The following appendix accompanies the article

Tracking changes in relative body composition of southern elephant seals using swim speed data

Michele Thums[1,*], Corey J. A. Bradshaw[2,3], Mark A. Hindell[1]

[1]Antarctic Wildlife Research Unit, School of Zoology, University of Tasmania, Private Bag 05, Hobart, Tasmania 7001, Australia
[2]Research Institute for Climate Change and Sustainability, School of Earth and Environmental Sciences, University of Adelaide, Adelaide, South Australia 5005, Australia
[3]South Australian Research and Development Institute, PO Box 120, Henley Beach, South Australia 5022, Australia

*Email: mthums@utas.edu.au

Marine Ecology Progress Series 370: 249–261 (2008)

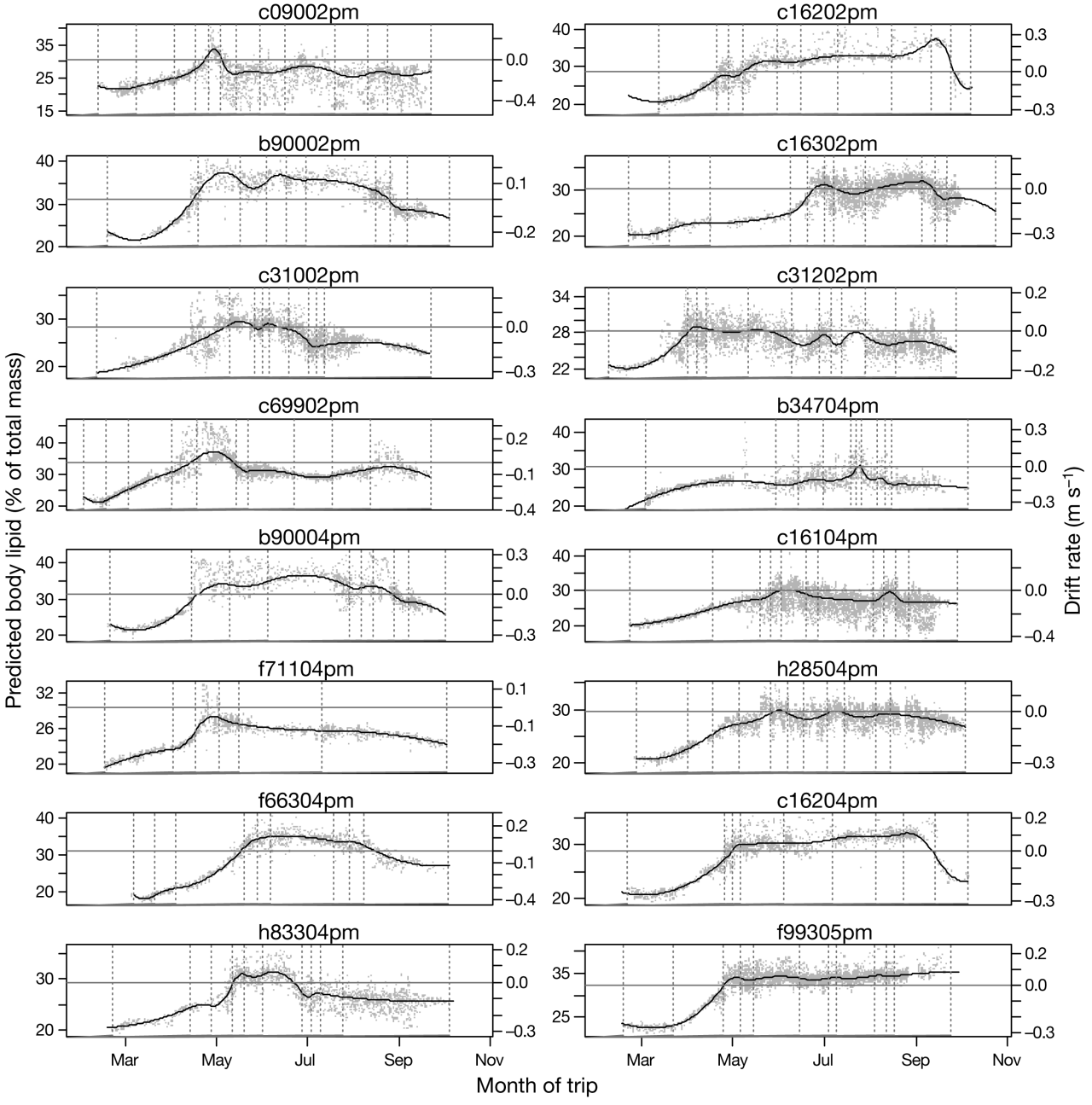

Fig. A1. Predicted body lipid content plotted against time for seals from the post-moult foraging trip (2 seals without full trips were omitted), with drift rate plotted on the right-hand *y*-axis. Spline fit (black line) and spline knot placements (vertical dotted lines) are shown

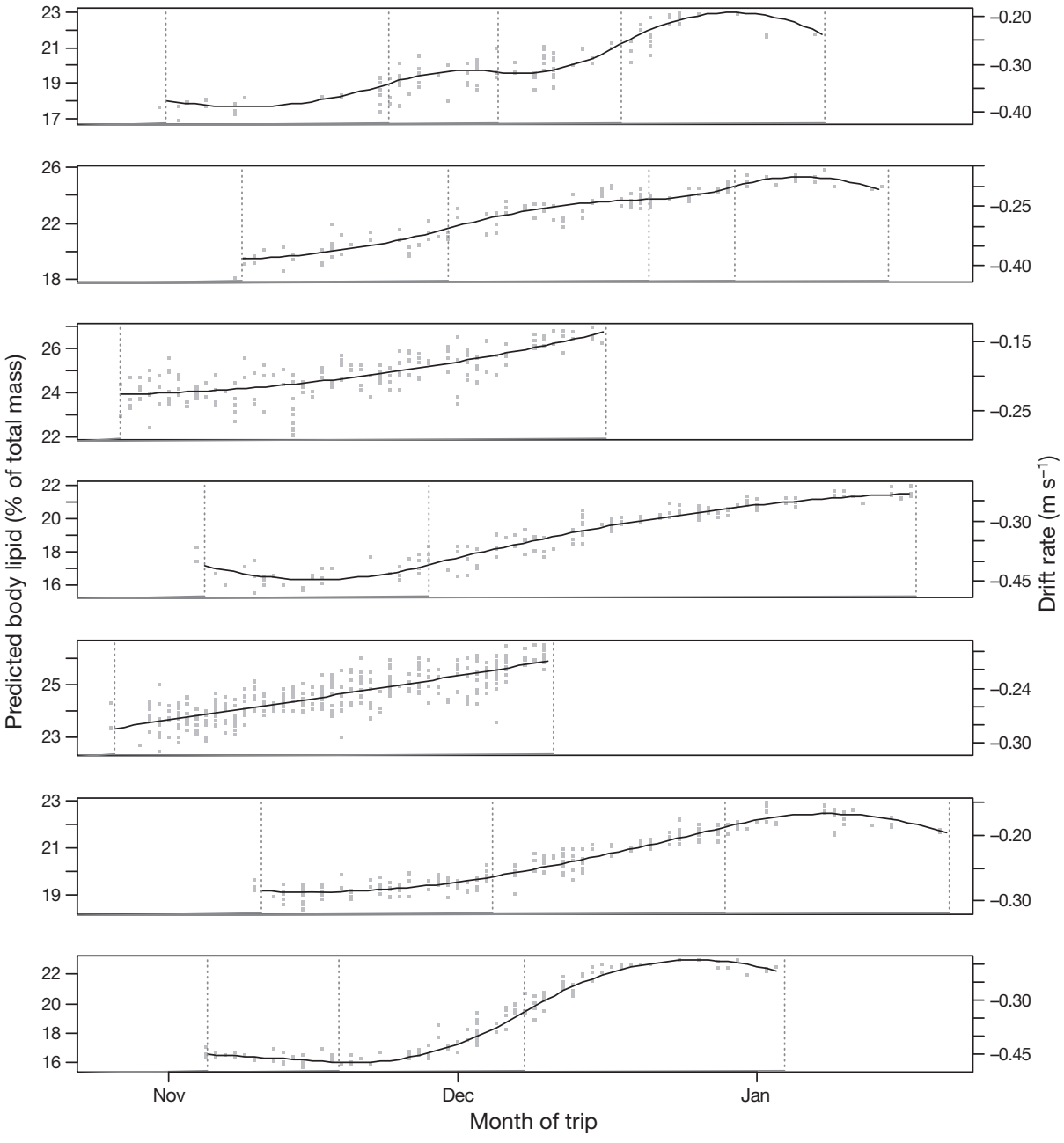

Fig. A2. Predicted body lipid content plotted against time for all seals from the post-lactation foraging trip, with drift rate plotted on the right-hand *y*-axis. Spline fit (black line) and spline knot placements (vertical dotted lines) are shown

Table A1. Seal-specific summary statistics for the start and end of the post-moult (PM) and post-lactation (PL) foraging trips showing the measured start and end fat content, the predicted start and end fat content (mean ± SD of the first and last 3 d of the trip), the error (%) between the measured and predicted start and end fat content, the start and end drift rates, fat masses, total masses and maximum predicted fat (maximum spline fitted value). Note: missing values (–) denote seals where the VTDR failed or where morphometric measurements were not made and the lack of SD indicates less than 3 values with which to calculate the mean. Diff = difference between the measured and predicted fat

Seal	Measured start fat %	Predicted start fat %	Diff	Measured end fat	Predicted end fat (%)	Diff	Maximum predicted fat (%)	Start drift rate (m s^{-1})	Start fat mass (kg)	Start mass (kg)	End drift rate (m s^{-1})	End fat mass (kg)	End mass (kg)
Post-moult													
b34704pm	19.78	21.65±0.83	−1.87	25.44	24.71±0.09	0.73	30.97	−0.30	69.40	350.87	−0.19	176.19	692.65
b90002pm	21.42	22.68±0.28	−1.26	30.92	26.67	4.25	37.40	−0.28	77.16	360.26	−0.15	205.42	664.40
b90004pm	24.23	22.73±0.35	1.5	28.31	25.83	2.48	36.63	−0.25	91.26	376.60	−0.16	194.52	687.18
c09002pm	–	23.03±0.59	–	26.98	27.31±1.46	−0.33	31.44	−0.29	–	365.65	−0.11	165.68	614.15
c16104pm	20.38	20.25±0.31	0.13	24.19	26.25±0.45	−2.06	28.11	−0.32	76.18	373.82	−0.14	157.70	652.19
c16202pm	21.95	22.59	−0.64	24.75	24.34±0.28	0.41	36.77	–	66.22	301.76	−0.16	130.32	526.53
c16204pm	22.29	21.00±0.50	1.29	23.87	23.39±0.69	0.48	33.51	−0.22	70.37	315.73	−0.18	125.55	526.06
c16302pm	20.72	21.43±1.10	−0.71	–	25.34	–	31.91	−0.26	69.32	334.54	−0.17	–	603.98
c16305pm	24.90	25.84±3.61	−0.94	26.87	26.10±0.17	0.77	33.61	−0.16	107.81	433.00	−0.16	172.56	641.74
c20905pm	19.05	21.78±1.46	−2.73	24.51	–	–	–	−0.33	72.08	378.34	–	171.38	699.57
c31002pm	17.53	18.26	−0.73	24.88	22.97±0.16	1.91	29.51	−0.30	49.96	285.00	−0.21	128.20	515.18
c31202pm	20.47	21.76±0.30	−1.29	25.72	24.90±0.86	0.82	28.98	−0.23	62.09	303.35	−0.13	141.39	549.85
c69902pm	22.70	22.22±0.30	0.48	30.15	29.73±0.58	0.42	37.06	−0.33	91.44	402.76	−0.11	253.25	839.95
c92704pm	20.98	–	–	23.80	26.31	−2.51	32.31	–	72.56	345.79	−0.11	137.95	579.50
f66304pm	17.74	19.19±0.21	−1.45	23.56	25.52±0.90	−1.96	34.96	−0.40	65.89	371.52	−0.21	155.48	660.04
f71104pm	18.16	19.89±0.84	−1.73	–	23.58±0.43	–	28.04	−0.37	68.85	379.11	−0.21	–	–
f99305pm	22.46	23.11±0.43	−0.65	29.00	30.68	−1.68	36.14	−0.26	81.57	363.22	−0.08	178.14	614.25
h28504pm	18.80	20.93±0.22	−2.13	25.11	26.91±0.68	−1.8	29.81	−0.27	62.60	333.00	−0.13	144.44	575.29
h83304pm	19.14	20.64±0.44	−1.5	25.03	25.11±0.40	−0.08	31.36	−0.35	72.74	380.00	−0.18	167.04	667.23
Mean	**20.71**	**21.61**	**1.23**	**26.07**	**25.87**	**1.42**	**32.70**	**−0.29**	**73.75**	**355.49**	**−0.16**	**165.01**	**627.89**
SD	**2.13**	**1.71**	**0.66**	**2.28**	**1.99**	**1.11**	**3.20**	**0.06**	**13.02**	**36.79**	**0.04**	**32.27**	**79.61**
Post-lactation													
b88904pb	20.07	17.57±0.62	2.5	22.65	21.74	0.91	22.94	−0.40	62.11	309.44	−0.24	106.91	472.11
b90004pb	25.24	–	–	25.06	24.51±0.13	0.55	25.81	–	100.42	397.86	−0.22	130.44	520.56
c09004pb	23.67	23.97±0.68	−0.3	27.26	26.53±0.24	0.73	26.62	−0.27	96.04	405.80	−0.15	136.93	502.24
c16204pb	16.72	17.07±0.98	−0.35	20.85	21.55±0.31	−0.7	21.68	−0.41	49.84	298.17	−0.24	84.33	404.44
c69904pb	25.04	23.46±0.79	1.58	–	26.07±0.32	–	26.21	−0.29	125.20	500.03	−0.22	–	–
c79004pb	19.93	19.13±0.32	0.8	24.48	21.69±0.08	2.79	22.70	−0.28	60.40	303.00	−0.20	104.48	426.86
c92704pb	16.48	16.59±0.22	−0.11	–	22.26±0.26	–	22.97	−0.47	53.72	326.00	−0.21	–	–
Mean	**21.02**	**19.63**	**0.94**	**24.06**	**23.48**	**1.25**	**24.13**	**−0.35**	**78.25**	**362.90**	**−0.21**	**112.62**	**465.24**
SD	**3.70**	**3.28**	**0.93**	**2.43**	**2.18**	**0.90**	**2.01**	**0.08**	**28.87**	**75.13**	**0.03**	**21.26**	**49.11**