

## 5th INTERNATIONAL WHALE SHARK CONFERENCE - DRAFT PROGRAM AND PRESENTATION SCHEDULE

Tuesday, 28th May 2019 Mandu Mandu Function Centre

Time	Activity	Presenter
08:00-08:20	<i>Registration and Coffee</i>	
08:20-08:25	Housekeeping	Mark Meekan
08:25-08:35	Welcome to Country	Hazel Walgar, Traditional Owner
08:35-08:45	Official Opening	Hon. Stephen Dawson, Minister for Environment
<b>08:50-09:45</b>	<b>Key Note: Ecotourism impacts on sharks: research priorities &amp; approaches</b>	<b>Neil Hammerschlag</b>
<b>Theme:</b>	<b>Ecotourism</b>	<b>Chair: David Rowat</b>
09:50-10:05	How do we improve conservation planning for whale sharks?	Simon Pierce
10:05-10:20	Baitfish, bagans and big sharks: an overview of CI's Indonesian whale shark conservation research initiative	Mark Erdmann
10:20-10:50	<b>Break</b>	
10:50-11:05	The needle in the haystack: In search of a whale shark aggregation on the Great Barrier Reef	Adam Barnett
11:05-11:20	Whale shark tourism development: opportunities and challenges, a lesson learned from Botubarani – Gorontalo, Indonesia	Asril Djunaidi
11:20-11:35	The economic value of community-based whale shark tourism in Sumbawa - Indonesia	Maulita Hani
11:35-11:50	The contributions of whale shark tourism to sustainable integrated coastal management: Oslob whale sharks	Judi Lowe
11:50-12:05	Top-down versus bottom-up management: finding the balance when provisioning an endangered species	Christine Legaspi
12:05-12:20	Protecting an endangered species: whale shark tourism as an incentive-based conservation approach	Jackie Ziegler
<b>Theme:</b>	<b>Understanding whale shark demographics in various places</b>	<b>Chair: Mark Meekan</b>
12:20-12:35	Ningaloo whale sharks - history and a holistic view	Geoff Taylor
12:35-13:35	<b>Lunch</b>	
13:35-13:50	A review of threats to whale sharks in the Arabian Gulf and the Sea of Oman	David Robinson
13:50-14:05	The whale shark in the Americas	Deni Ramirez Macias

14:05-14:20	Philippines: a global hotspot for the world's largest fish	Gonzalo Araujo
14:20-14:35	Connecting the dots: using multiple methods to understand whale shark ecology in the Red Sea and beyond	Michael Berumen
14:35-14:50	Using citizen science to reveal trends in whale shark sightings in Hawaii	Stacia Marcoux
14:50-15:05	Population ecology and habitat use of whale sharks off Nosy Be, Madagascar	Stella Diamant
15:05-15:20	Whale shark monitoring in Botubarani Beach Bone Bolango Regency Gorontalo Province, Indonesia	Sukirman Tilahunga
<b>Theme:</b>	<b>A taste of Ningaloo</b>	<b>Chair: Peter Barnes</b>
15:20-15:35	The whale shark aggregation at Ningaloo Reef, Western Australia is 'bucking' the global trend downwards for this ENDANGERED species	Brad Norman
15:35-16:05	<b>Break</b>	
16:05-16:20	The key approach to whale shark interaction management	Emily Wilson
16:20-16:35	Using an electronic monitoring system and photo-identification to understand effects of tourism encounters on whale sharks in Ningaloo Marine Park	Holly Raudino
16:35-16:50	The use of ecotourism to monitor scarring patterns, apparent survival and residency of whale sharks aggregating at the Ningaloo Reef, Western Australia	Emily Lester
16:50-17:05	Understanding the link between the oceanography and the whale sharks of Ningaloo Reef	Paul Thomson
17:05-17:20	The bio-physical drivers of the 3D movements of whale sharks at Ningaloo Reef	Michele Thums
17:20-17:35	Movement and diving behaviour of whale sharks tagged at Ningaloo Reef	Richard Pillans
17:35-19:30	<b>Poster session - see below</b>	Venue: Tantabiddi Travelling Gallery

### Wednesday, 29th May 2019

All day	<b>Woodside Day on the Water</b>	Pick up from your accommodation
From 5pm	<b>Profs &amp; Pints - public presentation evening</b>	Venue: Whalebone Brewing Company

### Thursday, 30th May 2019 Mandu Mandu Function Centre

08:00-08:15	<i>Coffee</i>	
08:15-08:20	Housekeeping	Mark Meekan
<b>08:20-09:15</b>	<b>Key Note: Tracking the lives of pelagic sharks in a changing world</b>	<b>David Sims</b>
<b>Theme:</b>	<b>Movement and Tracking I</b>	<b>Chair: Simon Pierce</b>

09:20-09:35	Population dynamics, connectivity and movement of whale sharks from a global hotspot in Palawan, Philippines	Ariana Agustines
09:35-09:50	Residency and patterns in habitat use of whale sharks at Mafia Island, Tanzania	Christoph Rohner
09:50-10:05	Analyzing passive acoustic data from whale shark aggregations: a comprehensive review of two papers	Jesse Cochran
10:05-10:20	Vertical movements and temperature preference of the whale shark in the Galapagos Marine Reserve, through the use of SPOT satellite transmitters	Kevin Morales
10:20-10:50	<b>Break</b>	
<b>Theme:</b>	<b>Movement and Tracking II</b>	<b>Chair: Richard Pillans</b>
10:50-11:05	Characterisation of fine-scale feeding behaviour of whale sharks at Ningaloo Reef from tri-axil accelerometer and video data	Luciana Ferreria
11:05-11:20	Investigating links between vertical and horizontal movement patterns of whale sharks	Lucy Arrowsmith
11:20-11:35	Preliminary study of whale shark occurrences and association with zooplankton biomass in Saudi Arabian waters of the Arabian Gulf	Hua Hsun Hsu
11:35-11:50	Horizontal movement patterns of whale sharks in the North-Western Indian Ocean	Charan Kumar Paidi
11:50-12:05	Whale sharks in a warming ocean: the implications of climate change for movement patterns and suitable habitat	Samantha Reynolds
12:05-12:20	Movements of real time satellite tagged whale sharks, from Isla Mujeres, Mexico	Rafael de la Parra
12:20-12:35	Fathoms below: vertical movements and diving patterns of whale sharks in West Papua, Indonesia	Megan Meyers
12:35-13:35	<b>Lunch</b>	
<b>Theme:</b>	<b>Biology/Ecology</b>	<b>Chair: Brad Norman</b>
13:35-13:50	The evolution of gigantism in filter-feeding marine vertebrates: lessons from the world's largest fish	Mark Meekan
13:50-14:05	Are whale sharks social animals? A perspective from the Djibouti aggregation	David Rowat
14:05-14:20	Comparing length-measurement methods and estimating growth parameters of free-swimming whale sharks near the South Ari Atoll, Maldives	Cameron Perry
14:20-14:35	Enhancing insights into foraging specialisation by whale sharks using a multi-tissue, multi-isotope approach	Alex Wyatt

14:35-14:50	Thermoregulatory behavior of whale sharks to extreme temperatures in the Arabian Gulf – is one of the world largest aggregation sites threatened by global warming?	Steffen Bach
14:50-15:05	Where'd all the whale sharks go? Discussing dramatic declines in aggregation attendance within the Red Sea	Royale Hardenstine
15:05-15:20	First ever observation of ovary in Galápagos whale sharks made using underwater ultrasonography	Rui Matsumoto
15:20-15:35	Relationship between the water temperature and heart rate of captive whale sharks	Kiyomi Murakumo
15:35-16:05	<b>Break</b>	
<b>Theme:</b>	<b>Biology/Ecology II</b>	<b>Chair: Simon Pierce</b>
16:05-16:20	Fine scale whale shark behaviour	Eugenio de la Parra
16:20-16:35	A Tale of Three Bays: comparison of movement patterns of three whale shark populations in eastern Indonesia	Abraham Sianipar
16:35-16:50	Characterising behaviours of the worlds largest shark through the application of machine learning algorithms	Darren Whitehead
16:50-17:05	Health assessment of whale sharks facilitated by bagan fishery interaction in Cenderawasih Bay, Indonesia	Alistair Dove
<b>19:00</b>	<b>Conference Dinner</b>	<b>Mantarays Beach Resort</b>

## Friday, 31st May 2019

08:00-08:25	<i>Coffee</i>	
08:25-08:30	Housekeeping	Mark Meekan
<b>Theme:</b>	<b>Genetics</b>	<b>Chair: Jennifer Schmidt</b>
08:30-08:45	Population genetic analysis of the whale shark	Jennifer Schmidt
08:45-09:00	Infering global population structure of whale sharks using target capture on environmental water samples	Mads Jensen
09:00-09:15	Whale shark skin microbiomes reflects host genetic similarities	Michael Doane
09:15-09:30	Using Close-Kin Mark-Recapture to estimate the abundance and survival rates of adult whale sharks	Rich Hillary
09:30-09:45	Visual ecology of whale shark revealed by whole genome sequencing	Shigehiro Kuraku
09:45-10:00	Connecting the dots: genetic characterisation of the worlds' most remote whale shark aggregation	Alexandra Watts

10:00-10:15	Community perspectives and portable sequencers for sustainable whale shark conservation in India	Shaili Johri
10:15-10:45	<b>Break</b>	
<b>Theme:</b>	<b>Health</b>	<b>Chair: David Rowat</b>
10:45-11:00	Microplastics a macro-disaster: a threat to the largest fish of our seas?	Ibrahim Shameel
11:00-11:15	Plastics on the menu: microplastics present in Indonesian whale shark feeding grounds	Elitza Germanov
11:15-11:30	Bioaccumulation of trace elements in whale shark tissues of the Gulf of California	Francesca Pancaldi
11:30-11:45	Monitoring shark health with the skin microbiome	Elizabeth Dinsdale
11:45-12:00	The biggest fish in the ocean: can we unravel the mystery with biochemistry?	Clare Prebble
12:00-12:15	<i>Closing remarks: oral presentations</i>	Mark Meekan
12:15-12:55	<b>Lunch</b>	
<b>Workshops</b>		
13:00-15:00	Managing the impacts of tagging on whale sharks - balancing science, welfare, conservation and tourism	Parks and Wildlife WA
13:00-15:00	Using stable isotopes to understand whale shark ecology	CSIRO
15:00-15:30	<b>Break</b>	
15:30-17:30	Can we determine sustainable levels of tourism?	Parks and Wildlife WA
15:30-17:30	Kin based population genetics; potential for deeper understanding of whale shark populations	CSIRO
17:30	<b>Conference close: delegates own time</b>	

## Tuesday 28th

17:35-19:30	<b>Poster session</b>	
1	Differentiation of euphausiid and fish prey in foraging grounds used by Whale sharks and Omura's whales off Madagascar	Andrew Brierly / Stella Diamant
2	Marooned: a trapped whale shark in Nukunonu Atoll, Tokelau	Brad Norman
3	Whale shark strandings in the Gulf of California, Mexico	Darren Whitehead

4	Isotopic assessment of whale sharks from two geographical sites: Gulf of California and the Mexican Caribbean	Darren Whitehead
5	Key elements for managing whale shark tourism in the Gulf of California	Deni Ramirez Macias
6	Whale shark retinal pigments and visual foraging ecology	Katherine Serba
7	St Helena Island, a Bone shark paradise	Kenickie Andrews
8	Whale sharks target dense copepod patches in Southern Leyte, Philippines	Lucia Sanabria / Ariana Agustines
9	Whale shark individual photo-identification in Mexico largest aggregation	Rafael de la Parra
10	New insights into the presence of whale sharks off northern Peru	Rossana Maguiño Napurí / Deni Ramirez Macias
11	From fish to flagship: 15 years of whale shark conservation, case study from India	Charan Kumar Paidi
12	In situ estimates of the prey field of whale sharks via animal mounted sonar tags	Heather Vance / Mark Meekan
13	Is the world's largest fish a herbivore?	Patti Virtue / Mark Meekan
14	Whale Shark's (Rhincodon typus) Occurrence, Bycatch & Conservation Efforts in Bangladesh Marine Territory	Zahirul Islam
15	Spatial Analysis of Plankton Community and Nutrients in Coastal Environment of Mozambique	Holly Kelchner (absent)



