



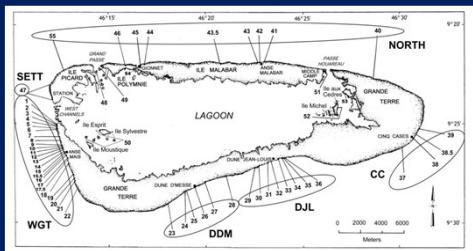
Indian Ocean - South-East Asian Marine Turtle Memorandum of Understanding

General Location & Area

- **Coordinates:**
-9.423698°, 46.343278°
 - **Most remote** Seychelles Island
 - 1,100 km SW of Victoria
 - No permanent **population**
 - **Total area: 439 km²**
Land: 155 km²



Habitats Used by Sea Turtles



Nesting beaches: 4,000 m; ~ 60 beaches
Foraging Habitat:

- Seagrass meadows; Mangrove; Coral Reef

Turtle Nesting Populations

Hawksbills: ~30 females / yr



Green Turtles :
>3,000-5,000 females /yr



Large numbers of Foraging Green Turtles and Hawksbills

Long Term Monitoring of Nesting Population: 1981-present

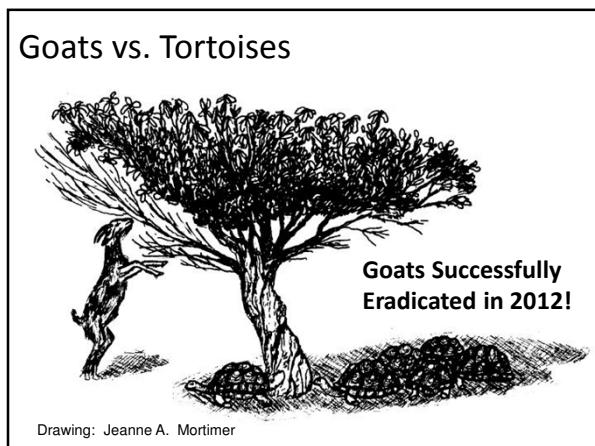
- Track counts
 - Flipper tagging





Other studies on turtles

- **Genetic studies**
 - Bourjea et al. 2007 Green turtles
 - Philips et al. 2014 Hawksbills
- **Satellite tracking (unpublished)**
- **Seasonality**
 - Mortimer 2012
 - Dalleau et al. 2012
- **Mortality of nesting turtles**
 - Mortimer & von Brandis 2013
- **Marine surveys & mapping**
- **Etc.....**



Aldabra Atoll (Seychelles)



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- Western Indian Ocean
- Managed by Seychelles Islands Foundation (SIF)
- UNESCO World Heritage Site (two in Seychelles)
- Wildlife & ecosystems protected since 1968

Cultural importance:

Symbol of cultural pride for all Seychellois.
Regional & international significance.

References

- Bourjea J., Lapégue S., Gagnevin L., Broderick D., Mortimer J.A., Ciccone S., Roos D., Taquet C. and Grizel H. (2007) Phylogeography of the green turtle, *Chelonia mydas*, in the Southwest Indian Ocean. *Molecular Ecology* 16(1):175
- Dalleau, M., Ciccone, S., Mortimer, J. A., Garnier, J., Benhamou, S., Bourjea.J. (2012) Nesting Phenology of Marine Turtles: Insights from a Regional Comparative Analysis on Green Turtle (*Chelonia mydas*). *PlosOne*, 7(10): 1 – 13
- Frazier, J. 1971. Observations on the sea turtles at Aldabra Atoll. *Phil. Trans. R. Soc. ser. B*, 260:373-410.
- Mortimer, J.A., von Brandis, R.G., Liljevik, A., Chapman, R., Collie, J. 2011. Fall and rise of nesting green turtles (*Chelonia mydas*) at Aldabra Atoll, Seychelles: Positive response to four decades of protection (1968-2008). *Chełonian Conservation and Biology* 10(2):165-176.
- Mortimer, J.A., Juniper, T., Collie, J., Chapman, R., Liljevik, A., Betsy, B., Pimm, R., Stevenson, I., Laboudallon, V., Assary, M., Augeré, D. & Pierce, S. (2003) Trends in the green turtle (*Chelonia mydas*) nesting population at Aldabra Atoll, Seychelles (WIO) and their implications for the region. *Proceedings of 23rd Annual Symposium on Sea Turtle Biology and Conservation*. NOAA Tech Mem.
- Mortimer, JA, Von Brandis RG, Liljevik A, Chapman R & Collie J (2011) Fall and Rise of Nesting Green Turtles (*Chelonia mydas*) at Aldabra Atoll, Seychelles: Positive Response to Four Decades of Protection (1968-2008). *Chełonian Conservation and Biology* 10(2): 165–176
- Mortimer, J.A. (2012) Seasonality of Green Turtle (*Chelonia mydas*) Reproduction at Aldabra Atoll, Seychelles (1980-2011) in the Regional Context of the Western Indian Ocean. *Chełonian Conservation Biology* 11(2): 170-181
- Mortimer JA & von Brandis RG (2013) Mortality of adult green turtles (*Chelonia mydas*) at the nesting beaches of Aldabra Atoll, Seychelles. *Chełonian Conservation Biology* 12(1): 151-157