

Title: Mollusc fisheries and length-weight relationship in Tonle Sap flood pulse system,
Cambodia

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Supplementary Information (S)

Figure S1. Daily water levels in Tonle Sap River, at the Kampong Chhnang Hydrological Station.

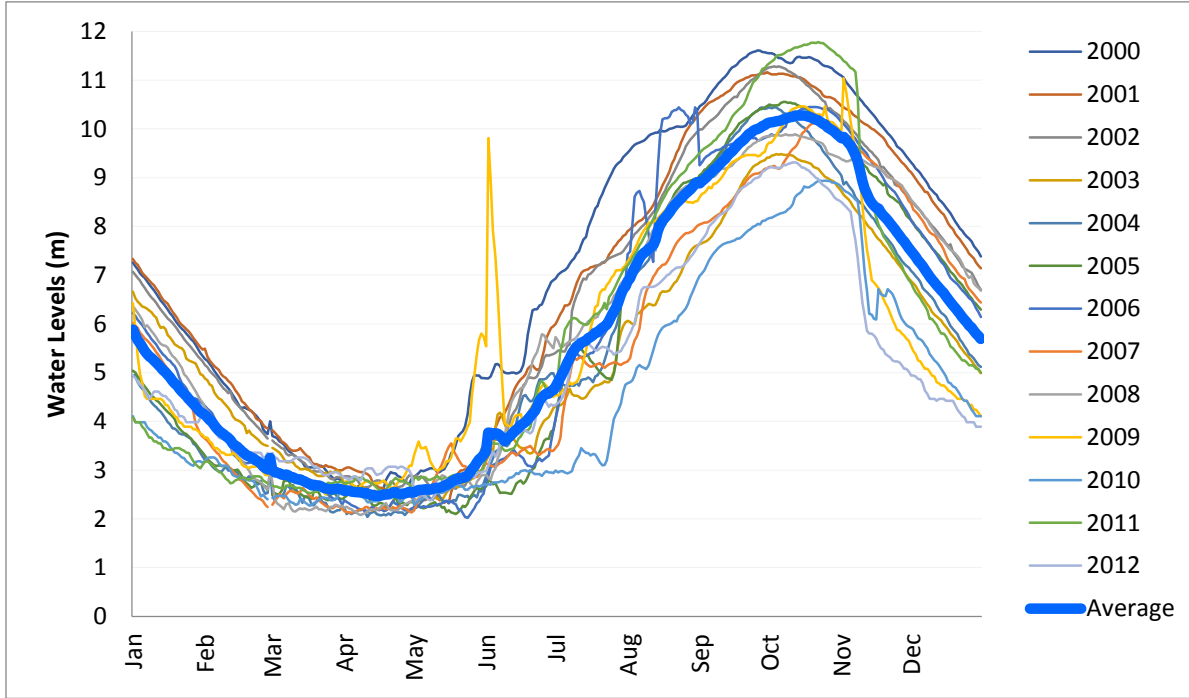




Table S1. Identification keys and brief description of three mollusc species commonly landed at the study sites. Source: Sangpradub & Boonsoong, 2006; applesnail.net; <http://www.iucnredlist.org>. Photos were taken by the authors.

Species names	Photos of max. length (height) measurement	Identification keys/brief description
<p>1. <i>Pila virescens</i> (Deshayes, 1824) (synonym of <i>Pila polita</i> - Deshayes, 1830)</p>		<p>ID key: Shell ovoidal, periderm very glossy, inner surface of operculum steel-blue.</p> <p>Shell: Two forms exist: one large form (80-95 mm high, 70-80 mm wide) with a short spire and a smaller form (60-70 mm high, 45-55 mm wide) with a high spire. The shell opening is oval, and the umbilicus is narrow and almost closed. The lip is somewhat thickened, and the surface of the shell is smooth. The colour of the shell varies from brown to bright olive green and sometimes faint spiral bands are visible.</p> <p>Operculum: 2 times higher than wide and calcified.</p> <p>Eggs: The calcareous, white eggs are deposited above the waterline.</p> <p>Body: No information</p> <p>Food: Various water plants.</p> <p>Behaviour: Prefers stagnant water (swamps, floodplains).</p> <p>Distribution: Asia: Cambodia, India, South China and Thailand.</p>
<p>2. <i>Pila ampullacea</i> (Linnaeus, 1758)</p>		<p>ID key: Shell with a thin white lip.</p> <p>Shell: The shell of this large Asiatic apple snails varies from 90-100 mm high, 85-90 mm wide. They have a globose shell with an oval shell opening (aperture). The spire is rather short and the umbilicus narrow to nearly closed. The surface of the shell is smooth. The colour varies from bright green to orange-brown with reddish spiral bands. The internal part of the shell is yellowish with a tinge of purple and marked with strong spiral bands, lighter at the lip.</p> <p>Operculum: 2 times higher than wide and calcified in older snails.</p> <p>Body: Grey – brown body.</p> <p>Eggs: The calcareous, white eggs are deposited above the water line on banks and mudflats in shallow depressions.</p> <p>Food: All kind of aquatic vegetation, algae.</p> <p>Aestivation: <i>Pila ampullacea</i> aestivates during the dry season. The snails bury</p>


		<p>themselves deep into the mud and can be found to depths of 1 m.</p> <p>Distribution: South Asia</p>
<p>3. <i>Corbicula moreletiana</i> (Prime, 1867)</p>		<p>ID key: Hinge teeth with laterals, surface with concentric ribs.</p> <p>Range: The species has been recorded from the Mekong Basin, e.g. with records from Cambodia: the Tonle Sap River and Lake, Prek Tnot and Pursat Rivers; Mekong River at Lao-Thai border; Thailand in Chi and Songkram Rivers; Viet Nam (Srepok River). The species occurrence is native to Cambodia, Lao PDR, Thailand and Viet Nam.</p> <p>Habitat and Ecology: Ecology: This species can be found in oxbow lakes, swamps, reservoirs, creeks, small rivers and large rivers. This species is fished in the rainy season.</p>

Table S2: Descriptive statistics on monthly weight and length (height) of the three studied species.

Weight (g)	Species	Month	N	mean	sd	median	min	max
	<i>Corbicula moreletiana</i>	April	80	9.55	7.63	8	2	23
	<i>Corbicula moreletiana</i>	May	121	6.3	3.7	7	2	13
	<i>Corbicula moreletiana</i>	September	40	3.45	1.4	3	2	7
	<i>Corbicula moreletiana</i>	October	63	2.32	0.47	2	2	3
	<i>Corbicula moreletiana</i>	November	57	2.63	0.56	3	2	4
	<i>Corbicula moreletiana</i>	December	24	2.58	0.78	2.5	1	4
	<i>Pila ampullacea</i>	February	137	29.47	18.03	25	5	92
	<i>Pila ampullacea</i>	March	279	36.19	23.69	30	2	119
	<i>Pila ampullacea</i>	April	168	27.37	10.84	27	9	71
	<i>Pila ampullacea</i>	May	10	23.7	16.62	15.5	8	55
	<i>Pila ampullacea</i>	June	39	32.36	22.91	22	7	89
	<i>Pila ampullacea</i>	July	25	23.68	7.46	25	10	41
	<i>Pila ampullacea</i>	August	68	29.25	23.87	21	2	93
	<i>Pila ampullacea</i>	September	20	33.2	20.66	29	6	73
	<i>Pila ampullacea</i>	October	31	26.58	19.22	21	4	79
	<i>Pila ampullacea</i>	November	133	42.74	24.33	39	3	115
	<i>Pila ampullacea</i>	December	93	42.82	25.51	41	3	119
	<i>Pila virescens</i>	February	509	36.47	27.55	28	2	125
	<i>Pila virescens</i>	March	524	49.05	28.72	46	2	131
	<i>Pila virescens</i>	April	398	42.01	21.12	41	3	102
	<i>Pila virescens</i>	May	248	38.77	20.83	35	4	97
	<i>Pila virescens</i>	June	298	44	21.96	43	6	104
	<i>Pila virescens</i>	July	294	37.75	23.38	35	4	106
	<i>Pila virescens</i>	August	290	53	24	52	3	116
	<i>Pila virescens</i>	September	204	50.1	25.13	49	4	111
	<i>Pila virescens</i>	October	188	61.15	27.51	62	6	129
	<i>Pila virescens</i>	November	139	49.43	23.12	48	9	141
	<i>Pila virescens</i>	December	170	35.19	21.86	30	5	111

Length (mm)	Species	Month	N	mean	sd	median	min	max
	<i>Corbicula moreletiana</i>	April	80	12.97	6.68	12.9	5.13	25.59
	<i>Corbicula moreletiana</i>	May	121	13.47	6.51	13.38	6.32	24.07
	<i>Corbicula moreletiana</i>	September	40	19.44	2.38	19.45	15.86	23.6
	<i>Corbicula moreletiana</i>	October	63	17.36	2.22	16.72	13.88	22.68
	<i>Corbicula moreletiana</i>	November	57	18.42	0.85	18.42	16.68	20.21
	<i>Corbicula moreletiana</i>	December	24	18.36	0.91	18.44	16.77	20.2
	<i>Pila ampullacea</i>	February	137	34.41	18.2	28.55	10.2	78.07
	<i>Pila ampullacea</i>	March	279	50.78	14.72	48.7	21.68	86.76
	<i>Pila ampullacea</i>	April	168	44.18	7.65	43.96	32.9	68.22
	<i>Pila ampullacea</i>	May	10	39.24	9.72	35.95	30.26	58.49
	<i>Pila ampullacea</i>	June	39	47.58	15.45	43.01	25.41	83.71
	<i>Pila ampullacea</i>	July	25	42.73	5.22	43.96	32.45	54.73
	<i>Pila ampullacea</i>	August	68	45.53	16.21	42.62	23.29	87.16

<i>Pila ampullacea</i>	September	20	46.8	13.17	40.3	30.18	74.79
<i>Pila ampullacea</i>	October	31	46.04	12.16	44.56	29.02	81.34
<i>Pila ampullacea</i>	November	133	53.82	14.4	52.13	20.75	87.76
<i>Pila ampullacea</i>	December	93	53.14	17.34	56.32	14.91	84.22
<i>Pila virescens</i>	February	509	45.58	20.32	44.42	10.76	86.35
<i>Pila virescens</i>	March	524	56.62	17.63	59.12	10.2	88.86
<i>Pila virescens</i>	April	398	55.63	12.52	57.86	22.96	78.87
<i>Pila virescens</i>	May	248	54.53	11.42	54.74	23.96	78.66
<i>Pila virescens</i>	June	298	56.84	11.68	58.16	30.01	88.07
<i>Pila virescens</i>	July	294	53.89	14.38	54.79	14.39	83.8
<i>Pila virescens</i>	August	290	62.52	11.97	64.71	7.36	86.62
<i>Pila virescens</i>	September	204	62.58	12.03	64.2	16.73	88.53
<i>Pila virescens</i>	October	188	68.01	11.72	69.03	26.65	90.68
<i>Pila virescens</i>	November	139	61.86	10.24	63.85	32.43	88.6
<i>Pila virescens</i>	December	170	48.12	14.33	50.21	11.76	83.97

Figure S2. Auto-correlation between daily landing biomass and daily landing values (income). Cmor: *C. moreletiana*, Pamp: *P. ampullacea*, Pvir: *P. virescens*.

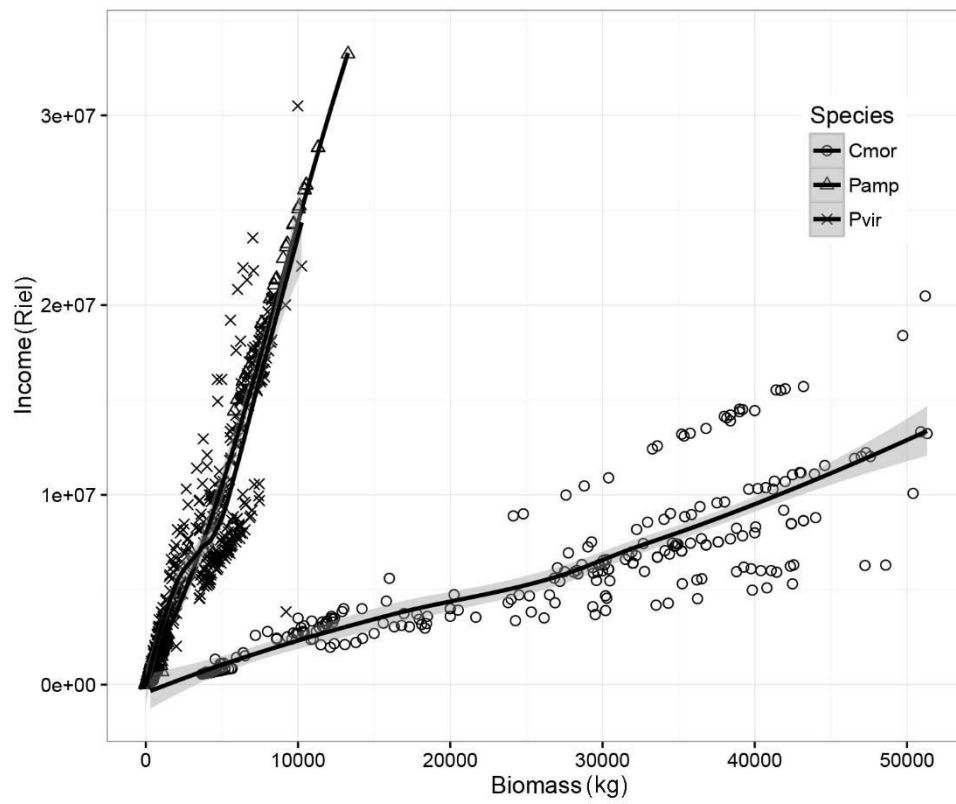


Figure S3. Box and whisker plots of b values estimated using daily measurement and analysis for each month. Cmor: *C. moreletiana*, Pamp: *P. ampullacea*, Pvir: *P. virescens*.

