

# Placing Madagascar's marine turtle populations in a regional context using community-based monitoring

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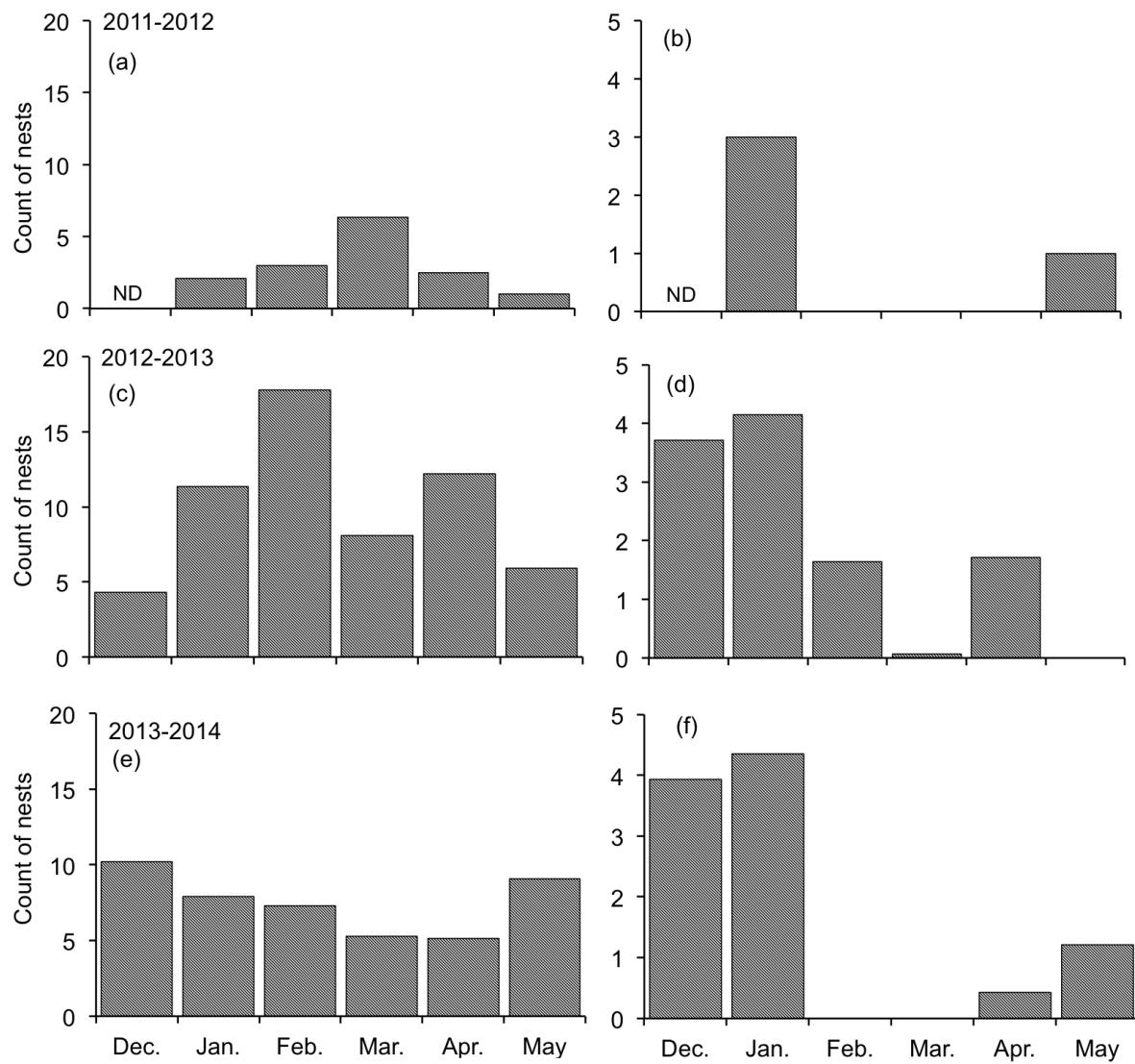


FIG. S1 Estimated total nests of green *Chelonia mydas* (a, c, e) and hawksbill *Eretmochelys imbricata* (b, d, f) turtles by month in each of the three survey periods (2011–2012, 2012–2013 and 2013–2014) on the islands of Nosy Abobazo, Nosy Andranoro and Nosy Dondosy, Madagascar (Fig. 1). Data have been interpolated for the gaps in monitoring during the survey period. There were no surveys during 26 May–14 December 2012 and 19 May–13 December 2013 (ND, no monitoring occurred).

TABLE S1 Data on nesting marine turtles in Madagascar since 2000, with site no. (Fig. 2), region, species, no. of nests, month/year, data type, and reference.

Site no.	Region	Species	No. of nests	Month/year	Data type	Reference
1	Nosy Hara region	Green turtle <i>Chelonia mydas</i>	<1,000	July–Dec. 2000	Body pit count	Metcalf et al., 2007
		Hawksbill turtle <i>Eretmochelys imbricata</i>	<500			
2	Ambolobozokely region	Unknown	<50	June 2011	Body pit count	Mealla, 2011
3	Archipel (Barralums)	Unknown	Not reported	Unknown		Rasolofo, 2012; van der Elst et al., 2012
4	Analandrafia	Unknown	Not reported	2011		CEDTM, 2001;
	Masoala			Unknown		Rasolofo, 2012
	Baie d'Antongil			Unknown		
	Ile Sainte Marie			Unknown		
	Manambato			Unknown		
5	96 km coastline north of Tolagnaro	Loggerhead turtle <i>Caretta caretta</i>	<50	2001–2002	No. of nests	Gladstone et al., 2003
		Unknown	<50			
6	Parc National Marin Nosy Ve-Androka	Olive ridley turtle <i>Lepidochelys olivacea</i>	Not reported	2011		IOSEA, 2011; van der Elst et al., 2012
		Leatherback turtle <i>Dermochelys coriacea</i>				

7	Ambohibola-Nosy Manitse	Unknown	Not reported	Unknown	G. Tovondrainy, pers. comm.
8	Beheloka-Besambay	Green Hawksbill Loggerhead	Not reported	2002	Walker & Roberts, 2005
9	Maromena	Loggerhead	Not reported	2002	Walker & Roberts, 2005
10	Salary Nord	Green	Not reported	2011	IOSEA, 2011
11	Ankitambanga-Belavenoke	Green	<50	2008	No. of nests
12	Lovobe-Antanimanimbo	Unknown	<50	2010–present	No. of nests
13	Barren Isles	Green Hawksbill	<50 <50	Dec.–May (2011–2014)	No. of nests
14	Radama Islands region	Green Hawksbill	<100 <50	July-Dec. 2000	Body pit count
15	Nosy Iranja region	Green Hawksbill	<100 <50	2000–2008	No. of nests
16	Nosy Be region	Green	<50	Nov. 2000–Jan. 2001	Body pit count
17	Ankarana beach - Nosy Mitsio	Unknown	<50	May 2011	Body pit count
					Mealla, 2011

TABLE S2 Records of known nesting sites of marine turtles on the islands around Madagascar and off the coast of Mozambique and northern South Africa, with site no. (Fig. 3), region, species, no. of nests, month/year, data type, and reference.

Site no.	Region	Species	No. of nests	Year	Data type	Reference
18	Glorieuses	Green	<5,000	1987–2006	Track counts	van der Elst et al., 2012; Lauret-Stepler et al., 2007
19	Moheli (Comoros)	Green	<5,000	Since 2000	Track counts	Bourjea, pers. comm. in van der Elst et al., 2012
20	Moya & Saziley sites (Mayotte)	Green	<5,000	Jan. 1998–Dec. 2005	Track counts	Bourjea et al., 2007
21	Juan de Nova	Unknown	<500	1987–2008*	Nesting turtles/year	Lauret-Stepler et al., 2010
22	Europa	Green	>5,000	1983–2006	Track counts	van der Elst et al., 2012; Lauret-Stepler et al., 2007
23	Vamizi (Mozambique)	Green	<500	Oct. 2003–Sep. 2007	Number of nests/year	Garnier et al., 2012
		Hawksbill	<50			
24	Quirimbas National Park (Mozambique)	Green	<50	2010–2011	Number of nests/year	Videira et al., 2011
		Hawksbill	<50			
		Unknown	<50			
25	São Sebastião (Mozambique)	Loggerhead	<50	2010–2011	Number of nests/year	Videira et al., 2011
		Leatherback	<50			
		Unknown	<50			
26	Primeiras e Segundas	Unknown	<50	2010–2011	Number of	Videira et al., 2011

	(Mozambique)				nests/year	
27	Bazaruto National Park (Mozambique)	Loggerhead	<50	2010–2011	Number of nests/year	Videira et al., 2011
		Green	<50			
		Leatherback	<50			
28	Ponta do Ouro to Macaneta (Mozambique)	Loggerhead	<1,000	2010–2011	Number of nests/year	Videira et al., 2011
		Leatherback	<100			
		Unknown	<50			
29	South Africa	Loggerhead	<5,000	2009–2010	Number of nests/year	Nel, 2010
		Leatherback	<500			
30	Tromelin	Green	<5,000	1986–2006	Track counts	van der Elst et al., 2012; Lauret-Stepler et al., 2007
31	Réunion Island	Green	<50	2004–2006	Number of nests/year	Ciccione & Bourjea, 2006

\*Only data since 1992 used in analyses because of gaps in data collection

TABLE S3 Records of historical (defined as pre-2000) known marine turtle nesting sites in Madagascar, with site no. (Fig. 2), site, possible species, last year of sighting, year data collected, and reference. No nest numbers were given for any of these nesting sites.

Site no.	Site (nearest village)	Species	Last year of sighting	Year data collected	Reference
4	Pointe Mahela (Manompana)	Unknown	Pre-2001	2001	CEDTM, 2001
9	Itampolo	Green	Pre-2002	2002	Walker & Roberts, 2005
	Anakao	Green			
	Anakao	Hawksbill			
	Anakao	Loggerhead			
	Ambola	Green			
	Andriangy	Green			
	Nosy Ve	Green			
	Befasy	Green			
	Nosy Satrana	Green			
11	Andoe avaratre (Nosy Andragnombala)	Green	1965	2011	Blue Ventures (this study)
	Antsotsomoroy (Andavadoaka)	Hawksbill	1991		
	Ampasilava (Belavenoke)	Green	1983		
	Agnorontane (Bevato South)	Loggerhead	1960		
	Anboapasy (Bevato North)	Loggerhead	1957		
	Antsatsamondika (Bevato South)	Loggerhead	1957		
	Depandempa (Bevato South)	Loggerhead	1965		
	Anboake avaratre (Bevato North)	Loggerhead	1966		
	Anboapasy Ovant (Bevato North)	Green	1966		
	Agnorontare Ovant (Bevato North)	Green	1966		

	Depandempa Ovant (Bevato North)	Green	1966		
	Amoronolagma (Nosy Be)	Green	1989		
	Nosy lava (Morombe)	Green	1971		
	Nosi-dolo (Morombe)	Green	1966		
	Andromona (Morombe)	Green	1971		
	Ananamdrome (Morombe)	Loggerhead	1985		
	Mandaviraty (Morombe)	Loggerhead	1974		
	Anopandikovia (Morombe)	Loggerhead	1975		
	Ampototry (Ampasilava)	Green	1990		
	Belalandia (Antsepoke)	Loggerhead	1995		
	Ankoapasy (Antsepoke)	Green	1983		
	Belalandia (Antsepoke)	Green	1980		
	Anbijeo (Nosy Ve)	Loggerhead	1984		
	Abelamera andrefa (Nosy Ve)	Green	1984		
	Ambatoloake (Bevato South)	Green	1962		
12	South of Begamela Ankaotelo	Unknown	1980s	2013	Blue Ventures (this study)
13	Nosy Vao Near Manomba, Maintirano Ampasimandoro beach, Maintirano Ambalahonko, nr Maintirano	Unknown	Unknown	2013	Blue Ventures (this study)
16	West coast Nosy Be Djamanzar, Nosy Be	Unknown	Pre-2001 1990	2001	Sagar, 2001