

Table.S1 The evaluation of ordinary least squares (OLS) regression relationship between fat mass and fat percentage with different body condition indices. The better predicting body condition indices were determined based on R^2 and p -value. Significance levels are indicated as follows: $*p < 0.05$; $**p < 0.01$; $***p < 0.001$.

			Fat mass			Fat percentage		
			R^2	Adjusted R^2	p -value	R^2	Adjusted R^2	p -value
Body mass			0.5925	0.5343	0.0153*	0.5946	0.5366	0.0150*
Fat score			0.7206	0.6807	0.0038**	0.7458	0.7094	0.0027**
Body mass ratio	BM/body length		0.5655	0.5034	0.0194*	0.5739	0.513	0.0181*
	BM/bill length		0.7259	0.6867	0.00354**	0.7357	0.698	0.00310**
	BM/beak crack length		0.6509	0.6011	0.00859**	0.6515	0.6018	0.00854**
	BM/tarsus length		0.7618	0.7278	0.00213**	0.7717	0.7391	0.00183**
	BM/tail length		0.4525	0.3743	0.0471*	0.452	0.3737	0.0473*
	BM/flattened wing chord length		0.3962	0.31	0.0693	0.398	0.312	0.0685
	BM/second secondary feather length		0.5442	0.479	0.0233*	0.5515	0.4875	0.0219*
	BM/third primary feather length		0.5141	0.4447	0.0297*	0.5074	0.437	0.0313*
	BM/bill + tarsus length		0.8299	0.8056	0.000635***	0.8247	0.7996	0.000707***
	BM/PCA1		0.5946	0.5367	0.0150*	0.6027	0.546	0.0139*
	BM~ body length		0.5924	0.5342	0.0153*	0.5944	0.5365	0.0150*
	BM~ bill length		0.5534	0.4896	0.0215*	0.5545	0.4909	0.0214*
	BM~ beak crack length		0.4854	0.4119	0.037*	0.4874	0.4142	0.0365*
	BM~ tarsus length		0.02095	−0.1189	0.71	0.01591	−0.1247	0.746
	BM~ tail length		0.5134	0.4438	0.0299*	0.5135	0.444	0.0298*
Body residual	BM~ flattened wing chord length		0.5652	0.5031	0.0195*	0.5673	0.5055	0.0191*
	BM~ second secondary feather length		0.5808	0.5209	0.0170*	0.5799	0.5199	0.0171*
	BM~ third primary feather length		0.5919	0.5336	0.0153*	0.5908	0.5324	0.0155*
	BM~ bill + tarsus length		0.1832	0.06651	0.25	0.1893	0.07352	0.242
	BM~ PCA1		0.5797	0.5196	0.0172*	0.5805	0.5205	0.017*