#### SHELLEY CATHERINE CLARKE

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Citizenship

United States; Permanent Resident status in Japan and Hong Kong SAR, China

**Education** 

PhD Quantitative Fisheries Science, Imperial College London, 2003
Luce Scholars Program – Guangzhou, China & Monterey Institute, 1993-1994
MSc Fisheries and Marine Policy, University of Washington, 1988
BA (Hons) Zoology, University of North Carolina-Chapel Hill, 1986

### Employment History

**Technical Coordinator-Sharks and Bycatch, Common Oceans (ABNJ) Tuna Project, FAO/WCPFC Secretariat – Rome/Pohnpei, Micronesia** (June 2014- to present). Responsible for a US\$ 3.2M portfolio of projects designed to mitigate the adverse impacts of bycatch on biodiversity in global tuna fisheries. Contributed papers to shark and bycatch working groups of all five global tuna Regional Fisheries Management Organizations. Numerous conference presentations and media interviews, e.g. https://bit.ly/2CEKiER

*Principal, Sasama Consulting* (Sept. 2012-May 2014). Various consulting projects for FAO, NOAA, New Zealand's MPI and WWF-China.

**Technical Director, MRAG Asia Pacific, Japan Representative Office** (Sept. 2011-August 2012). Various consulting projects for the Cook Islands Government, FAO, World Bank, New Zealand's MPI and the Australia Northern Prawn Fishery's Marine Stewardship Council's certification.

*Shark Assessment Scientist, Secretariat of the Pacific Community, New Caledonia* (July 2010-August 2011). Responsible for development and implementation of a Shark Research Plan for the Western and Central Pacific Fisheries Commission.

Visiting Researcher, Imperial College London and Senior Fishery Researcher, MRAG Asia Pacific (July 2006-June 2010). Various consulting projects for DEFRA (UK Government), FAO, SPC and WCPFC.

Visiting Scientist, Joint Institute for Marine and Atmospheric Research, University of Hawaii and National Research Institute of Far Seas Fisheries, Shimizu, Japan, December 2003 – June 2006. Post-doctoral studies involving analysis of Japanese fishery logbook records and stock assessment, and interview surveys of nearshore and far seas Japanese longline fishermen.

# Professional Experience

#### Shark Stock Assessment and Indicator Studies

- Clarke, S., A. Langley, C. Lennert-Cody, A. Aires-da-Silva and M. Maunder. 2018. *Pacific-wide silky shark (Carcharhinus falciformis) stock status assessment.* https://www.wcpfc.int/node/31006
- o Clarke, S. 2018. *Historical Catch Estimate Reconstruction for the Pacific Ocean based on Shark Fin Trade Data (1980-2016)*. <a href="https://www.wcpfc.int/node/31003">https://www.wcpfc.int/node/31003</a>
- o Carvalho, F., H.H. Lee, K.R. Piner, M. Kapur and S.C. Clarke. 2018. Can the status of pelagic shark populations be determined using simple fishery indicators? *Biological Conservation* 228: 195-204. https://bit.ly/2U6Lz00
- o Neubauer, P., Y. Richard and S. Clarke. 2018. *Risk to the Indo-Pacific whale sharks from interactions with Pacific purse seine fisheries*. <a href="https://bit.ly/2WnjwrL">https://bit.ly/2WnjwrL</a>

- Fu, D., M.-J. Roux, S. Clarke, M. Francis, A. Dunn, S. Hoyle and C. Edwards. 2018.
   Pacific-wide sustainability risk assessment of bigeye thresher shark (Alopias superciliosus). <a href="https://bit.ly/2HFnyIR">https://bit.ly/2HFnyIR</a>
- o Hoyle, S., C. Edwards, M.J. Roux, S. Clarke and M. Francis. 2017. *Southern Hemisphere porbeagle shark (Lamna nasus) stock status assessment*. <a href="https://bit.ly/2HI48m0">https://bit.ly/2HI48m0</a>
- Clarke, S.C., M.P. Francis, L.H. Griggs and S.D. Hoyle. 2015. *Indicator based analysis of the status of New Zealand blue, mako and porbeagle sharks*. FAR 2014/69. https://fs.fish.govt.nz/Page.aspx?pk=113&dk=23745
- Clarke, S. and S. Hoyle. 2014. *Development of Limit Reference Points for Elasmobranchs*. <a href="https://bit.ly/2HSEE5">https://bit.ly/2HSEE5</a>j
- Clarke, S., S.J. Harley, S.D. Hoyle and J.S. Rice. 2013. Population Trends in Pacific Oceanic Sharks and the Utility of Regulations on Shark Finning. *Conservation Biology* 27(1): 197-209. https://bit.ly/2TCatBE

## Shark Policy and Management Studies

- Clarke, S. 2017. Development of a comprehensive shark conservation and management measure for the WCPFC. <a href="https://bit.ly/2TYMotU">https://bit.ly/2TYMotU</a>
- o Clarke, S. 2017. *Technical and compliance considerations for a Comprehensive Shark Conservation and Management Measure*. <a href="https://bit.ly/2YrYqdl">https://bit.ly/2YrYqdl</a>
- Clarke, S., K. Staisch and L. Manarangi-Trott. 2017. *Clarification of WCPFC Shark Designations and Observer Data Collection Requirements in Response to WCPFC13 Decisions regarding Manta and Mobulid (Devil) Rays.* https://bit.ly/2Ui4W70
- Clarke, S. 2017. A Review of Observer Codes for Recording the Condition of Sharks and Seabirds. CCSBT Twelfth Meeting of the Ecologically Related Species Working Group. CCSBT-ERS/1703/22, Wellington, New Zealand. <a href="https://bit.ly/2UenvJP">https://bit.ly/2UenvJP</a>
- Clarke, S. 2017. Minimising Unwanted Shark Interactions and Mortalities in CCSBT Longline Fisheries. CCSBT Twelfth Meeting of the Ecologically Related Species Working Group. CCSBT-ERS/1703/21, Wellington, NZ. https://bit.ly/2TYNSV0
- o Clarke, S. 2016. *Elaboration of technical details regarding shark targeting and shark management plans for CMM 2014-05*. https://bit.ly/20p0Uou
- Clarke, S., M. Sato, C. Small, B. Sullivan, Y. Inoue and D. Ochi. 2014. Bycatch in longline fisheries for tuna and tuna-like species: a global review of status and mitigation measures. FAO Fisheries and Aquaculture Technical Paper No. 588. Rome, FAO. 199 pp <a href="http://www.fao.org/3/a-i4017e.pdf">http://www.fao.org/3/a-i4017e.pdf</a>
- o Clarke, S., L. Manarangi-Trott and S. Brouwer. 2014. *Issues for t-RFMOs in relation to the listing of shark and ray species by CITES*. <a href="https://bit.ly/2uzrG41">https://bit.ly/2uzrG41</a>
- Clarke, S. 2013. *Towards an Integrated Shark Management Plan for the Western and Central Pacific Ocean*. SC9-EB-WP-08. Western and Central Pacific Fisheries Commission, Micronesia. <a href="https://www.wcpfc.int/node/4742">https://www.wcpfc.int/node/4742</a>
- Bromhead, D., S. Clarke, S. Hoyle, B. Muller, P. Sharples, and S. Harley. 2012. Identification and management implications of factors influencing shark mortality in the Marshall Islands Tuna Longline Fishery. *Journal of Fish Biology* 80(5): 1870-1894. https://bit.ly/2V1zub2
- Clarke, S. 2012. National Plan of Action for the Conservation and Management of Sharks in the Cook Islands. <a href="https://bit.ly/2U6SSWM">https://bit.ly/2U6SSWM</a>

### Studies of Shark Fin and Shark Meat Markets and the Regulation of Shark Finning

- Clarke, S. 2018. *An assessment of shark finning in Indian Ocean Tuna Commission Fisheries*. IOTC-2018-WPDCS37-14. https://bit.lv/2DBNZvE
- Clarke, S. 2016. Data Available to the Commission to Address the Implementation and Effectiveness of CMM 2010-07 regarding Shark Finning. WCPFC-TCC12-2016-20 (rev 1). <a href="https://www.wcpfc.int/node/27847">https://www.wcpfc.int/node/27847</a>
- Dent, F. and S. Clarke. 2015. State of the global market for shark products. FAO
  Fisheries and Aquaculture Technical Paper No. 590. Rome, FAO. 187 pp.
  <a href="https://bit.lv/2SczVkg">https://bit.lv/2SczVkg</a>
- Eriksson, H. and S. Clarke. 2015. Chinese market responses to overexploitation of sharks and sea cucumbers. Biological Conservation 184: 163-173.
   <a href="https://www.sciencedirect.com/science/article/abs/pii/S0006320715000397">https://www.sciencedirect.com/science/article/abs/pii/S0006320715000397</a>
- Clarke, S.C., Francis, M.P., Griggs, L.H. 2013. Review of shark meat markets, discard mortality and pelagic shark data availability, and a proposal for a shark indicator analysis. New Zealand Fisheries Assessment Report 2013/65. 74 pp. <a href="https://bit.ly/2WjzTGB">https://bit.ly/2WjzTGB</a>
- Clarke, S.C., E.J. Milner-Gulland and T. Bjørndal. 2007. Perspective: Social, economic and regulatory drivers of the shark fin trade. Marine Resource Economics 22: 305-327. <a href="https://bit.ly/2CSW4dM">https://bit.ly/2CSW4dM</a>
- Clarke, S.C., M.K. McAllister, E.J. Milner-Gulland, G.P. Kirkwood, C.G.J. Michielsens, D.J. Agnew, E.K. Pikitch, H. Nakano and M.S. Shivji. 2006. *Global Estimates of Shark Catches using Trade Records from Commercial Markets*. Ecology Letters 9: 1115-1126. <a href="https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1461-0248.2006.00968.x">https://onlinelibrary.wiley.com/doi/abs/10.1111/j.1461-0248.2006.00968.x</a>
- Clarke, S.C., J.E. Magnussen, D.L. Abercrombie, M.K. McAllister and M.S. Shivji. 2006. Identification of Shark Species Composition and Proportion in the Hong Kong Shark Fin Market Based on Molecular Genetics and Trade Records. Conservation Biology 20(1): 201-211. <a href="https://bit.ly/2FUwwAU">https://bit.ly/2FUwwAU</a>
- Clarke, S. 2005. Trade in Shark Products in Singapore, Malaysia and Thailand.
   Southeast Asian Development Center and ASEAN, Singapore. (available on request)
- Clarke, S. 2004. Shark Product Trade in Hong Kong and Mainland China, and Implementation of the Shark CITES Listings, TRAFFIC East Asia, Hong Kong. <a href="https://bit.ly/2Ug02eb">https://bit.ly/2Ug02eb</a>

# Popular Articles for the General Public

- o Clarke, S. 2019. *Taking Stock of Pacific Sharks*. IW:Learn <a href="https://bit.ly/2uqS8gK">https://bit.ly/2uqS8gK</a>
- Clarke, S. 2017. The real shark threat: humans menace shark populations (In Japanese: 本当に「怖い」サメの話―サメを恐れる人類こそがサメを脅かしている). Oceanic Wildlife Society, Volume 67. <a href="https://bit.ly/2UWkECB">https://bit.ly/2UWkECB</a>
- Clarke, S. 2017. *Sharks in a Post Truth World*. SPC Fisheries Newsletter 151: 19-20 <a href="https://bit.ly/2lMQOC2">https://bit.ly/2lMQOC2</a>
- Clarke, S. 2015. *Bycatch is troublesome: deal with it!* SPC Fisheries Newsletter 147: 35-40. <a href="https://www.wcpfc.int/system/files/FishNews147">https://www.wcpfc.int/system/files/FishNews147</a> 35 Clarke.pdf
- Clarke, S. 2014. Re-examining the shark trade as a tool for conservation. SPC Fisheries Newsletter 145: 49-56. https://bit.lv/2U4WGIb