



Figure S1: Important foraging and interesting areas for (Cm) green, (Ei) hawksbill, (Cc) loggerhead, and (Dc) leatherback turtles. Exclusive Economic Zones and labels are indicated for Dc only for clarity. SO: Somalia; KE: Kenya; TZ: Tanzania; MZ: Mozambique; ZA: South Africa; MG: Madagascar. Sources for these maps: (Frazier 1995, Hughes 1995, Papi et al. 1997, Hughes et al. 1998, Mortimer 2001, Baldwin et al. 2003, Luschi et al. 2003, 2006, Muir 2004, Zanre 2005, Costa et al. 2007, Lambardi et al. 2008, Whiting et al. 2010, Namboothri et al. 2012, Sea Sense 2012, 2013, 2014, 2015, 2017, Garnier et al. 2012, de Wet 2012, Bourjea et al. 2013a b, Dubernet et al. 2013, Ali 2014, Anastácio et al. 2014, Hays et al. 2014, Pereira et al. 2014, Trindade & West 2014, West 2014, West & Hoza 2014, Dalleau et al. 2014, 2019, Harris et al. 2015, 2018, West et al. 2016, Robinson et al. 2016, 2017, 2018, von Brandis et al. 2017, Swaminathan et al. 2019, Nel et al. 2020, Sanchez et al. 2020, Shimada et al. 2020, Fernandes et al. 2021).

- Ali MH (2014) A summary of sea turtle status and conservation efforts in Somalia. *Afr Sea Turt Newsl* 2:29–30.
- Anastácio R, Santos C, Lopes C, Moreira H, Souto L, Ferrão J, Garnier J, Pereira MJ (2014) Reproductive biology and genetic diversity of the green turtle (*Chelonia mydas*) in Vamizi island, Mozambique. *SpringerPlus* 3:540.
- Baldwin R, Hughes G, Prince R (2003) Loggerhead turtles in the Indian Ocean. In: *Loggerhead Sea Turtles*. Bolten AB, Witherington BE (eds) Smithsonian Institution Press, Washington, D.C., USA, p 218–232
- Bourjea J, Ciccione S, Dalleau M (2013a) DYMITILE – Dynamique migratoire des tortues marines nidifiant dans les Iles Françaises de l’Océan Indien. IFREMER, Brest, France.
- Bourjea J, Dalleau M, Ciccione S (2013b) Seasonal variability of migrating corridors and foraging areas of adults green turtles revealed by satellite tracking at the regional scale. In: *Proceedings of the 33rd Annual Symposium on Sea Turtle Biology and Conservation*. Baltimore, MD, USA
- von Brandis RG, Mortimer JA, van de Geer CH, Lea JSE (2017) A long migratory record for a small post-pelagic hawksbill. *Mar Turt Newsl* 152:13–15.
- Costa A, Motta H, Pereira MAM, Videira EJS, Louro CMM, João J (2007) Marine turtles in Mozambique: towards an effective conservation and management program. *Mar Turt Newsl*:1–3.
- Dalleau M, Benhamou S, Sudre J, Ciccione S, Bourjea J (2014) The spatial ecology of juvenile loggerhead turtles (*Caretta caretta*) in the Indian Ocean sheds light on the “lost years” mystery. *Mar Biol* 161:1835–1849.
- Dalleau M, Kramer-Schadt S, Gangat Y, Bourjea J, Lajoie G, Grimm V (2019) Modeling the emergence of migratory corridors and foraging hot spots of the green sea turtle. *Ecol Evol* 9:10317–10342.
- Dubernet S, Dalleau M, Ciccione S, Machaku R, West L, Rakotonirina B, Bourjea J (2013) Alarming poaching of satellite tracked individuals raises regional conservation concerns for green turtle (*Chelonia mydas*) in the Western Indian Ocean. In: *Proceedings of the 33rd Annual Symposium on Sea Turtle Biology and Conservation*. Baltimore, MD, USA, p 96
- Fernandes RS, Inteca GE, Williams JL, Muaves L, Xavier M, Pereira MAM, Louro CMM (2021) Monitoring, tagging and conservation of marine turtles in Mozambique: Annual report 2019/20. Centro Terra Viva, Maputo, Mozambique.
- Frazier JG (1995) Status of sea turtles in the central western Indian Ocean. In: *Biology and Conservation of Sea Turtles (1995)*, 2nd ed. Bjorndal KA (ed) Smithsonian Institution Press, Washington, D.C., USA, p 385–389
- Garnier J, Hill N, Guissamulo A, Silva I, Witt M, Godley B (2012) Status and community-based conservation of marine turtles in the northern Querimbas Islands (Mozambique). *Oryx* 46:359–367.
- Harris LR, Nel R, Oosthuizen H, Meÿer M, Kotze D, Anders D, McCue S, Bachoo S (2015) Paper-efficient multi-species conservation and management are not always field-effective: The status and future of Western Indian Ocean leatherbacks. *Biol Conserv* 191:383–390.
- Harris LR, Nel R, Oosthuizen H, Meÿer M, Kotze D, Anders D, McCue S, Bachoo S (2018) Managing conflicts between economic activities and threatened migratory marine species toward creating a multiobjective blue economy: turtles and economic activities. *Conserv Biol* 32:411–423.
- Hays GC, Mortimer JA, Ierodiaconou D, Esteban N (2014) Use of long-distance migration patterns of an endangered species to inform conservation planning for the world’s largest marine protected area. *Conserv Biol* 28:1636–1644.
- Hughes GR (1995) Conservation of sea turtles in the southern Africa region. In: *Biology and Conservation of Sea Turtles (1995)*, 2nd ed. Bjorndal KA (ed) Smithsonian Institution Press, Washington, D.C., USA, p 397–404
- Hughes GR, Luschi P, Mencacci R, Papi F (1998) The 7000-km oceanic journey of a leatherback turtle tracked by satellite. *J Exp Mar Biol Ecol* 229:209–217.

- Lambardi P, Lutjeharms JRE, Mencacci R, Hays GC, Luschi P (2008) Influence of ocean currents on long-distance movement of leatherback sea turtles in the Southwest Indian Ocean. *Mar Ecol Prog Ser* 353:289–301.
- Luschi P, Lutjeharms JRE, Lambardi R, Mencacci R, Hughes GR, Hays GC (2006) A review of migratory behaviour of sea turtles off southeastern Africa. *South Afr J Sci* 102:51–58.
- Luschi P, Sale A, Mencacci R, Hughes GR, Lutjeharms JRE, Papi F (2003) Current transport of leatherback sea turtles (*Dermochelys coriacea*) in the ocean. *Proc R Soc Lond B Biol Sci* 270:129–132.
- Mortimer JA (2001) International migrations of sea turtles tagged at Aldabra. *Seychelles Isl Found Newsl* 7 P 3.
- Muir CE (2004) An assessment of the status of turtles, dugongs and cetaceans in Mnazi Bay-Ruvuma Estuary Marine Park and recommendations for a conservation strategy. IUCN, Nairobi, Kenya.
- Namboothri N, Swaminathan A, Choudhury BC, Shanker K (2012) Post-nesting migratory routes of leatherback turtles from Little Andaman Island. *Indian Ocean Turt Newsl* 16:21–23.
- Nel R, Harris LR, Sink KJ, Bachoo S, Anders D, Singh S, Snyders L (2020) Tamsyn the leatherback turtle validates locations of new MPAs in South Africa. *Indian Ocean Turt Newsl* 32:10–16.
- Papi F, Luschi P, Crosio E, Hughes GR (1997) Satellite tracking experiments on the navigational ability and migratory behaviour of the loggerhead turtle *Caretta caretta*. *Mar Biol* 129:215–220.
- Pereira MAM, Videira EJS, Goncalves PMB, Fernandes RS (2014) Post-nesting migration of loggerhead turtles (*Caretta caretta*) from southern Mozambique. *Afr Sea Turt Newsl* 1:46–51.
- Robinson NJ, Anders D, Bachoo S, Harris L, Hughes R, Kotze D, Maduray S, Mccue S, Meyer M, Oosthuizen H, Paladino FV, Luschi P (2018) Satellite tracking of leatherback and loggerhead sea turtles on the southeast African coastline. *Indian Ocean Turt Newsl* 28:3–7.
- Robinson NJ, Morreale SJ, Nel R, Paladino FV (2016) Coastal leatherback turtles reveal conservation hotspot. *Sci Rep* 6:37851.
- Robinson NJ, Morreale SJ, Nel R, Paladino FV (2017) Movements and diving behaviour of inter-nesting leatherback turtles in an oceanographically dynamic habitat in South Africa. *Mar Ecol Prog Ser* 571:221–232.
- Sanchez C, Lucas C, Odhiambo O, Beswick J, van de Geer C (2020) A juvenile green turtle long distance migration in the Western Indian Ocean. *Mar Turt Newsl* 160:5–7.
- Sea Sense (2012) Sea Sense Annual Report 2012. Sea Sense, Dar es Salaam, Tanzania.
- Sea Sense (2013) Sea Sense Annual Report 2013. Sea Sense, Dar es Salaam, Tanzania.
- Sea Sense (2014) Sea Sense Annual Report 2014. Sea Sense, Dar es Salaam, Tanzania.
- Sea Sense (2015) Sea Sense Annual Report 2015. Sea Sense, Dar es Salaam, Tanzania.
- Sea Sense (2017) Sea Sense Annual Report 2017. Sea Sense, Dar es Salaam, Tanzania.
- Shimada T, Limpus CJ, Hamann M, Bell I, Esteban N, Groom R, Hays GC (2020) Fidelity to foraging sites after long migrations. *J Anim Ecol* 89:1008–1016.
- Swaminathan A, Namboothri N, Shanker K (2019) Tracking leatherback turtles from Little Andaman Island. *Indian Ocean Turt Newsl* 29:8–10.
- Trindade J, West L (2014) A trans-boundary green turtle (*Chelonia mydas*) nesting event in Eastern Africa. *Afr Sea Turt Newsl* 1:52–53.
- West L (2014) The first documented case of foraging ground philopatry in a female green turtle (*Chelonia mydas*) in Tanzania. *Afr Sea Turt Newsl* 2:34–36.
- West L, Hoza RB (2014) Recognising the regional importance of the central Tanzanian coast to marine turtles. *Afr Sea Turt Newsl* 1:45–47.
- West L, Pastory T, Mchomvu B (2016) Surveys of nesting beaches in Lindi region, Tanzania, reveal threats to nesting and foraging green turtle, *Chelonia mydas*, populations. *Afr Sea Turt Newsl* 5:24–26.

- de Wet A (2012) Factors affecting survivorship of loggerhead (*Caretta caretta*) and leatherback (*Dermochelys coriacea*) sea turtles of South Africa. Nelson Mandela University, Port Elizabeth, South Africa
- Whiting SD, Macrae I, Murray W, Thorn R, Flores T, Joynson-Hicks C, Hashim S (2010) Indian Ocean crossing by a juvenile hawksbill turtle. *Mar Turt Newsl* 129:16–17.
- Zanre R (2005) Report on Watamu Turtle Watch's sea turtle bycatch release programme, Watamu, Kenya. Local Ocean Conservation, Watamu, Kenya.