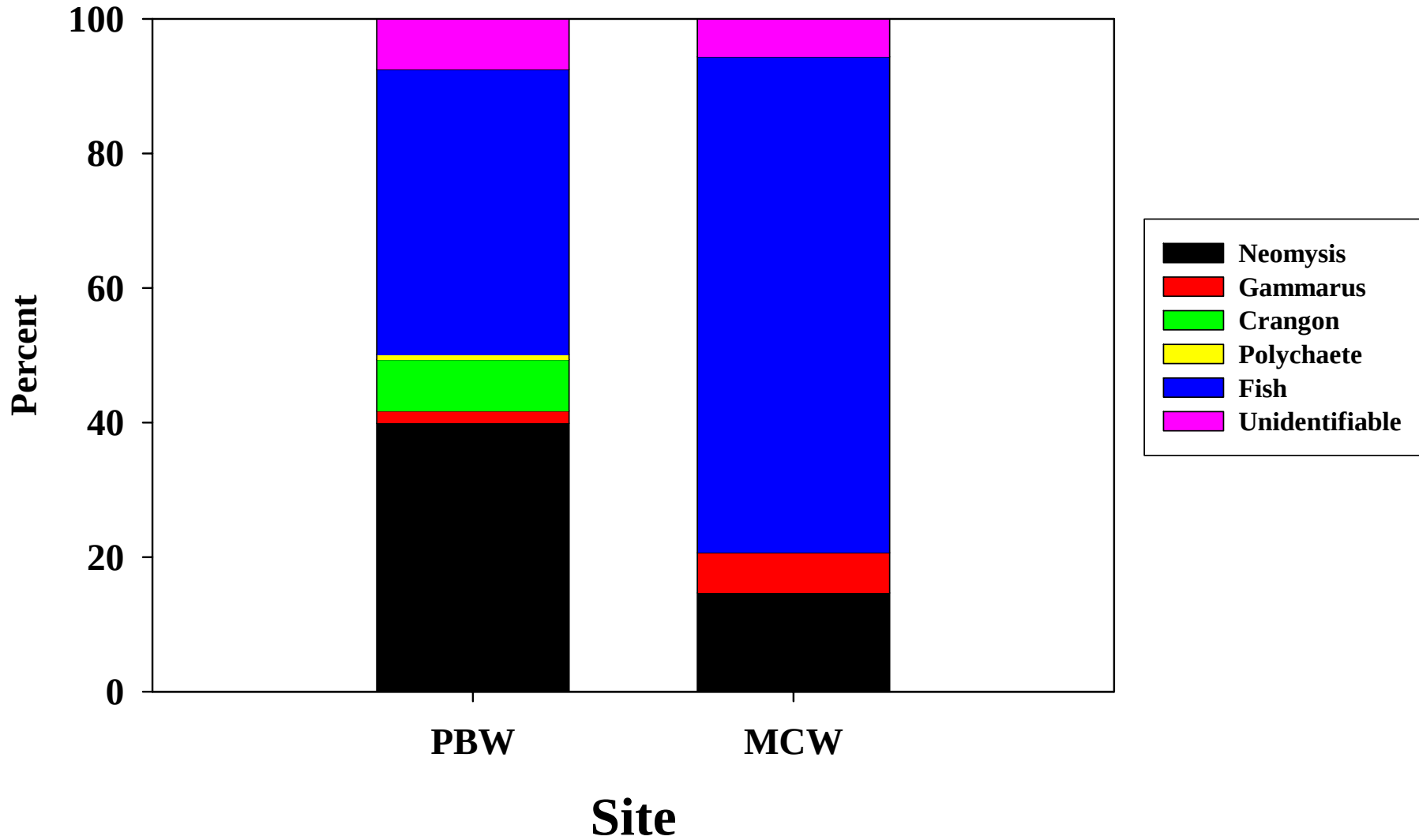
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Weakfish - Size



Weakfish - Site



Conclusions

- Species feeding habits similar to previous reports
- Differences in feeding habits among different size ranges similar to previous reports (e.g. Scup)
- Scup diet varies among shallow and deep habitats especially in Size Class 1 (30-50 mm)