

CURRICULUM VITAE: Taryn Sara Murray

Employer: South African Institute for Aquatic Biodiversity (SAIAB)
Position: ATAP Instrument Scientist
Specialisation: Fish movement behaviour, acoustic telemetry, estuarine ecology
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 @murray_taryn

Education Qualification

- B.Sc. Ichthyology (with distinction), Geology Rhodes University 2009
- B.Sc. (Hons) (with distinction) Ichthyology Rhodes University 2010
- M.Sc. Fisheries Science Rhodes University 2013
- Ph.D. Ichthyology Rhodes University 2017

Employment Record

- Research assistant – South African Institute for Aquatic Biodiversity (2007 – 2008)
- Researcher for Coastal and Environmental Services (2010)
- Administration assistant (2011)
 - Sub-regional training seminar of OIE National Points for Aquatic Animal Diseases
- Rhodes University Graduate assistant (2010, 2011, 2013, 2014)
- Postdoctoral fellow at SAIAB (Apr 2016 – Mar 2017)
- ATAP Instrument Scientist (Apr 2017 – current)

Committees

- 2nd International Conference on Fish Telemetry local organising committee (2013)
- Member of the Ocean Tracking Network's International Data Management Committee (2014 – present)
- Member of SAIAB's Animal Ethics Committee (2017 – present)
- 5th southern African Marine Linefish Symposium local organising committee (2019)

Achievements, Awards and Leadership Positions

- Recipient of the best poster presentation at the 4th South African Shark and Ray Symposium, 10 – 13 September 2017, Hermanus (2017)
- Recipient of the SANCOR Student International Travel Award (2015)
- Recipient of the 2015 best PhD presentation at the Department of Ichthyology and Fisheries Science student seminars (2015)
- Recipient of the 2011 ASCLME Prize for the best MSc presentation at the Department of Ichthyology and Fisheries Science student seminars (2011)

Publications

Peer-reviewed journal articles

- **Murray TS**, Cowley PD, Bennett RH, Childs A-R. 2018. Fish on the move: connectivity of an estuary-dependent fishery species evaluated using a large-scale acoustic telemetry array. *Canadian Journal of Fisheries and Aquatic Sciences* 75: 2038–2052. doi: 10.1139/cjfas-2017-0361
- Cowley PD, Bennett RH, Childs A-R, **Murray TS**. 2017. Reflection of the first five years of South Africa's Acoustic Tracking Array Platform (ATAP): status, challenges and opportunities. *African Journal of Marine Science* 39: 363–372. doi: 10.2989/1814232X.2017.1399927
- Grant G, Cowley PD, Bennett RH, **Murray TS**, Whitfield AK. 2017. Space use patterns by *Rhabdosargus holubi* in a southern African estuary, with emphasis on fish movements and ecosystem connectivity. *African Journal of Marine Science* 39: 135–143. doi: 10.2989/1814232X.2017.1327887
- **Murray TS**, Cowley PD, Childs A-R, Bennett RH. 2017. Philopatry and dispersal of juvenile leervis *Lichia amia* (Teleostei: Carangidae) tagged in a warm-temperate South African estuary. *African Journal of Marine Science* 39: 59–68. <http://dx.doi.org/10.2989/1814232X.2017.1303401>
- Dunlop SW, Mann BQ, **Murray TS**, Cowley PD, Maggs JQ. 2015. Movement patterns of *Lichia amia* (Teleostei: Carangidae) on the South African coast: results of a long-term cooperative tag-recapture project. *African Zoology* 50: 249–257. <http://dx.doi.org/10.1080/15627020.2015.1058724>
- **Murray TS**, Magoro ML, Whitfield AK, Cowley PD. 2015. Movement of largemouth bass *Micropterus salmoides* investigated in the Kowie River, South Africa, using acoustic telemetry. *African Zoology* 50: 263–271. <http://dx.doi.org/10.1080/15627020.2015.1079141>
- Smith MKS, Kruger N, **Murray TS**. 2015. Aerial surveys conducted along the Garden Route coastline, South Africa, to determine patterns in shore fishing effort. *Koedoe* 57: 1–9. <http://dx.doi.org/10.4102/koedoe.v57i1.1236>
- **Murray TS**, Gouws G, Mwale M, Mann BQ, Cowley PD. 2014. Unravelling population structure of black musselcracker *Cymatoceps nasutus*: evidence for multiple populations in South African coastal waters. *African Journal of Marine Science* 36: 493–503. <http://dx.doi.org/10.2989/1814232X.2014.983970>

Reports

- Cowley PD, Bennett RH, **Murray TS**. 2015. *Acoustic Tracking Array Platform status report (2011 – 2014)*. 22 pp.
- **Murray TS**. 2013. Poenskop (*Cymatoceps nasutus*). In: Mann BQ (ed.) Southern African marine linefish status reports. *Oceanographic Research Institute Special Publication* 9: 228-229.

Conference outputs

- **Murray TS**, Gouws G, Cowley PD, Maggs JQ, Mann BQ. 2013. Movement behaviour and genetic stock delineation of a coastal reef fish species, poenskop, *Cymatoceps nasutus* (Teleostei: Sparidae). In: Attwood C, Booth T, Kerwath S, Mann B, Marr S, Bonthuys J, Duncan J, Potts W (eds) A decade after the emergency: the proceedings of the 4th linefish symposium. *WWF South Africa Report Series – 2013/Marine/001*: 185-193.

Popular articles

- **Murray TS**, Parkinson MC, Cowley PD. 2018. Keeping track of marine life: the Acoustic Tracking Array Platform. *SANCOR Newsletter* 219: 6–7.
- Cowley PD, **Murray TS**, Parkinson MC. 2018. ATAP Anecdotes: The tale of a “home-loving” spotted grunter. *SANCOR Newsletter* 221: 3–5.
- **Murray TS**, Parkinson MC, Cowley PD. 2018. ATAP Anecdotes: The stingray tales. *SANCOR Newsletter* 222: 11–12.
- Maggs J, Mann B, Dunlop S, Potts W, Cowley P, **Murray T**. 2016. Garrick: a fish population on the rise or in demise? *Rock, Surf and Deep* April/May: 6–8.
- **Murray TS**. 2015. The wanderings of a PhD student. *SANCOR Newsletter* 210: 25–27.
- **Murray TS**, Cowley PD. 2014. Visspesie: Leervis (*Lichia amia*). *WegSleep Maart 2014*: 70.
- **Murray TS**, Cowley PD. 2013. Movements and dispersal of leervis – a combination of tagging programmes. In: Dunlop S, Mann B, Everett B (eds), Tagging News. *Oceanographic Research Institute* 26: 10.
- **Murray TS**. 2012. Movement patterns of poenskop *Cymatoceps nasutus*. In: Dunlop S, Mann B, Everett B (eds), Tagging News. *Oceanographic Research Institute* 25: 10.
- **Murray TS**. 2010. Not just a pretty face. *The Fishing and Hunting Journal* 13(1): 14–15.

Conferences Attended

- **Murray TS**, Smale MJ, Cowley PD, Goschen WS, Dicken MD, Childs A-R. 2017. Acoustic telemetry and network analysis reveal the space use patterns of multiple marine predators in a South African coastal embayment. *Addo Marine Symposium, Addo Elephant National Park, 25 October 2018*. Oral presentation.
- **Murray TS**, Cowley PD. 2017. Filling in the blanks: Assessing movement behaviour of data deficient stingrays in South Africa using acoustic telemetry. *4th South African Shark and Ray Symposium, Hermanus, South Africa, 10–13 September 2017*. Poster presentation (**received an award for the best poster presentation**).
- **Murray TS**, Smale MJ, Cowley PD, Goschen WS, Dicken MD, Childs A-R. 2017. Movement ranges and time scales in marine predators: acute and seasonal environmental drivers. *16th South African Marine Science Symposium, Port Elizabeth, 5–7 July 2017*. Oral presentation.
- **Murray TS**, Smale MJ, Cowley PD, Goschen WS, Dicken MD, Childs A-R. 2017. Movement ranges and time scales in marine predators: acute and seasonal environmental drivers. *4th International Conference on Fish Telemetry, Cairns, Australia, 18–23 June 2017*. Oral presentation.
- **Murray TS**, Cowley PD, Childs A-R. July 2015. The wanderings of leervis *Lichia amia* (Carangidae), an estuary-dependent piscivorous predator. *3rd International Conference on Fish Telemetry, Halifax, Canada, 13–17 July 2015*. Oral presentation.
- **Murray TS**, Cowley PD, Childs A-R. 2014. Estuarine movements and habitat connectivity by juvenile leervis *Lichia amia* (Carangidae), determined by passive acoustic tracking. *15th South African Marine Science Symposium, Stellenbosch, 15–18 July 2014*. Oral presentation.
- **Murray TS**, Cowley PD, Childs A-R. 2014. Can partial estuarine area protection reduce the vulnerability of a highly mobile fishery species? *4th Ocean Tracking Network Symposium, Ottawa, Ontario, Canada, 3–5 June 2014*. Poster presentation.

- **Murray TS**, Cowley PD. 2013. Can partial estuarine area protection reduce the vulnerability of a highly mobile fishery species? *3rd DAAD-NRF In-country scholarship-holders meeting, Stellenbosch, 08 – 11 November 2013*. Poster presentation.
- **Murray TS**, Cowley PD. 2013. Movement patterns of a piscivorous predator leervis Lichia amia (Carangidae) determined by passive acoustic tracking. *2nd International Conference on Fish Telemetry, Grahamstown, 14–19 July 2013*. Poster presentation.
- **Murray TS**, Gouws G, Cowley PD, Mwale M, Mann B. 2013. Residency, movement, migration and the genetic stock structure of an endemic South African sparid, the black musselcracker (Cymatoceps nasutus). *9th Indo-Pacific Fish Conference, Okinawa, Japan, 24–28 June 2013*. Poster presented by Dr Gavin Gouws on my behalf.
- **Murray TS**, Gouws G, Cowley PD, Mann B. 2012. Movement behaviour and genetic stock structure of poenskop Cymatoceps nasutus (Teleostei: Sparidae). *4th Marine Linefish Symposium, Geelbek, Langebaan, 16–20 April 2012*. Oral presentation.
- **Murray TS**, Gouws G, Cowley PD, Mann B. 2011. Genetic stock delineation of poenskop, Cymatoceps nasutus. *3rd Interdisciplinary Postgraduate Conference, Grahamstown, 14–16 September 2011*. Oral presentation.
- **Murray TS**, Smith MKS, Cowley PD. 2011. Evaluation of the illegal coastal fishing effort in the Tsitsikamma National Park Marine Protected Area, South Africa. *14th South African Marine Science Symposium, Grahamstown, 4–7 April 2011*. Oral presentation.