

**APPENDIX D**

**GILLNET**



Table D-1. Combined two-year seasonal percent frequency of occurrence for all species collected in gillnets at four shoals and four reference sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. Ref – All reference sites combined. Shoal – All shoal sites combined.

Scientific Name	Common Name	Fall		Winter		Spring		Summer	
		Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal
<i>Alosa pseudoharengus</i>	Alewife			0.06	0.06				
<i>Alosa sapidissima</i>	American shad					0.13			
<i>Sarda sarda</i>	Atlantic bonito					0.06			
<i>Micropogonias undulatus</i>	Atlantic croaker							0.38	
<i>Scomber scombrus</i>	Atlantic mackerel								0.06
<i>Brevoortia tyrannus</i>	Atlantic menhaden					0.31	0.44	0.19	
<i>Cancer irroratus</i>	Atlantic rock crab	0.13		0.13	0.06				
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark							0.25	0.56
<i>Centropristis striata</i>	Black sea bass					0.06			
<i>Alosa aestivalis</i>	Blueback herring	0.06							
<i>Pomatomus saltatrix</i>	Bluefish	0.25	0.38	0.06		0.06		0.19	0.25
<i>Myliobatis freminvillei</i>	Bullnose ray							0.06	
<i>Peprilus triacanthus</i>	Butterfish	0.06				0.06		0.19	0.06
<i>Raja eglanteria</i>	Clearnose skate						0.13		0.06
<i>Ovalipes stephensoni</i>	Coarsehand lady crab								0.06
<i>Rachycentron canadum</i>	Cobia							0.06	0.06
<i>Rhinoptera bonasus</i>	Cownose ray								0.06
<i>Carcharhinus obscurus</i>	Dusky shark					0.13		0.31	0.31
<i>Ovalipes ocellatus</i>	Lady crab							0.06	0.06
<i>Polinices</i>	Moon snails					0.06			
<i>Menticirrhus saxatilis</i>	Northern kingfish						0.06		
<i>Syngnathus fuscus</i>	Northern pipefish			0.06					
<i>Prionotus carolinus</i>	Northern searobin					0.06		0.38	0.19
<i>Libinia emarginata</i>	Portly spider crab			0.06		0.31	0.06	0.19	0.13
<i>Carcharhinus plumbeus</i>	Sandbar shark						0.06		
<i>Mustelus canis</i>	Smooth dogfish	0.13	0.06	0.06		0.81	1.00	0.50	0.50
<i>Scomberomorus maculatus</i>	Spanish mackerel							0.25	
<i>Squalus acanthias</i>	Spiny dogfish	0.94	0.94	0.38	0.56				
<i>Leiostomus xanthurus</i>	Spot							0.06	
<i>Asteroidea</i>	Starfishes		0.25					0.06	0.13
<i>Morone saxatilis</i>	Striped bass	0.06	0.31						
<i>Prionotus evolans</i>	Striped searobin	0.06		0.06		0.25	0.44	0.25	
<i>Alopias vulpinus</i>	Thresher shark						0.06		
<i>Cynoscion regalis</i>	Weakfish	0.06						0.13	
<i>Scophthalmus aquosus</i>	Windowpane			0.06					
<i>Raja ocellata</i>	Winter skate	0.19	0.19			0.19	0.25		

Table D-2. Combined two-year seasonal percent composition for all species collected in gillnets at four shoal and four reference sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. Ref – All reference sites combined. Shoal – All shoal sites combined. A 0.00 value is < 0.005%.

Scientific Name	Common Name	Fall		Winter		Spring		Summer	
		Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal
<i>Alosa pseudoharengus</i>	Alewife			0.03	0.05				
<i>Alosa sapidissima</i>	American shad					0.03			
<i>Sarda sarda</i>	Atlantic bonito					0.00			
<i>Micropogonias undulatus</i>	Atlantic croaker							0.24	
<i>Scomber scombrus</i>	Atlantic mackerel								0.02
<i>Brevoortia tyrannus</i>	Atlantic menhaden					0.18	0.20	0.30	
<i>Cancer irroratus</i>	Atlantic rock crab	0.00		0.08	0.06				
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark							0.03	0.21
<i>Centropristis striata</i>	Black sea bass					0.01			
<i>Alosa aestivalis</i>	Blueback herring	0.00							
<i>Pomatomus saltatrix</i>	Bluefish	0.05	0.04	0.01			0.00	0.10	0.21
<i>Myliobatis freminvillei</i>	Bullnose ray							0.01	
<i>Peprilus triacanthus</i>	Butterfish	0.00				0.01		0.06	0.01
<i>Raja eglanteria</i>	Clearnose skate						0.01		0.01
<i>Ovalipes stephensoni</i>	Coarsehand lady crab								0.01
<i>Rachycentron canadum</i>	Cobia							0.00	0.01
<i>Rhinoptera bonasus</i>	Cownose ray								0.02
<i>Carcharhinus obscurus</i>	Dusky shark						0.01	0.04	0.07
<i>Ovalipes ocellatus</i>	Lady crab							0.00	0.01
<i>Polinices</i>	Moon snails					0.01			
<i>Menticirrhus saxatilis</i>	Northern kingfish						0.01		
<i>Syngnathus fuscus</i>	Northern pipefish			0.06					
<i>Prionotus carolinus</i>	Northern searobin					0.01		0.02	0.02
<i>Libinia emarginata</i>	Portly spider crab			0.01		0.06	0.00	0.01	0.02
<i>Carcharhinus plumbeus</i>	Sandbar shark						0.00		
<i>Mustelus canis</i>	Smooth dogfish	0.01	0.00	0.15		0.57	0.56	0.13	0.29
<i>Scomberomorus maculatus</i>	Spanish mackerel							0.02	
<i>Squalus acanthias</i>	Spiny dogfish	0.91	0.83	0.58	0.89				
<i>Leiostomus xanthurus</i>	Spot							0.01	
<i>Asteroidea</i>	Starfishes		0.07					0.02	0.10
<i>Morone saxatilis</i>	Striped bass	0.00	0.04						
<i>Prionotus evolans</i>	Striped searobin	0.00		0.05		0.09	0.08	0.01	
<i>Alopias vulpinus</i>	Thresher shark						0.00		
<i>Cynoscion regalis</i>	Weakfish	0.00						0.01	
<i>Scophthalmus aquosus</i>	Windowpane			0.03					
<i>Raja ocellata</i>	Winter skate	0.02	0.01			0.07	0.09		

Table D-3. Combined two-year seasonal mean CPUE for all species collected in gillnets at four shoal and four reference sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. Ref – All reference sites combined. Shoal – All shoal sites combined.

Scientific Name	Common Name	Fall		Winter		Spring		Summer	
		Ref	Shoal	Shoal	Ref	Ref	Shoal	Ref	Shoal
<i>Alosa pseudoharengus</i>	Alewife			0.02	0.01				
<i>Alosa sapidissima</i>	American shad						0.14		
<i>Sarda sarda</i>	Atlantic bonito						0.03		
<i>Micropogonias undulatus</i>	Atlantic croaker							1.99	
<i>Scomber scombrus</i>	Atlantic mackerel								0.06
<i>Brevoortia tyrannus</i>	Atlantic menhaden					0.45	1.03	2.49	
<i>Cancer irroratus</i>	Atlantic rock crab	0.07		0.03	0.03				
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark							0.24	0.54
<i>Centropristis striata</i>	Black sea bass					0.02			
<i>Alosa aestivalis</i>	Blueback herring	0.04							
<i>Pomatomus saltatrix</i>	Bluefish	0.74	0.57		0.00		0.02	0.84	0.55
<i>Myliobatis freminvillei</i>	Bullnose ray							0.11	
<i>Peprilus triacanthus</i>	Butterfish	0.04				0.02		0.47	0.03
<i>Raja eglanteria</i>	Clearnose skate						0.05		0.02
<i>Ovalipes stephensoni</i>	Coarsehand lady crab								0.02
<i>Rachycentron canadum</i>	Cobia							0.02	0.03
<i>Rhinoptera bonasus</i>	Cownose ray								0.04
<i>Carcharhinus obscurus</i>	Dusky shark						0.05	0.36	0.18
<i>Ovalipes ocellatus</i>	Lady crab							0.02	0.02
<i>Polinices</i>	Moon snails					0.02			
<i>Menticirrhus saxatilis</i>	Northern kingfish						0.05		
<i>Syngnathus fuscus</i>	Northern pipefish				0.02				
<i>Prionotus carolinus</i>	Northern searobin					0.02		0.17	0.05
<i>Libinia emarginata</i>	Portly spider crab				0.00	0.15	0.02	0.10	0.06
<i>Carcharhinus plumbeus</i>	Sandbar shark						0.02		
<i>Mustelus canis</i>	Smooth dogfish	0.14	0.04		0.06	1.41	2.94	1.06	0.74
<i>Scomberomorus maculatus</i>	Spanish mackerel							0.14	
<i>Squalus acanthias</i>	Spiny dogfish	14.17	10.89	0.41	0.22				
<i>Leiostomus xanthurus</i>	Spot							0.07	
<i>Asteroidea</i>	Starfishes		0.95					0.17	0.25
<i>Morone saxatilis</i>	Striped bass	0.04	0.56						
<i>Prionotus evolans</i>	Striped searobin	0.04			0.02	0.22	0.41	0.09	
<i>Alopias vulpinus</i>	Thresher shark						0.02		
<i>Cynoscion regalis</i>	Weakfish	0.04						0.07	
<i>Scophthalmus aquosus</i>	Windowpane				0.01				
<i>Raja ocellata</i>	Winter skate	0.24	0.18			0.16	0.45		

Table D-4. Seasonal percent frequency of occurrence for all species collected in gillnets at four shoal and four reference sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. Ref – All reference sites combined. Shoal – All shoal sites combined.

Scientific Name	Common Name	Fall 02		Winter 03		Spring 03		Summer 03		Fall 03		Winter 04		Spring 04		Summer 04	
		Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal
<i>Alosa pseudoharengus</i>	Alewife			0.13								0.13					
<i>Alosa sapidissima</i>	American shad													0.25			
<i>Sarda sarda</i>	Atlantic bonito					0.13											
<i>Micropogonias undulatus</i>	Atlantic croaker							0.63								0.13	
<i>Scomber scombrus</i>	Atlantic mackerel								0.13								
<i>Brevoortia tyrannus</i>	Atlantic menhaden					0.38	0.50	0.38						0.25	0.38		
<i>Cancer irroratus</i>	Atlantic rock crab	0.25		0.13								0.13	0.13				
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark							0.50	0.25								0.88
<i>Centropristis striata</i>	Black sea bass					0.13											
<i>Alosa aestivalis</i>	Blueback herring	0.13															
<i>Pomatomus saltatrix</i>	Bluefish			0.13			0.13	0.38		0.50	0.75						0.50
<i>Myliobatis freminvillei</i>	Bullnose ray							0.13									
<i>Peprilus triacanthus</i>	Butterfish	0.13						0.38						0.13			0.13
<i>Raja eglanteria</i>	Clearnose skate						0.13		0.13						0.13		
<i>Ovalipes stephensoni</i>	Coarsehand lady crab								0.13								
<i>Rachycentron canadum</i>	Cobia							0.13									0.13
<i>Rhinoptera bonasus</i>	Cownose ray								0.13								
<i>Carcharhinus obscurus</i>	Dusky shark						0.13	0.63	0.50					0.13			0.13
<i>Ovalipes ocellatus</i>	Lady crab								0.13								0.13
<i>Polinices</i>	Moon snails					0.13											
<i>Menticirrhus saxatilis</i>	Northern kingfish							0.13									
<i>Syngnathus fuscus</i>	Northern pipefish											0.13					
<i>Prionotus carolinus</i>	Northern searobin					0.13		0.38	0.38								0.38
<i>Libinia emarginata</i>	Portly spider crab			0.13		0.25			0.25					0.38	0.13	0.38	
<i>Carcharhinus plumbeus</i>	Sandbar shark							0.13									
<i>Mustelus canis</i>	Smooth dogfish			0.13		0.88	1.00	1.00	0.13	0.25	0.13			0.75	1.00		0.88
<i>Scomberomorus maculatus</i>	Spanish mackerel							0.50									
<i>Squalus acanthias</i>	Spiny dogfish	1.00	0.88	0.13	0.25					0.88	1.00	0.63	0.88				
<i>Leiostomus xanthurus</i>	Spot							0.13									
<i>Asteroidea</i>	Starfishes		0.50					0.13									0.25
<i>Morone saxatilis</i>	Striped bass	0.13	0.38								0.25						
<i>Prionotus evolans</i>	Striped searobin			0.13		0.50	0.75	0.38		0.13					0.13	0.13	

Table D-4. Continued																	
Scientific Name	Common Name	Fall 02		Winter 03		Spring 03		Summer 03		Fall 03		Winter 04		Spring 04		Summer 04	
		Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal
<i>Alopias vulpinus</i>	Thresher shark					0.13											
<i>Cynoscion regalis</i>	Weakfish	0.13						0.25									
<i>Scophthalmus aquosus</i>	Windowpane			0.13													
<i>Raja ocellata</i>	Winter skate									0.38	0.38			0.38	0.50		

Table D-5. Seasonal percent composition for all species collected in gillnets at four shoal and four reference sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. Ref – All reference sites combined. Shoal – All shoal sites combined. A 0.00 value is < 0.005%.

Scientific Name	Common Name	Fall 02		Winter 03		Spring 03		Summer 03		Fall 03		Winter 04		Spring 04		Summer 04	
		Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal
<i>Alosa pseudoharengus</i>	Alewife			0.10								0.05					
<i>Alosa sapidissima</i>	American shad													0.06			
<i>Sarda sarda</i>	Atlantic bonito						0.01										
<i>Micropogonias undulatus</i>	Atlantic croaker							0.24								0.14	
<i>Scomber scombrus</i>	Atlantic mackerel																0.12
<i>Brevoortia tyrannus</i>	Atlantic menhaden					0.10	0.16	0.31						0.31	0.26		
<i>Cancer irroratus</i>	Atlantic rock crab	0.02		0.03								0.10	0.06				
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark							0.03	0.23								0.12
<i>Centropristis striata</i>	Black sea bass					0.02											
<i>Alosa aestivalis</i>	Blueback herring	0.01															
<i>Pomatomus saltatrix</i>	Bluefish			0.04		0.01	0.10	0.27	0.06	0.06							
<i>Myliobatis freminvillei</i>	Bullnose ray							0.01									
<i>Peprilus triacanthus</i>	Butterfish	0.01						0.06	0.01					0.02			
<i>Raja eglanteria</i>	Clearnose skate					0.01									0.01		0.04
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																0.04
<i>Rachycentron canadum</i>	Cobia						0.00	0.01									
<i>Rhinoptera bonasus</i>	Cownose ray																0.08
<i>Carcharhinus obscurus</i>	Dusky shark					0.01	0.04	0.01						0.01			0.32
<i>Ovalipes ocellatus</i>	Lady crab															0.08	0.03
<i>Polinices</i>	Moon snails					0.02											
<i>Menticirrhus saxatilis</i>	Northern kingfish							0.01									
<i>Syngnathus fuscus</i>	Northern pipefish											0.09					
<i>Prionotus carolinus</i>	Northern searobin					0.02		0.01									0.35 0.10
<i>Libinia emarginata</i>	Portly spider crab			0.04		0.03								0.11	0.01	0.39	0.12
<i>Carcharhinus plumbeus</i>	Sandbar shark							0.01									
<i>Mustelus canis</i>	Smooth dogfish			0.47		0.68	0.66	0.13	0.35	0.01	0.00			0.41	0.43		0.04
<i>Scomberomorus maculatus</i>	Spanish mackerel							0.02									
<i>Squalus acanthias</i>	Spiny dogfish	0.92	0.65	0.09	1.00					0.91	0.88	0.81	0.89				
<i>Leiostomus xanthurus</i>	Spot							0.01									
<i>Asteroidea</i>	Starfishes		0.31					0.02	0.12								
<i>Morone saxatilis</i>	Striped bass	0.01	0.04								0.04						



Table D-5. Continued

Scientific Name	Common Name	Fall 02		Winter 03		Spring 03		Summer 03		Fall 03		Winter 04		Spring 04		Summer 04	
		Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal
<i>Prionotus evolans</i>	Striped searobin			0.14		0.15	0.13	0.01		0.00				0.01		0.05	
<i>Alopias vulpinus</i>	Thresher shark						0.01										
<i>Cynoscion regalis</i>	Weakfish	0.01						0.01									
<i>Scophthalmus aquosus</i>	Windowpane			0.10													
<i>Raja ocellata</i>	Winter skate									0.02	0.02			0.16	0.21		

Table D-6. Seasonal mean CPUE for all species collected in gillnets at four shoal and four reference sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. Ref – All reference sites combined. Shoal – All shoal sites combined.

Scientific Name	Common Name	Fall 02		Winter 03		Spring 03		Summer 03		Fall 03		Winter 04		Spring 04		Summer 04	
		Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal
<i>Alosa pseudoharengus</i>	Alewife			0.02								0.05					
<i>Alosa sapidissima</i>	American shad													0.28			
<i>Sarda sarda</i>	Atlantic bonito					0.05											
<i>Micropogonias undulatus</i>	Atlantic croaker							3.91								0.07	
<i>Scomber scombrus</i>	Atlantic mackerel																0.11
<i>Brevoortia tyrannus</i>	Atlantic menhaden					0.28	0.95	4.98						0.63	1.11		
<i>Cancer irroratus</i>	Atlantic rock crab	0.14		0.01								0.05	0.05				
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark							0.48	0.97								0.12
<i>Centropristis striata</i>	Black sea bass					0.05											
<i>Alosa aestivalis</i>	Blueback herring	0.08															
<i>Pomatomus saltatrix</i>	Bluefish			0.01			0.05	1.68	1.10	1.48	1.14						
<i>Myliobatis freminvillei</i>	Bullnose ray							0.22									
<i>Peprilus triacanthus</i>	Butterfish	0.08						0.94	0.05					0.04			
<i>Raja eglanteria</i>	Clearnose skate						0.05								0.06		0.04
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																0.04
<i>Rachycentron canadum</i>	Cobia							0.04	0.05								
<i>Rhinoptera bonasus</i>	Cownose ray																0.08
<i>Carcharhinus obscurus</i>	Dusky shark						0.04	0.71	0.05					0.06			0.31
<i>Ovalipes ocellatus</i>	Lady crab															0.04	0.03
<i>Polinices</i>	Moon snails					0.05											
<i>Menticirrhus saxatilis</i>	Northern kingfish							0.09									
<i>Syngnathus fuscus</i>	Northern pipefish											0.05					
<i>Prionotus carolinus</i>	Northern searobin						0.05	0.15									0.18 0.10
<i>Libinia emarginata</i>	Portly spider crab			0.01			0.08							0.21	0.04	0.20	0.12
<i>Carcharhinus plumbeus</i>	Sandbar shark							0.04									
<i>Mustelus canis</i>	Smooth dogfish			0.11		1.99	4.03	2.11	1.43	0.28	0.08			0.83	1.85		0.04
<i>Scomberomorus maculatus</i>	Spanish mackerel							0.29									
<i>Squalus acanthias</i>	Spiny dogfish	5.49	3.96	0.02	0.02					22.85	17.81	0.43	0.79				
<i>Leiostomus xanthurus</i>	Spot							0.13									
<i>Asteroidea</i>	Starfishes		1.90					0.35	0.49								
<i>Morone saxatilis</i>	Striped bass	0.09	0.23								0.90						

Table D-6. Continued

Scientific Name	Common Name	Fall 02		Winter 03		Spring 03		Summer 03		Fall 03		Winter 04		Spring 04		Summer 04	
		Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal	Ref	Shoal
<i>Prionotus evolans</i>	Striped searobin			0.03		0.45	0.77	0.16		0.08				0.04		0.02	
<i>Alopias vulpinus</i>	Thresher shark						0.04										
<i>Cynoscion regalis</i>	Weakfish	0.09						0.13									
<i>Scophthalmus aquosus</i>	Windowpane																
<i>Raja ocellata</i>	Winter skate									0.48	0.35			0.33	0.90		



Table D-7. Combined two-year seasonal percent frequency of occurrence for all species collected in gillnets at eight sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. FS – Fenwick Island Shoal; FR – Fenwick Island Reference; BS – Shoal B; BR – Shoal B Reference; DS – Shoal D; DR – Shoal D Reference; WS – Weaver Shoal; WR – Weaver Shoal Reference.																																						
Scientific Name	Common Name	Fall								Winter								Spring								Summer												
		FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR					
<i>Alosa pseudoharengus</i>	Alewife											0.25				0.25																						
<i>Alosa sapidissima</i>	American shad																	0.25							0.25													
<i>Sarda sarda</i>	Atlantic bonito																			0.25																		
<i>Micropogonias undulatus</i>	Atlantic croaker																								0.50		0.50		0.25		0.25							
<i>Scomber scombrus</i>	Atlantic mackerel																								0.25													
<i>Brevoortia tyrannus</i>	Atlantic menhaden																	0.50	0.50			0.25		1.00	0.75		0.50		0.25									
<i>Cancer irroratus</i>	Atlantic rock crab		0.50									0.25	0.25		0.25																							
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark																								0.50	0.50	0.50	0.25	0.50		0.75	0.25						
<i>Centropristis striata</i>	Black sea bass																		0.25																			
<i>Alosa aestivalis</i>	Blueback herring																													0.25								
<i>Pomatomus saltatrix</i>	Bluefish		0.25	0.50	0.25	0.50		0.50	0.50															0.25	0.25	0.50		0.25		0.50								
<i>Myliobatis freminvillei</i>	Bullnose ray																									0.25												
<i>Peprilus triacanthus</i>	Butterfish				0.25																					0.50			0.25		0.25							
<i>Raja eglanteria</i>	Clearnose skate																	0.50							0.25													
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																														0.25							
<i>Rachycentron canadum</i>	Cobia																										0.25				0.25							
<i>Rhinoptera bonasus</i>	Cownose ray																														0.25							
<i>Carcharhinus obscurus</i>	Dusky shark																								0.50	0.50	0.50		0.25		0.75	0.50						
<i>Ovalipes ocellatus</i>	Lady crab																									0.25	0.25											
<i>Polinices</i>	Moon snails																														0.25							
<i>Menticirrhus saxatilis</i>	Northern kingfish																								0.25													
<i>Syngnathus fuscus</i>	Northern pipefish																														0.25							
<i>Prionotus carolinus</i>	Northern searobin																										0.25	0.25	0.25	0.25	0.25	0.50		0.50				
<i>Libinia emarginata</i>	Portly spider crab																								0.25	0.25	0.50		0.50		0.25	0.25						
<i>Carcharhinus plumbeus</i>	Sandbar shark																				0.25																	
<i>Mustelus canis</i>	Smooth dogfish			0.25	0.25		0.25																		0.25	1.00	1.00	1.00	1.00	1.00	0.50	1.00	0.75	0.50	0.50	0.50	0.50	0.50
<i>Scomberomorus maculatus</i>	Spanish mackerel																											0.25		0.50						0.25		
<i>Squalus acanthias</i>	Spiny dogfish	1.00	1.00	0.75	0.75	1.00	1.00	1.00	1.00	0.50	0.50	0.50	0.25	1.00	0.50	0.25	0.25																					
<i>Leiostomus xanthurus</i>	Spot																																			0.25		
<i>Asteroidea</i>	Starfishes	0.50		0.25					0.25																	0.50			0.25									
<i>Morone saxatilis</i>	Striped bass	0.25		0.25		0.25	0.25	0.50																														
<i>Prionotus evolans</i>	Striped searobin																								0.25	0.25	0.50	0.75	0.25	0.25		0.50	0.25		0.25		0.50	0.25
<i>Alopias vulpinus</i>	Thresher shark																											0.25										
<i>Cynoscion regalis</i>	Weakfish																																			0.50		
<i>Scophthalmus aquosus</i>	Windowpane													0.25																								
<i>Raja ocellata</i>	Winter skate	0.25	0.25	0.25					0.50	0.25																0.50	0.25	0.25				0.25	0.50					

Table D-8. Combined two-year seasonal percent composition for all species collected in gillnets at eight sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. FS - Fenwick Island Shoal; FR - Fenwick Island Reference; BS - Shoal B; BR - Shoal B Reference; DS - Shoal D; DR - Shoal D Reference; WS - Weaver Shoal; WR - Weaver Shoal Reference. A 0.00 value is < 0.005%.

Scientific Name	Common Name	Fall								Winter								Spring								Summer														
		FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR							
<i>Alosa pseudoharengus</i>	Alewife									0.12						0.33																								
<i>Alosa sapidissima</i>	American shad																	0.02																						
<i>Sarda sarda</i>	Atlantic bonito																					0.04																		
<i>Micropogonias undulatus</i>	Atlantic croaker																															0.30		0.13		0.09			0.04	
<i>Scomber scombrus</i>	Atlantic mackerel																															0.07								
<i>Brevoortia tyrannus</i>	Atlantic menhaden																	0.07	0.06								0.43	0.41				0.32		0.37						
<i>Cancer irroratus</i>	Atlantic rock crab		0.02									0.10	0.25		0.05							0.08																		
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark																														0.09	0.03	0.18	0.02	0.38		0.26	0.08		
<i>Centropristis striata</i>	Black sea bass																	0.03																						
<i>Alosa aestivalis</i>	Blueback herring																																				0.02			
<i>Pomatomus saltatrix</i>	Bluefish		0.04	0.04	0.03	0.11		0.05	0.24							0.03		0.01													0.29	0.11		0.11			0.26			
<i>Myliobatis freminvillei</i>	Bullnose ray																														0.02									
<i>Peprilus triacanthus</i>	Butterfish				0.02																				0.02										0.09			0.08		
<i>Raja eglanteria</i>	Clearnose skate																	0.03													0.02									
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																																					0.02		
<i>Rachycentron canadum</i>	Cobia																																	0.01			0.02			
<i>Rhinoptera bonasus</i>	Cownose ray																																					0.03		
<i>Carcharhinus obscurus</i>	Dusky shark																								0.02						0.10	0.05		0.01			0.08	0.08		
<i>Ovalipes ocellatus</i>	Lady crab																															0.00	0.06							
<i>Polinices</i>	Moon snails																							0.06																
<i>Menticirrhus saxatilis</i>	Northern kingfish																	0.03																						
<i>Syngnathus fuscus</i>	Northern pipefish																																				0.19			
<i>Prionotus carolinus</i>	Northern searobin																								0.06						0.02	0.00	0.06	0.01	0.05	0.14		0.12		
<i>Libinia emarginata</i>	Portly spider crab																								0.03						0.02	0.02					0.03	0.03		
<i>Carcharhinus plumbeus</i>	Sandbar shark																					0.02																		
<i>Mustelus canis</i>	Smooth dogfish			0.01	0.07		0.00																								0.63	0.59	0.69	0.92	0.69	0.77	0.40	0.35		
<i>Scomberomorus maculatus</i>	Spanish mackerel																																	0.01			0.04			
<i>Squalus acanthias</i>	Spiny dogfish	0.63	0.93	0.91	0.88	0.86	0.96	0.78	0.73	1.00	1.00	0.90	0.51	1.00	0.95	0.67	0.19																							
<i>Leiostomus xanthurus</i>	Spot																																	0.01						
<i>Asteroidea</i>	Starfishes	0.34		0.03					0.02																						0.32			0.09						
<i>Morone saxatilis</i>	Striped bass	0.02		0.01		0.03	0.01	0.12																																
<i>Prionotus evolans</i>	Striped searobin								0.02																						0.01	0.09	0.15	0.08	0.16		0.07	0.13		
<i>Alopias vulpinus</i>	Thresher shark																					0.02																		
<i>Cynoscion regalis</i>	Weakfish							0.01																										0.01						
<i>Scophthalmus aquosus</i>	Windowpane												0.12																											
<i>Raja ocellata</i>	Winter skate	0.02	0.01	0.01				0.03	0.03																						0.19	0.15	0.11				0.01	0.04		



Table D-10. Seasonal percent frequency of occurrence for all species collected in gillnets at eight sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004.  
 FS – Fenwick Island Shoal; FR – Fenwick Island Reference; BS – Shoal B; BR – Shoal B Reference; DS – Shoal D; DR – Shoal D Reference; WS – Weaver Shoal; WR – Weaver Shoal Reference.

Scientific Name	Common Name	Fall 02								Winter 03								Spring 03								Summer 03							
		FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR
<i>Alosa pseudoharengus</i>	Alewife												0.5																				
<i>Alosa sapidissima</i>	American shad																																
<i>Sarda sarda</i>	Atlantic bonito																				0.5												
<i>Micropogonias undulatus</i>	Atlantic croaker																									1.0		1.0					0.5
<i>Scomber scombrus</i>	Atlantic mackerel																																
<i>Brevoortia tyrannus</i>	Atlantic menhaden																	0.5	1.0			0.5		1.0	0.5	1.0		0.5					
<i>Cancer irroratus</i>	Atlantic rock crab	1.0												0.5																			
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark																									0.5	1.0	1.0	0.5	1.0		1.0	0.5
<i>Centropristis striata</i>	Black sea bass																	0.5															
<i>Alosa aestivalis</i>	Blueback herring								0.5																								
<i>Pomatomus saltatrix</i>	Bluefish															0.5		0.5								1.0	1.0	0.5				1.0	
<i>Myliobatis freminvillei</i>	Bullnose ray																									0.5							
<i>Peprilus triacanthus</i>	Butterfish				0.5																					1.0		0.5				0.5	
<i>Raja eglanteria</i>	Clearnose skate																	0.5															
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																																
<i>Rachycentron canadum</i>	Cobia																											0.5				0.5	
<i>Rhinoptera bonasus</i>	Cownose ray																																
<i>Carcharhinus obscurus</i>	Dusky shark																							0.5		1.0	0.5			0.5	1.0		
<i>Ovalipes ocellatus</i>	Lady crab																																
<i>Polinices</i>	Moon snails																						0.5										
<i>Menticirrhus saxatilis</i>	Northern kingfish																	0.5															
<i>Syngnathus fuscus</i>	Northern pipefish																																
<i>Prionotus carolinus</i>	Northern searobin																						0.5						1.0		0.5		
<i>Libinia emarginata</i>	Portly spider crab															0.5							0.5	0.5									
<i>Carcharhinus plumbeus</i>	Sandbar shark																				0.5												
<i>Mustelus canis</i>	Smooth dogfish															0.5		1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	0.5	1.0	1.0	1.0	1.0	1.0	1.0	
<i>Scomberomorus maculatus</i>	Spanish mackerel																									0.5		1.0					0.5
<i>Squalus acanthias</i>	Spiny dogfish	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0					1.0	0.5																		
<i>Leiostomus xanthurus</i>	Spot																									0.5							
<i>Asteroidea</i>	Starfishes	1.0							0.5																	1.0		0.5					
<i>Morone saxatilis</i>	Striped bass	0.5		0.5		0.5	0.5																										
<i>Prionotus evolans</i>	Striped searobin		0.5													0.5		0.5	1.0	1.0	0.5	0.5		1.0	0.5	0.5		1.0					
<i>Alopias vulpinus</i>	Thresher shark																				0.5												
<i>Cynoscion regalis</i>	Weakfish							0.5																		1.0							
<i>Scophthalmus aquosus</i>	Windowpane													0.5																			
<i>Raja ocellata</i>	Winter skate																																



Table D-10. Continued																																	
Scientific Name	Common Name	Fall 03								Winter 04								Spring 04								Summer 04							
		FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR
<i>Alosa pseudoharengus</i>	Alewife															0.5																	
<i>Alosa sapidissima</i>	American shad																			0.5								0.5					
<i>Sarda sarda</i>	Atlantic bonito																																
<i>Micropogonias undulatus</i>	Atlantic croaker																											0.5					
<i>Scomber scombrus</i>	Atlantic mackerel																											0.5					
<i>Brevoortia tyrannus</i>	Atlantic menhaden																			0.5							1.0	1.0					
<i>Cancer irroratus</i>	Atlantic rock crab															0.5	0.5																
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark																											0.5					
<i>Centropristis striata</i>	Black sea bass																																
<i>Alosa aestivalis</i>	Blueback herring																																
<i>Pomatomus saltatrix</i>	Bluefish			0.5	1.0	0.5	1.0																										
<i>Myliobatis freminvillei</i>	Bullnose ray																																
<i>Peprilus triacanthus</i>	Butterfish																											0.5					
<i>Raja eglanteria</i>	Clearnose skate																										0.5						
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																												0.5				
<i>Rachycentron canadum</i>	Cobia																																
<i>Rhinoptera bonasus</i>	Cownose ray																												0.5				
<i>Carcharhinus obscurus</i>	Dusky shark																										0.5	1.0	1.0				
<i>Ovalipes ocellatus</i>	Lady crab																											0.5	0.5				
<i>Polinices</i>	Moon snails																																
<i>Menticirrhus saxatilis</i>	Northern kingfish																																
<i>Syngnathus fuscus</i>	Northern pipefish																											0.5					
<i>Prionotus carolinus</i>	Northern searobin																											0.5	0.5				
<i>Libinia emarginata</i>	Portly spider crab																										0.5	1.0	0.5				
<i>Carcharhinus plumbeus</i>	Sandbar shark																																
<i>Mustelus canis</i>	Smooth dogfish			0.5	0.5		0.5																				1.0	1.0	0.5				
<i>Scomberomorus maculatus</i>	Spanish mackerel																																
<i>Squalus acanthias</i>	Spiny dogfish	1.0	1.0	1.0	0.5	1.0	1.0	1.0	1.0	1.0	1.0	1.0	0.5	1.0	0.5	0.5	0.5																
<i>Leiostomus xanthurus</i>	Spot																																
<i>Asteroidea</i>	Starfishes																																
<i>Morone saxatilis</i>	Striped bass																											1.0					
<i>Prionotus evolans</i>	Striped searobin																										0.5						
<i>Alopias vulpinus</i>	Thresher shark																																
<i>Cynoscion regalis</i>	Weakfish																																
<i>Scophthalmus aquosus</i>	Windowpane																																
<i>Raja ocellata</i>	Winter skate	0.5	0.5	0.5																							1.0	0.5					

Table D-11. Seasonal percent composition for all species collected in gillnets at eight sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. FS – Fenwick Island Shoal; FR – Fenwick Island Reference; BS – Shoal B; BR – Shoal B Reference; DS – Shoal D; DR – Shoal D Reference; WS – Weaver Shoal; WR – Weaver Shoal Reference. A 0.00 value is < 0.005%.

Scientific Name	Common Name	Fall 02								Winter 03								Spring 03								Summer 03							
		FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR
<i>Alosa pseudoharengus</i>	Alewife									0.50																							
<i>Alosa sapidissima</i>	American shad																																
<i>Sarda sarda</i>	Atlantic bonito																			0.04													
<i>Micropogonias undulatus</i>	Atlantic croaker																									0.31		0.14					0.05
<i>Scomber scombrus</i>	Atlantic mackerel																																
<i>Brevoortia tyrannus</i>	Atlantic menhaden																	0.10	0.12			0.09		0.33	0.20	0.33		0.38					
<i>Cancer irroratus</i>	Atlantic rock crab	0.04													0.25																		
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark																									0.05	0.03	0.20	0.02	0.40		0.29	0.09
<i>Centropristis striata</i>	Black sea bass																	0.06															
<i>Alosa aestivalis</i>	Blueback herring								0.14																								
<i>Pomatomus saltatrix</i>	Bluefish															0.05		0.03								0.42	0.11		0.11			0.31	
<i>Myliobatis freminvillei</i>	Bullnose ray																									0.02							
<i>Peprilus triacanthus</i>	Butterfish				0.05																					0.08			0.10				0.09
<i>Raja eglanteria</i>	Clearnose skate																	0.03															
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																																
<i>Rachycentron canadum</i>	Cobia																											0.01			0.02		
<i>Rhinoptera bonasus</i>	Cownose ray																																
<i>Carcharhinus obscurus</i>	Dusky shark																						0.02			0.05		0.01		0.02	0.09		
<i>Ovalipes ocellatus</i>	Lady crab																																
<i>Polinices</i>	Moon snails																						0.06										
<i>Menticirrhus saxatilis</i>	Northern kingfish																	0.05															
<i>Syngnathus fuscus</i>	Northern pipefish																																
<i>Prionotus carolinus</i>	Northern searobin																						0.06						0.17		0.05		
<i>Libinia emarginata</i>	Portly spider crab															0.05							0.06		0.04								
<i>Carcharhinus plumbeus</i>	Sandbar shark																			0.03													
<i>Mustelus canis</i>	Smooth dogfish															0.68		0.77	0.65	0.73	0.89	0.70	0.82	0.50	0.48	0.05	0.03	0.80	0.17	0.50	0.83	0.36	0.59
<i>Scomberomorus maculatus</i>	Spanish mackerel																									0.01		0.04					0.05
<i>Squalus acanthias</i>	Spiny dogfish	0.35	0.96	0.40	0.95	0.80	0.50	0.94	0.86					1.00	0.75																		
<i>Leiostomus xanthurus</i>	Spot																									0.01							
<i>Asteroidea</i>	Starfishes	0.62		0.50					0.06																	0.47			0.09				
<i>Morone saxatilis</i>	Striped bass	0.03		0.10		0.20	0.25																										
<i>Prionotus evolans</i>	Striped searobin															0.21		0.03	0.18	0.20	0.11	0.17		0.15	0.28	0.00		0.03					
<i>Alopias vulpinus</i>	Thresher shark																			0.03													
<i>Cynoscion regalis</i>	Weakfish						0.25																			0.01							
<i>Scophthalmus aquosus</i>	Windowpane													0.50																			
<i>Raja ocellata</i>	Winter skate																																

Table D-11. Continued																																	
Scientific Name	Common Name	Fall 03								Winter 04								Spring 04								Summer 04							
		FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR
<i>Alosa pseudoharengus</i>	Alewife															0.33																	
<i>Alosa sapidissima</i>	American shad																	0.04											0.11				
<i>Sarda sarda</i>	Atlantic bonito																																
<i>Micropogonias undulatus</i>	Atlantic croaker																												0.60				
<i>Scomber scombrus</i>	Atlantic mackerel																												0.23				
<i>Brevoortia tyrannus</i>	Atlantic menhaden																	0.04											0.53 0.60				
<i>Cancer irroratus</i>	Atlantic rock crab																	0.10	0.33														
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark																												0.15 0.10				
<i>Centropristis striata</i>	Black sea bass																																
<i>Alosa aestivalis</i>	Blueback herring																																
<i>Pomatomus saltatrix</i>	Bluefish																												0.07 0.04 0.06 0.13 0.09 0.27				
<i>Myliobatis freminvillei</i>	Bullnose ray																																
<i>Peprilus triacanthus</i>	Butterfish																												0.04				
<i>Raja eglanteria</i>	Clearnose skate																												0.04 0.08				
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																												0.10				
<i>Rachycentron canadum</i>	Cobia																																
<i>Rhinoptera bonasus</i>	Cownose ray																												0.20				
<i>Carcharhinus obscurus</i>	Dusky shark																												0.03 0.31 0.40				
<i>Ovalipes ocellatus</i>	Lady crab																												0.15 0.50				
<i>Polinices</i>	Moon snails																																
<i>Menticirrhus saxatilis</i>	Northern kingfish																																
<i>Syngnathus fuscus</i>	Northern pipefish																												0.50				
<i>Prionotus carolinus</i>	Northern searobin																												0.08 0.18 0.50 1.00 1.00 1.00				
<i>Libinia emarginata</i>	Portly spider crab																												0.08 0.15 0.33 1.00 0.04 0.67 0.20				
<i>Carcharhinus plumbeus</i>	Sandbar shark																												0.20				
<i>Mustelus canis</i>	Smooth dogfish																												0.01 0.13 0.00 0.48 0.54 0.63 1.00 0.67 0.31 0.24 0.08				
<i>Scomberomorus maculatus</i>	Spanish mackerel																																
<i>Squalus acanthias</i>	Spiny dogfish																												0.96 0.91 0.95 0.81 0.88 0.97 0.68 0.71 1.00 1.00 0.90 0.67 1.00 1.00 0.67 0.50				
<i>Leiostomus xanthurus</i>	Spot																																
<i>Asteroidea</i>	Starfishes																																
<i>Morone saxatilis</i>	Striped bass																												0.19				
<i>Prionotus evolans</i>	Striped searobin																												0.02 0.06 0.20				
<i>Alopias vulpinus</i>	Thresher shark																																
<i>Cynoscion regalis</i>	Weakfish																																
<i>Scophthalmus aquosus</i>	Windowpane																																
<i>Raja ocellata</i>	Winter skate																												0.04 0.02 0.01 0.03 0.04 0.41 0.31 0.31 0.03 0.08				



Table D-12. Continued																																							
Scientific Name	Common Name	Fall 03								Winter 04								Spring 04								Summer 04													
		FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR	FS	FR	BS	BR	DS	DR	WS	WR						
<i>Alosa pseudoharengus</i>	Alewife															0.19																							
<i>Alosa sapidissima</i>	American shad																	0.23							0.88														
<i>Sarda sarda</i>	Atlantic bonito																																						
<i>Micropogonias undulatus</i>	Atlantic croaker																																					0.28	
<i>Scomber scombrus</i>	Atlantic mackerel																															0.45							
<i>Brevoortia tyrannus</i>	Atlantic menhaden																																					2.50	
<i>Cancer irroratus</i>	Atlantic rock crab												0.20	0.20																									
<i>Rhizoprionodon terraenovae</i>	Atlantic sharpnose shark																0.23								4.19						0.30								
<i>Centropristis striata</i>	Black sea bass																																						
<i>Alosa aestivalis</i>	Blueback herring																																					0.16	
<i>Pomatomus saltatrix</i>	Bluefish		1.25	1.89	0.45	1.05		1.60	4.24																														
<i>Myliobatis freminvillei</i>	Bullnose ray																																						
<i>Peprilus triacanthus</i>	Butterfish																																					0.17	
<i>Raja eglanteria</i>	Clearnose skate																															0.15							
<i>Ovalipes stephensoni</i>	Coarsehand lady crab																																					0.16	
<i>Rachycentron canadum</i>	Cobia																0.23																						
<i>Rhinoptera bonasus</i>	Cownose ray																																					0.32	
<i>Carcharhinus obscurus</i>	Dusky shark																															0.61							
<i>Ovalipes ocellatus</i>	Lady crab																																0.16	0.12					
<i>Polinices</i>	Moon snails																							0.22														0.65	
<i>Menticirrhus saxatilis</i>	Northern kingfish																																						
<i>Syngnathus fuscus</i>	Northern pipefish																0.20																						
<i>Prionotus carolinus</i>	Northern searobin																															0.15	0.20	0.12	0.17	0.12			0.35
<i>Libinia emarginata</i>	Portly spider crab																		0.49			0.17	0.20		0.17						0.15	0.72					0.10	0.32	
<i>Carcharhinus plumbeus</i>	Sandbar shark																																						
<i>Mustelus canis</i>	Smooth dogfish			0.32	0.90		0.22											3.00	1.72	1.66	0.59	0.33		2.43	1.00						0.15								
<i>Scomberomorus maculatus</i>	Spanish mackerel																																						
<i>Squalus acanthias</i>	Spiny dogfish	6.92	17.08	44.21	5.82	7.33	57.39	12.80	11.09	0.51	0.60	1.81	0.40	0.47	0.50	0.37	0.20																						
<i>Leiostomus xanthurus</i>	Spot																																						
<i>Asteroidea</i>	Starfishes																																						
<i>Morone saxatilis</i>	Striped bass																																					3.60	
<i>Prionotus evolans</i>	Striped searobin																0.33																				0.17		
<i>Alopias vulpinus</i>	Thresher shark																																						
<i>Cynoscion regalis</i>	Weakfish																																					0.09	
<i>Scophthalmus aquosus</i>	Windowpane																																						
<i>Raja ocellata</i>	Winter skate	0.29	0.42	0.32				1.52	0.80									2.54	0.98	0.83				0.22	0.33														

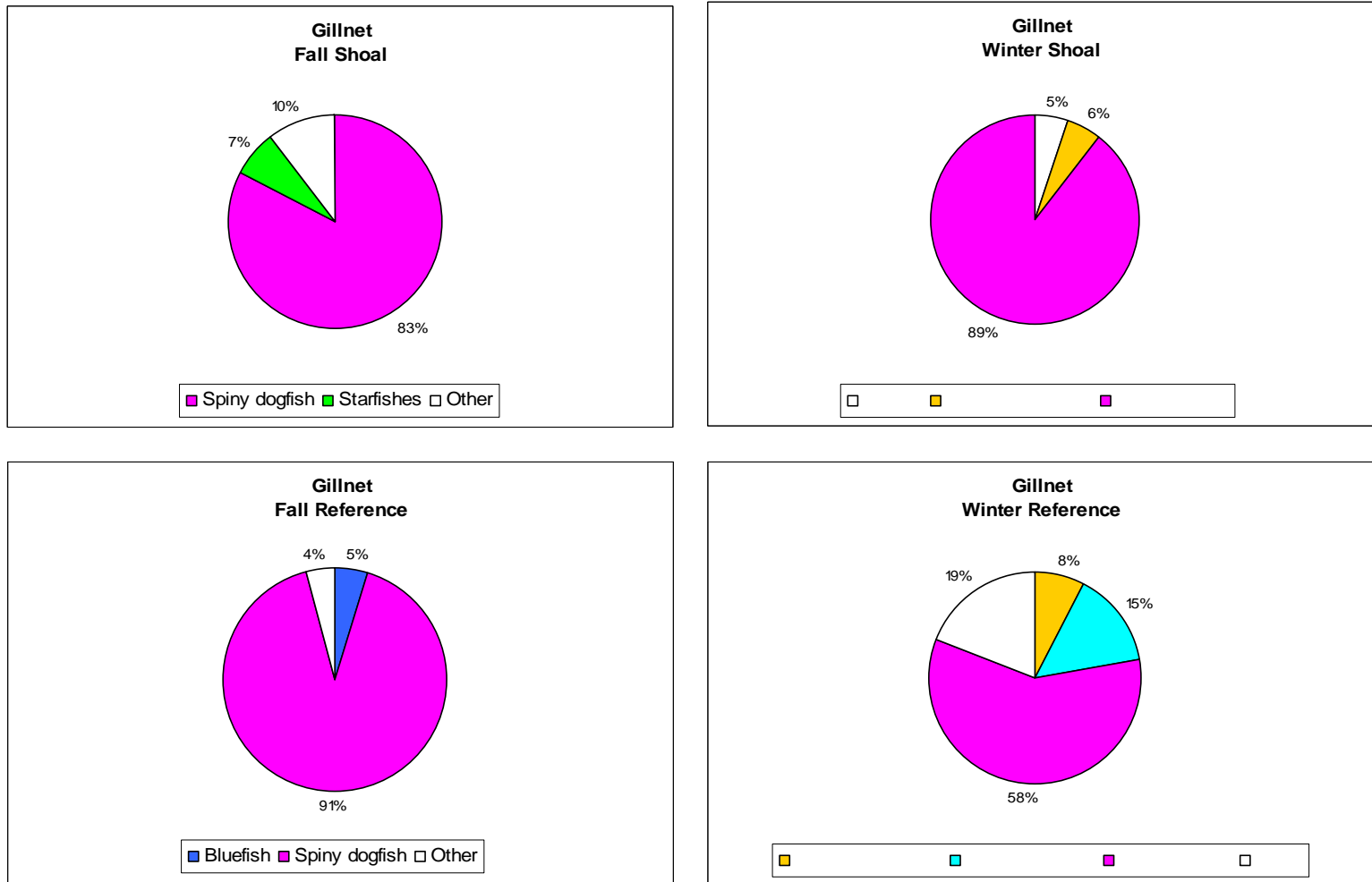


Figure D-1. Combined two-year fall and winter percent species composition for all species collected in gillnets at four shoal and four reference sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. Ref – All reference sites combined. Shoal – All shoal sites combined.

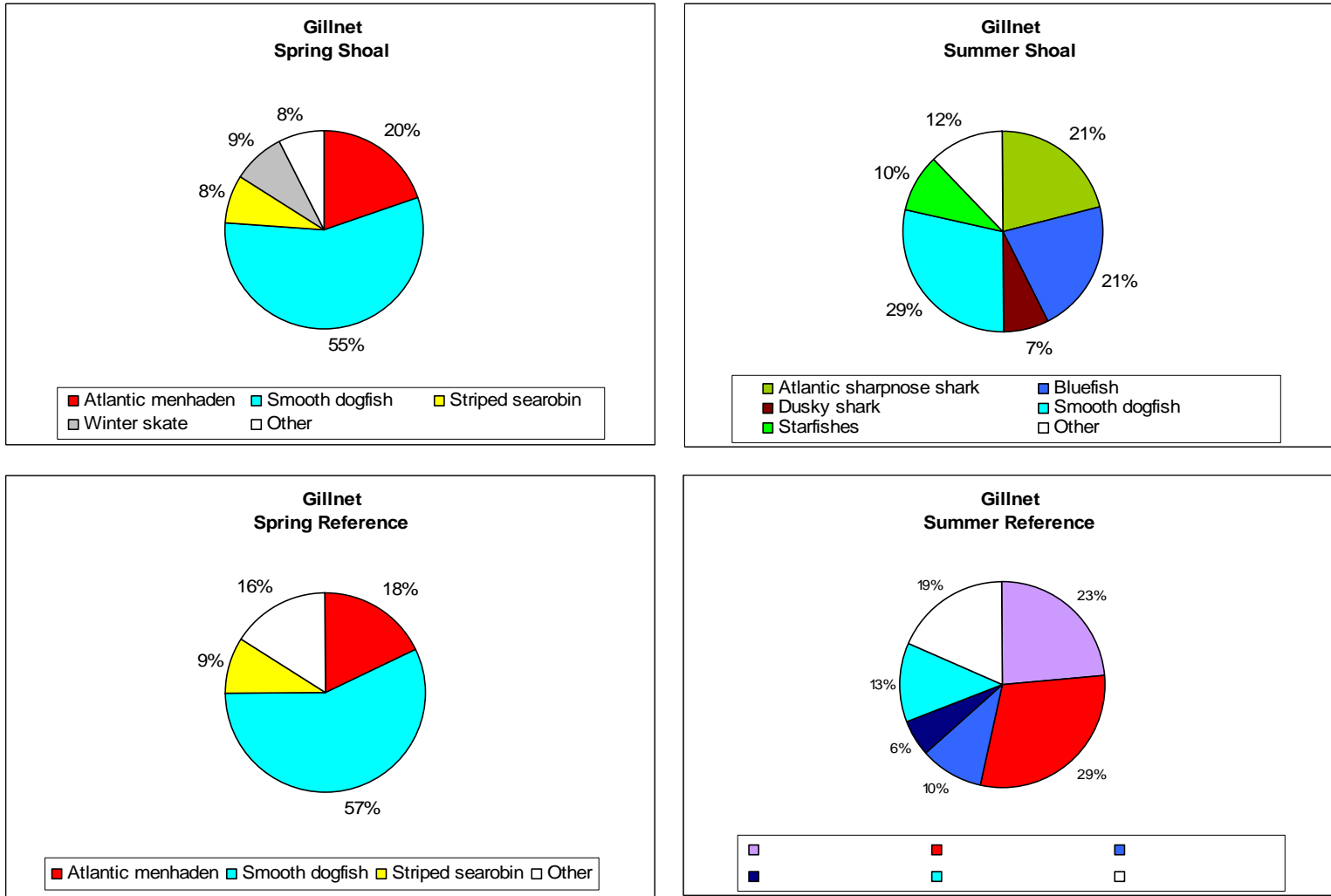


Figure D-2. Combined two-year spring and summer percent species composition for all species collected in gillnets at four shoal and four reference sites in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004. Ref – All reference sites combined. Shoal – All shoal sites combined.

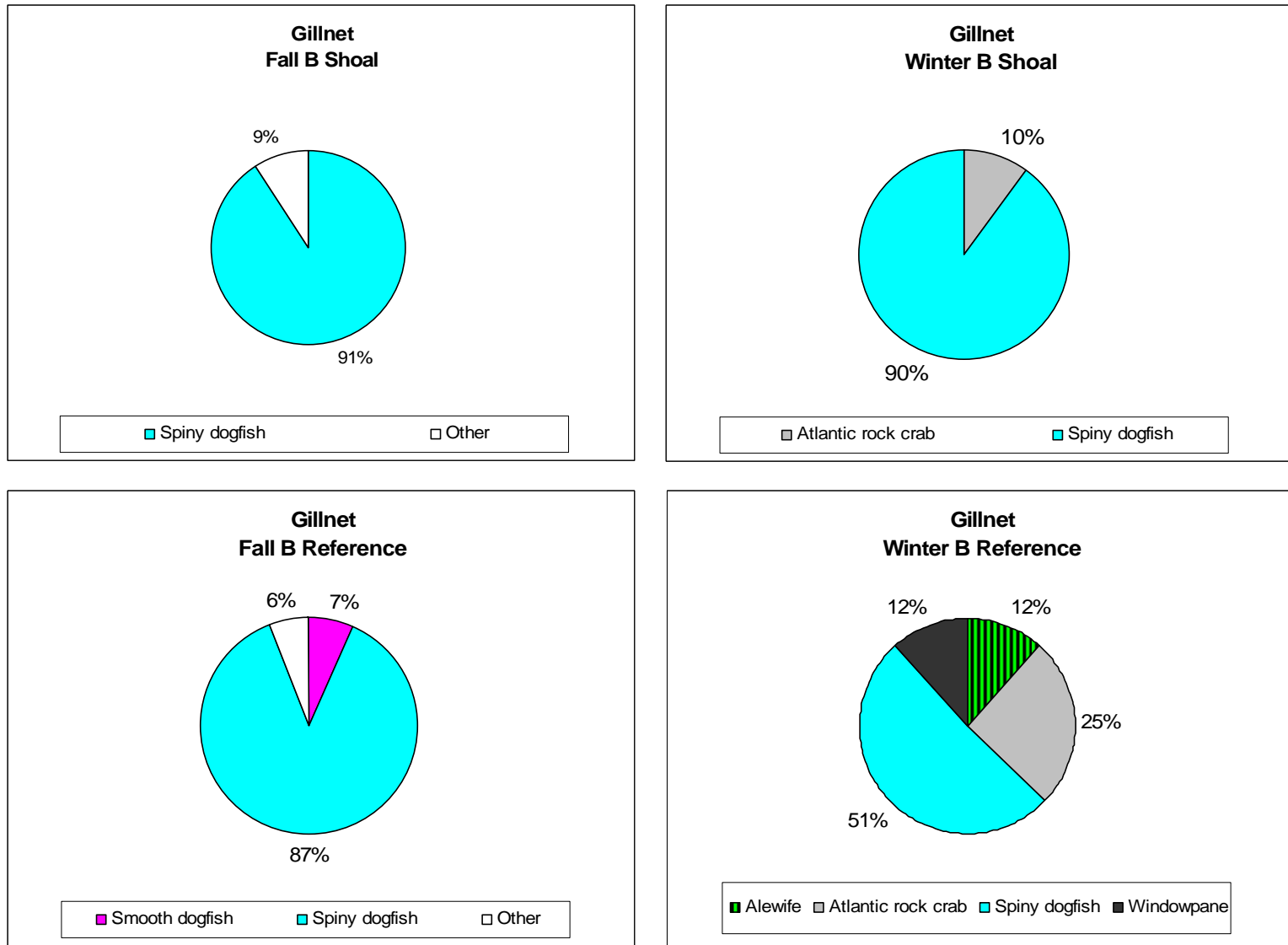


Figure D-3. Combined two-year fall and winter percent composition for all species collected in gillnets at Shoal B and Shoal B Reference site in the Atlantic Ocean off the coast off Maryland and Delaware from November 2002 to September 2004.



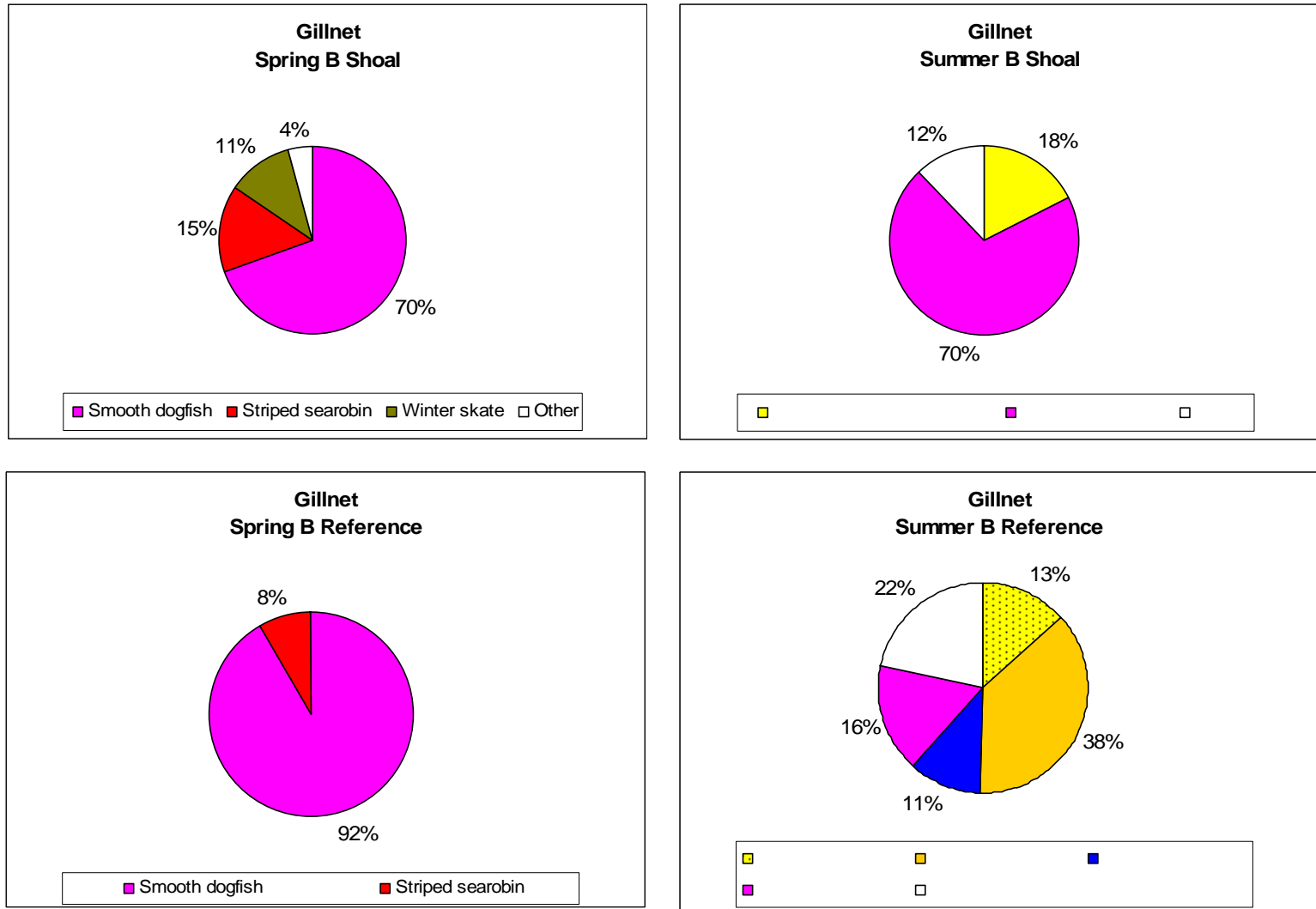


Figure D-4. Combined two-year spring and summer percent composition for all species collected in gillnets at Shoal B and Shoal B Reference site in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004.

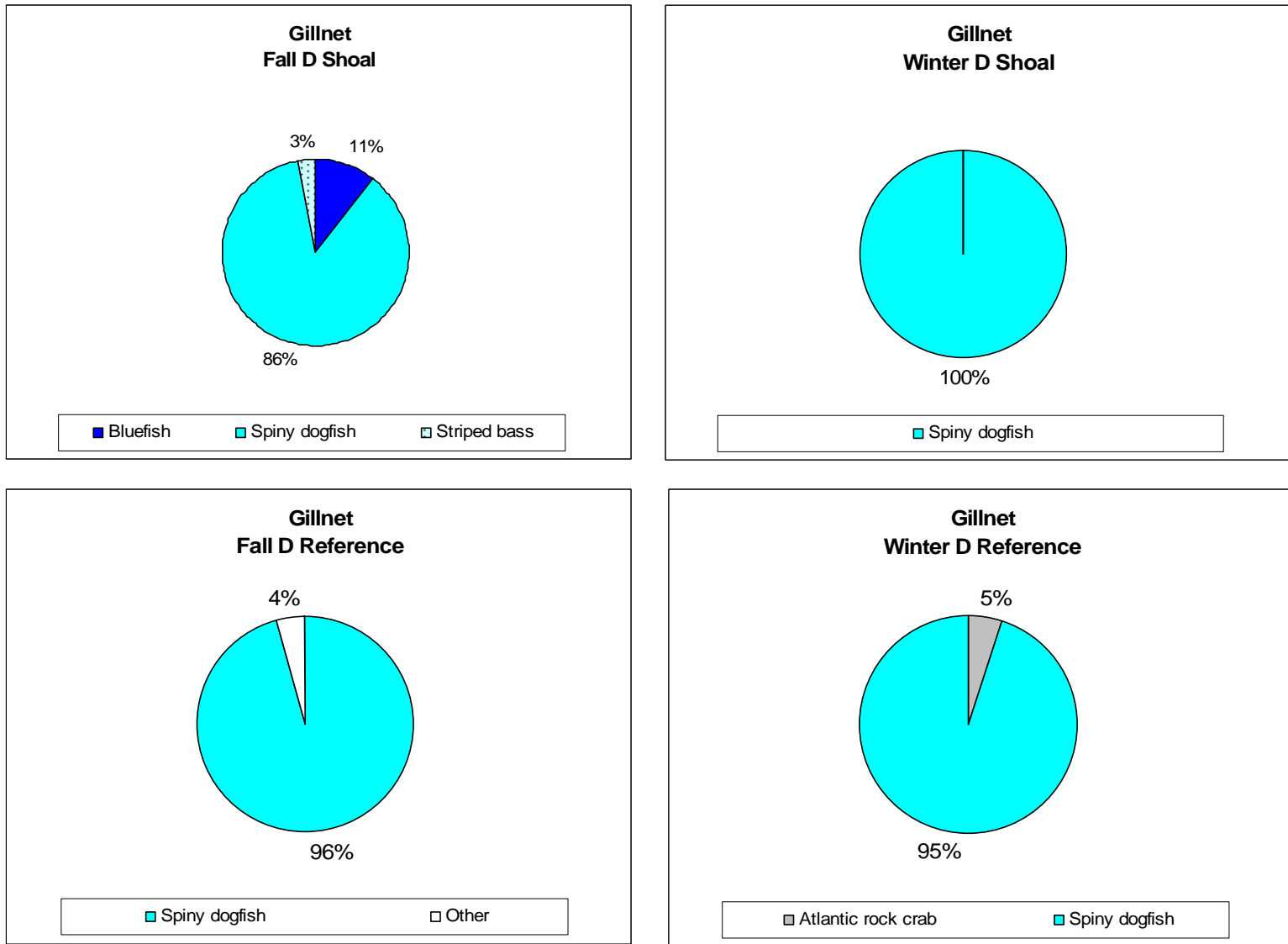


Figure D-5. Combined two-year fall and winter percent composition for all species collected in gillnets at Shoal D and Shoal D Reference site in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004.

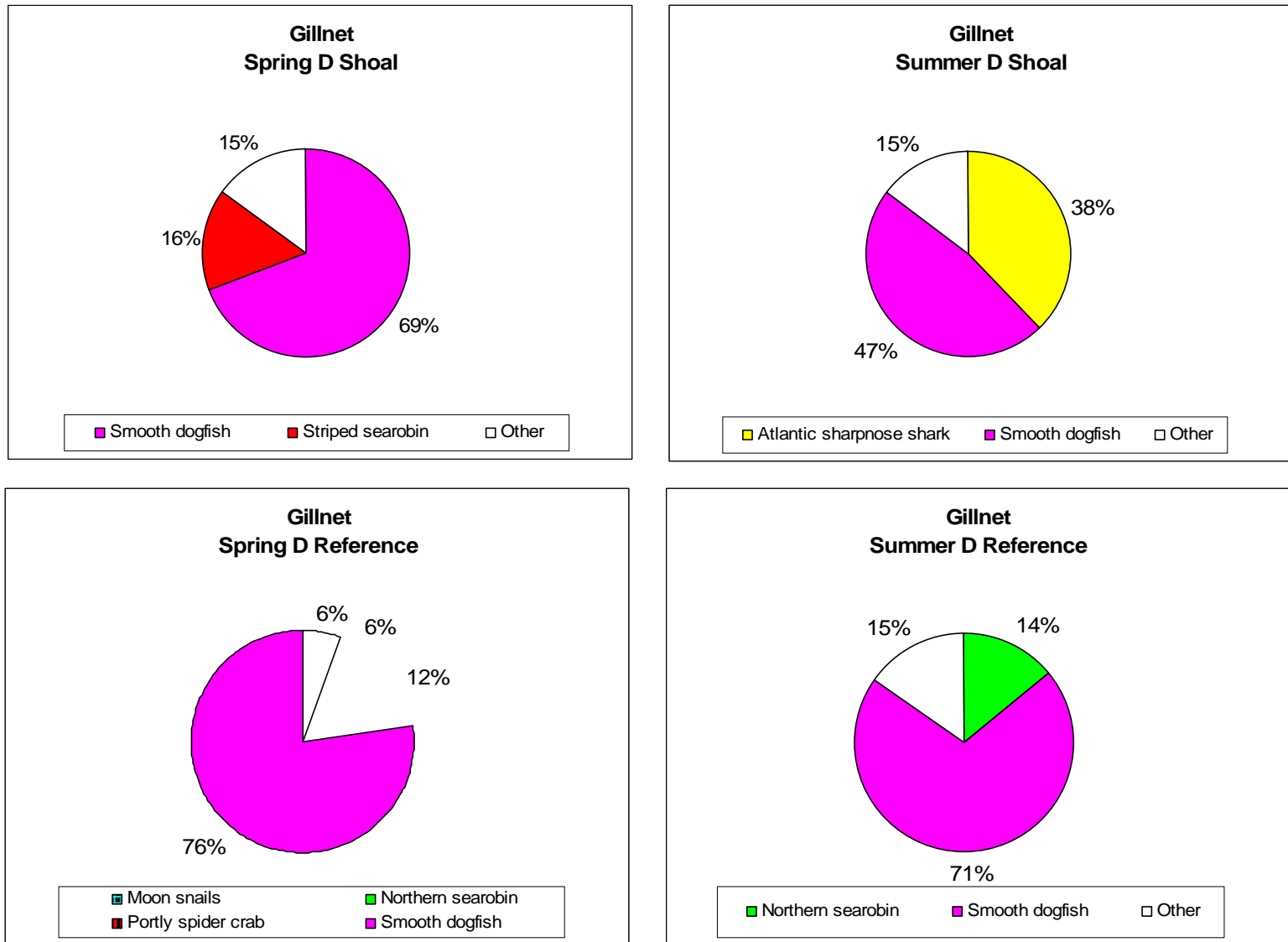


Figure D-6. Combined two-year spring and summer percent composition for all species collected in gillnets at Shoal D and Shoal D Reference site in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004.



Figure D-7. Combined two-year fall and winter percent composition for all species collected in gillnets at Fenwick Island Shoal and Fenwick Island Reference site in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004.

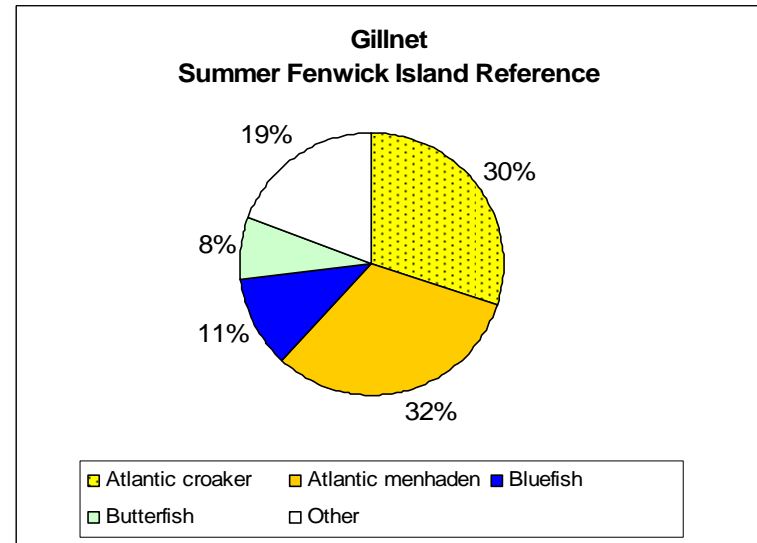
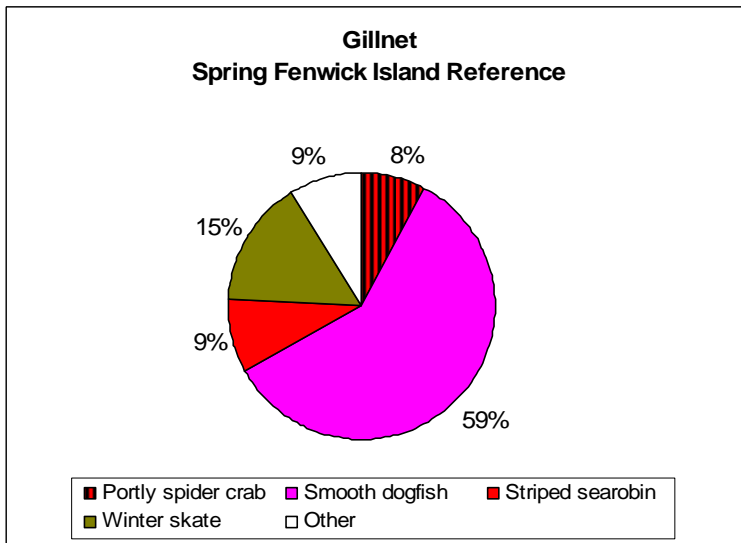
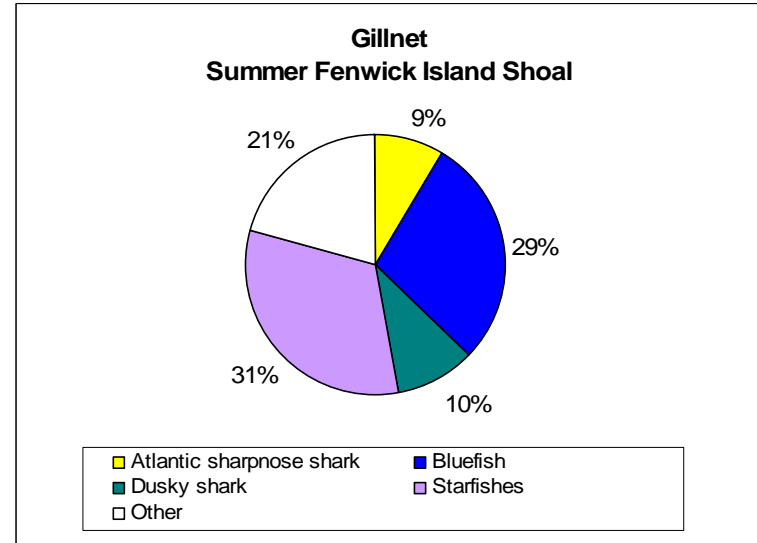
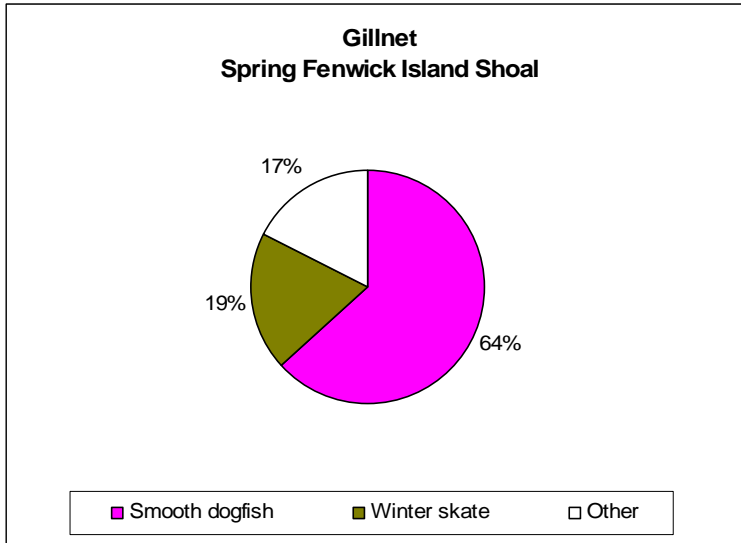


Figure D-8. Combined two-year spring and summer percent composition for all species collected in gillnets at Fenwick Island Shoal and Fenwick Island Shoal Reference site in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004.

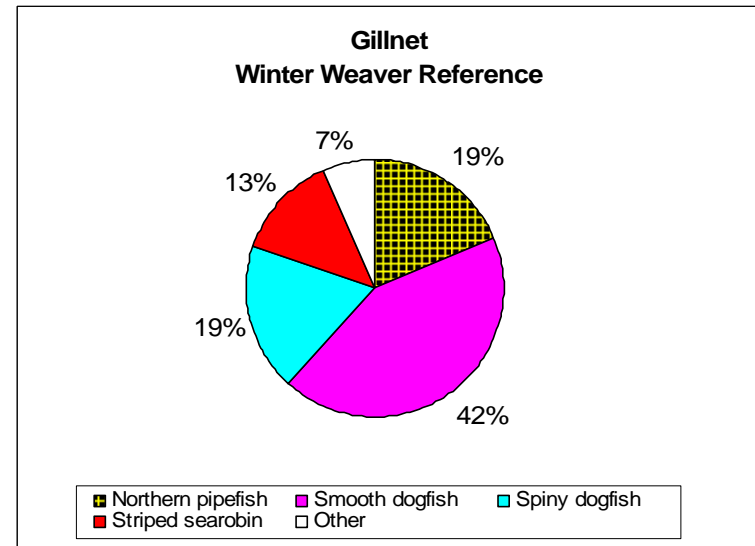
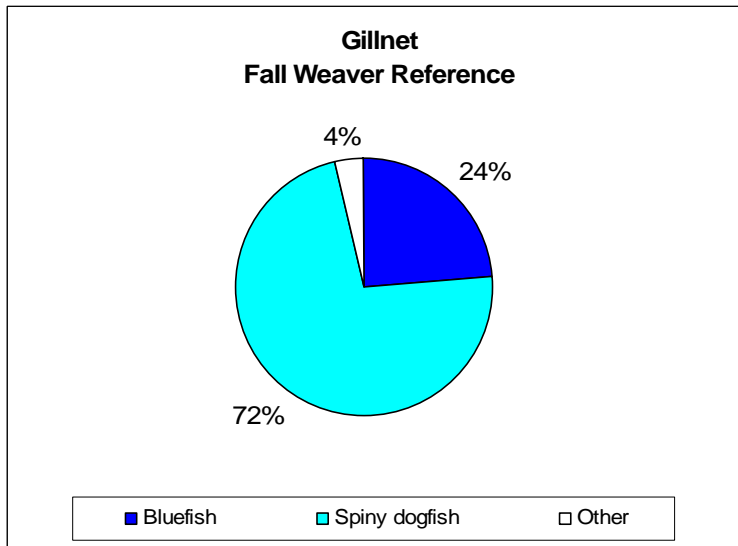
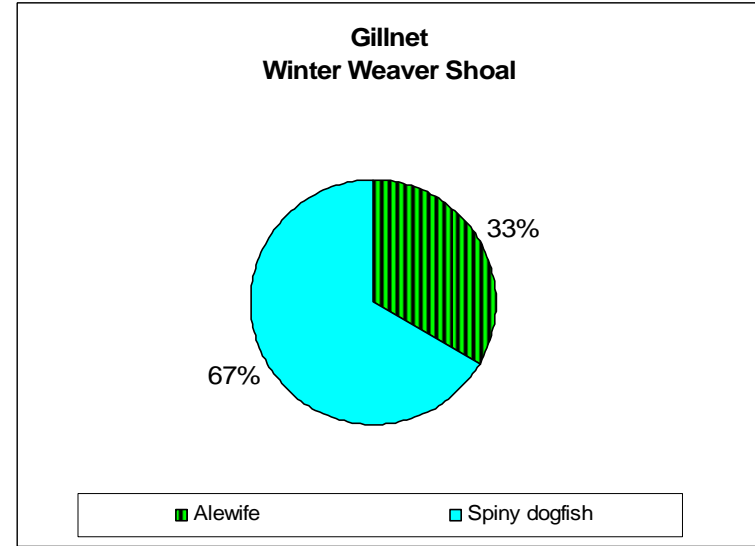
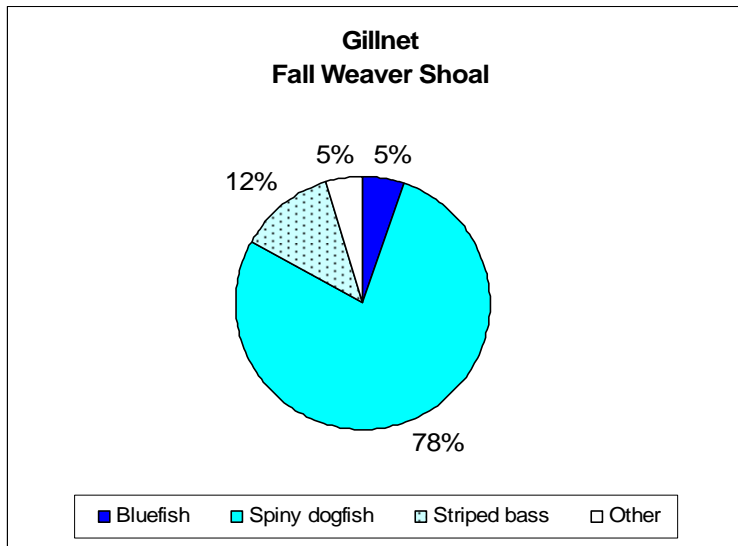


Figure D- 9. Combined two-year fall and winter percent composition for all species collected in gillnets at Weaver Shoal and Weaver Reference site in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004.

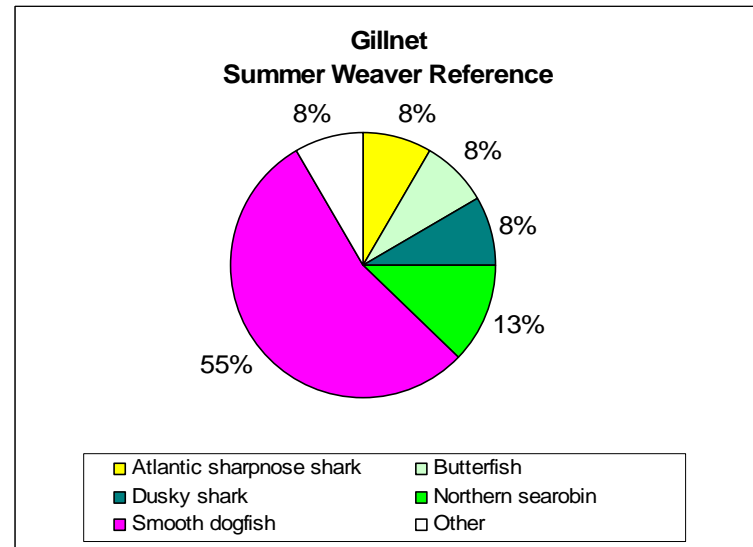
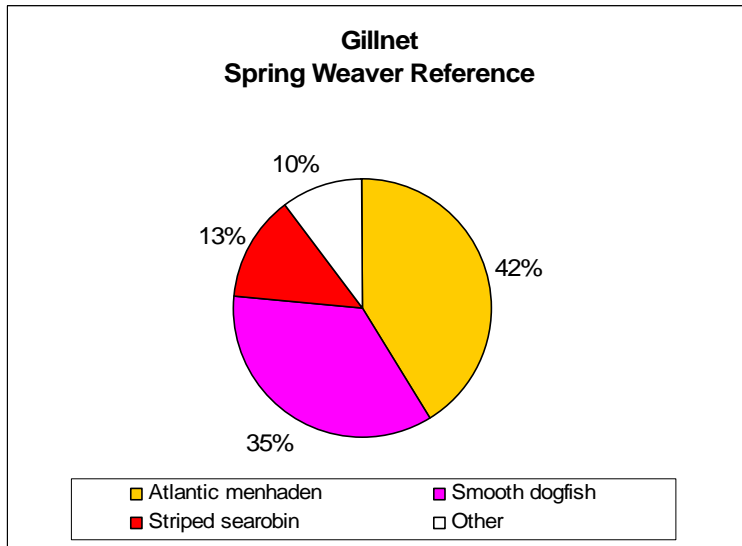
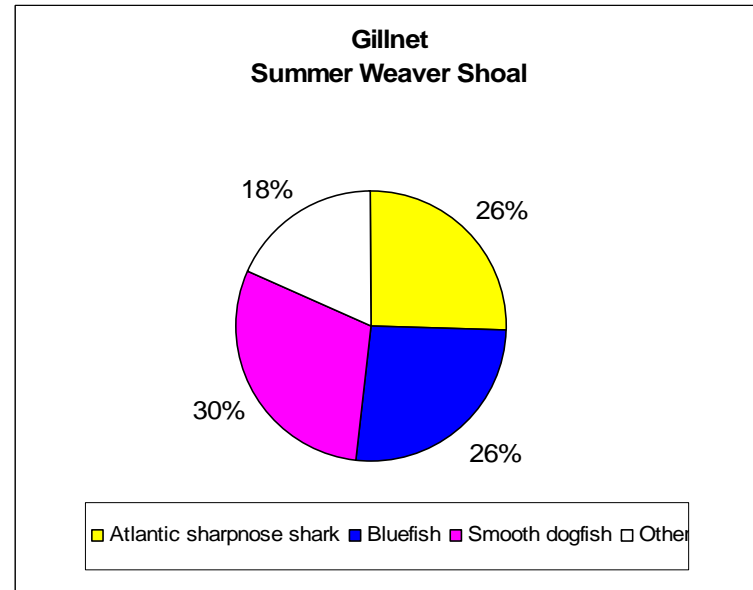
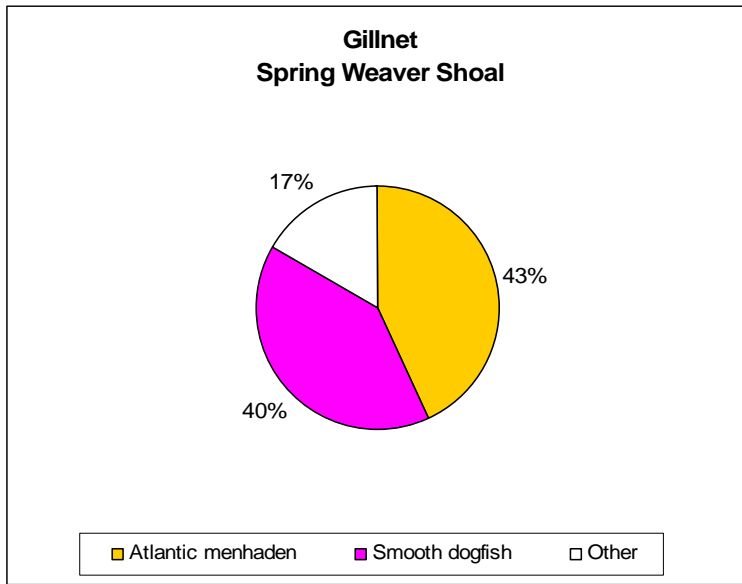


Figure D-10. Combined two-year spring and summer percent composition for all species collected in gillnets at Weaver Shoal and Weaver Shoal Reference site in the Atlantic Ocean off the coast of Maryland and Delaware from November 2002 to September 2004.