

## Supplementary Material

### Spatial dynamics of the Argentine sandperch, *Pseudoperca semifasciata* (Pinguipedidae), in temperate rocky reefs from northern Patagonia, Argentina

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**Table S1. Schedule of field work by our project staff in each fishing spot within San José (SJ) and Nuevo (N) gulfs**

The numbers indicate the months in which the reefs were surveyed. Underlined: angling and scuba diving; bold: scuba diving; plain: angling

Fishing Spot	Reef ID	Year				
		2001	2002	2003	2004	2005
Esfinge Point (SJ)	1			<u>4</u> , 7		<u>2</u>
San Román Point (SJ)	2–4	<u>10</u>	<b>1</b> , <u>2</u> , <u>4</u> , <u>7</u> , <u>8</u> , <u>10</u> , <u>12</u>	<u>2</u> , 3, <u>4</u> , <u>7</u> , <u>8</u> , <u>10</u> , <b>12</b>	<u>2</u> , <u>4</u> , <u>8</u>	<u>2</u> , <u>8</u>
Conos Point (SJ)	5–10			1, 7, <u>11</u> , 12	1, 8, 12	
Camp 39 (SJ)	11		<u>3</u> , <u>5</u> , <u>7</u> , <b>9</b> , <u>11</u> , 12	<u>1</u> , <u>3</u> , <u>5</u> , <u>7</u> , <u>9</u> , <u>11</u>	<u>1</u> , <b>3</b> , <u>5</u> , <u>8</u> , <u>10</u> , <b>11</b>	<b>2</b> , <b>8</b>
Fracasso Beach (SJ)	12–14		<u>2</u> , <u>5</u> , <u>7</u> , <b>9</b> , <u>11</u> , <u>12</u>	<u>1</u> , <u>3</u> , <u>5</u> , <u>7</u> , <u>9</u> , <u>11</u>	<u>1</u> , <u>3</u> , <b>5</b> , <b>8</b>	<b>8</b>
Fracasso's Prows (SJ)	15–17				1	
Gales Point (SJ)	18–20			7, 9, 12	1, 12	
Larralde Beach (SJ)	21–31		5, 10, 11, 12	1, 2, 3, 4, 7, 10, 11, 12	1, 2, <u>3</u> , 4, 6, 8, 12	
Mouth (SJ)	32–35			1, 3, 4, 7	2	
East Point (N)	36			<u>8</u> , <u>9</u> , <u>10</u> , <u>12</u>	<b>1</b> , <u>2</u> , <u>3</u> , <u>4</u> , <u>6</u> , <u>7</u> , <u>8</u> , <u>9</u> , <b>10</b> , <u>11</u> , <u>12</u>	<b>1</b> , <b>2</b>

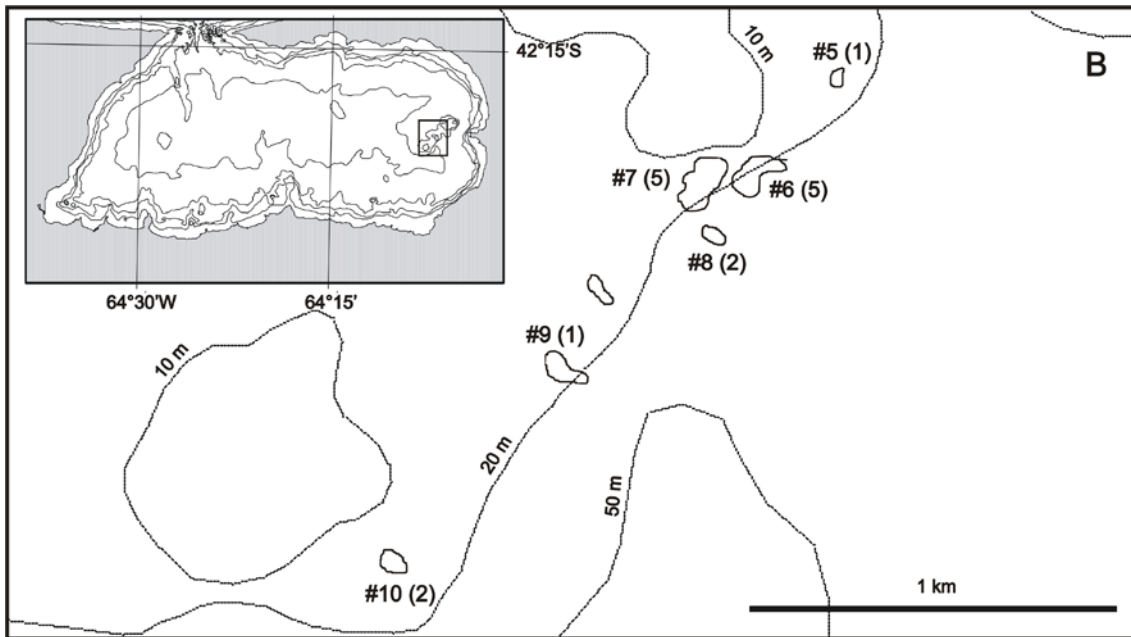
**Table S2. *Pseudoperca semifasciata* recaptured >1 km from the tagging site**

Individual code composed of chromatic phenotype (Y: yellow, G: grey) and fish size at tagging (cm TL).

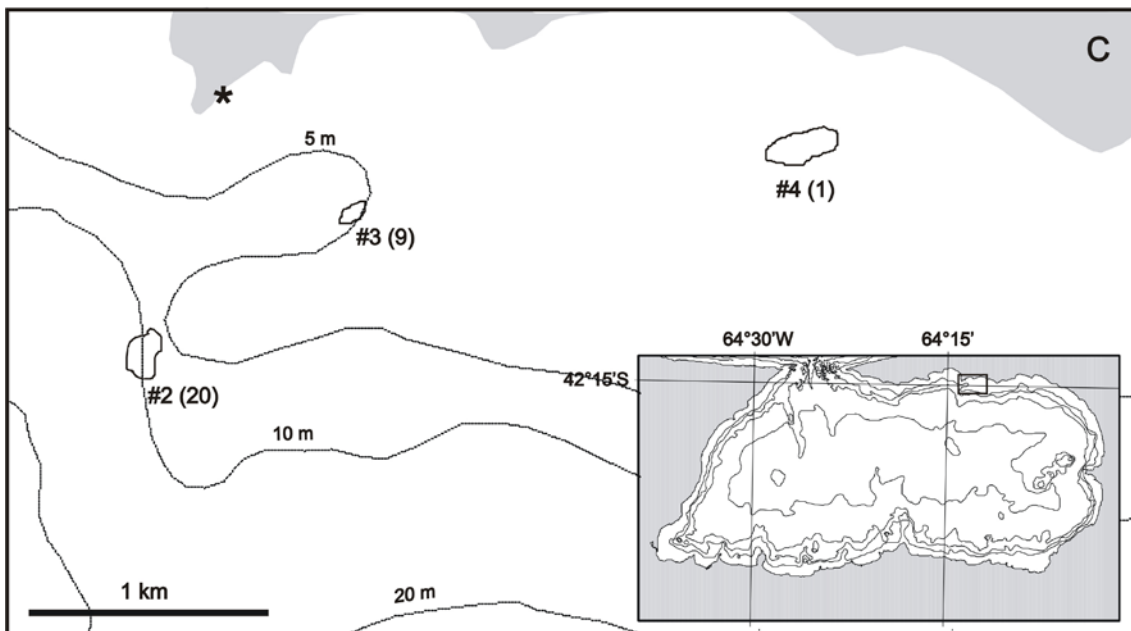
The asterisk indicates a fish angled in reef #2, displaced 1.13 km and kept 24 hrs within a cage to evaluate the effect of tagging, before being released. The location of the unknown reef within Bahía Nueva was estimated approximately based on references provided by a recreational angler

ID Code	Time at liberty (days)	Distance displaced (km)	Spot / reef of tagging	Recapture reef
Y40	387	1.05	San Román Point / # 2	San Román Point / # 3
Y43	289	1.13	San Román Point / *	San Román Point / # 2
G80	606	1.20	Larralde Beach / # 27	Larralde Beach / # 25
Y40	675	1.51	Larralde Beach / # 25	Larralde Beach / # 29
G59	60	2.30	East Point # 36	Bahía Nueva / unknown
Y41	104	6.17	Conos Point / # 6	Camp 39 / # 11

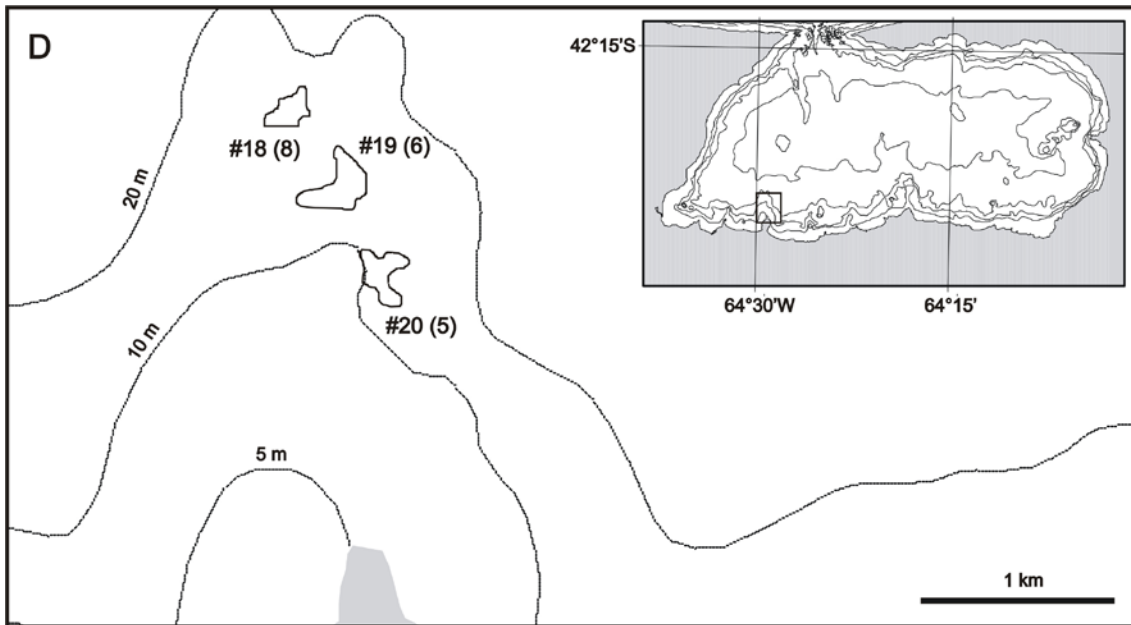




Reef	#6	#7	#8	#9	#10
#5	0.34	0.44	0.54	1.09	1.77
#6		0.12	0.20	0.74	1.43
#7			0.15	0.65	1.34
#8				0.55	1.23
#9					0.68

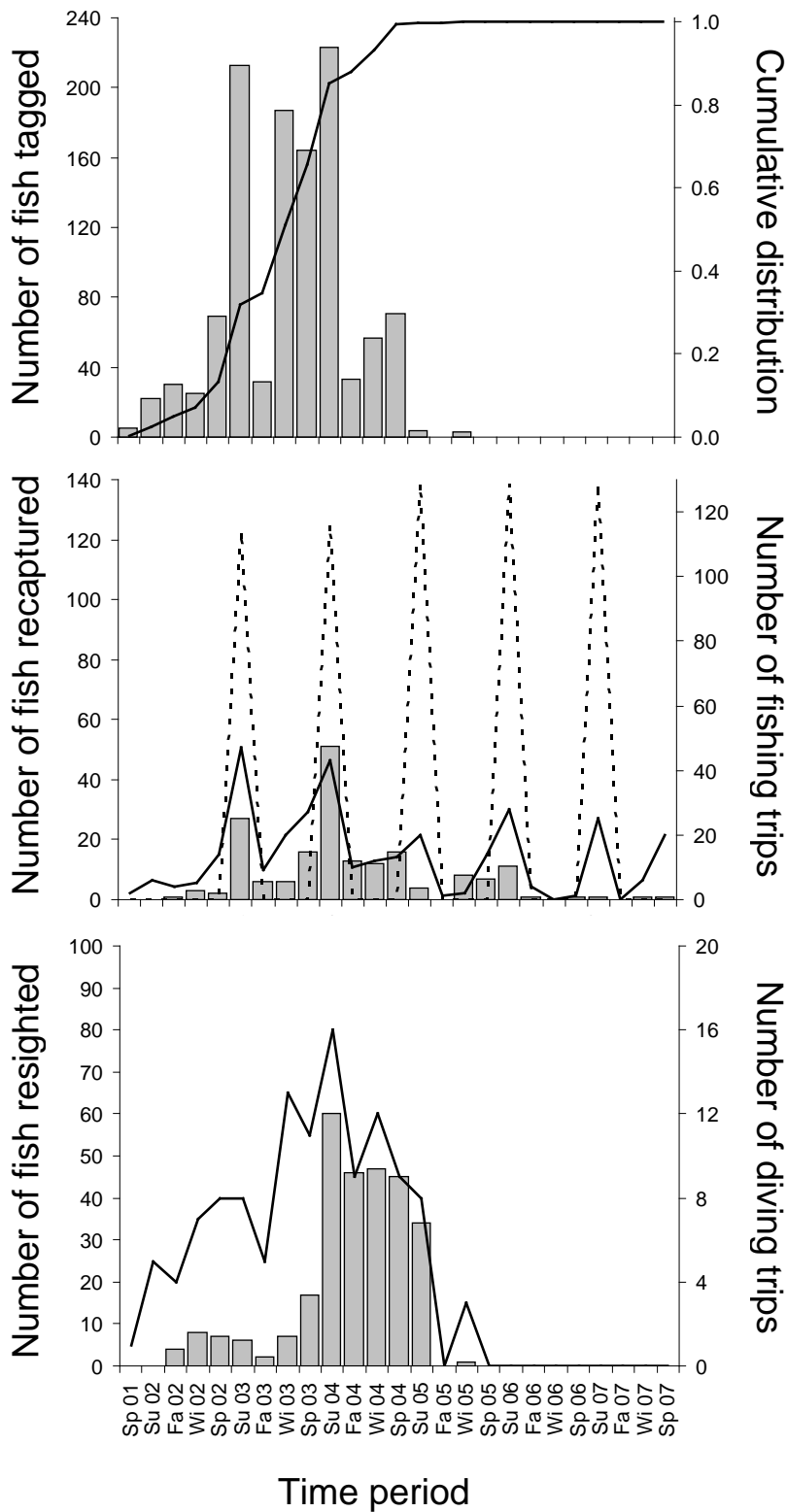


Reef	#2	#3	#4
*	1.14	0.71	2.61
#2		1.05	3.08
#3			2.11



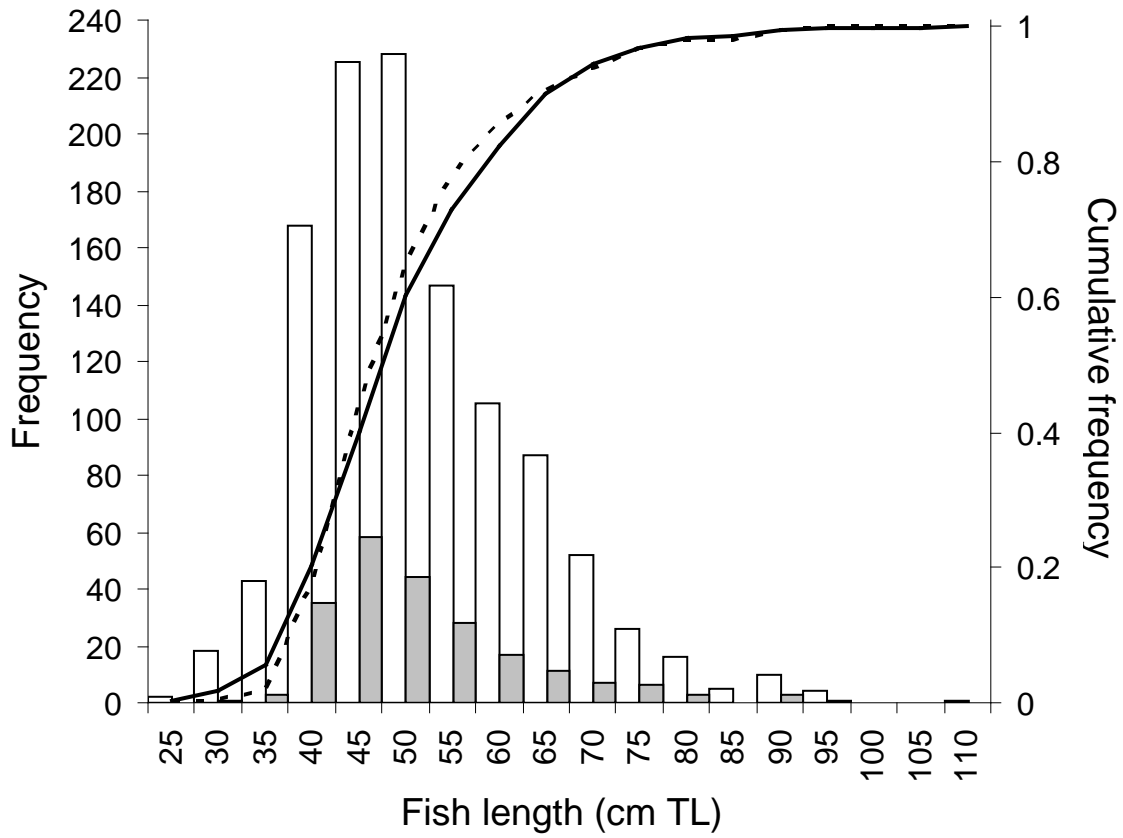
Reef	#19	#20
#18	0.45	0.94
#19		0.50

**Fig. S1.** Spatial distribution of patchy reef areas (filled lines) and angling effort in four fishing spots located in San José Gulf, between October 2001 and September 2005. A, Larralde Beach; B, Conos Point; C, San Román Point; and D, Gales Point. The number of trips made to each reef is shown in parenthesis. In Larralde Beach, we used italics to indicate the minimum number of trips in reefs also used by fishing guides. The asterisk in San Román Point shows the location of a cage in which some fish were observed prior to release. The table below each map shows the estimated between-reef distances, in km.



**Fig. S2.** Number of fish tagged, recaptured and resighted in San José and Nuevo gulfs, over the entire study (grey bars). Middle panel: the solid line shows the fishing effort exerted by us in San José and Nuevo gulfs and by the fishing guides operating off Gales Point, Larralde Beach and in the mouth of San José Gulf; the dotted line shows the number of fishing trips estimated for boat owners in the same three fishing spots. Lower panel: the solid line shows the number of diving trips conducted by us in the two gulfs.

Although the estimated angling effort by boat owners off Larralde Beach, off Gales Point and in the mouth of San José Gulf, during the angling season (late December to mid March), was more than twice that of research and charter trips, its impact on the number of recoveries was lower (mid panel). Resightings increased disproportionately between December 2003 and February 2005, when fish were double-tagged in reefs #11 and #36 (lower panel).



**Fig. S3.** Size frequency and cumulative distributions of *P. semifasciata* tagged ( $n = 1138$ ) and recaptured or resighted ( $n = 218$ ) within Nuevo and San José gulfs. White bars and black solid line: fish tagged; grey bars and dotted line: fish recaptured or resighted.