

See discussions, stats, and author profiles for this publication at: <https://www.researchgate.net/publication/329706130>

Evaluating hatchling fitness in relation to nest temperatures of leatherback (Dermochelys coriacea) sea turtles at Jamursba Medi nesting beach, Bird's Head Seascape – Papua Barat I...

Conference Paper · April 2017

CITATIONS

0

READS

4

4 authors, including:



Ricardo Tapilatu

University of Papua, Manokwari - Indonesia

65 PUBLICATIONS 302 CITATIONS

[SEE PROFILE](#)



William G. Iwangin

WWF Indonesia

10 PUBLICATIONS 32 CITATIONS

[SEE PROFILE](#)

Some of the authors of this publication are also working on these related projects:



Pacific leatherback and Global climate change [View project](#)

INTERNATIONAL SEA TURTLE SOCIETY



EXECUTIVE COMMITTEE:

FRANK PALADINO (USA)
PRESIDENT
PALADINO@IPFW.EDU

JOANNA ALFARO SHIGUETO (PERU)
PAST PRESIDENT
JAS_26@YAHOO.COM

YOSHIMASA MATSUZAW (Japan)
PRESIDENT-ELECT
YMATSU@UMIGAME.ORG

TERRY MEYER (USA)
TREASURER
TOPSAILSEATURTLE@AOL.COM

MANJULA TIWARI (USA & INDIA)
SECRETARY
MANJULA.TIWARI@NOAA.GOV

BOARD OF DIRECTORS:

ALEJANDRO FALLABRINO (URUGUAY)
AFALLA7@GMAIL.COM

LAURA PROSDOCIMI (ARGENTINA)
LPROSDO@YAHOO.COM.AR

GEORGE BALAZS (HAWAII)
GABALAZS@HONLAB.NMFS.HAWAII.EDU

ALAN REES (UK)
AREES@SEATURTLE.ORG

ANDREA PHILLOTT (AUSTRALIA &
BANGLADESH)
ANDREA.PHILLOTT@AUW.EDU.BD

MARIANA FUENTES (BRAZIL & USA)
MARIANA.FUENTES@JCU.EDU.AU

JEANETTE WYNEKEN (USA)
JWYNEKEN@GMAIL.COM

ANDREWS AGYEKUMHENE (GHANA)
ANDYAOHENE@YAHOO.COM

PAMELA PLOTKIN (USA)
PLOTKIN@NEO.TAMU.EDU

EMMA HARRISON (COSTA RICA & UK)
EMMA@CONSERVETURTLES.ORG

ROLDAN VALVERDE (USA & COSTA RICA)
PAST PRESIDENT
ROLDAN.VALVERDE@SELU.EDU

YAKUP KASKA (TURKEY)
PAST PRESIDENT
CARETTA@PAU.EDU.TR

February 19th, 2017

Dear Ricardo Tapilatu,

I am pleased to invite you to the 37th Annual Symposium on Sea Turtle Biology and Conservation to be held in Las Vegas, Nevada, April 15 – 20 2017 at the Marriott Resort & Spa. This Symposium will be celebrated for the first time in the American desert Southwest. We will have a theme of “The impact of Global Climate Change on Sea Turtles” with other workshops on freshwater turtles and tortoises to continue to keep the ISTS innovating and energized. We want to use this opportunity to promote their broad attendance from throughout the region and around the world. Annual Sea Turtle Symposia aim to strengthen regional and international conservation efforts by providing a venue for the sharing of cutting edge research and conservation practices. Symposium participants have been able to promote their research, connect with other people working in their field, and train future sea turtle advocates. The annual gatherings also provide a unique opportunity for participants to collaborate on projects, forge new partnerships and establish the international networks vital for successful sea turtle conservation.

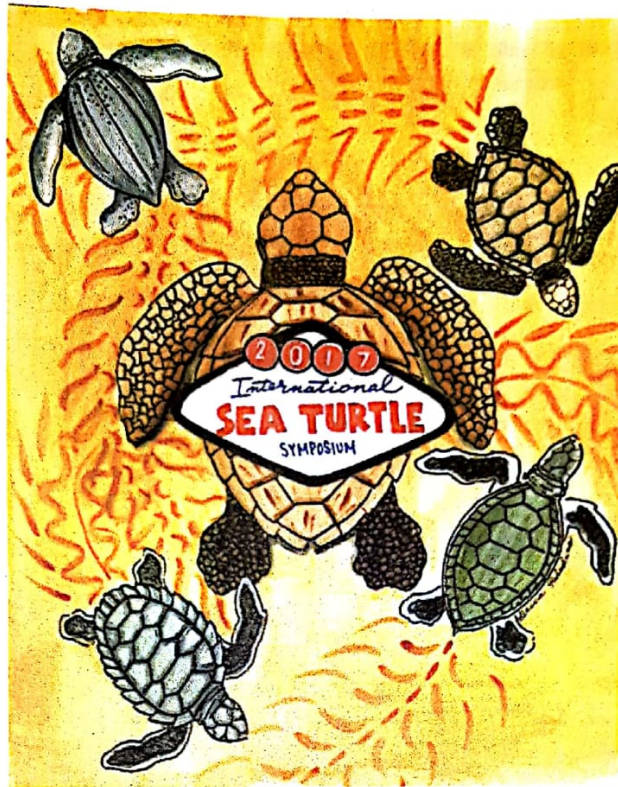
The ISTS is an international non-profit professional organization devoted to the conservation of the marine turtles through sharing of knowledge and international collaboration. Each year the Society organizes and hosts the Annual Sea Turtle Symposium, an international gathering of 800-1000 of the world's foremost sea turtle scientists, conservationists, policy-makers and enthusiasts from more than 80 countries, and the only major conference of its type. More information about the Symposium is available at www.internationalseaturtlesociety.org. Your participation in the planned meetings and activities is critical to the success of the 2017 Symposium. I look forward to seeing you in Las Vegas, Nevada, April 15 – 20 2017 at the Marriott Resort & Spa. .

Warmest regards,

Frank V. Paladino

Frank V. Paladino Ph. D. FAAAS
President ISTS

2017 INTERNATIONAL SEA TURTLE SYMPOSIUM



PROGRAM

**37th Annual Symposium on Sea Turtle
Biology and Conservation
Las Vegas, Nevada, USA
15 – 20 April 2017**



International Sea Turtle Society <laura@bluesalamandersolutions.com>

To

rftapilatu@yahoo.com

Nov 30 at 4:35 AM

Hi Ricardo Tapilatu,

You have successfully submitted your abstract.

Abstracts Title: EVALUATING HATCHLING FITNESS IN RELATION TO NEST TEMPERATURES OF LEATHERBACK (DERMOCHELYS CORIACEA) SEA TURTLES AT JAMURSBA MEDI NESTNG BEACH, BIRD'S HEAD SEASCAPE – PAPUA BARAT, INDONESIA

Abstracts ID: 246

Event:

To make changes to your submission or view the status visit

<http://internationalseaturtlesociety.org> and sign in to your dashboard.

Regards,

ISTS

<http://internationalseaturtlesociety.org>

Reply Reply to All Forward More

Presenting Author: Ricardo F. Tapilatu
E-mail: rf.tapilatu@unipa.ac.id
Fax # : +62986211455
Date: 28 November 2016

EVALUATING HATCHLING FITNESS IN RELATION TO NEST TEMPERATURES OF LEATHERBACK (*DERMOCHELYS CORIACEA*) SEA TURTLES AT JAMURSB A MEDI NESTING BEACH, BIRD'S HEAD SEASCAPE – PAPUA BARAT, INDONESIA

Ricardo F. Tapilatu^{1,2)}, Amy Bonka³⁾, William G. Iwanggin¹⁾, Hengki Wona¹⁾, Yairus Swabra¹⁾, Sadrak Woisiri¹⁾, Riki M. Mayor¹⁾, Gideon Waroy¹⁾, Erick Sembor¹⁾, Roy Rumbiak¹⁾, and Thane Wibbels³⁾

¹⁾ Bird's Head Leatherback Conservation Program - Research Center for Pacific Marine Resources – University of Papua (UNIPA), Manokwari 98314 – Papua Barat INDONESIA

²⁾ Marine Science Dept – Faculty of Fisheries and Marine Science, University of Papua (UNIPA), Manokwari 98314 – Papua Barat INDONESIA

³⁾ Biology Dept – University of Alabama at Birmingham (UAB), AL – 35294 USA

Abstract

Hatching fitness can significantly affect the survival of sea turtles, and has been shown to be influenced by nest temperatures during the incubation period. During the 2016 nesting season, we monitored fitness of hatchlings in terms of crawl and swimming speeds, and incubation temperatures from both *in situ* and relocated nests of the leatherback sea turtle (*Dermochelys coriacea*) at Jamursba Medi, Papua Barat, the primary nesting beach for this species in the Western Pacific. We used a drone as a video platform for monitoring hatchlings during their movements down the nesting beach and through the surf. Crawl speed was documented for an average of 10m prior to the hatchling entering the surf. Swimming speed was documented for 30 – 300m during their movements through the surf. During the current study, the hatchling leatherback sea turtles had a mean crawl speed of 0.04 ± 0.009 m/s and a mean swimming speed of 0.55 ± 0.13 m/s. We also monitored beach and nest temperatures throughout the incubation period. Daily mean beach temperatures (30.3 ± 0.8 , ranged from 28.6-32.1) and nest incubation temperatures (30.9 ± 1.3 , ranged from 28.5-33.8) where hatchlings for the trials were from, were relatively 'warm'. The results of this study provide base-line data for evaluating hatchling fitness relative to crawl speed, swimming speed, and beach-nest incubation temperatures. For example, in the current study crawl speed was lower than those reported for leatherbacks in the eastern Pacific. Monitoring hatchling crawl speed and swim speed at the natural nesting beach provides useful metrics for evaluating hatchling fitness relative to factors such as nest incubation temperature and other ecological aspects of the nesting beaches.

Key words: Leatherback sea turtle; Hatchling; Behavior; Conservation; Ecology; Fitness; Papua; Jamursba Medi; Temperature.

We thank the National Geographic (NG) for providing research grant (Asia03-15), and International Sea Turtle Society (ISTS) for generously supporting our participation in the Symposium.