## null

## Tables for manuscript

Tab 1 Summary of biological paramaters of individual eels used in the experiment

ID	Biomass at start (g)	Biomass at end (g)	Length (cm)	Silvering Index*
а	935	866	78	4
b	732	701	74	5
С	908	864	77	5
d	973	928	78	5
е	1045	1000	83	4
f	1142	1079	90	4
g	1345	1070	87	5
h	987	947	81	4
i	1345	1247	86	4

<sup>\*</sup>according to Durif et al. (2005)

**Tab 2** Short summary of the model statistics for main effects. Note, that value gives the change in the log of O2-consuption rate per change in one unit of the predictor.

Parameter	Value	Lower conf. limit	Upper conf. limit p
Intercept	3.298	2.232	4.364 < 0.001
Temperature	0.069	0.062	0.076 < 0.001
Pressure	-0.003	-0.009	0.002 0.213
Flow rate	-1.719	-3.567	0.129 0.068
Tunnel 2	0.522	-0.130	1.174 0.09
Tunnel 3	-0.552	-1.199	0.096 0.077
Run 2	-0.494	-1.135	0.147 0.099
Run 3	-0.058	-0.711	0.595 0.817

## Graphs for the manuscript

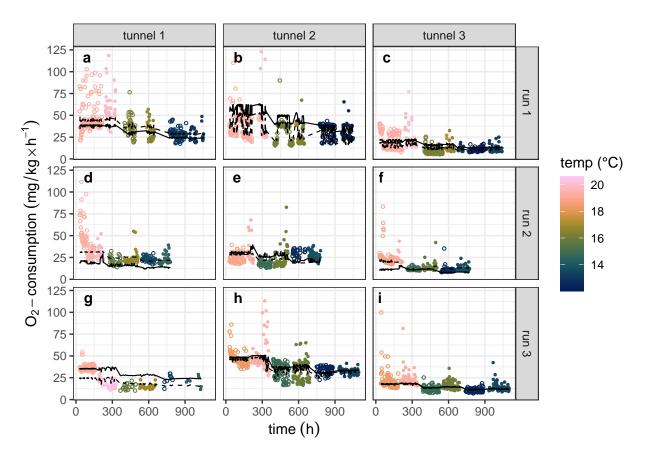


Fig 1 Oxygen consumption rate per individual (a-i) and modeled predictions on the population level (solid line) and for the respective individual (dashed line)

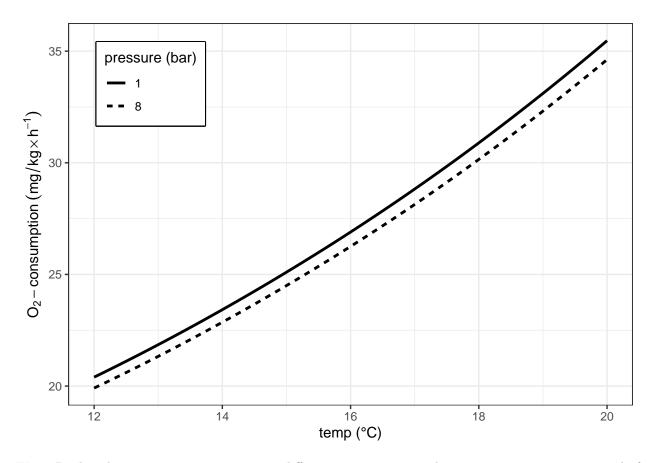


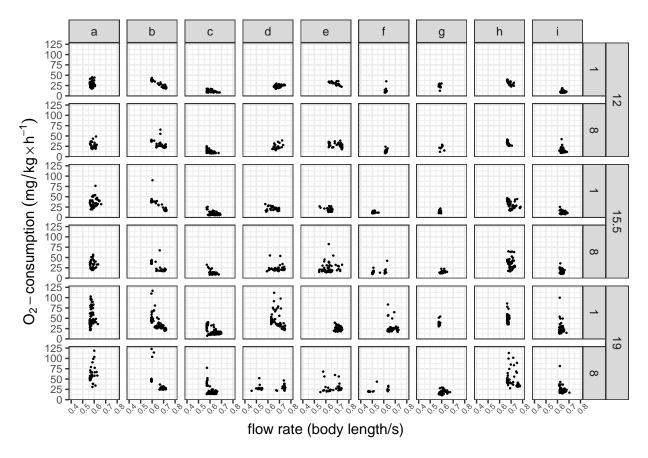
Fig 2 Predicted oxygen consumption rate at different temperatures and pressures at a swimming speed of  $0.6~\mathrm{BL/s}$ . Difference between 1 and 8 bar is not significant.

## Graphs/tabs for supplementary

 ${\bf Tab~S1}~{\rm Summary~of~model~AICs}$ 

Intercept press	_mean	run	speedBL	temp_mean	tunnel	df	logLik	AIC	delta	weight
3.32		1	-1.76	0.07	1	12	-1.51	27.02	0.00	0.25
3.31	0	1	-1.73	0.07	1	13	-0.75	27.50	0.48	0.20
2.39		1		0.07	1	11	-3.11	28.22	1.20	0.14
3.14			-1.71	0.07	1	10	-4.21	28.42	1.39	0.13
2.40	0	1		0.07	1	12	-2.35	28.70	1.68	0.11
3.14	0		-1.69	0.07	1	11	-3.36	28.72	1.70	0.11

Intercept press	_mean	run	speedBL	temp_mean	tunnel	df	logLik	AIC	delta	weight
2.15	0			0.07	1	10	-4.94	29.89	2.87	0.06
3.08	0		-1.68	0.07		9	-8.29	34.57	7.55	0.01
3.19		1	-1.70	0.07		10	-9.00	38.01	10.98	0.00
3.19	0	1	-1.68	0.07		11	-8.17	38.35	11.32	0.00
2.13	0	1		0.07		10	-9.74	39.48	12.46	0.00
4.13	0		-1.39		1	10	-124.27	268.54	241.51	0.00
3.51	0	1			1	11	-123.40	268.79	241.77	0.00
4.09	0	1	-1.39			10	-129.38	278.76	251.74	0.00



 $\textbf{Fig S2} \ \text{Effect od swimming speed on Oxygen consumption rate per Temperature and pressure for each individual}$