

# Small-scale gill-net fisheries cause massive green turtle *Chelonia mydas* mortality in Baja California Sur, Mexico

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**Appendix 1** Stranding probabilities of dead turtles ( $p_{turtle}$ ) as estimated from stranding probabilities of marked drifters ( $p_{orange}$ ) released in the upper, middle and lower parts of San Ignacio Lagoon (Figs 1 & 3).

$\hat{p}_{turtle}$	No. of released turtles	No. of recovered turtles	$\hat{p}_{orange}$	Drifter release date	No. of released drifters	No. of recovered drifters
<b>Upper lagoon</b>						
0.000	7	0	0.730	Day 1	15	11
			0.670	Day 2	18	12
			0.250	Day 3	16	4
			0.550	Day 4	40	22
			0.410	Day 5	14	0
<i>Subtotal</i>					103	49
<b>Middle lagoon</b>						
0.077	13	1	0.450	Day 1	11	5
			0.270	Day 2	12	4
			0.125	Day 3	15	1
			0.090	Day 4	11	1
			0.049	Day 5	30	1
<i>Subtotal</i>					79	12
<b>Lower lagoon</b>						
0.200	5	1	0.000	Day 1	4	0
			0.000	Day 5	6	0
<i>Subtotal</i>					10	0
<i>Total</i>	25	2			192	61

**Appendix 2** Results from interviews with 22 local fishers asked to give a range for the number of boats working illegally in San Ignacio Lagoon (Figs 1 & 3) during summer, the approximate duration of the illegal guitar-fish fishery, and the number of turtles caught incidentally per boat per day.

Interview ID	Mean no. (range) of boats illegally fishing guitar-fish inside lagoon per day	Mean duration (range) of illegal fishery inside the lagoon (days)	Mean no. (range) of turtles caught accidentally per day per boat
1	10 (8–12)	10 (10)	22 (22)
2	14 (12–16)	12.5 (10–15)	6.5 (5–8)
3	15 (15)	11 (7–15)	3 (2–4)
4	15 (15)	12 (12)	4 (4)
5	12.5 (10–15)	12.5 (10–15)	5 (5)
6	15 (15)	7.5 (7–8)	10 (10)
7	17.5 (15–20)	11 (10–12)	11 (10–12)
8	15 (15)	11 (10–12)	7.5 (5–10)
9	15 (15)	12.5 (10–15)	7 (7)
10	15 (15)	8.5 (7–10)	9 (8–10)
11	12.5 (10–15)	12.5 (10–15)	4.5 (4–5)
12	15 (10–20)	12.5 (10–15)	2.5 (2–3)
13	15 (15)	8.5 (7–10)	2.5 (2–3)
14	15 (15)	12.5 (10–15)	5 (5)
15	15 (15)	7 (7)	7 (6–8)
16	15 (15)	7 (7)	7 (7)
17	15 (15)	7 (7)	7 (6–8)

**Appendix 2** (Continued)

Interview ID	Mean no. (range) of boats illegally fishing guitar-fish inside lagoon per day	Mean duration (range) of illegal fishery inside the lagoon (days)	Mean no. (range) of turtles caught accidentally per day per boat
18	15 (12–18)	11 (7–15)	7.5 (5–10)
19	15 (12–18)	10.5 (7–14)	6 (6)
20	15 (15)	10 (10)	5.5 (5–6)
21	15 (15)	11 (10–12)	10 (10)
22	15 (15)	12.5 (10–15)	10 (10)
Mean ± SD	14.6 ± 1.41	10.5 ± 2.02	6.8 ± 4.26