

# Monitoring design for quantification of marine turtle nesting with limited effort: a test case in the Guadeloupe Archipelago

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SUPPLEMENTARY TABLE S1 Beaches in the Guadeloupe Archipelago monitored for nesting of the hawksbill turtle *Eretmochelys imbricata* from 2000 to 2008 (Fig. 1), with name of the nearest town and of the island, dates (day/month) that monitoring began and ended, the total number of nights of monitoring, the total number of turtle nesting tracks observed, and the total number of tracks estimated from modelling (with 95% confidence interval, CI).

Beach (by year)	Town	Island	Beginning of monitoring	End of monitoring	No. of monitoring nights*	No. of tracks	Estimated total no. of tracks (95% CI)
<b>2000</b>							
Trois Ilets	Grand Bourg	Marie-Galante	1/7	3/9	20*	27	59.36 (56.77–61.95)
<b>2001</b>							
Trois Ilets	Grand Bourg	Marie-Galante	28/4	27/9	83*	61	76.64 (61.00–101.78)
<b>2002</b>							
Trois Ilets	Grand Bourg	Marie-Galante	7/5	11/9	110*	160	185.93 (175.47–196.40)
Folle Anse	Grand Bourg	Marie-Galante	12/7	11/9	62*	72	147.05 (116.45–177.66)
<b>2003</b>							
Trois Ilets	Grand Bourg	Marie-Galante	9/5	25/6	23*	35	159.09 (77.80–240.39)
<b>2004</b>							
Trois Ilets	Grand Bourg	Marie-Galante	31/5	10/9	102	97	127.22 (119.91–134.52)
Folle Anse	Grand Bourg	Marie-Galante	18/6	10/9	5*	4	4.01 (4.00–105.59)
<b>2005</b>							
Trois Ilets	Grand Bourg	Marie-Galante	27/4	24/8	69*	122	223.94 (192.27–255.60)
<b>2006</b>							
Trois Ilets	Grand Bourg	Marie-Galante	17/5	25/8	47*	131	355.40 (295.27–415.53)
<b>2007</b>							
Anse Laborde	Anse Bertrand	Guadeloupe	20/5	12/7	3	0	<73.15 (0–127.49)
La Chapelle	Anse Bertrand	Guadeloupe	28/5	28/5	1	0	<236.61 (0–651.39)
Anse à Sable	Bouillante	Guadeloupe	31/5	6/12	48	0	
Galets Rouges	Bouillante	Guadeloupe	31/5	6/12	47	2	9.83 (1.00–20.23)
Machette	Bouillante	Guadeloupe	31/5	6/12	69	7	15.23 (4.00–28.11)
Malendure	Bouillante	Guadeloupe	31/5	23/9	64	1	2.34 (7.00–25.44)
Grande Anse	Deshaies	Guadeloupe	13/4	4/7	14	0	<17.06 (1.00–12.90)
Kahouanne	Deshaies	Guadeloupe	21/7	22/7	2	0	145.81 (0–54.66)
Lavolvaine	Port-Louis	Guadeloupe	30/6	30/6	1	0	<138.35 (106.68–184.93)
Port-Louis Sud	Port-Louis	Guadeloupe	19/5	28/7	12	6	68.37 (0–192.16)
Anse à l'eau	Saint-François	Guadeloupe	5/7	17/7	7	0	<18.57 (45.25–91.48)
Anse à la croix	Saint-François	Guadeloupe	5/7	17/7	7	0	<18.78 (0–58.09)
Anse des	Saint-François	Guadeloupe	26/6	1/8	17	3	41.33 (0–59.66)

Châteaux

Anse Kahouanne	Saint-François	Guadeloupe	8/7	12/7	3	0	<45.54 (21.06–61.59)
Baie Olive	Saint-François	Guadeloupe	5/7	30/7	5	0	<27.32 (0–96.87)
Km 7	Saint-François	Guadeloupe	9/7	31/7	7	0	<19.72 (0–72.21)
La Coulée	Saint-François	Guadeloupe	10/7	31/7	7	0	<19.72 (0–59.71)
La Gourde	Saint-François	Guadeloupe	1/6	31/7	13	4	38.15 (0–59.76)
La Grotte	Saint-François	Guadeloupe	20/5	1/8	19	5	41.98 (11.46–64.83)
Les Rouleaux	Saint-François	Guadeloupe	25/4	30/7	6	1	28.30 (20.60–63.37)
Les Salines	Saint-François	Guadeloupe	2/6	4/8	14	6	79.90 (1.00–72.09)
Loquet	Saint-François	Guadeloupe	16/7	31/7	5	0	<28.01 (60.78–99.01)
Raisins Clairs	Saint-François	Guadeloupe	5/7	17/7	3	0	<45.48 (0–73.97)
Cluny	Sainte-Rose	Guadeloupe	28/3	30/8	54	0	<6.18 (0–96.57)
Nogent	Sainte-Rose	Guadeloupe	28/3	23/7	57	0	<5.35 (0–32.45)
Plage naturiste	Sainte-Rose	Guadeloupe	30/5	16/6	2	1	90.09 (0–29.44)
Pointe Allegre	Sainte-Rose	Guadeloupe	29/4	1/7	6	0	<51.46 (35.94–144.25)
Tillet	Sainte-Rose	Guadeloupe	23/4	30/5	9	0	<59.09 (0–101.07)
Grande Anse	Trois-Rivières	Guadeloupe	13/7	4/8	3	1	57.71 (0–107.34)
Grande Anse	Terre-de-Haut	Les Saintes	9/5	26/11	8	0	<56.71 (40.62–74.79)
Pain de Sucre	Terre-de-Haut	Les Saintes	20/6	18/7	3	0	<46.14 (0–74.01)
Pompierre	Terre-de-Haut	Les Saintes	9/8	12/8	2	0	<82.47 (0–96.81)
Rodrigue	Terre-de-Haut	Les Saintes	16/8	4/9	2	0	<99.63 (0–138.22)
Feuillard	Capesterre	Marie-Galante	13/6	22/8	12	1	12.80 (0–155.95)
Feuillère	Capesterre	Marie-Galante	11/6	22/8	13	2	23.39 (1.00–45.11)
Ferrière							
Les Galets	Capesterre	Marie-Galante	11/6	23/8	17	5	51.10 (2.00–54.49)
Petite Anse	Capesterre	Marie-Galante	13/6	22/8	12	0	<11.72 (29.21–73.00)
Folle Anse	Grand Bourg	Marie-Galante	9/6	24/8	27	52	421.94 (0–45.55)
Trois Ilets	Grand Bourg	Marie-Galante	2/5	24/8	33	136	851.49 (331.93–511.95)
Anse Canot	Saint-Louis	Marie-Galante	18/6	23/8	11	1	14.26 (731.39–971.59)
Anse l'Eglise	Saint-Louis	Marie-Galante	14/6	23/8	14	6	54.88 (1.00–50.65)
Anse Vieux Fort	Saint-Louis	Marie-Galante	10/6	23/8	17	6	49.84 (32.31–77.44)
Moustique	Saint-Louis	Marie-Galante	10/6	23/8	19	21	243.20 (28.02–71.65)
Terre-de-Bas	Petite-Terre	Petite Terre	27/7	4/9	8	8	181.83 (156.53–329.87)
Terre-de-Haut	Petite-Terre	Petite Terre	22/8	22/8	1	0	<189.45 (30.25–333.42)

**2008**

Anse Laborde	Anse Bertrand	Guadeloupe	16/4	9/11	33	1	5.78 (1.00–28.45)
La Chapelle	Anse Bertrand	Guadeloupe	7/3	18/11	41	5	28.96 (9.14–48.78)
Anse à Sable	Bouillante	Guadeloupe	1/5	1/9	94	2	9.56 (7.00–14.66)
Galet Rouge	Bouillante	Guadeloupe	1/5	1/9	94	14	45.85 (41.18–50.51)
Machette	Bouillante	Guadeloupe	1/5	1/9	94	4	20.52 (15.61–25.42)
Malendure	Bouillante	Guadeloupe	20/5	1/9	90	0	<0.52 (0–6.05)
Petite Anse	Bouillante	Guadeloupe	2/6	20/7	6	0	<24.33 (0–66.94)
Bananier	Capesterre	Guadeloupe	15/6	16/9	25	1	6.51 (1.00–31.15)
	Belle Eau						

Esclaves	Capesterre Belle Eau	Guadeloupe	15/6	16/9	28	3	27.35 (6.56–48.15)
Saint Sauveur	Capesterre Belle Eau	Guadeloupe	28/3	30/9	21	0	<11.40 (0–43.58)
Fort Royal	Deshaies	Guadeloupe	11/7	12/8	21	0	<6.14 (0–31.33)
Grande Anse	Deshaies	Guadeloupe	11/7	12/8	20	0	<6.36 (0–32.27)
La perle	Deshaies	Guadeloupe	11/7	12/8	20	3	17.51 (3.00–43.54)
Rifflet	Deshaies	Guadeloupe	11/7	12/8	19	0	<6.89 (0–33.45)
Rivière Sens	Gourbeyre	Guadeloupe	3/3	30/9	53	2	7.61 (2.00–24.91)
Roseau	Goyave	Guadeloupe	16/6	12/8	20	0	<6.36 (0–33.20)
Sainte Claire	Goyave	Guadeloupe	15/3	30/9	49	2	8.00 (2.00–25.25)
Alizés	Le Moule	Guadeloupe	3/7	12/9	16	0	<10.40 (0–43.91)
Four à Chaux	Morne à l'Eau	Guadeloupe	12/5	2/10	23	2	90.42 (76.64–104.20)
Plage Ouest Fajou	Morne à l'Eau	Guadeloupe	17/6	17/6	1	0	<10.12 (0–10.88)
Anse Marigot	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<20.56 (0–62.64)
Petite Anse	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<20.56 (0–61.36)
Cimetière-Pte A	Port-Louis	Guadeloupe	7/3	9/7	12	0	<59.17 (0–111.56)
Lavolvaine	Port-Louis	Guadeloupe	16/4	1/11	39	7	50.50 (34.10–66.90)
Le Souffleur	Port-Louis	Guadeloupe	7/3	27/9	36	0	<5.33 (0–29.86)
Port-Louis Sud	Port-Louis	Guadeloupe	7/3	23/11	79	51	128.41 (118.72–138.10)
Anse à l'Eau	Saint-François	Guadeloupe	3/7	11/9	14	2	25.98 (2.00–59.21)
Anse à la Croix	Saint-François	Guadeloupe	3/7	11/9	15	3	36.21 (8.49–63.94)
Anse des Châteaux	Saint-François	Guadeloupe	3/7	12/9	25	0	20.79 (3.00–45.73)
Baie Olive	Saint-François	Guadeloupe	3/7	12/9	24	0	<6.55 (0–33.44)
La Gourde	Saint-François	Guadeloupe	3/7	12/9	23	0	<7.45 (0–31.50)
La Grotte	Saint-François	Guadeloupe	3/7	12/9	25	2	14.00 (2.00–38.78)
Les Rouleaux	Saint-François	Guadeloupe	6/7	12/9	19	2	37.68 (15.00–60.36)
Les Salines	Saint-François	Guadeloupe	2/7	12/9	27	3	26.54 (6.00–50.35)
Raisins Clairs	Saint-François	Guadeloupe	3/7	5/9	17	1	9.64 (1.00–40.71)
Bois-Jolan	Sainte-Anne	Guadeloupe	4/7	10/9	11	0	<14.76 (0–51.35)
Amandiers	Sainte-Rose	Guadeloupe	1/8	12/8	12	1	13.43 (1.00–48.46)
Clugny	Sainte-Rose	Guadeloupe	16/4	12/8	33	5	28.36 (9.28–47.44)
Manbia	Sainte-Rose	Guadeloupe	11/7	12/8	20	0	<6.36 (0–33.23)
Nogent	Sainte-Rose	Guadeloupe	11/7	12/8	20	0	<6.36 (0–33.41)
Pointe Allegre	Sainte-Rose	Guadeloupe	11/7	12/8	20	0	<6.36 (0–32.44)
Tillet	Sainte-Rose	Guadeloupe	11/7	12/8	20	0	<6.36 (0–32.27)
Grande Anse	Trois-Rivières	Guadeloupe	3/3	30/9	56	10	28.06 (13.26–42.86)
Anse Caraïbe	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<20.56 (0–61.21)
Marigot	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<20.01 (0–61.66)
Plage de l'Etang	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<20.01 (0–60.18)
Simaho	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<20.01 (0–58.40)
Feuillard	Capesterre	Marie-Galante	28/2	31/8	16	1	13.96 (2.00–47.17)
Feuillère	Capesterre	Marie-Galante	28/2	31/8	17	2	22.99 (2.00–53.72)

Les Galets	Capesterre	Marie-Galante	28/2	30/11	76	9	35.18 (25.96–44.39)
Petite anse	Capesterre	Marie-Galante	28/2	31/8	15	0	<11.50 (0–44.18)
Trois Ilets	Grand Bourg	Marie-Galante	27/2	25/9	101	206	511.75 (478.38–545.12)
Folle Anse	Grand Bourg	Marie-Galante	27/2	1/9	32	56	328.61 (244.81–412.41)
Plage des bébés	Grand Bourg	Marie-Galante	11/6	11/6	1	1	162.10 (1.00–448.37)
Anse Canot	Saint-Louis	Marie-Galante	27/2	1/9	16	1	12.03 (1.00–44.43)
Anse l'Eglise	Saint-Louis	Marie-Galante	27/2	1/9	17	3	32.03 (4.64–59.43)
Moustique	Saint-Louis	Marie-Galante	27/2	1/9	21	23	234.84 (141.22–328.46)
Vieux Fort	Saint-Louis	Marie-Galante	27/2	1/9	18	8	75.57 (55.59–95.55)
Terre-de-Bas	Petite-Terre	Petite Terre	20/8	15/9	9	9	248.78 (82.87–414.69)

\*Indicates that field patrols did not always report when a zero track count was observed.

SUPPLEMENTARY TABLE S2 Beaches in the Guadeloupe Archipelago monitored for nesting of the green turtle *Chelonia mydas* from 2007 to 2008 (Fig. 2), with name of the nearest town and of the island, dates (day/month) that monitoring began and ended, the total number of nights of monitoring, the total number of turtle nesting tracks observed, and the total number of tracks estimated from modelling (with 95% confidence interval, CI).

Beach (by year)	Town	Island	Beginning of monitoring	End of monitoring	No. of monitoring nights	No. of tracks	Estimated total no. of tracks (95% CI)
<b>2007</b>							
Anse Laborde	Anse Bertrand	Guadeloupe	20/5	12/7	3	0	<568.72 (0–1,539.62)
La Chapelle	Anse Bertrand	Guadeloupe	28/5	28/5	1	0	<3,248.10 (0–8,857.38)
Anse à Sable	Bouillante	Guadeloupe	31/5	6/12	48	0	<2.19 (0–13.05)
Galets Rouges	Bouillante	Guadeloupe	31/5	6/12	47	0	<2.29 (0–13.69)
Machette	Bouillante	Guadeloupe	31/5	6/12	69	0	<1.61 (0–10.33)
Malendure	Bouillante	Guadeloupe	31/5	23/9	64	0	<1.81 (0–11.39)
Grande Anse	Deshaies	Guadeloupe	13/4	4/7	14	0	<224.73 (0–607.79)
Kahouanne	Deshaies	Guadeloupe	21/7	22/7	2	0	<178.07 (0–482.98)
Lavolvaine	Port-Louis	Guadeloupe	30/6	30/6	1	0	<3,248.10 (0–8,913.83)
Port-Louis Sud	Port-Louis	Guadeloupe	19/5	28/7	12	0	<52.45 (0–90.11)
Anse à l'eau	Saint-François	Guadeloupe	5/7	17/7	7	0	<129.32 (0–368.60)
Anse à la croix	Saint-François	Guadeloupe	5/7	17/7	7	0	<129.32 (0–381.20)
Anse des Châteaux	Saint-François	Guadeloupe	26/6	1/8	17	0	<24.41 (0–57.05)
Anse Kahouanne	Saint-François	Guadeloupe	8/7	12/7	3	0	<363.48 (0–1,006.44)
Baie Olive	Saint-François	Guadeloupe	5/7	30/7	5	0	<90.68 (0–128.69)
Km 7	Saint-François	Guadeloupe	9/7	31/7	7	0	<51.09 (0–86.85)
La Coulée	Saint-François	Guadeloupe	10/7	31/7	7	0	<51.08 (0–85.94)
La Gourde	Saint-François	Guadeloupe	1/6	31/7	13	0	<39.49 (0–74.66)
La Grotte	Saint-François	Guadeloupe	20/5	1/8	19	0	<26.11 (0–58.01)
Les Rouleaux	Saint-François	Guadeloupe	25/4	30/7	6	0	<6.30 (0–18.60)
Les Salines	Saint-François	Guadeloupe	2/6	4/8	14	0	<24.39 (0–57.17)
Loquet	Saint-François	Guadeloupe	16/7	31/7	5	0	<57.68 (0–94.18)
Raisins Clairs	Saint-François	Guadeloupe	5/7	17/7	3	0	<330.87 (0–893.36)
Cluny	Sainte-Rose	Guadeloupe	28/3	30/8	54	1	31.81 (1.00–66.81)
Nogent	Sainte-Rose	Guadeloupe	28/3	23/7	57	5	213.19 (24.61–401.78)
Plage naturiste	Sainte-Rose	Guadeloupe	30/5	16/6	2	0	<1,590.17 (0–4,243.41)
Pointe Allegre	Sainte-Rose	Guadeloupe	29/4	1/7	6	2	635.98 (2.00–1,745.43)
Tillet	Sainte-Rose	Guadeloupe	23/4	30/5	9	0	<358.69 (0–936.44)
Grande Anse	Trois-Rivières	Guadeloupe	13/7	4/8	8	0	<108.53 (0–123.76)
Grande Anse	Terre-de-Haut	Les Saintes	9/5	26/11	3	0	<36.55 (0–72.55)
Pain de Sucre	Terre-de-Haut	Les Saintes	20/6	18/7	2	0	<354.28 (0–964.27)
Pompierre	Terre-de-Haut	Les Saintes	9/8	12/8	2	0	<70.00 (0–106.86)
Rodrigue	Terre-de-Haut	Les Saintes	16/8	4/9	3	0	<58.37 (0–94.73)
Feuillard	Capesterre	Marie-Galante	13/6	22/8	12	0	<29.24 (0–61.15)
Feuillère	Capesterre	Marie-Galante	11/6	22/8	13	0	<27.99 (0–61.01)
Ferrière							
Les Galets	Capesterre	Marie-Galante	11/6	23/8	17	26	250.50 (116.97–384.02)
Petite Anse	Capesterre	Marie-Galante	13/6	22/8	12	0	<29.24 (0–62.69)

Folle Anse	Grand Bourg	Marie-Galante	9/6	24/8	27	0	<9.47 (0–32.30)
Trois Ilets	Grand Bourg	Marie-Galante	2/5	24/8	33	0	<9.22 (0–31.89)
Anse Canot	Saint-Louis	Marie-Galante	18/6	23/8	11	0	<19.16 (0–48.03)
Anse l'Eglise	Saint-Louis	Marie-Galante	14/6	23/8	14	0	<19.13 (0–48.47)
Anse Vieux Fort	Saint-Louis	Marie-Galante	10/6	23/8	17	0	<18.63 (0–48.15)
Moustique	Saint-Louis	Marie-Galante	10/6	23/8	19	0	<13.44 (0–39.89)
Terre-de-Bas	Petite-Terre	Petite Terre	27/7	4/9	8	12	154.39 (34.29–274.48)
Terre-de-Haut	Petite-Terre	Petite Terre	22/8	22/8	1	0	<114.17 (0–395.34)

## 2008

Anse Laborde	Anse Bertrand	Guadeloupe	16/4	9/11	33	0	<12.48 (0–38.79)
La Chapelle	Anse Bertrand	Guadeloupe	7/3	18/11	41	0	<11.57 (0–35.55)
Anse à Sable	Bouillante	Guadeloupe	1/5	1/9	94	3	6.32 (3.00–15.21)
Galet Rouge	Bouillante	Guadeloupe	1/5	1/9	94	2	5.26 (2.00–14.13)
Machette	Bouillante	Guadeloupe	1/5	1/9	94	0	<1.72 (0–11.13)
Malendure	Bouillante	Guadeloupe	20/5	1/9	90	0	<1.60 (0–10.42)
Petite Anse	Bouillante	Guadeloupe	2/6	20/7	6	0	<171.47 (0–470.50)
Bananier	Capesterre Belle Eau	Guadeloupe	15/6	16/9	25	0	<7.74 (0–29.64)
Esclaves	Capesterre Belle Eau	Guadeloupe	15/6	16/9	28	0	<7.07 (0–28.10)
Saint Sauveur	Capesterre Belle Eau	Guadeloupe	28/3	30/9	21	0	<23.54 (0–55.57)
Fort Royal	Deshaies	Guadeloupe	11/7	12/8	21	5	39.51 (22.43–56.59)
Grande Anse	Deshaies	Guadeloupe	11/7	12/8	20	8	57.79 (41.80–73.77)
La perle	Deshaies	Guadeloupe	11/7	12/8	20	0	<9.24 (0–32.33)
Rifflet	Deshaies	Guadeloupe	11/7	12/8	19	0	<10.25 (0–33.81)
Rivière Sens	Gourbeyre	Guadeloupe	3/3	30/9	53	0	<4.83 (0–21.95)
Roseau	Goyave	Guadeloupe	16/6	12/8	20	0	<10.88 (0–33.79)
Sainte Claire	Goyave	Guadeloupe	15/3	30/9	49	0	<5.07 (0–22.32)
Alizés	Le Moule	Guadeloupe	3/7	12/9	16	3	21.12 (5.21–37.03)
Four à Chaux	Morne à l'Eau	Guadeloupe	12/5	2/10	31	0	<10.82 (0–35.19)
Plage Ouest Fajou	Morne à l'Eau	Guadeloupe	17/6	17/6	1	0	<3,248.10 (0–8,046.50)
Anse Marigot	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<6.33 (0–18.96)
Petite Anse	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<147.79 (0–415.82)
Cimetière-Pte A	Port-Louis	Guadeloupe	7/3	9/7	12	0	<221.67 (0–599.82)
Lavolvaine	Port-Louis	Guadeloupe	16/4	1/11	39	2	13.03 (2.00–30.66)
Le Souffleur	Port-Louis	Guadeloupe	7/3	27/9	36	0	<11.56 (0–37.06)
Port-Louis Sud	Port-Louis	Guadeloupe	7/3	23/11	79	42	94.08 (84.28–103.87)
Anse à l'Eau	Saint-François	Guadeloupe	3/7	11/9	14	1	11.05 (1.00–34.90)
Anse à la Croix	Saint-François	Guadeloupe	3/7	11/9	15	0	<9.06 (0–30.66)
Anse des Châteaux	Saint-François	Guadeloupe	3/7	12/9	25	0	<5.03 (0–22.39)
Baie Olive	Saint-François	Guadeloupe	3/7	12/9	24	0	<4.71 (0–21.44)
La Gourde	Saint-François	Guadeloupe	3/7	12/9	23	0	<5.80 (0–24.73)
La Grotte	Saint-François	Guadeloupe	3/7	12/9	25	0	<5.02 (0–22.31)
Les Rouleaux	Saint-François	Guadeloupe	6/7	12/9	21	0	<5.88 (0–24.22)
Les Salines	Saint-François	Guadeloupe	2/7	12/9	27	5	10.26 (5.00–27.93)
Raisins Clairs	Saint-François	Guadeloupe	3/7	5/9	17	0	<9.03 (0–32.87)
Bois-Jolan	Sainte-Anne	Guadeloupe	4/7	10/9	11	0	<13.06 (0–38.96)

Amandiers	Sainte-Rose	Guadeloupe	1/8	12/8	12	0	<11.41 (0–36.10)
Clugny	Sainte-Rose	Guadeloupe	16/4	12/8	33	0	<8.72 (0–30.92)
Manbia	Sainte-Rose	Guadeloupe	11/7	12/8	20	2	20.01 (2.00–41.90)
Nogent	Sainte-Rose	Guadeloupe	11/7	12/8	20	7	41.93 (23.20–60.66)
Pointe Allegre	Sainte-Rose	Guadeloupe	11/7	12/8	20	1	9.95 (1.00–32.14)
Tillet	Sainte-Rose	Guadeloupe	11/7	12/8	20	0	<9.24 (0–32.19)
Grande Anse	Trois-Rivières	Guadeloupe	3/3	30/9	56	4	18.14 (4.00–34.23)
Anse Caraïbe	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<147.81 (0–414.75)
Marigot	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<142.23 (0–398.81)
Plage de l'Etang	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<142.23 (0–396.04)
Simaho	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<142.23 (0–368.85)
Feuillard	Capesterre	Marie-Galante	28/2	31/8	16	1	17.98 (1.00–46.70)
Feuillère	Capesterre	Marie-Galante	28/2	31/8	17	1	17.61 (1.00–47.33)
Les Galets	Capesterre	Marie-Galante	28/2	30/11	76	341	501.51 (447.33–555.69)
Petite anse	Capesterre	Marie-Galante	28/2	31/8	15	0	<17.30 (0–45.09)
Trois Ilets	Grand Bourg	Marie-Galante	27/2	25/9	101	1	2.77 (1.00–11.98)
Folle Anse	Grand Bourg	Marie-Galante	27/2	1/9	32	0	<8.97 (0–31.30)
Plage des bébés	Grand Bourg	Marie-Galante	11/6	11/6	1	0	<3,248.10 (0–8,575.87)
Anse Canot	Saint-Louis	Marie-Galante	27/2	1/9	16	0	<17.54 (0–45.96)
Anse l'Eglise	Saint-Louis	Marie-Galante	27/2	1/9	17	0	<17.35 (0–45.66)
Moustique	Saint-Louis	Marie-Galante	27/2	1/9	21	0	<14.95 (0–42.91)
Vieux Fort	Saint-Louis	Marie-Galante	27/2	1/9	18	0	<17.30 (0–45.37)
Terre-de-Bas	Petite-Terre	Petite Terre	20/8	15/9	9	52	456.47 (274.79–638.16)

SUPPLEMENTARY TABLE S3 Beaches in the Guadeloupe Archipelago monitored for nesting of the leatherback turtle *Dermochelys coriacea* from 2007 to 2008 (Fig. 3), with name of the nearest town and of the island, dates (day/month) that monitoring began and ended, the total number of nights of monitoring, the total number of turtle nesting tracks observed, and the total number of tracks estimated from modelling (with 95% confidence interval, CI).

Beach (by year)	Town	Island	Beginning of monitoring	End of monitoring	No. of monitoring nights	No. of tracks	Estimated total no. of tracks (95% CI)
<b>2007</b>							
Anse Laborde	Anse Bertrand	Guadeloupe	20/5	12/7	3	0	<46.39 (0–102.38)
La Chapelle	Anse Bertrand	Guadeloupe	28/5	28/5	1	1	123.95 (56.59–191.31)
Anse à Sable	Bouillante	Guadeloupe	31/5	6/12	48	0	<7.50 (0–36.73)
Galets Rouges	Bouillante	Guadeloupe	31/5	6/12	47	0	<7.60 (0–35.94)
Machette	Bouillante	Guadeloupe	31/5	6/12	69	0	<4.16 (0–27.10)
Malendure	Bouillante	Guadeloupe	31/5	23/9	64	0	<4.15 (0–24.73)
Grande Anse	Deshaies	Guadeloupe	13/4	4/7	14	7	65.33 (34.38–96.29)
Kahouanne	Deshaies	Guadeloupe	21/7	22/7	2	0	<137.87 (0–209.59)
Lavolvaine	Port-Louis	Guadeloupe	30/6	30/6	1	0	<177.57 (0–581.99)
Port-Louis Sud	Port-Louis	Guadeloupe	19/5	28/7	12	2	31.52 (2.00–77.14)
Anse à l'eau	Saint-François	Guadeloupe	5/7	17/7	7	0	<30.11 (0–79.02)
Anse à la croix	Saint-François	Guadeloupe	5/7	17/7	7	0	<30.11 (0–77.66)
Anse des Châteaux	Saint-François	Guadeloupe	26/6	1/8	17	0	<13.57 (0–49.62)
Anse Kahouanne	Saint-François	Guadeloupe	8/7	12/7	3	0	<70.59 (0–130.38)
Baie Olive	Saint-François	Guadeloupe	5/7	30/7	5	0	<49.14 (0–104.18)
Km 7	Saint-François	Guadeloupe	9/7	31/7	7	0	<37.38 (0–87.54)
La Coulée	Saint-François	Guadeloupe	10/7	31/7	7	0	<37.38 (0–89.55)
La Gourde	Saint-François	Guadeloupe	1/6	31/7	13	0	<16.48 (0–55.71)
La Grotte	Saint-François	Guadeloupe	20/5	1/8	19	0	<10.51 (0–44.75)
Les Rouleaux	Saint-François	Guadeloupe	25/4	30/7	6	1	32.58 (1.00–82.05)
Les Salines	Saint-François	Guadeloupe	2/6	4/8	14	0	<16.93 (0–57.34)
Loquet	Saint-François	Guadeloupe	16/7	31/7	5	0	<58.40 (0–118.28)
Raisins Clairs	Saint-François	Guadeloupe	5/7	17/7	3	0	<70.21 (0–129.28)
Clugny	Sainte-Rose	Guadeloupe	28/3	30/8	54	19	47.57 (32.65–62.48)
Nogent	Sainte-Rose	Guadeloupe	28/3	23/7	57	18	41.66 (28.01–55.32)
Plage naturiste	Sainte-Rose	Guadeloupe	30/5	16/6	2	0	<67.55 (0–126.18)
Pointe Allegre	Sainte-Rose	Guadeloupe	29/4	1/7	6	3	63.90 (28.13–99.66)
Tillet	Sainte-Rose	Guadeloupe	23/4	30/5	9	1	13.03 (1.00–46.44)
Grande Anse	Trois-Rivières	Guadeloupe	13/7	4/8	5	2	107.59 (56.01–159.16)
Grande Anse	Terre-de-Haut	Les Saintes	9/5	26/11	8	0	<99.68 (0–161.51)
Pain de Sucre	Terre-de-Haut	Les Saintes	20/6	18/7	3	0	<63.39 (0–121.30)
Pompierre	Terre-de-Haut	Les Saintes	9/8	12/8	2	0	<263.03 (0–724.58)
Rodrigue	Terre-de-Haut	Les Saintes	16/8	4/9	2	0	<529.53 (0–1,496.85)
Feuillard	Capesterre	Marie-Galante	13/6	22/8	12	0	<16.24 (0–55.54)
Feuillère Ferrière	Capesterre	Marie-Galante	11/6	22/8	13	0	<14.28 (0–51.29)
Les Galets	Capesterre	Marie-Galante	11/6	23/8	17	0	<13.05 (0–50.12)
Petite Anse	Capesterre	Marie-Galante	13/6	22/8	12	0	<16.24 (0–55.77)
Folle Anse	Grand Bourg	Marie-Galante	9/6	24/8	27	0	<7.30 (0–35.11)



Trois Ilets	Grand Bourg	Marie-Galante	2/5	24/8	33	0	<5.05 (0–28.64)
Anse Canot	Saint-Louis	Marie-Galante	18/6	23/8	11	0	<24.00 (0–68.73)
Anse l'Eglise	Saint-Louis	Marie-Galante	14/6	23/8	14	0	<15.46 (0–53.17)
Anse Vieux Fort	Saint-Louis	Marie-Galante	10/6	23/8	17	0	<11.26 (0–44.66)
Moustique	Saint-Louis	Marie-Galante	10/6	23/8	19	0	<10.81 (0–44.86)
Terre-de-Bas	Petite-Terre	Petite Terre	27/7	4/9	8	0	<65.87 (0–125.63)
Terre-de-Haut	Petite-Terre	Petite Terre	22/8	22/8	1	0	<928.30 (0–2,624.11)

## 2008

Anse Laborde	Anse Bertrand	Guadeloupe	16/4	9/11	33	0	<5.49 (0–29.97)
La Chapelle	Anse Bertrand	Guadeloupe	7/3	18/11	41	0	<4.34 (0–26.15)
Anse à Sable	Bouillante	Guadeloupe	1/5	1/9	94	0	<1.51 (0–14.51)
Galet Rouge	Bouillante	Guadeloupe	1/5	1/9	94	0	<1.50 (0–13.58)
Machette	Bouillante	Guadeloupe	1/5	1/9	94	0	<1.50 (0–13.73)
Malendure	Bouillante	Guadeloupe	20/5	1/9	90	0	<1.78 (0–15.51)
Petite Anse	Bouillante	Guadeloupe	2/6	20/7	6	0	<28.21 (0–77.38)
Bananier	Capesterre Belle Eau	Guadeloupe	15/6	16/9	25	0	<11.27 (0–45.60)
Esclaves	Capesterre Belle Eau	Guadeloupe	15/6	16/9	28	9	82.69 (50.03–115.35)
Saint Sauveur	Capesterre Belle Eau	Guadeloupe	28/3	30/9	21	0	<7.65 (0–37.17)
Fort Royal	Deshaies	Guadeloupe	11/7	12/8	21	0	<15.48 (0–55.66)
Grande Anse	Deshaies	Guadeloupe	11/7	12/8	20	1	16.69 (1.00–56.32)
La perle	Deshaies	Guadeloupe	11/7	12/8	20	0	<16.19 (0–54.96)
Rifflet	Deshaies	Guadeloupe	11/7	12/8	19	0	<16.92 (0–56.85)
Rivière Sens	Gourbeyre	Guadeloupe	3/3	30/9	53	0	<3.30 (0–23.42)
Roseau	Goyave	Guadeloupe	16/6	12/8	20	0	<12.33 (0–47.86)
Sainte Claire	Goyave	Guadeloupe	15/3	30/9	49	2	9.39 (2.00–31.00)
Alizés	Le Moule	Guadeloupe	3/7	12/9	16	0	<33.44 (0–82.63)
Four à Chaux	Morne à l'Eau	Guadeloupe	12/5	2/10	31	0	<6.16 (0–32.20)
Plage Ouest Fajou	Morne à l'Eau	Guadeloupe	17/6	17/6	1	0	<149.57 (0–220.88)
Anse Marigot	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<15.70 (0–54.57)
Petite Anse	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<15.72 (0–53.07)
Cimetière-Pte A	Port-Louis	Guadeloupe	7/3	9/7	12	0	<13.39 (0–50.35)
Lavolvaine	Port-Louis	Guadeloupe	16/4	1/11	39	0	<7.63 (0–37.20)
Le Souffleur	Port-Louis	Guadeloupe	7/3	27/9	36	2	12.24 (2.00–36.46)
Port-Louis Sud	Port-Louis	Guadeloupe	7/3	23/11	79	1	4.59 (1.00–26.45)
Anse à l'Eau	Saint-François	Guadeloupe	3/7	11/9	14	0	<36.14 (0–87.57)
Anse à la Croix	Saint-François	Guadeloupe	3/7	11/9	15	0	<33.88 (0–84.21)
Anse des Châteaux	Saint-François	Guadeloupe	3/7	12/9	25	0	<18.66 (0–60.34)
Baie Olive	Saint-François	Guadeloupe	3/7	12/9	24	0	<24.27 (0–68.83)
La Gourde	Saint-François	Guadeloupe	3/7	12/9	23	0	<19.46 (0–60.43)
La Grotte	Saint-François	Guadeloupe	3/7	12/9	25	0	<18.35 (0–58.69)
Les Rouleaux	Saint-François	Guadeloupe	6/7	12/9	21	0	<23.51 (0–66.48)
Les Salines	Saint-François	Guadeloupe	2/7	12/9	27	0	<16.46 (0–55.96)
Raisins Clairs	Saint-François	Guadeloupe	3/7	5/9	17	0	<23.24 (0–67.90)
Bois-Jolan	Sainte-Anne	Guadeloupe	4/7	10/9	11	0	<42.05 (0–95.58)
Amandiers	Sainte-Rose	Guadeloupe	1/8	12/8	12	0	<37.91 (0–91.52)

Clugny	Sainte-Rose	Guadeloupe	16/4	12/8	33	0	<5.57 (0–31.92)
Manbia	Sainte-Rose	Guadeloupe	11/7	12/8	20	0	<16.19 (0–55.19)
Nogent	Sainte-Rose	Guadeloupe	11/7	12/8	20	1	16.78 (1.00–56.65)
Pointe Allegre	Sainte-Rose	Guadeloupe	11/7	12/8	20	0	<16.19 (0–54.74)
Tillet	Sainte-Rose	Guadeloupe	11/7	12/8	20	1	16.60 (1.00–55.48)
Grande Anse	Trois-Rivières	Guadeloupe	3/3	30/9	56	5	18.39 (5.00–39.08)
Anse Caraïbe	Pointe-Noire	Guadeloupe	30/4	20/7	9	0	<15.70 (0–55.45)
Marigot	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<13.61 (0–49.97)
Plage de l'Etang	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<13.61 (0–50.81)
Simaho	Vieux Habitants	Guadeloupe	29/4	20/7	10	0	<13.61 (0–49.92)
Feuillard	Capesterre	Marie-Galante	28/2	31/8	16	0	<14.13 (0–50.35)
Feuillère	Capesterre	Marie-Galante	28/2	31/8	17	0	<12.27 (0–47.94)
Les Galets	Capesterre	Marie-Galante	28/2	30/11	76	0	<6.82 (0–34.85)
Petite anse	Capesterre	Marie-Galante	28/2	31/8	15	0	<15.81 (0–54.58)
Trois Ilets	Grand Bourg	Marie-Galante	27/2	25/9	101	1	2.24 (1.00–15.34)
Folle Anse	Grand Bourg	Marie-Galante	27/2	1/9	32	0	<6.24 (0–32.05)
Plage des bébés	Grand Bourg	Marie-Galante	11/6	11/6	1	0	<139.69 (0–211.86)
Anse Canot	Saint-Louis	Marie-Galante	27/2	1/9	16	0	<14.53 (0–52.35)
Anse l'Eglise	Saint-Louis	Marie-Galante	27/2	1/9	17	0	<12.44 (0–46.59)
Moustique	Saint-Louis	Marie-Galante	27/2	1/9	21	0	<9.64 (0–40.19)
Vieux Fort	Saint-Louis	Marie-Galante	27/2	1/9	18	0	<11.50 (0–45.62)
Terre-de-Bas	Petite-Terre	Petite Terre	20/8	15/9	9	0	<234.77 (0–675.63)