



International
Whale Shark
conference

9-12 May 2005 Perth Western Australia



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Review of the First International Whale Shark Conference - May 2005

Dr John Keesing and Tennille Irvine
CSIRO Marine and Atmospheric Research, Australia





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Resumen de la Primera Conferencia Internacional de Tiburón Ballena - Mayo 2005

Dr John Keesing and Tennille Irvine
CSIRO Marine and Atmospheric Research



Topics to be Covered / Puntos de la presentación

- Rationale for conference
- Theme of the conference
- Conference objectives
- Delegates
- Publications
- Conference Sessions Summary
 - Conservation
 - Ecotourism
 - Science
 - Socio-economics
 - Management
- Conference workshops
 - Conservation
 - Science
- Conference Communiqué
- Importancia de la conferencia
- Temas de la conferencia
- Objetivos de la conferencia
- Delegados
- Publicaciones
- Resumen de los talleres de la conferencia
 - Conservación
 - Ecoturismo
 - Ciencia
 - Socio-economía
 - Manejo
- Talleres de trabajo de la conferencia
 - Conservación
 - Ciencia
- Comunicado de la conferencia

Rationale for the conference

The emergence of rapidly developing whale shark ecotourism in many parts of the world lead to a heightened focus:

- on concerns over continued legal and illegal harvest of whale sharks
- the lack of knowledge of all aspects of the biology and ecology of whale sharks

1st IWSC was organised in response to this concern and in order to generate international collaboration in conservation, research and sustainable tourism

Importancia de la conferencia

El rápido desarrollo de ecoturismo asociado con tiburón ballena en muchas regiones del mundo ha incrementado el interés en:

- Preocupación de las capturas legales e ilegales de tiburón ballena
- La falta de conocimiento en todos los aspectos de la biología y ecología del tiburón ballena

1ª IWSC fue organizada en respuesta a esta creciente preocupación; así como también para generar una colaboración internacional en aspectos de conservación, investigación y turismo sostenible

Theme of the conference/ Tema de la conferencia

Promoting international collaboration in whale shark conservation, science and management

Promover colaboración internacional para la conservación, ciencia y manejo del tiburón ballena

“Promoting international collaboration in whale shark conservation, science and management”



International
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1st IWSC Conference objectives

Conference objectives were to:

- bring researchers, government and non-government representatives and ecotourism industry practitioners together;
- provide a forum for sharing international experience and expertise;
- set research and conservation priorities;
- promote international collaboration;
- develop and release a Communiqué to capture the long term objectives for global whale shark conservation; and
- summarise the status of knowledge on whale sharks.

Objetivos de la 1ª conferencia IWSC

Los objetivos de la conferencia fueron:

- reunir investigadores, representantes gubernamentales y no-gubernamentales, así como gente de la industria turística;
- proporcionar una plataforma de comunicación para compartir conocimiento y experiencias;
- establecer líneas de investigación y prioridades de conservación;
- promover colaboración internacional;
- facilitar el desarrollo y elaboración de un documento de comunicación que capture los objetivos de largo plazo para la conservación global de tiburón ballena; y
- Resumir el presente conocimiento en tiburón ballena.

1st International Whale Shark Conference

- 87 delegates from 23 countries
- 51 presentations made by delegates were divided into 5 themes: science, conservation, ecotourism, socioeconomics and management
- 8 posters
- 2 proceedings publications



1ª Conferencia Internacional Tiburón Ballena

- 87 delegados de 23 países
- 51 presentaciones hechas por delegados que fueron divididas en 5 temas: ciencia, conservación, ecoturismo, socioeconomía y manejo
- 8 pósters
- 2 documentos publicados



1st International Whale Shark Conference Delegates (Delegados de la 1^a Conferencia Internacional Tiburón Ballena)

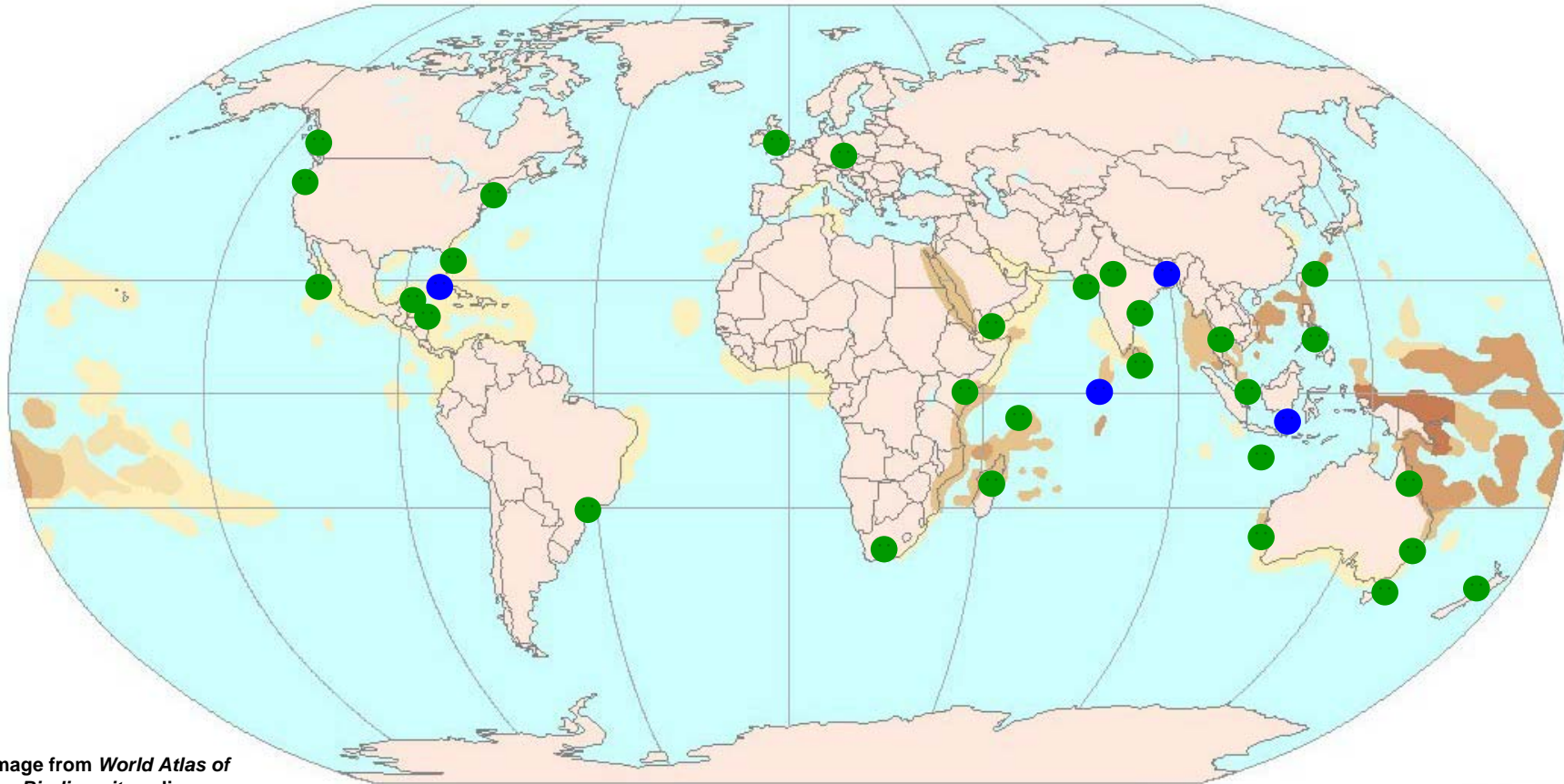
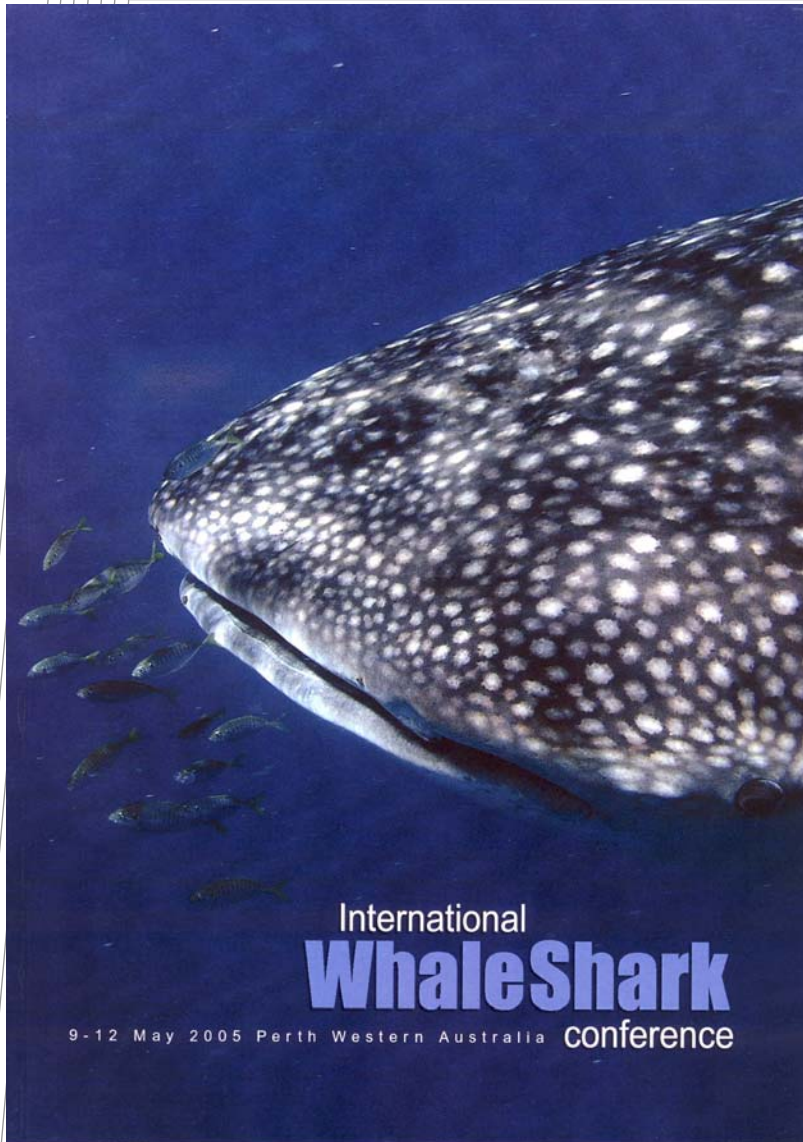


Image from *World Atlas of Biodiversity* online

Imagen de la pagina de internet :
World Atlas of Biodiversity

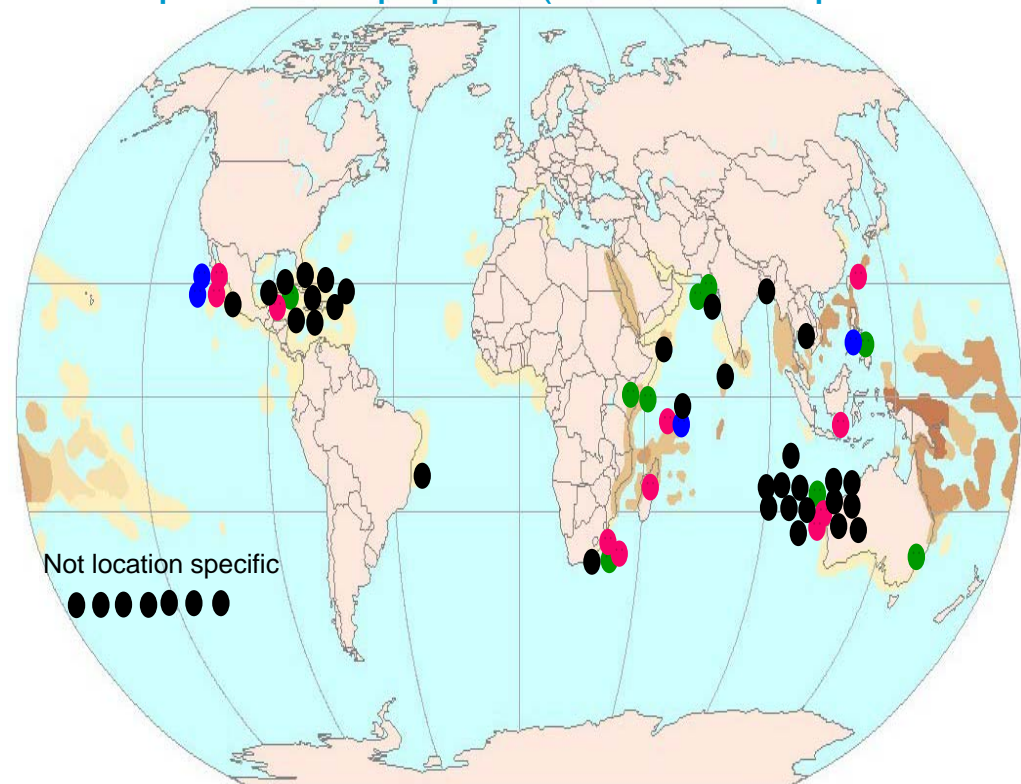
- Delegates and Reports (Delegados y Reportes)
- Reports (Reportes)

1st IWSC Abstracts (Resúmenes de la 1^a IWSC)

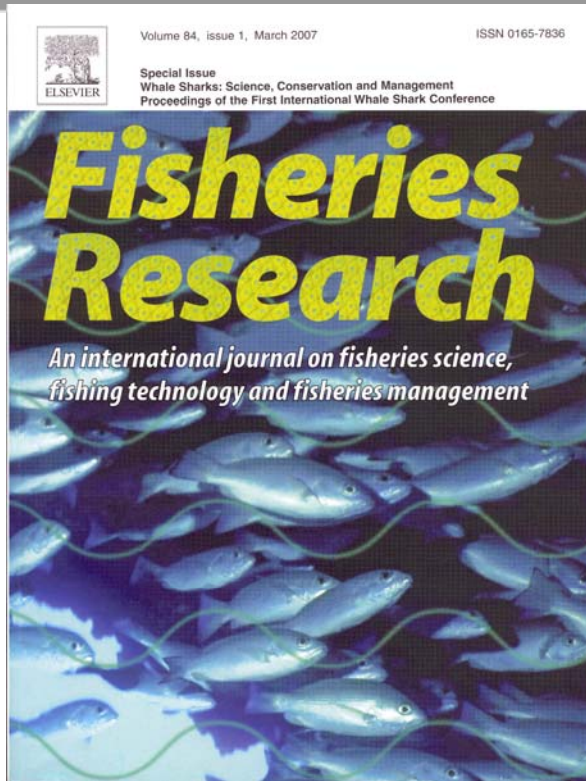


59 abstracts (59 resúmenes)

- 32 abstracts not featured as full papers in either of the published proceedings (32 resúmenes no incluidos como artículos en ninguno de los documentos publicados)
- 27 published papers (27 artículos publicados)



Publications arising from conference



T.R. Irvine and J.K. Keesing (Eds.) (2007) *Whale Sharks: Science, Conservation and Management. Proceedings of the First International Whale Shark Conference, 9-12 May 2005 Australia. Fisheries Research* 84(1) special issue.



T.R. Irvine and J.K. Keesing (Eds.) (2007). *The First International Whale Shark Conference: Promoting International Collaboration in Whale Shark Conservation, Science and Management. Conference Overview, Abstracts and Supplementary Proceedings*. CSIRO Marine and Atmospheric Research, Australia. 98p.

IWSC Proceedings published in *Fisheries Research* (Documentos IWSC publicados en *Fisheries Research*)



Volume 84, issue 1, March 2007

ISSN 0165-7836

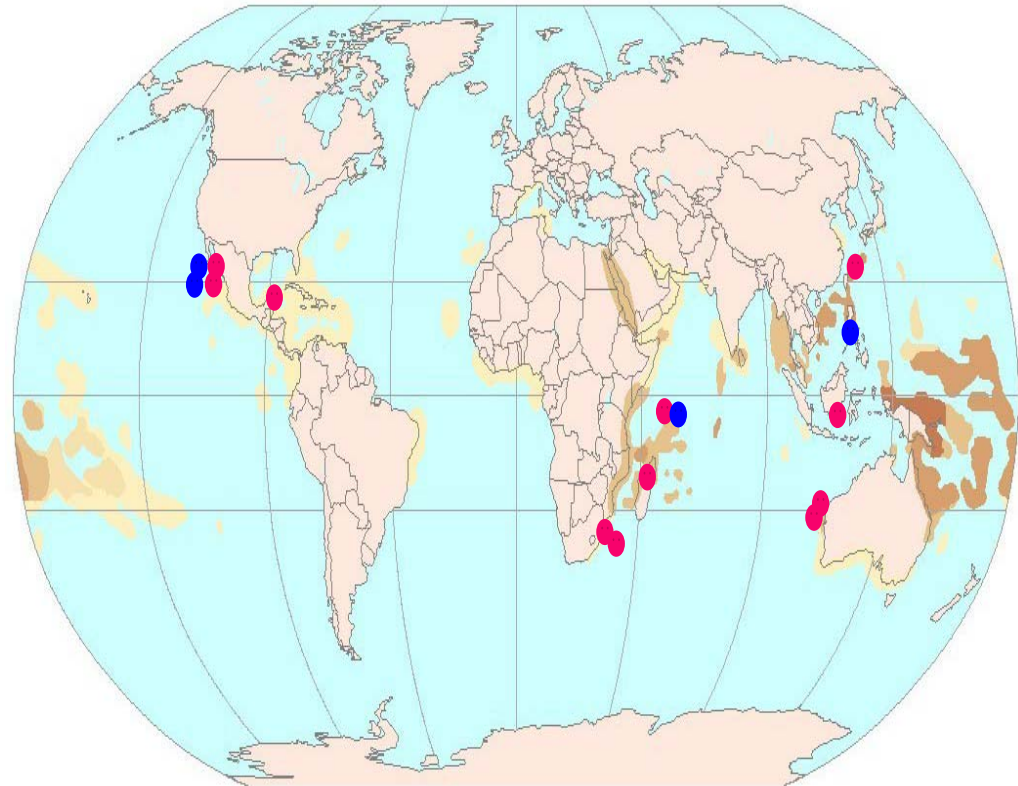
Special Issue
Whale Sharks: Science, Conservation and Management
Proceedings of the First International Whale Shark Conference

Fisheries Research

*An international journal on fisheries science,
fishing technology and fisheries management*

135 pages (135 paginas)

- 13 science papers incl. 2 reviews
(13 artículos científicos)
- 5 conservation and management papers
incl. 1 review
(5 artículos de conservación y manejo)



1st IWSC (2005) – Fisheries Research Publication

Foreword: International collaboration in science, conservation and sustainable tourism of whale sharks (Tennille R. Irvine and John K. Keesing, Guest Editors)

Part I. Science

Whale shark (*Rhincodon typus*) biology and ecology: a review of the primary literature (J.D. Stevens)

A review of behavioural ecology of whale sharks (*Rhincodon typus*) (R. Aidan Martin)

Satellite tracking of whale sharks using tethered tags (Andrew Gifford, Leonard J.V. Compagno, Marie Levine and Alex Antoniou)

Satellite tracking of juvenile whale sharks, *Rhincodon typus*, in the Northwestern Pacific (Hua-Hsun Hsu, Shoou-Jeng Joung, Yih-Yia Liao and Kwang-Ming Liu)

Regional scale horizontal and local scale vertical movements of whale sharks in the Indian Ocean off Seychelles (D. Rowat and M. Gore)

Aerial census of whale sharks (*Rhincodon typus*) on the northern KwaZulu-Natal coast, South Africa (Jeremy Cliff, Michael D Anderson-Reade, Andrew P. Aitken, Graeme E. Charter and Victor M Peddemors)

Foraging ecology of whale sharks (*Rhincodon typus*) within Bahía de los Angeles, Baja California Norte, México (Jonathan D. Nelson and Scott A. Eckert)

Ram filter-feeding and nocturnal feeding of whale sharks (*Rhincodon typus*) at Ningaloo Reef, Western Australia (J. Geoff Taylor)

Assessing the size, growth rate and structure of a seasonal population of whale sharks (*Rhincodon typus* Smith 1828) using conventional tagging and photo identification (Rachel T. Graham and Callum M. Roberts)

Size and maturity status of the whale shark (*Rhincodon typus*) at Ningaloo Reef in Western Australia (Bradley M. Norman and John D. Stevens)

1st IWSC (2005) – Fisheries Research Publication

Part I. Science Continued

Variations of the mitochondrial control region sequence in whale sharks (*Rhincodon typus*) from the Gulf of California, Mexico (Dení Ramírez-Macías, Ricardo Vázquez-Juárez, Felipe Galván-Magaña, Adrián Munguía-Vega)

Part II. Conservation & Management

Occurrence of whale shark (*Rhincodon typus*) in the Indian Ocean: a case for regional conservation (David Rowat)

Tourist compliance to a Code of Conduct and the resulting effects on whale shark (*Rhincodon typus*) behavior in Donsol, Philippines (Angela L. Quiros)

Seychelles: A case study of community involvement in the development of whale shark ecotourism and its socio economic impact (David Rowat and Udo Engelhardt)

Community-based management through ecotourism in Bahia de los Angeles, Mexico (Nirari Cárdenas-Torres, Roberto Enríquez-Andrade and Natalie Rodríguez-Dowdell)

Property rights based management: Whale shark ecotourism in Bahia de los Angeles, Mexico (Natalie Rodríguez-Dowdell, Roberto Enríquez-Andrade, Nirari Cárdenas-Torres)

Short Communications

Whale shark landings in Indonesian artisanal shark and ray fisheries (William White and Rachel Cavanagh)

Occurrence of whale sharks (*Rhincodon typus*) in Madagascar (Mananjo Jonahson and Simon Harding)

1st IWSC (2005) – Supplementary Publication (Artículos suplementarios IWSC)

The First International Whale Shark Conference:
Promoting International Collaboration in
Whale Shark Conservation, Science and Management

Conference Overview, Abstracts and
Supplementary Proceedings

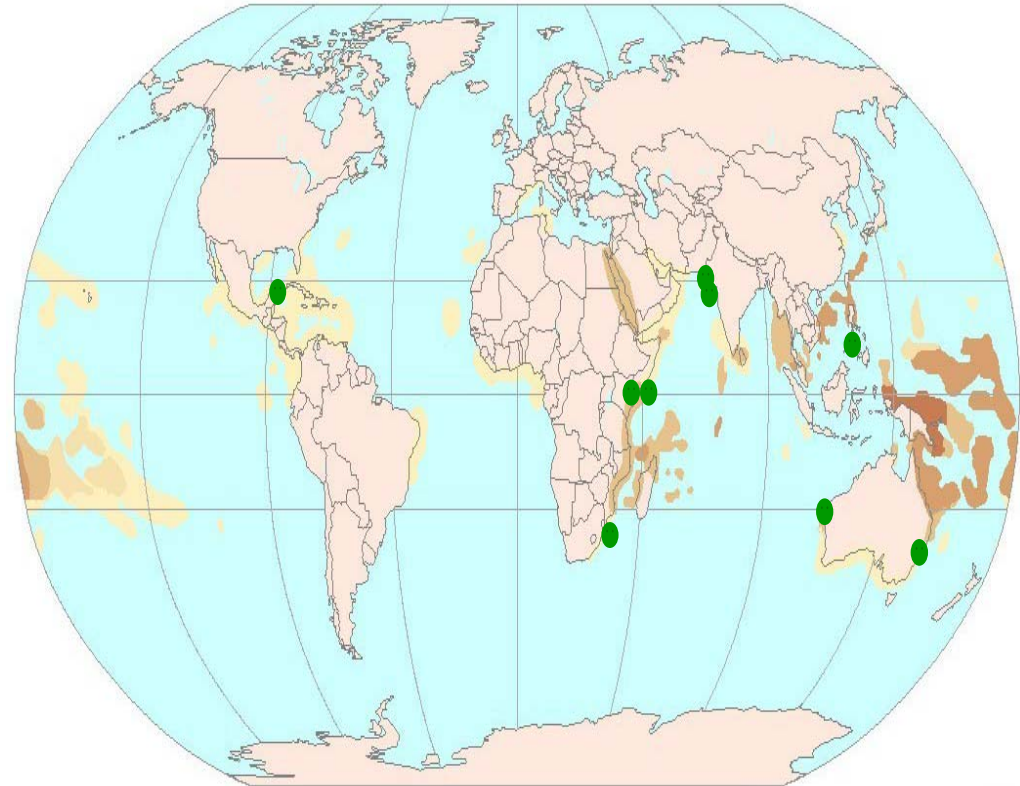


9-12 May 2005 Perth Western Australia

Edited by Tennille R. Irvine and John K. Keesing

97 pages (97 paginas)

● 9 papers (9 artículos)



Can be downloaded at
www.srfme.org.au

1st IWSC (2005) – Supplementary Publication

Foreword: Conference Summary

Open Communiqué

Conservation Workshop Summary and Outcomes

Science Workshop Summary and Outcomes

Conference Papers

Campaign for whale shark conservation: Experiences from coastal Gujarat, India. *Dhiresch Joshi, Vivek Talwar, Rupa Gandhi and Aniruddha Mookerjee.*

Conservation efforts of the East African Whale Shark Trust in Kenya. *Volker Bassen.*

Community initiative projects of the East African Whale Shark Trust. *Nimu Njonjo.*

Australian Government conservation and management of whale sharks under the Environment Protection and Biodiversity Conservation Act 1999. *Julien Colomer.*

Whale shark management strategies, with the participation of local stakeholders, in Yum Balam, Mexico. *José Francisco Remolina Suárez, José Juan Pérez Ramírez, Jaime M. González Cano, Rafael de la Parra Venegas, Norma Betancourt Sabatini, Montserrat Trigo Mendoza, Lilia González Moreno and José Antele Marcial.*

Challenges and lessons learned in setting-up a community-based whale shark ecotourism program: The case in Donsol, Philippines. *Ruel Pine, Moonyeen Nida R. Alava and Arnel Andrew Yaptinchay.*

Industry trends and whale shark ecology based on tourism operator logbooks at Ningaloo Marine Park. *Roland Mau and Emily Wilson.*

Aerial surveys of whale sharks (*Rhincodon typus*) off the East Coast of Southern Africa. *Andrew Gifford, Leonard J.V. Compagno and Marie Levine.*

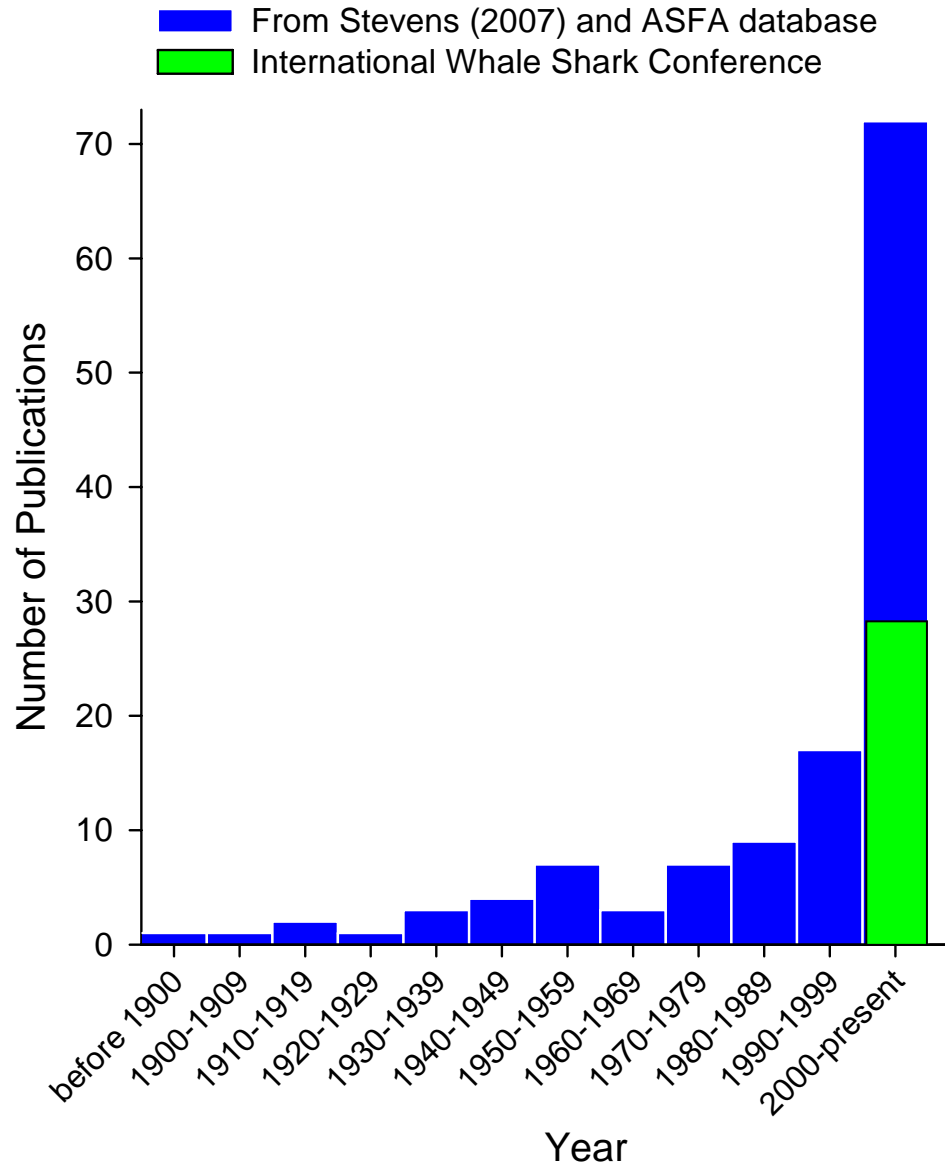
Satellite remote sensing as a tool to determine whale shark distribution. *Beena Kumari and Mini Raman.*

Abstracts from *Fisheries Research* (Volume 84, March 2007)

Conference Presentation Abstracts



Whale Shark Publications



Conference Sessions/ Sesiones de la Conferencia

- Conservation
- Ecotourism
- Science
- Socio-economics
- Management

- 2 special sessions:
Ningaloo
Whale Shark Observation
and Recognition

- Conservación
- Ecoturismo
- Ciencia
- Socio-economía
- Manejo

- 2 sesiones especiales:
Ningaloo
Observación y reconocimiento
del tiburón ballena

1st IWSC - Conservation

Plenary Session: Keiran McNamara (Australia) - Whale Sharks in Ningaloo Marine Park – Conservation and Sustainable Tourism

Sonya Fordham (USA) - International Conservation of Whale Sharks

David Rowat (Seychelles) - Indian Ocean whale sharks: a case for regional conservation

Michel Vely (Djibouti) - Whale Shark (*Rhincodon typus*) in Djibouti (Horn of Africa): Conciliation of Ecotourism Development, Conservation and Development of a Scientific Program

Julien Colomer (Australia) - Australian Government conservation and management of whale sharks

Brad Norman (Australia) - Whale shark conservation: protecting 'critical habitats' and managing risks to the species

Ingo Lange (Singapore) - German-European School in Singapore – nature and conservation studies (*Poster*)

Allison Richards (Australia) - Conservation Through Collaboration (*Poster*)

Surasak Thongsukdee (Thailand) - Whale shark in Thailand (*Poster*)

William White (Australia) - Whale Shark Landings in Indonesian Artisanal Shark and Ray Fisheries (*Poster*)

1st IWSC - Ecotourism

Plenary Session: Rachel Graham (Belize) - Iterative planning and adaptive management of whale shark tourism in Belize: global implications of lessons learnt from 1998 and 2004

Ruel Pine (Philippines) - Lessons Learned and Challenges in Setting-up a Community-Based Whale Shark Ecotourism Program: The Case of Donsol, Sorsogon

Angela Quiros (Philippines) - Monitoring Whale Shark Tourism in Donsol, Philippines: Examining tourist compliance to regulations and the effects of tourism on whale shark behavior

Claire Davies (Christmas Island, Australia) - Christmas Island – Ecotourism and Research

Nirari Cardenas-Torres (Mexico) - Community-based management through ecotourism in Bahia de los Angeles, Mexico

Aidan Martin (Canada) - Behavioural Ecology of Whale Sharks (*Rhincodon typus*): Research Opportunities and Implications for Ecotourism Management

Lisa Carne (Belize) – Whale Shark Tourism at Gladden Spit Marine Reserve, Belize, Central America (*Poster*)

1st IWSC - Science

Plenary Session: John Stevens (Australia) - Whale shark biology: a review of published literature

GENETICS

Brent Stewart (USA) - A large fish and a large puzzle: preliminary information on the population genetics of the whale shark (*Rhincodon typus*)

Jennifer Schmidt (USA) - Development of a DNA micro satellite panel for the study of whale shark (*Rhincodon typus*) genetics and population biology

Deni Ramirez-Macias (Mexico) - Characterization of Molecular Markers for populational studies of the whale shark (*Rhincodon typus*, Smith, 1828) of the Gulf of California

APPLICATION OF SATELLITE OCEANOGRAPHIC DATA

Jeffery Polovina (USA) - Investigating the ocean habitat of the Ningaloo Reef whale sharks

Jai Sleeman (Australia) - The influence of oceanographic and atmospheric processes on whale shark abundance at Ningaloo Reef, Western Australia

Beena Kumari (India) - Role of remote sensing for strategic planning and conservation of whale shark: A case study in the Northern Arabian Sea

1st IWSC – Science Cont.

POPULATION AND DEMOGRAPHICS

David Rowat (Seychelles) - Aerial surveys and estimates of whale shark populations

Jeremy Cliff (South Africa) - Aerial census of whale sharks on the northern KwaZulu-Natal coast, South Africa 2001-2005

Marie Levine (USA) - Aerial Survey of Whale Sharks (*Rhincodon typus*) off the East Coast of Southern Africa from 1993 to 1998

Mark Meekan (Australia) - The World's Largest Fish is Getting Smaller

Brad Norman (Australia) - Size, sex ratio, maturity status and occurrence of the whale shark (*Rhincodon typus*) at Ningaloo Reef in Western Australia

Robert Hueter (USA) - Biological studies of large feeding aggregations of whale sharks (*Rhincodon typus*) in the southern Gulf of Mexico

Mananjo Jonahson (Madagascar) - Methodological approach for whale shark (*Rhincodon typus*) observations on the North Western coast of Madagascar

Rachel Graham (Belize) - Estimating a global population of whale sharks: pitfalls and opportunities

Otto Bismarck Gazzano Gadig (Brazil) - Records of the Whale Shark, *Rhincodon typus*, along the Brazilian Coast (Western South Atlantic) (Poster)

Jonathon Nelson (USA) - Seasonal comparison of whale shark (*Rhincodon typus*) distributions within Bahía de los Angeles, Baja California Norte, México between 1999 and 2002 (Poster)

1st IWSC – Science Cont.

SATELLITE TAGGING

Rachel Graham (Belize) - Patterns of diving whale shark over variable time scales and in relation to a predictable food source

Steve Wilson (USA) - Migratory movements and vertical behavior of whale sharks tagged at Ningaloo Reef, Western Australia

Huahsun Hsu (Taiwan) - Satellite tracking of young whale shark, *Rhincodon typus* in the North - western Pacific

Marie Levine (USA) - Satellite Tracking of Whale Sharks

David Rowat (Seychelles) - Regional scale horizontal migration and local scale vertical movements of whale sharks

FORAGING BEHAVIOUR

Jonathon Nelson (USA) - Foraging Ecology by Whale Sharks (*Rhincodon typus*) within Bahía de los Angeles, Baja California Norte, México

1st IWSC - Socio-Economics

Plenary Session: David Wood (Australia) - Socio-Economics of Tourism at Ningaloo and Importance of Whale Sharks.

David Rowat (Seychelles) - Seychelles: A case study of community involvement in the development of whale shark ecotourism and the socio-economic impact

Fahmida Hanfee (India) - Transition from Whale Shark harvesting to protection in India.

Sarang Kulkarni (India) - Opportunities and Challenges in Research, Conservation and Management of Whale Shark along the coast of Gujarat

Mariana Diaz (New Zealand) - The importance of cross scale institutional arrangements for whale shark conservation and management: the experience from two coastal communities in Mexico

1st IWSC - Management

- Plenary Session:* Natalie Rodriguez-Dowdell (Mexico) - Property rights based management Whale shark ecotourism in Bahia de los Angeles, Baja California
- Otto Gadig (Brazil) - Occurrence, Distribution and Conservation of the Whale Shark in the Western South Atlantic
- Dhiresch Joshi (Presented by Vivek Talwar, India) - Campaign for Whale Shark Conservation: Experiences from Coastal Gujarat, Western India
- Nimu Njonjo (Kenya) - Whale Sharks in Kenya
- Volker Bassen (Kenya) - The East African Whale Sharks Trust
- Jose Remolina-Suárez (Presented by Natalie Rodriguez-Dowdell, Mexico) - Promoting International Collaboration in Whale Shark Conservation, Science and Management
- Jose Remolina-Suárez (Mexico) - Domino Project. Whale shark ecology, population dynamics and management strategies in the Mexican Atlantic Ocean (*Poster*)

1st IWSC – Special Sessions

NINGALOO

Geoff Taylor (Australia) - Whale sharks – the early history, and the Ningaloo phenomenon

Peter Lake (Australia) - Ecotourism role in public awareness, research and community involvement.

Branka King (Australia) - The Whale Shark Industry, Exmouth / Coral Bay - Western Australia

WHALE SHARK RECOGNITION AND OBSERVATION

Michelle Press (USA) - Photo identification of whale sharks.

Brad Norman (Australia) - The ECOCEAN Whale Shark Photo-identification Library: A Centralized and Scalable Approach to Whale Shark Data Collection, Management, and Analysis

Jason Holmberg (USA) - An Astronomical Pattern-Matching Algorithm for Automated Identification of Whale Sharks (*Rhincodon typus*)

Roland Mau (Australia) - Involving Tourism Operators in whale shark monitoring and research - Opportunities and Limitations at Ningaloo Marine Park

Conservation Workshop Summary and Outcomes

Workshop Aim:

- to facilitate mechanisms for collaborative efforts in management and conservation of whale sharks

The workshop identified:

- the key issues to be resolved - global status, threats, improving conditions at local, regional and global levels.
- how worldwide conservation could be improved by administrative mechanisms (current treaties and conventions, new policies and regulations),
- and the need for:
 - education and public participation (such as community monitoring);
 - requirement for surveillance intervention and enforcement;
 - research and monitoring.

The workshop developed a list of priority actions

Resumen y principales resultados del taller de trabajo sobre Conservación.

Objetivo del taller de trabajo:

- Facilitar los mecanismos de colaboración en el manejo y conservación de los tiburones ballena.

El taller de trabajo ha identificado:

- Los elementos claves ha resolver: Condición actual, amenazas, mejoramiento de las condiciones a nivel local, regional y global.
- Como la conservación a nivel mundial puede ser mejorada por mecanismos administrativos (tratados y convenios actuales, nuevas políticas y regulaciones de manejo).
- Y la necesidad de:
 - Educación y participación pública (como es el monitoreo de la comunidad);
 - Requisitos para monitoreo y su aplicación;
 - investigación y monitoreo.

El taller de trabajo desarrolló una lista de acciones prioritarias.

Conservation Workshop Summary

Priority topics / actions

1. Convention on Migratory Species agreement
2. Communications
3. Funding
4. Information needs for conservation
5. Networks
6. Community involvement
7. Need to approach those not represented at the IWSC
8. Increasing pressure on governments to ban legal fishery

Resumen del taller de trabajo sobre conservación

Temas/acciones prioritarias:

1. Acuerdo sobre la Convención de Especies Migratorias
2. Comunicaciones
3. Fondos
4. Información necesaria para la conservación
5. Redes de información (Networks)
6. Incorporación de la comunidad
7. Necesidad de considerar los puntos no representados en IWSC
8. Incrementar la presión a los gobiernos para prohibir la pesca legal

Outcomes towards goals since conference

Convention on Migratory Species

- “Eighth Meeting of the Conference of the Parties to the Convention on Migratory Species (CoP8)” - Nairobi - November 2005. Migratory Sharks recommendation adopted
- “Meeting to Identify and Elaborate an Option for International Cooperation on Migratory Sharks under the Convention on Migratory Species” Seychelles - December 2007 - www.cms.int/sharks

Communications

- 2 conference proceedings publications
- Communiqué was circulated at CoP8
- Regional workshops in the Mesoamerican Reef Region

Information Needs for Conservation

- Regional collaboration in the Indian Ocean
- Sharing of photo-identification data

Networks

- Global online community forum - <http://forum.ecocean.org> (132 registered users)

Need to Approach Those Not Represented at the IWSC

- Contact made with Project Aware and Shark Trust by Ecocean

Increasing Pressure on Governments to Ban Legal Fishery

- Taiwan – reduced quota followed by ban

Logros alcanzados desde la conferencia

Convención en Especies Migratorias

- “Octava reunión de la Conferencia de los partidos involucrados en la Convención de Especies Migratorias (CoP8)” - Nairobi – Noviembre, 2005. Se adoptó la recomendación Migratoria de Tiburones.
- “Reunión para Identificar y Elaborar una Opción para la Cooperación Internacional de Tiburones Migratorios bajo la Convención de Especies Migratorias” Seychelles – Dic, 2007 www.cms.int/sharks

Comunicaciones

- 2 publicaciones de las conferencias realizadas
- Communiqué fue circulado en CoP8
- Talleres de trabajo regionales en la región de arrecifes Mesoamericanos

Información necesaria para la Conservación

- Colaboración regional en el Océano Indico
- Compartir las bases de datos de foto-identificación

Redes de Información (Networks)

- Foro global comunitario en Internet - <http://forum.ecocean.org> (132 usuarios registrados)

Necesidad de considerar aquellos puntos no representados en IWSC

- Se han realizado contactos con ‘Project Aware’ y ‘Shark Trust’

Incrementar la presión en los gobiernos para prohibir la pesca legal

- Taiwan – reducción de su cuota seguida por la prohibición

Science Workshop Summary

Workshop Aim:

to identify key needs and priorities for research on whale sharks and to facilitate international collaboration

The workshop identified the following priority needs:

- more life history information,
- better understanding of migration habits, and
- local, regional and global population estimates.
 - current projects include genetic studies, photo identification and tagging
 - all require better coordination.
 - need to identify funding sources for regional and global projects
- the need to improve the coverage and quality of whale shark observation data
 - capability workshops needed on - what data to collect and how
 - greater sharing and uniformity of photo ID libraries.
 - convergence to a standard approach – “Ecocean” library?
- the need for experts to advise countries developing new whale shark research programs.
- the need for greater sharing of data and information
 - including a data sharing network for accessing global information

Resumen del taller de trabajo científico

Meta del taller de trabajo:

identificar las necesidades claves y prioridades para la investigación en tiburones ballena y para facilitar la colaboración internacional

El taller de trabajo identificó las siguientes prioridades:

- Más información sobre la historia de vida,
- Mejor entendimiento de los hábitos migratorios, y
- Estimaciones poblaciones a nivel local, regional y global.
 - Proyectos actuales incluyen estudios de genética, foto identificación y marcado
 - Todos estos aspectos requieren mejor coordinación.
 - Necesidad para identificar fondos de patrocinio para proyectos regionales y globales.
- La necesidad de mejorar la cobertura y calidad de los datos de observación del tiburón ballena.
- Organizar talleres de trabajo sobre: - Qué tipo de datos coleccionar y Cómo
 - Mejorar la distribución y uniformidad de las bases de datos de foto ID.
 - Convergir en una base de datos estándar – “Ecocean”?
- La necesidad para los expertos de avisar a los países en desarrollo sobre nuevos programas de investigación de tiburón ballena.
- La necesidad de incrementar la distribución de datos e información
- Incluyendo las bases de datos compartidas con capacidad de ser acezadas a nivel global

Outcomes towards goals since conference

- Experts travelling to support work in other areas
- Linkage of Ecocean with Project AWARE and Shark Trust
- Sharing of genetic information
- Regional and large scale international collaborations
- Regional workshops and international conferences convened or planned

Logros alcanzados desde la conferencia

- Expertos han viajado para apoyar trabajos en otras áreas
- Enlace de *Ecocean* con *Project AWARE* y *Shark Trust*
- Compartir la información genética
- Colaboración regional e internacional
- Continuar con talleres de trabajo regionales y conferencias internacionales

1st IWSC Conference Communiqué

The Conference issued a communiqué agreeing that:

- There is cause for heightened concern over the state of global whale shark populations
- The state of knowledge is insufficient.....
- There is a need for urgent regional and international conservation measures
- Healthier economic outcomes for coastal communities can occur through non-consumptive uses

Calling upon nations to:

- Ensure worldwide protection . . . facilitate sustainable economic alternatives
- Ensure greater collaboration in scientific research and conservation efforts

Undertaking to:

- Facilitate greater sharing of information to support these goals
- Meet again in future in conference to review progress

Comunicado de la 1ª conferencia IWSC

- **La Conferencia proporcionó un comunicado acordando que:**
 - Existe una causa para incrementar la preocupación sobre el estado global de las poblaciones de tiburón ballena
 - El conocimiento actual es insuficiente....
 - Existe una necesidad para establecer medidas de conservación regional e internacional
 - Resultados económicos más sanos para las comunidades costeras pueden ocurrir a través de usos no-consumibles
- **Un llamado internacional para:**
 - Asegurar una protección a nivel mundial . . . para facilitar alternativas económicas sostenibles
 - Asegurar una mayor colaboración en la investigación científica y esfuerzos de conservación
- **Tareas a desarrollar:**
 - Facilitar un mayor flujo de la información para apoyar estas metas
 - Reunirse nuevamente en una futura conferencia para revisar el progreso

John Keesing
Email: john.keesing@csiro.au
Web: www.cmar.csiro.au

Thank you / Gracias

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