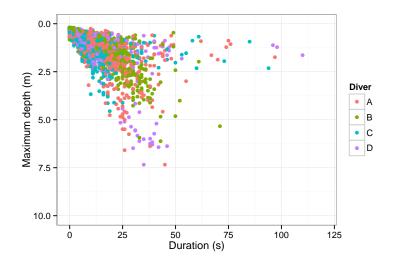
## **Appendix C: Supporting figures and tables**

## Philipp Neubauer<sup>1</sup> and Edward R. Abraham<sup>1</sup>

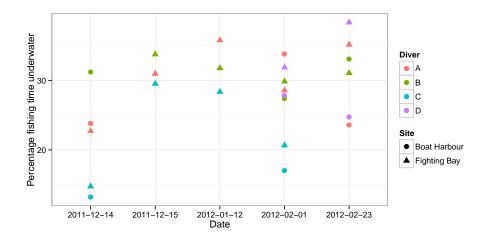
<sup>1</sup>Dragonfly Data Science, PO Box 27535, Wellington 6141, New Zealand



**Figure C-1.** Relationship between maximum dive depth and dive duration, for each of the four divers (A–D) diving for abalone (pāua, *Haliotis iris*) during the fish-down experiment at Fighting Bay, New Zealand in 2011–12.

**Table C-1.** Percentage of the total number of recorded catch bags that had associated dive data, recorded by diver (A–D) for each day of the fish-down experiment of New Zealand abalone (pāua, *Haliotis iris*) in 2011–12.

Date	A	В	C	D
2011-12-14	96.6	16.0	100.0	
2011-12-15	94.1	41.9	96.2	
2012-01-12	28.0	29.2	100.0	
2012-02-01	100.0	100.0	100.0	100.0
2012-02-23	100.0	100.0		100.0



**Figure C-2.** Ratio of time spent underwater to time spent fishing, for each diver (A–D) at the unfished site at Fighting Bay (closed to fishing in 1996) and the fished site at Boat Harbour, New Zealand, over the course of the fish-down experiment.

**Table C-2.** Number of commercial divers and total time fishing (hour) per day during the fish-down experiment of New Zealand abalone (pāua, *Haliotis iris*), as recorded on Pāua Catch Effort Landing Return forms. Sites included Fighting Bay that was closed to fishing in 1996, and adjacent Boat Harbour that remained open to pāua fishing.

Date	No. divers	Time fishing (h)			
		Fighting Bay	Boat Harbour		
2011-12-14	3	21.0	10.0		
2011-12-15	3	30.0			
2012-01-12	3	33.0			
2012-02-01	4	39.5	14.0		
2012-02-23	3	30.0	13.5		

**Table C-3.** Raw catch-per-unit-effort (kg per hour) by diver (A–D) and day for the total fishing time during the fish-down experiment of abalone (pāua, *Haliotis iris*) at Fighting Bay and Boat Harbour, New Zealand. Fighting Bay was closed to fishing in 1996, and adjacent Boat Harbour remained open to pāua fishing.

	<b>(a)</b> F	ighting B	ay			
Date				Di	ver	
Date	A	В		С	D	
2011-12-14	147.00		124.0	00		
2011-12-15	141.67	128.18	125.4	45		
2012-01-12	105.83	92.73	94.	17		
2012-02-01	71.67	66.67	46.0	57 44	.00	
2012-02-23	56.67	31.67		32	.50	
<b>(b)</b> Boat Harbour						
Date				Diver	Total	
2400	A	В	С	D	1000	
2011-12-14	20.00	17.50	12.00			
2011-12-15						
2012-01-12						
2012-02-01	37.50	20.00	22.50	16.00		
2012-02-23	34.00	28.00		23.33		

**Table C-4.** Raw catch-per-unit-effort (kg per hour) by diver (A–D) and day using bottom time as effort measure, during the fish-down experiment of abalone (pāua, *Haliotis iris*) at Fighting Bay and Boat Harbour, New Zealand. Fighting Bay was closed to fishing in 1996, and adjacent Boat Harbour remained open to pāua fishing.

(a) Fighting Bay

	` '		•		
Date				Div	er
Dute	A	В	C		D
2011-12-14	588.39		841.31		
2011-12-15	422.42	1044.44	389.71		
2012-01-12	887.42	802.80	332.03		
2012-02-01	251.01	206.19	225.96	138.	12
2012-02-23	161.26	101.94		84.	75
(b) Boat Harbour					
Date				Diver	Total
	A	В	С	D	10141
2011-12-14	83.92	56.02	90.99		
2011-12-15					
2012-01-12					
2012-02-01	110.84	72.96	132.24	57.49	
2012-02-23	144.07	84.59		94.38	

**Table C-5.** Raw catch-per-unit-effort (kg per metre) by diver and day from cumulative depth effort, during the fish-down experiment of abalone (pāua, Haliotis iris) at Fighting Bay and Boat Harbour, New Zealand. Fighting Bay was closed to fishing in 1996, and adjacent Boat Harbour remained open to pāua fishing.

(a) Fighting Bay

Diver

Date				Diver	
24.0	A	В	С	D	
2011-12-14	3.17		3.01		
2011-12-15	1.44	4.72	1.27		
2012-01-12	2.79	3.23	0.95		
2012-02-01	1.11	0.79	0.72	0.40	
2012-02-23	0.52	0.47		0.38	
Date	(b)	Boat Ha	arbour	Diver	Total
Date	(b) A	Boat Ha	arbour C	Diver D	Total
Date 2011-12-14					Total
	A	В	C		Total
2011-12-14	A	В	C		Total
2011-12-14 2011-12-15	A	В	C		Total