

Duration of migration and reproduction in males is dependent on energy reserve in a fish forming spawning aggregations

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Table S1. *Epinephelus ongus*. Summary of the gonadosomatic index (GSI) and feeding probability of males collected at the spawning aggregation site before the prohibition began in 2010

Date captured	Number of samples	TL (mm)	BW (g)	GSI (%)	Feeding probability	Days from EPSD (d)
2007/5/9	12	280±34	385±138	1.02±0.49	0	0
2008/4/27	5	286±25	420±97	0.99±0.17	0	-1
2008/5/1	3	314±24	483±101	0.35±0.10	0	+3
2008/5/27	4	296±23	410±80	0.87±0.20	0	0
2009/5/13	19	282±38	367±89	1.43±0.32	0.05	-4
2009/5/14	6	278±38	333±119	1.29±0.42	0.17	-3
2009/5/18	10	292±22	401±88	0.47±0.10	0.1	+1
total or mean ± SD	59	286±27	387±104	1.04±0.49	0.05	-1.4±2.2

TL, total length; BW, body weight; GSI, gonadosomatic index; EPSD, estimated peak spawning date

Table S2. *Epinephelus ongus*. Summary of acoustic monitoring data for female white-streaked grouper

Year	ID	TL (mm)	BW (g)	Date released	Departure date	Returning date	Duration away (d)
2012	F1	244	206	2012/4/9	-	-	-
	F2	260	262	2012/4/9	2012/5/9	2012/5/16	7
	F3	243	198	2012/4/9	2012/5/8	2012/5/16	8
	F4	264	260	2012/4/9	2012/5/8	2012/5/16	8
	F5	225	174	2012/4/9	2012/5/8	2012/5/16	8
	F6	210	134	2012/4/9	-	-	-
	F7	195	106	2012/4/9	2012/5/7	2012/5/17	10
	F8	193	98	2012/4/9	-	-	-
	F9	241	212	2012/4/9	2012/5/7	2012/5/16	9
	F10	213	146	2012/4/9	2012/5/9	2012/5/16	7
	F11	225	148	2012/4/9	2012/5/11	2012/5/15	4
	F12	252	234	2012/4/9	2012/5/8	2012/5/16	8
	F13	216	164	2012/4/9	-	-	-
	F14	241	196	2012/4/9	2012/5/9	2012/5/15	6
	F15	220	144	2012/4/9	2012/5/8	2012/5/16	8
	F16	216	140	2012/4/9	-	-	-
	F17	241	216	2012/4/10	2012/5/9	2012/5/15	6
	F18	242	210	2012/4/10	2012/5/8	2012/5/15	7
	F19	244	222	2012/4/10	2012/5/7	2012/5/15	8
	F20	235	208	2012/4/10	2012/5/9	2012/5/18	9
	F21	240	192	2012/4/10	2012/5/9	2012/5/19	10
2013	F22	256	254	2014/4/2	2013/4/30	-	-
	F23	212	132	2014/4/2	-	-	-
	F24	236	196	2014/4/2	2013/4/29	2013/5/9	10
	F25	238	186	2014/4/2	-	-	-
	F26	253	238	2014/4/2	2013/4/30	2013/5/7	7
	F27	243	226	2014/4/2	-	-	-
	F28	256	262	2014/4/2	2013/4/30	2013/5/8	8
	F29	216	160	2014/4/4	2013/4/30	2013/5/13	13
	F30	238	214	2014/4/4	2013/4/29	2013/5/8	9
	F31	238	210	2014/4/4	2013/4/30	2013/5/9	9
	F32	244	220	2014/4/4	2013/4/30	2013/5/8	8
	F33	236	208	2014/4/4	2013/4/30	2013/5/8	8
	F34	238	208	2014/4/4	2013/5/3	2013/5/10	7
	F35	215	144	2014/4/4	-	-	-
mean±SD	-	234±17	192±44	-	-	-	8.0±1.7

TL, total length; BW, body weight