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Tables for manuscript

Tab 1 Summary of biological and experimental paramaters for individual eels

```
## Warning: Warning: fonts used in 'flextable' are ignored because the 'pdflatex'
## engine is used and not 'xelatex' or 'lualatex'. You can avoid this warning
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## compatible engine by defining 'latex_engine: xelatex' in the YAML header of the
## R Markdown document.
```

ID	Length (cm)	Silvering Index*	Biomass at start (g)	Biomass at end (g)	Fat at start (% WM)	Fat at end (% WM)	Swim time (d)	Swimming distance (km)
a	78	4	935	866	17.20	18.50	44.1	1727
b	74	5	732	701	20.85	21.65	44.1	1837
c	77	5	908	864	22.55	24.50	44.1	1814
d	78	5	973	928	19.25	17.65	32.6	1481
e	83	4	1045	1000	18.45	20.05	32.6	1573
f	90	4	1142	1079	21.55	20.75	32.2	1464
g	87	5	1345	1070	17.05	20.90	43.4	1935
h	81	4	987	947	19.15	19.15	45.8	2195
i	86	4	1345	1247	18.35	18.50	47.0	2169

*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.

```
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```

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

```
## Warning: 'guides(<scale> = FALSE)' is deprecated. Please use 'guides(<scale> =
## "none")' instead.
```
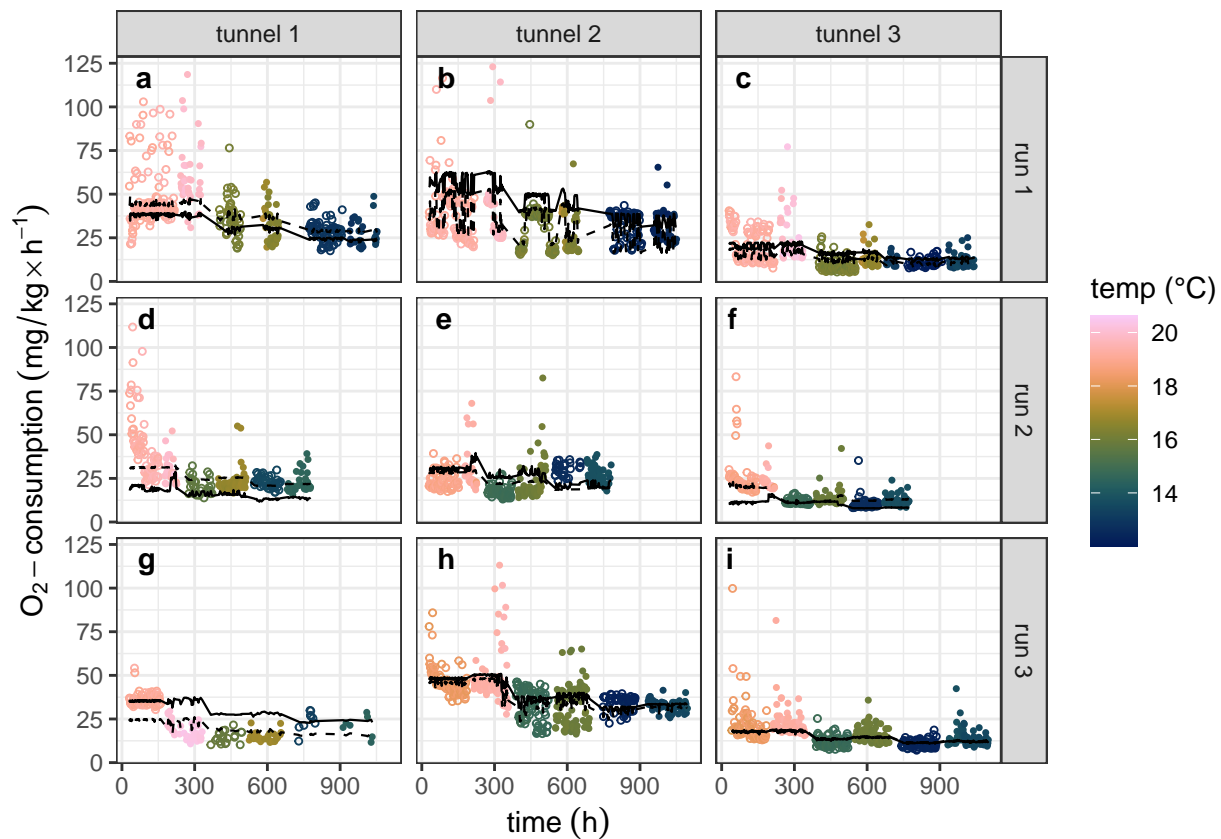
Fig 1 Oxygen consumption rate per individual (a-i) over time different at temperatures (color scale) at 1 bar (open circles) and 8 bar (closed circles). Modeled predictions are displayed on the population level (solid line) and for the individual (dashed line).

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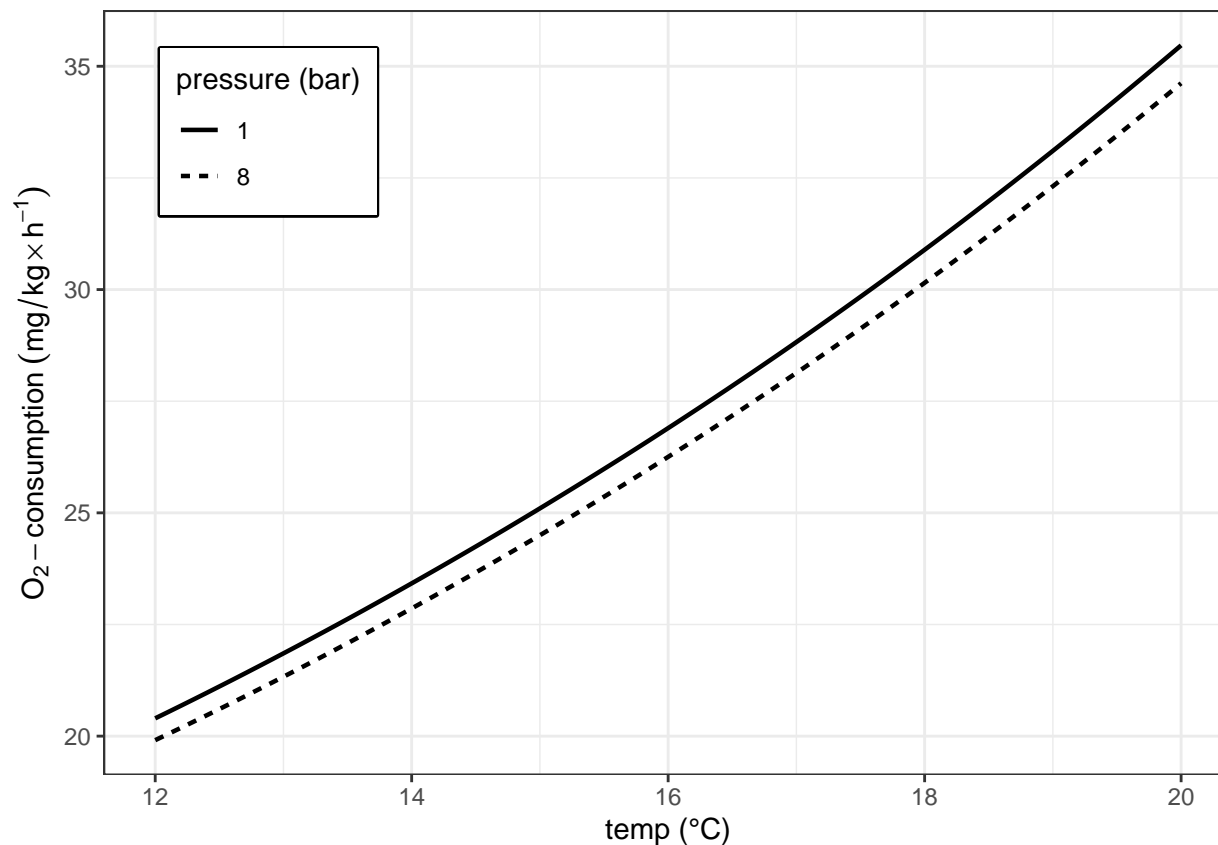
Fig 2 Predicted oxygen consumption rate at different temperatures and pressures at a swimming speed of 0.6 BL/s. Difference between 1 and 8 bar is not significant.

Graphs/tabs for supplementary

Tab S1 Summary of

```
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```

ID	nominal temperature	nominal pressure	Swimming time (d)
a	12.0	1	7.0
a	12.0	8	6.1

ID	nominal temperature	nominal pressure	Swimming time (d)
a	15.5	1	7.5
a	15.5	8	4.0
a	19.0	1	9.0
a	19.0	8	4.6
b	12.0	1	7.0
b	12.0	8	5.5
b	15.5	1	7.5
b	15.5	8	4.0
b	19.0	1	9.1
b	19.0	8	4.0
c	12.0	1	7.0
c	12.0	8	6.1
c	15.5	1	7.6
c	15.5	8	4.5
c	19.0	1	9.0
c	19.0	8	5.0
d	12.0	1	5.8
d	12.0	8	5.2
d	15.5	1	5.1
d	15.5	8	5.8
d	19.0	1	6.4
d	19.0	8	3.9
e	12.0	1	5.8
e	12.0	8	5.2
e	15.5	1	5.1
e	15.5	8	5.8
e	19.0	1	6.4
e	19.0	8	3.9
f	12.0	1	5.8
f	12.0	8	5.2
f	15.5	1	5.1
f	15.5	8	5.8
f	19.0	1	6.0
f	19.0	8	3.9
g	12.0	1	7.0

ID	nominal temperature	nominal pressure	Swimming time (d)
g	12.0	8	6.6
g	15.5	1	6.9
g	15.5	8	7.9
g	19.0	1	6.8
g	19.0	8	7.0
h	12.0	1	7.0
h	12.0	8	8.0
h	15.5	1	6.9
h	15.5	8	7.9
h	19.0	1	7.8
h	19.0	8	7.0
i	12.0	1	7.0
i	12.0	8	8.0
i	15.5	1	6.9
i	15.5	8	7.5
i	19.0	1	7.8
i	19.0	8	6.6

Tab S2 Summary of model AICs

```
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```

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
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	-1.71	0.07		10	-9.00	38.01	10.98	0.00

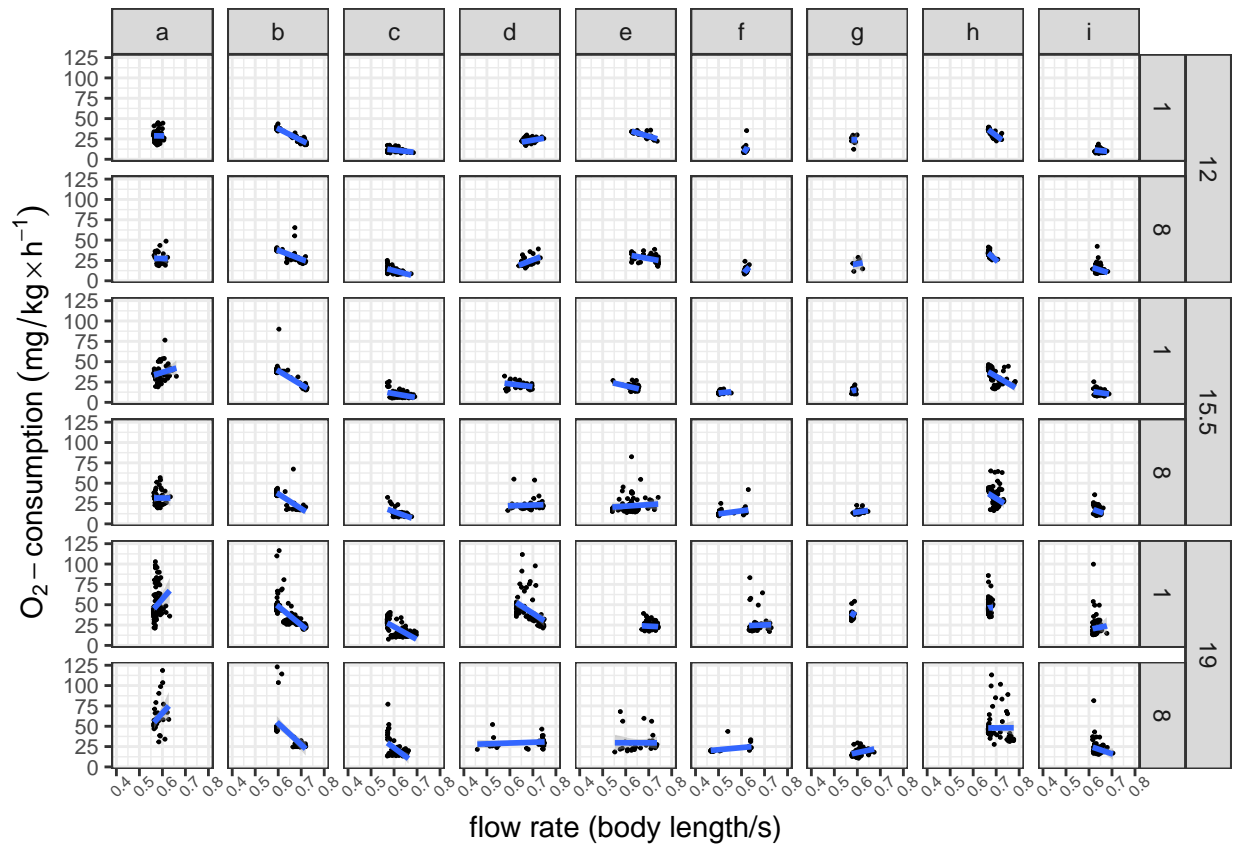| Intercept	press_mean	run	speedBL	temp_mean	tunnel	df	logLik	AIC	delta	weight
3.18	0	1	-1.68	0.07		11	-8.17	38.35	11.32	0.00
2.13	0	1		0.07		10	-9.74	39.48	12.46	0.00
4.13	0		-1.39		1	10	-124.27	268.54	241.51	0.00
3.51	0	1			1	11	-123.40	268.79	241.77	0.00
4.09	0	1	-1.39			10	-129.38	278.76	251.74	0.00

Fig S1 Effect of swimming speed on Oxygen consumption rate per Temperature and pressure for each individual