

The following supplement accompanies the article

It takes guts to locate elusive crustacean prey

L. S. Lasley-Rasher*, D. C. Brady, B. E. Smith, P. A. Jumars

*Corresponding author: rachel.lasleyrasher@maine.edu

Marine Ecology Progress Series 538: 1–12 (2015)

Supplement.

Table S1. Total number of fish diets examined each month from 1973 to 2012.

Year	January	February	March	April	May	June	July	August	September	October	November	December
1973			1155	1099	1265				384	2263	2399	
1974			1047	3707	139				657	2666	1171	
1975			682	281	14					3009	1048	
1976			3161	1748	46				918	2504	1393	
1977			332	2535	1528		49	619	126	2687	394	233
1978	111		421	3637	1296		114	3186	1469	2703	573	
1979			380	3653	791	3	101	3090	434	2643	943	
1980			535	2847	386		886	1123	94	1287	197	
1981			716	1979	789	185	71		235	1280	618	
1982	3		1131	3459	1214				443	974	681	
1983			1292	1081					78	1377	477	
1984			1552	747					494	2414	244	
1985		290	4127	2963					139	2569	1999	
1986			2813	4094					311	2913	1241	

Year	January	February	March	April	May	June	July	August	September	October	November	December
1987			1312	5761					1164	3017	2	
1988			3560	1481					1328	3414		
1989		92	7780	1526					2034	5357	395	
1990			4621	2396					2234	5701		
1991			6346	3168			2124	10	2157	5338		
1992		3518	6154	3126			1055	2358	2605	5878		
1993		4801	5398	6179			2950	995	3697	5189		
1994		4152	5029	4661			1596	969	2521	5782		
1995		7171	4534	5381				4146	3725	5874		
1996		7450	3734	6098					4291	4738		
1997		4731	5367	3159					1866	5598		
1998		7762	6769	3906					2214	6704	2205	
1999		7201	3407	4457					1123	4059	2203	
2000		4041	2658	4347	418				2804	3340		
2001	521	4834	2199	3904					2527	3634		
2002		4107	3244	4323					1892	4010		
2003		2759	2634	4311					2832	4168		
2004		3969	2887	3067					1547	3835		
2005		2711	2294	3360					2032	3728	762	
2006		3339	3355	2730					3268	3553		
2007		3000	3160	3700					1474	4702		
2008			2996	3554	335				1980	4044	453	
2009		28	4251	5474	1741				1610	2442	2767	
2010		133	4206	5502	206				1416	2808	2010	141
2011			3696	2841	1073				1711	3758	1867	
2012		115	3708	5111	594				1717	3819	1959	

Table S2. Species belonging to the four prey families of interest: Crangonidae, Euphausiidae, Mysidae, and Pandalidae that occur in northeastern US shelf large ecosystem (NESLE).

	Distribution	Depth range (m)	Maximum Body Length (cm)	Reference
Family Crangonidae				
<i>Crangon septemspinosa</i>	Western Atlantic: northern Gulf of St. Lawrence to east Florida	1-850	7.1	Haefner 1972, Williams 1984, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Pontophilus brevirostris</i>	Western Atlantic: Gulf of Maine to south to Gulf of Mexico off Dry Tortugas and Cuba	20 - 2000	3.3	Williams 1984, Pollock 1998, Parr et al. 2014, Moretzsohn et al. 2015, Mees et al. 2015
<i>Pontophilus norvegicus</i>	Northwest Atlantic: Greenland to Maryland, northeast Atlantic: Iceland to Gulf of Gascoigne, Mediterranean Sea	50 - 1450	7.8	Williams 1984, Pollock 1998, Parr et al. 2014, Mees et al. 2015,
<i>Sabinea sarsi</i>	North Atlantic: Gulf of St. Lawrence, Gulf of Maine, North Sea	5 - 600	7.1	Williams 1984, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Sabinea septemcarinata</i>	North Atlantic: Labrador Sea to Massachusetts Bay, circumpolar in Arctic,	10 - 300	9.1	Williams 1984, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Sclerocrangon boreas</i>	North Atlantic: Labrador Sea to Massachusetts Bay, circumpolar in Arctic,	10 - 600	12.9	Williams 1984, Birkely & Gulliksen 2003, Parr et al. 2014, Mees et al. 2015,
Family Euphausiidae				
<i>Euphausia krohnii</i>	Northeast Atlantic: Bay of Biscay to Iceland	1 - 600	1.9	Mauchline 1980, Brinton et al. 2000, Parr et al. 2014, Mees et al. 2015
<i>Meganyctiphanes norvegica</i>	North Atlantic: Cape Hatteras to Labrador Sea, Barents Sea to northwest Africa (Canary Basin)	4 - 3200	3.8	Mauchline 1980, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Nyctiphantes couchii</i>	Northeast Atlantic: North Sea to Bay of Biscay	1 - 1000	1.7	Mauchline 1980, Brinton et al. 2000, Parr et al. 2014, Mees et al. 2015
<i>Thysanoessa inermis</i>	North Atlantic: Greenland and Barents Sea to Gulf of Maine; North Pacific: Chukchi Sea to offshore from San Francisco Bay; circumpolar in Arctic	5 - 900	3.2	Mauchline 1980, Brinton et al. 2000, Parr et al. 2014, Mees et al. 2015
<i>Thysanoessa longicaudata</i>	Northwest Atlantic: Newfoundland to Long Island, northeast Atlantic: Iceland to Bay of Biscay; circumpolar in Arctic	1 - 4000	1.6	Mauchline 1980, Brinton et al. 2000, Parr et al. 2014, Mees et al. 2015

	Distribution	Depth range (m)	Maximum Body Length (cm)	Reference
<i>Thysanoessa raschii</i>	Northeast Pacific, northwest Atlantic: Cobscook Bay to Long Island, northeast Atlantic: Barents Sea to North Sea, circumpolar in Arctic	5 - 500	2.5	Mauchline 1980, Brinton et al. 2000, Parr et al. 2014, Mees et al. 2015
Family Pandalidae				
<i>Dichelopandalus leptocerus</i>	Cobscook Bay – North Carolina (continuous), one account in the tropics	5 - 2000	10.1	Stevenson & Pierce 1984, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Pandalus borealis</i>	Northwest Atlantic: Labrador Sea, Gulf of Maine, Arctic, northern Europe, British Isles	20 - 1000	16	Haynes & Wigley 1969, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Pandalus montagui</i>	Northwest Atlantic: Newfoundland to Delaware Bay; northeast Atlantic: Iceland to Bay of Biscay, Arctic, northeast Pacific: Bering Sea to Gulf of Alaska	5 - 1000	16.5	Stevenson & Pierce 1984, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Atlantopandalus propinquus</i>	Northwest Atlantic: Gulf of St. Lawrence to Delaware Bay, northeast Atlantic: Iceland to Bay of Biscay	5 - 2000	10.1	Pollock 1998, Parr et al. 2014, Mees et al. 2015
Family Mysidae				
<i>Amblyops abbreviatus</i>	Northwest Atlantic: Cape Cod to Long Island, northeast Atlantic: Iceland to Bay of Biscay	180 - 2000	1.3	Wigley & Burns 1971, Pollock 1998, Parr et al. 2014, Mees et al. 2015,
<i>Erythrops erythrophthalma</i>	Northwest Atlantic: Newfoundland to Long Island, northeast Atlantic: Greenland to UK, Northwest Atlantic: Cape Cod to Florida	130 - 260	1.1	Wigley & Burns 1971, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Heteromysis formosa</i>	1 - 60	0.8	Wigley & Burns 1971, Pollock 1998, Parr et al. 2014, Mees et al. 2015	
<i>Americamysis bigelowi</i>	North Atlantic: Georges Bank to Florida (east and west side), Gulf of Mexico	1 - 260	0.5	Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Mysis mixta</i>	North Atlantic: Labrador Sea to Cape Cod, Iceland to Baltic Sea	1 - 160	2	Wigley & Burns 1971, Pollock 1998, Parr et al. 2014, Mees et al. 2015

	Distribution	Depth range (m)	Maximum Body Length (cm)	Reference
<i>Neomysis americana</i>	Northwest and southwest Atlantic	1 - 260	1.2	Wigley & Burns 1971, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Praunus flexuosus</i>	North Atlantic: Barents to North Sea; Mediterranean; Gulf of Maine	1 - 70	2.5	Wigley & Burns 1971, Pollock 1998, Parr et al. 2014, Mees et al. 2015
<i>Pseudomma affine</i>	North Atlantic: Gulf of Maine to Long Island; Barents Sea to Bay of Biscay	150 - 700	1.1	Wigley & Burns 1971, Pollock 1998, Parr et al. 2014, Mees et al. 2015

References

- Birkely SR, Gulliksen B (2003) Population features of the caridean shrimp, *Sclerocrangon boreas* (Phipps, 1774) in Isfjorden, Spitsbergen. Crustaceana 76:87-101
- Brinton E, Ohman MD, Townsend AW, Knight MD, Bridgeman A (2000) Euphausiids of the world ocean. World Biodiversity Database CD-ROM Series. Springer Verlag, New York. NY
- Haefner PA (1972) The biology of the sand shrimp, *Crangon septemspinosa* at Lamoine, Maine. J Elisha Mitchell Sci Soc 88:36-42
- Mauchline J (1980) The biology of mysids and euphausiids. Adv Mar Biol 18:1-681
- Mees J, Boxshall GA, Costello MJ, Hernandez F, Bailly N...Zeidler W (2015) World Register of Marine Species (WoRMS). WoRMS Editorial Board
- Moretzsohn F, Sanchez Chavez JA, Tunnell JW (2015) GulfBase: Resource Database for Gulf of Mexico Research. World Wide Web electronic publication. www.gulfbase.org
- Parr CS, Wilson N, Leary P, Schulz S, Lans K, Walley L, Hammock JA, Goddard A, Rice J, Studer M, Holmes JT, Corrigan RJ (2014) The encyclopedia of life: Providing global access to knowledge about life on earth. Biodiversity Data Journal 2. World Wide Web electronic publication. eol.org
- Pollock LW (1998) A Practical Guide to the Marine Animals of Northeastern North America. Rutgers University Press, New Brunswick
- Stevenson DK, Pierce F (1984) Life history characteristics of *Pandalus montagui* and *Dichelopandalus leptocerus* in Penobscot Bay, Maine. Fish Bull 83:219-233
- Wigley RL, Burns BR (1971) Distribution and biology of mysids (Crustacea, Mysidacea) from the Atlantic coast of the United States in the NMFS Woods Hole Collection. Fish Bull 69:717
- Williams AB (1984) Shrimps, lobsters and crabs of the Atlantic coast of the eastern United States, Maine to Florida. Washington DC: Smithsonian Institution Press, Washington, DC