

## Umbrella species in marine systems: using the endangered humphead wrasse to conserve coral reefs

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**Supplement.** This supplement contains information gathered from the published literature on the home ranges of coral reef fishes.

Table S1: Body size, home-range length, and references for coral reef fishes

Species	Mean body length (mm)	Mean home range length (m)	Reference
<i>Acanthurus bahianus</i>	145	116	(Chapman & Kramer 2000)
<i>Acanthurus chirurgus</i> <sup>1</sup>	185	75	(Garcia et al. 2011)
<i>Acanthurus coeruleus</i>	145	88	(Chapman & Kramer 2000)
<i>Acanthurus coeruleus</i> <sup>1</sup>	42	1.67	(Bell & Kramer 2000)
<i>Amblycirrhites pinos</i>	44	1.8	(Luckhurst & Luckhurst 1978)
<i>Bodianus rufus</i> <sup>1</sup>	190	24	(Hoffman 1983)
<i>Cantherhines pullus</i>	170	42	(Chapman & Kramer 2000)
<i>Canthigaster rostrata</i> <sup>1</sup>	53	5.1	(Sikkel 1990)
<i>Caranx ignobilis</i>	329	2913	(Wetherbee et al. 2004)
<i>Caranx melampygus</i>	502	4593	(Holland et al. 1996)
<i>Carcharhinus leucas</i> <sup>1</sup>	2080	6250	(Yeiser et al. 2008)
<i>Carcharhinus melanopterus melanopterus</i>	1210	5900	(Papastamatiou et al. 2010)
<i>Centropyge argi</i>	45	1.2	(Luckhurst & Luckhurst 1978)
<i>Cephalopholis cruentata</i>	300	64	(Pople & Hunte 2005)
<i>Chaetodon austriacus</i>	130	233	(Righton & Mills 2006)
<i>Chaetodon striatus</i>	135	110	(Chapman & Kramer 2000)
<i>Chaetodon trifascialis</i>	180	1204	(Righton & Mills 2006)
<i>Chlorurus microrhinos</i> <sup>1</sup>	431	101	(Welsh & Bellwood 2011)
<i>Dascyllus aruanus</i> <sup>1</sup>	40	2	(Sale 1971)
<i>Enneanectes atrorus</i>	23	0.4	(Luckhurst & Luckhurst 1978)

Species	Mean body length (mm)	Mean home range length (m)	Reference
<i>Epinephelus fulvus</i>	260	8	(Shapiro et al. 1994)
<i>Epinephelus guttatus</i> <sup>1</sup>	254	33	(Chapman & Kramer 2000)
<i>Epinephelus morio</i> <sup>1</sup>	535	1572	(Farmer 2009)
<i>Epinephelus striatus</i> <sup>1</sup>	582	152	(Bolden 2001)
<i>Haemulon sciurus</i> <sup>1</sup>	288	133	(Hitt et al. 2011)
<i>Halichoeres bivittatus</i> <sup>1</sup>	114	6.45	(Jones 2006)
<i>Halichoeres garnoti</i> <sup>1</sup>	119	6.7	(Jones 2006)
<i>Halichoeres maculipinna</i> <sup>1</sup>	117	7.88	(Jones 2006)
<i>Halichoeres poeyi</i> <sup>1</sup>	107	5.81	(Jones 2006)
<i>Holocanthus tricolor</i>	160	62	(Kramer & Chapman 1999)
<i>Holocentrus adscensionis</i>	170	22	(Kramer & Chapman 1999)
<i>Kyphosus sectatrix</i>	352	547	(Eristhee & Oxenford 2001)
<i>Labroides dimidiatus</i> <sup>1</sup>	40	4.4	(Moland & Jones 2004)
<i>Lethrinus harak</i> <sup>1</sup>	244	182	(Taylor & Mills 2013)
<i>Lethrinus obsoletus</i> <sup>1</sup>	209	100	(Taylor & Mills 2013)
<i>Lutjanus analis</i> <sup>1</sup>	553	3120	(Farmer 2009)
<i>Lutjanus apodus</i> <sup>1</sup>	312	120	(Hitt et al. 2011)
<i>Lutjanus griseus</i> <sup>1</sup>	540	2016	(Farmer 2009)
<i>Cheilinus undulatus</i>	750	6329	This study
<i>Micrognathus ensenadae</i>	90	2.6	(Luckhurst & Luckhurst 1978)
<i>Mycteroperca bonaci</i> <sup>1</sup>	500	1199	(Farmer 2009)
<i>Myripristis jacobus</i>	145	26	(Chapman & Kramer 2000)
<i>Naso lituratus</i> <sup>1</sup>	194	151	(Marshall et al. 2011)
<i>Naso unicornis</i> <sup>1</sup>	115	130	(Marshall et al. 2011)
<i>Naso unicornis</i> <sup>1</sup>	473	136	(Meyer & Holland 2005)
<i>Negaprion brevirostris</i> <sup>1</sup>	1510	6320	(Yeiser et al. 2008)
<i>Ocyurus chrysurus</i> <sup>1</sup>	513	1788	(Farmer 2009)
<i>Ophioblennius atlantius</i> <sup>1</sup>	67	0.8	(Nursall 1977)
<i>Parupeneus porphyreus</i> <sup>1</sup>	232	156	(Meyer et al. 2000)
<i>Plagiotremus rhinorhynchus</i> <sup>1</sup>	51.5	5.7	(Moland & Jones 2004)
<i>Plectropomus areolatus</i> <sup>1</sup>	537	247	(Hutchinson & Rhodes 2010)
<i>Plectropomus leopardus</i>	490	223	(Zeller 1997)
<i>Pomacentrus flavicauda</i> <sup>1</sup>	66	1.6	(Low 1971)
<i>Pseudocaranx dentex</i>	476	6100	(Afonso et al. 2009)
<i>Scarus niger</i> <sup>1</sup>	400	18	(Bellwood 1985)
<i>Scarus oviceps</i> <sup>1</sup>	350	20	(Bellwood 1985)
<i>Scarus rivulatus</i> <sup>1</sup>	236	55.8	(Welsh & Bellwood 2012)

Species	Mean body length (mm)	Mean home range length (m)	Reference
<i>Scarus rubroviolaceus</i> <sup>1</sup>	700	58	(Ong 2007)
<i>Scarus rubroviolaceus</i> <sup>1</sup>	449.5	72.7	(Howard et al. 2013)
<i>Sianus leneatus</i> <sup>1</sup>	255	200	(Fox & Bellwood 2011)
<i>Siganus doliatus</i>	231	140	(Brandl & Bellwood 2013)
<i>Sparisoma aurofrenatum</i> <sup>1</sup>	280	15	(Mumby & Wabnitz 2002)
<i>Sparisoma chysopterygum</i> <sup>1</sup>	460	18	(Mumby & Wabnitz 2002)
<i>Sparisoma rubripinne</i> <sup>1</sup>	478	28	(Mumby & Wabnitz 2002)
<i>Sparisoma viride</i> <sup>1</sup>	280	25	(Rooij & Jong 1996)
<i>Sparisoma viride</i> <sup>1</sup>	227.5	68.5	(Garcia et al. 2011)
<i>Sparisoma viride</i> <sup>1</sup>	640	15	(Mumby & Wabnitz 2002)
<i>Stegastes diencaeus</i>	78	2	(Luckhurst & Luckhurst 1978)
<i>Stegastes nigricans</i> <sup>1</sup>	70	0.28	(Letourneur 2000)
<i>Stegastes partitus</i>	57	2.4	(Luckhurst & Luckhurst 1978)
<i>Stegastes planifrons</i>	68	1.8	(Luckhurst & Luckhurst 1978)
<i>Thalassoma bifasciatum</i> <sup>1</sup>	74	6.5	(Jones 2006)
<i>Ucla xenogrammus</i> <sup>1</sup>	50.6	2.08	(Fujita et al. 2006)

<sup>1</sup>Home-range length estimated from area assuming circular home range.

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