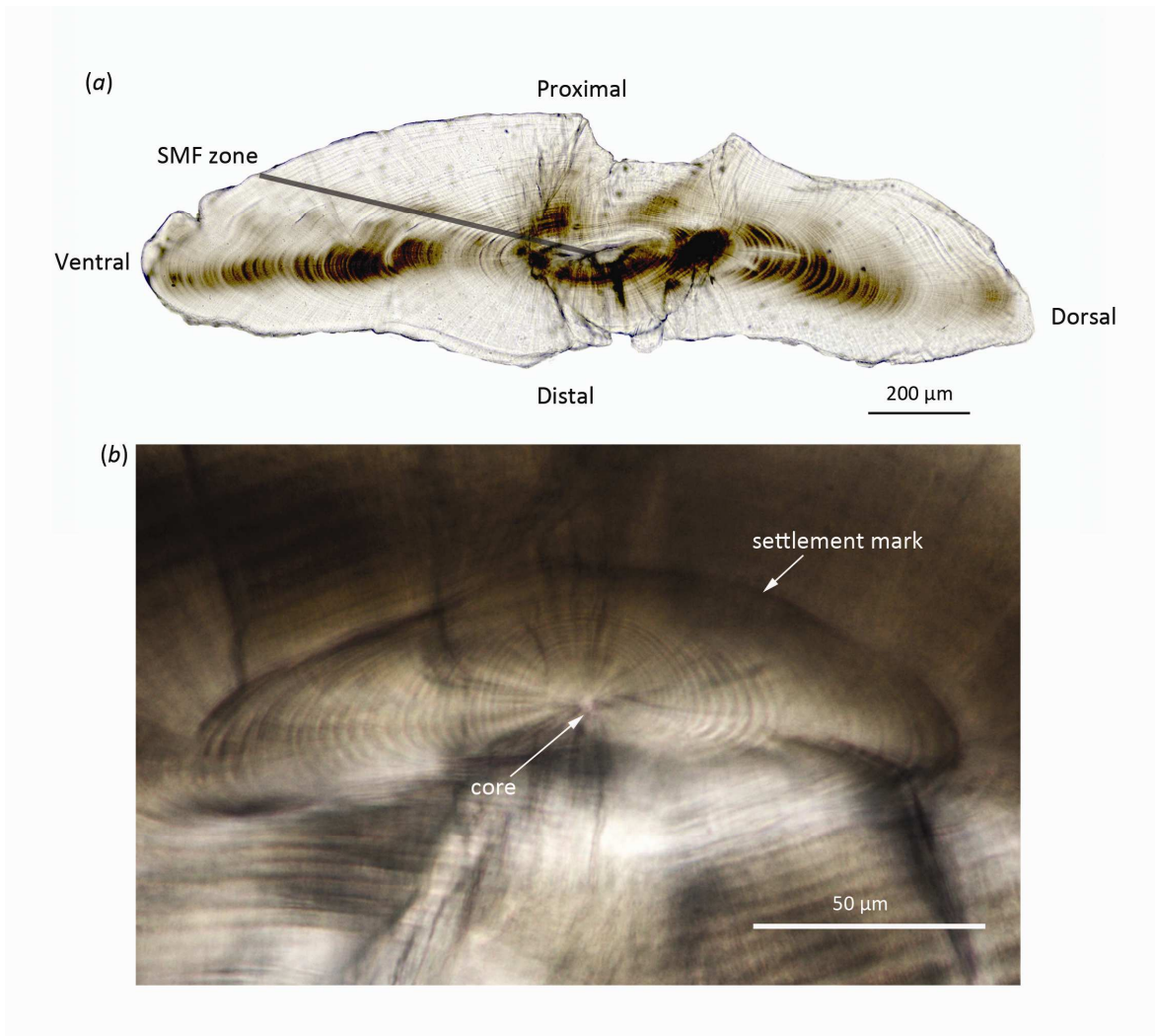


1 10.1071/MF12176\_AC  
2 ©CSIRO 2012  
3 Supplementary Material: *Marine and Freshwater Research*, 2012, **63**(12), 1231–1243  
4

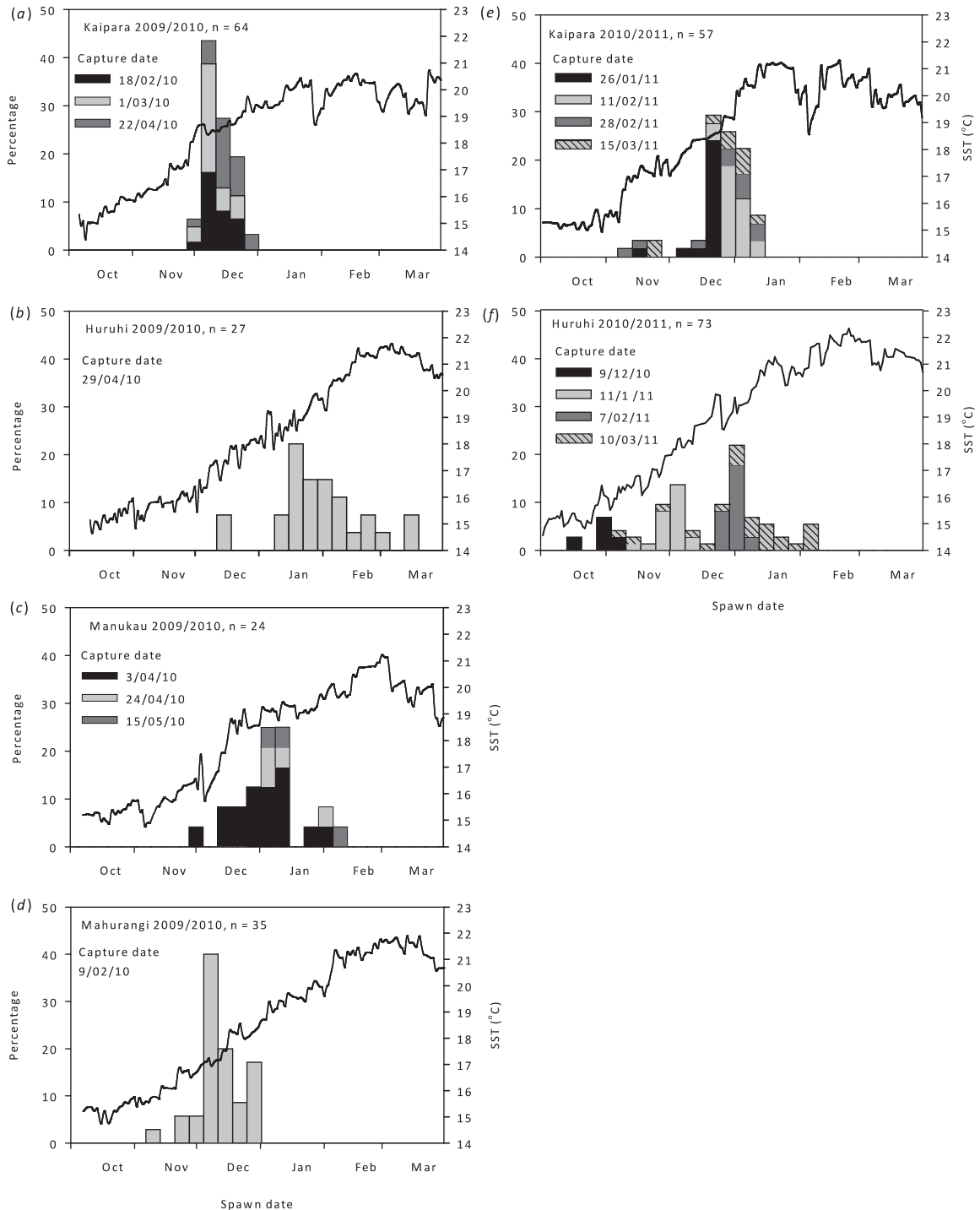
5 **SUPPLEMENTARY MATERIAL**  
6

7 **Figure S1.** (a) Thin transverse section of a sagittal otolith from a 49-mm (SL) *Chrysophrys auratus*,  
8 showing the position of the sagitta–subcupular meshwork fibre (SMF) zone along which daily increments are  
9 counted. (b) High-magnification image of the otolith core, showing the larval rings and the settlement mark.



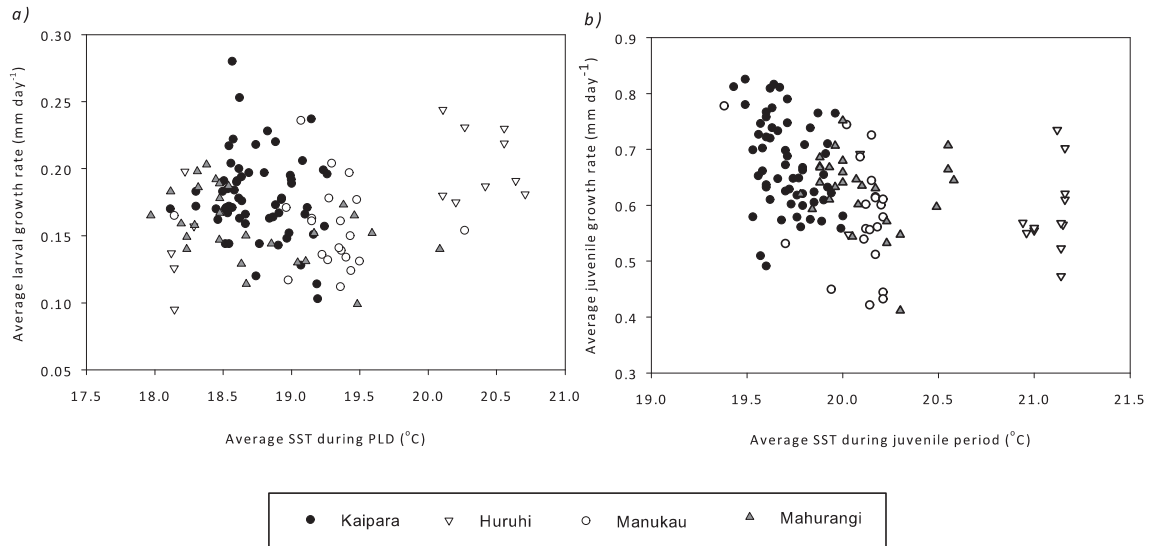
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17 **Figure S2.** Successful spawning period of *Chrysophrys auratus* in the Kaipara, Huruhi, Manukau and  
 18 Mahurangi Harbour sites, back-calculated from the daily otolith increments of 0+-year-old fish sampled  
 19 during 2009/2010 and 2010/2011. Each bar represents a week. Sea-surface temperatures (SST) at each site  
 20 are given on the right axis.



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24 **Figure S3.** The relationship between the average sea-surface temperature (SST) during the (a) larval and  
 25 (b) juvenile duration of *Chrysophrys auratus* captured from the Kaipara, Huruhi, Manukau and Mahurangi  
 26 Harbour sites in 2009/2010, and their average daily growth rate. Daily growth was back-calculated from  
 27 daily otolith increments.



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30 **Table S1.** Results of the log-likelihood tests for difference model variance structures tested (equal  
 31 variances (EV), separate intercept variances per site (SI), separate slope variances per site (SS) and separate  
 32 intercept and slope variances per site (SIS)). *P* values in bold indicate a significantly better model fit at  
 33 *P*<0.05.

34

Data set		Model comparison	$\chi^2$	df	<i>P</i>
2009/2010 among sites	larvae	EV vs SI	0	3	1.00
		EV vs SS	4.7	3	0.20
	juveniles	EV vs SI	9.1	3	<b>0.03</b>
		EV vs SS	7.3	3	0.06
		SI vs SIS	7.5	3	0.06
2010/2011 among sites	larvae	EV vs SI	0	1	1.00
		EV vs SS	0.1	1	0.75
	juveniles	EV vs SI	0.2	1	0.65
		EV vs SS	10.9	1	<b>0.0009</b>
		SS vs SIS	0.6	1	0.44
Kaipara between years	larvae	EV vs SI	0	1	1.00
		EV vs SS	0.7	1	0.4
	juveniles	EV vs SI	7.6	1	<b>0.005</b>
		EV vs SS	20.2	1	<b>&lt;0.0001</b>
		SS vs SIS	8.6	1	<b>0.003</b>
Huruhi between years	larvae	EV vs SI	0	1	1.0
		EV vs SS	0.9	1	0.34
	juveniles	EV vs SI	19.6	1	<b>&lt;0.0001</b>
		EV vs SS	0.1	1	0.75

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