

Grouping reduces the metabolic demand of a social squid

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Table S1. Social conditions utilized in respiration studies of group-forming cephalopods. Cephalopod lifestages are defined as follows: hatchling (non-nektonic), juvenile (nektonic, immature), and adult (nektonic, mature). Group-forming lifestage references: ¹Fields 1965, ²Hurley 1976, ³Hurley 1978, ⁴Yang et al. 1986, ⁵Hanlon & Messenger 1996, ⁶Hunt et al. 2000, ⁷Zeidberg 2004, ⁸Porterio et al. 1990, ⁹Pierce et al. 1994, ¹⁰Pham et al. 2009, ¹¹Hanlon et al. 1983, ¹²Vecchione & Roper 1991, ¹³Bartol et al. 2002, ¹⁴Martins & Perez 2006, ¹⁵Lee et al. 1994, ¹⁶Sugimoto & Ikeda 2012, ¹⁷Hunt & Seibel 2000, ¹⁸Benoit-Bird & Gilly 2012, ¹⁹Rosen et al. 2015, ²⁰Trueblood et al. 2015, ²¹Squires 1957, ²²Mather & O'Dor 1984, ²³Belokopytin 1982, ²⁴Bower & Ichii 2005, ²⁵Zuyev et al. 2002, ²⁶Roper et al. 2010, ²⁷Nigmatullin & Arkhipkin 1998. (References S1) lists references that are cited in this table, but not included in the references section of the main article text. *Juveniles respired in groups of 2-3. †Solitary squid respired in jars in visual contact with conspecifics (no studies have compared rates with and without social stimuli). ‡Authors do not specify if acclimation took place inside or outside respirometers.

Family	Species	Group-forming lifestage(s)	Respiration study	Lifestage(s) examined	Social condition during captivity	Social condition during respirometry	Average hours of acclimation to respirometry conditions
Loliginidae	<i>Doryteuthis opalescens</i>	juvenile - adult (1-7)	Hurley 1976 O'Dor 1982 Shadwick et al. 1990 This study	hatchling - juvenile adult adult adult	group group group group	group* solitary solitary group	0 2 2 1.5
	<i>Loligo forbesii</i>	juvenile - adult (5, 8-10)	Segawa & Hanlon 1988 Boucher-Rondi & Mangold 1989	hatchling juvenile - adult	group group + solitary	solitary solitary	0 2.5
	<i>Lolliguncula brevis</i>	juvenile - adult (5, 11-14)	Finke et al. 1996 Segawa & Hanlon 1988 Wells et al. 1988 Zielinski et al. 2000 Bartol et al. 2001	juvenile - adult	group	solitary	0.5
				juvenile - adult	group	solitary	0
				juvenile - adult	group	solitary	0
<i>Sepioteuthis lessoniana</i>	juvenile - adult (5, 15, 16)	Segawa 1991 Segawa 1995	juvenile - adult	group	solitary	0.6	
			hatchling - juvenile hatchling - juvenile	group group	solitary solitary	1	
Gonatidae	<i>Gonatus onyx</i>	juvenile (17)	Seibel et al. 1997 Hunt & Seibel 2000	juvenile adult	solitary solitary	solitary solitary	several‡ 10‡
Ommastrephidae	<i>Dosidicus gigas</i>	juvenile - adult (5, 18-20)	Gilly et al. 2006 Rosa & Seibel 2008, 2010	juvenile - adult juvenile	solitary solitary	solitary solitary	0 10
	<i>Illex illecebrosus</i>	juvenile - adult (5, 21, 22)	DeMont & O'Dor 1984 Hoeger et al. 1987 Webber & O'Dor 1986	juvenile - adult	group + solitary	solitary	1
				juvenile - adult	group	solitary	2
				juvenile - adult	group	solitary	2.5
	<i>Ommastrephes bartramii</i>	juvenile - adult (23,24)	Belokopytin 1982	juvenile - adult	solitary	solitary	1
<i>Sthenoteuthis oualaniensis</i>	juvenile - adult (25, 26)	Belokopytin 1982 Abolmasova 1985	juvenile - adult	solitary	solitary	1	
			juvenile - adult	solitary	solitary	1.5	
			juvenile - adult	solitary	solitary	1	
<i>Sthenoteuthis pteropus</i>	juvenile - adult (23, 25)	Belokopytin 1982 Abolmasova 1984 Abolmasova & Belokopytin 1987 Stolbov 1988 Abolmasova & Stolbov 1991	juvenile - adult	solitary	solitary	1	
			juvenile - adult	solitary	solitary	1.25	
			juvenile - adult	solitary	solitary	0.75	
			juvenile	solitary	solitary	0	
Octopodidae	<i>Octopus rubescens</i>	juvenile - adult (5)	Seibel et al. 1997	juvenile	solitary	solitary	several‡
				juvenile - adult	solitary	solitary	1
Thysanoteuthidae	<i>Thysanoteuthis rombus</i>	juvenile - adult (23,27)	Belokopytin 1982	juvenile - adult	solitary	solitary	1

References S1. List of references included in Table S1, but not the main text.

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