

**Table S1.** Summary of the mean and the standard error (S.E.) of the larvae (standard length in mm) of both shoals and batches used in the study.

Shoal	Batch	Mean $\pm$ S.E.
Natal	1	11.055 $\pm$ 0.232
Non-natal	1	11.599 $\pm$ 0.233
Natal	2	11.918 $\pm$ 0.218
Non-natal	2	14.763 $\pm$ 0.396

**Table S2.** Summary of the mean and standard error (S.E.) of the preference of the focal larva (% time and % visits) for each stimulus shoal (natal and non-natal), sensory cues (visual, chemical, chemical and visual in simultaneous), and batch of experiments (1 and 2).

	Shoal	Batch	Mean	S.E.
<i>Chemical cues</i>				
% time	Natal	1	5.670	4.570
	Natal	2	3.110	2.452
	Non-natal	1	4.222	2.320
	Non-natal	2	12.220	7.342
% visits	Natal	1	14.790	6.218
	Natal	2	11.333	5.742
	Non-natal	1	19.111	6.194
	Non-natal	2	23.444	6.466
<i>Visual cues</i>				
% time	Natal	1	32.333	12.186
	Natal	2	36.220	13.491
	Non-natal	1	11.333	4.604
	Non-natal	2	17.890	7.549
% visits	Natal	1	25.670	5.876
	Natal	2	28.111	6.609
	Non-natal	1	19.444	6.377
	Non-natal	2	21.000	6.351
<i>Chemical and visual cues in simultaneous</i>				
% time	Natal	1	28.875	12.163
	Natal	2	27.440	10.472
	Non-natal	1	13.125	6.093
	Non-natal	2	16.890	10.302
% visits	Natal	1	26.875	7.756
	Natal	2	30.222	5.254
	Non-natal	1	15.625	6.785
	Non-natal	2	13.110	6.217

**Table S3.** Summary statistics for differences in percentage of time and visits to each stimulus shoal, according to the sensory cues under test (visual, chemical, chemical and visual in simultaneous) and between batches (1 and 2), using Mann-Whitney U test; test value (U), Z-score, sample size (n in each batch), and the p-value (p).

Differences between batches (1 and 2)	Test value	Z	N	p
<i>Chemical cues</i>				
% time near the natal shoal	33.500	0.684	18	0.494
% visits to the natal shoal	35.500	0.452	18	0.651
% time near the non-natal shoal	37.500	-0.231	18	0.817
% visits to the non- natal shoal	36.500	-0.317	18	0.751
<i>Visual cues</i>				
% time near the natal shoal	37.500	-0.221	18	0.825
% visits to the natal shoal	40.000	0.000	18	1.000
% time near the non- natal shoal	35.000	-0.455	18	0.649
% visits to the non- natal shoal	36.5000	-0.318	18	0.750
<i>Chemical and visual cues in simultaneous</i>				
% time near the natal shoal	35.000	-0.048	17	0.962
% visits to the natal shoal	35.500	0.000	17	0.962
% time near the non- natal shoal	33.000	0.249	17	0.815
% visits to the non- natal shoal	32.500	0.299	17	0.743