

## Inter-American Convention for the Protection and Conservation of Sea Turtles

14<sup>th</sup> Meeting of the Consultative Committee of Experts (CCE14) *March 4-5, 2021 - Videoconference* 

Updated: February 4, 2021

CIT-CC17-2020-Doc.5A

## Progress Report on the Implementation of the Resolution on Exceptions in Costa Rica

The following document includes Costa Rica's five years progress report on the Implementation of the Resolution <u>CIT-COP7-2015-R.1</u>: <u>Exceptions for subsistence harvesting of Lepidochelys olivacea eggs in Costa Rica</u>, and was presented to the 17<sup>th</sup> Meeting of the Scientific Committee (2020) for their consideration and recommendations.

The Scientific Committee was requested to review the document and provide recommendations to Costa Rica based on the results presented herein. Costa Rica has not yet received the recommendations from the Scientific Committee.

**Request to the Consultative Committee:** Consider the information in this report to provide recommendations as appropriate.

## COSTA RICA PROGRESS REPORT ON THE IMPLEMENTATION OF RESOLUTION CIT-COP7-2015-R1

Progress report on the implementation of the Resolution on Resolution on the Exceptions under Article IV (3a and 3b) for subsistence harvesting of Lepidochelys olivacea eggs in Costa Rica (CIT-COP7-20 15-Rl).

Date submitted: July 2020

Date submitted by Costa Rica focal point: July 2020

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According to Resolution CIT-COP7-2015-Rl, the adopted by the 7th Conference of the Parties of the Inter-American Convention for the Protection and Conservation of Sea Turtles Recommends the Following Measures to Costa Rica to Meet the Requirements of Article iv (3) regarding exceptions

- 1. The COP recommends that one standardized sampling method to quantify the nesting population at Ostional Beach be selected. Since there is not currently one method it is recommended that a study be conducted to assess the accuracy and precision of the two methods currently used (Chávez-Morera unpublished; Valverde & Gates, 2000) and to choose the most statistically robust method. Costa Rica should provide a report of this study to the IAC Scientific Committee and Consultative Committee by the end of 2017.
- 2. In the interim, Costa Rica should continue to manage its exception as described in its five-year plan.
- 3. To prevent illegal trade of eggs from other *L. olivacea* populations and from other sea turtle species, Costa Rica should develop and implement a system for traceability from the beach to the final distributor.
- 4. In order to determine the status of the nesting population of Ostional L. olivacea and the impact of the egg harvest on it, Costa Rica should monitor for additional indicators including: number of neonates (a recruitment index), and number/percentage of viable and non-viable clutches. Costa Rica should implement the monitoring of these indicators no later than the end of 2017. After this monitoring, there should be an evaluation to make adjustments to ensure the egg harvest is sustainable

This document includes the most relevant activities implemented by Costa Rica for the 2015-2020 period.

## Costa Rica Relevant Activities (2015-2020)

Describe the activities according to the Resolution (number 1-4) and mark with an X the corresponding box (yes, no, in progress)

Recommended activities to comply with the exception requirements; be concise with the description of the activities	YES	NO	In Progress
Updates 2015-2016			
In the IAC Costa Rica National Reports annex "Table 2: Nesting index sites or beaches for sea turtles conservation", we reported the information available according to the Valverde & Gates methodology, since we had the corresponding data for this purpose, contrary to the situation we had accessing the information on the unpublished Chávez-Morera methodology (Annex 1).  According to the estimation through transects methodology, 5,559,399 L. olivacea turtles arrived at Ostional between January 2011 and December 2016, which laid eggs in arribadas. During this same period, 4,671 individuals laid eggs individually.  At the Scientific Committee meeting (2016), Costa Rica proposed analyzing 7 criteria/indicators to assess the methods of Chávez-Morera unpublished vs. Valverde & Gates, 2000, to which the Committee added two criteria. (The criteria are: Type of sample; Error; Variability; Sensitivity of the Methodology; Sampling Area; Background; Publication of the Methodology; Feasibility to apply the estimation method; How these two methods are compared with those being implemented in Escobilla beach in Mexico).  According to Resolution CIT-COP7-2015-Rl recommendation 1	X		
The Ministry of Environment and Energy, through its Vice Ministry of Waters and Seas, officially formed the Technical Advisory Group to address the exception for the use of Ostional eggs, as it was stated in the official letter VAMCH 115-2016 (Annex 2).  **According to Resolution CIT-COP7-2015-Rl recommendation 1**	X		

By 2016 last semester, the Advisory Group had already selected Valverde & Gates, 2000 as the most statistically robust. This information has been reported in table 2 of the national reports.  **According to Resolution CIT-COP7-2015-Rl recommendation 1**	X	
The five-year <i>Lepidochelys olivacea</i> Sea Turtle Management and Conservation Plan is evaluated annually. Currently, this Plan is in implementation. Attached are the 2015 document evaluated (Annex 3) and the Plan's Operation Matrix (Annex 4). The Vice Minister of the Environment issued the guideline No VAMCH-275-2015, prohibiting donations of <i>L. olivacea</i> eggs to public institutions, a practice that was common for those years (Annex 5). In addition, the Conservation Areas National System, Tempisque Conservation Area, developed the Specific Plan for the attention of Arribadas in Ostional National Wildlife Refuge, to reduce threats and impacts on <i>L. olivacea</i> nesting population through tourist activities control and management, especially during the a <i>rribadas</i> or massive nesting of this species (Annex 6.)  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
The annual report on achievements of the project for eggs usage, control, and habitat management of Ostional beach <i>Lepidochelys olivacea</i> nesting population, 2015. Mixed National Wildlife Refuge Ostional. Tempisque Conservation Area (Annex 7), details the information on the activities carried out by Ostional Integral Development Association (ADIO) in those years as: l. Habitat maintenance and management; 2. Hatchlings release and protection; 3. Surveillance and eggs poaching control; 4. Contribution by ADIO Local Tourist Guides involved in the project; 5. Eggs extraction and marketing; 6. Social aspects of the project, investment and infrastructure.  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
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The annual report on achievements of the project for eggs usage, control, and habitat management of Ostional beach <i>Lepidochelys olivacea</i> nesting population, 2015. Mixed National Wildlife Refuge Ostional. Tempisque Conservation Area (Annex 7), details the information on the activities carried out by Ostional Integral Development Association (ADIO) in those years as: l. Habitat maintenance and management; 2. Hatchlings release and protection; 3. Surveillance and eggs poaching control; 4. Contribution by ADIO Local Tourist Guides involved in the project; 5. Eggs extraction and marketing; 6. Social aspects of the project, investment and infrastructure.  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
The document called "Procedures for Traceability of Olive Ridley Eggs ( <i>L. olivacea</i> ) from Ostional National Wildlife Refuge" was prepared and approved. This inter-institutional protocol for packing, distribution, and control of eggs objectives involve improving the current packing and sales system of olive ridley eggs, in a way that human activities impact is minimized, and that a reasonable eggs usage and the sustainability of the olive ridley Management and Conservation Project in Ostional are guaranteed. The document is attached (Annex 8).  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	

Before 2016, Costa Rica had been monitoring indicators such as hatching and the emergence success in Ostional. Attached are: Final Report		
"Programa regional de monitoreo, marcaje y morfometría de tortuga lora ( <i>Lepidochelys olivacea</i> ) en el RNVS Camarona y el RNVS Ostional, ACT, Costa Rica", corresponding to 2014 (Annex 1); Carlos M. Orrego 2014. Biology and Management of Olive Ridley Turtles ( <i>Lepidochelys olivacea</i> ) in Central America. Ph.D. Thesis (Annex 9); Bezy <i>et al.</i> 2016. "Estimation of the Net Nesting Effort of Olive Ridley Arribada Sea Turtles Based on Nest Densities at Ostional Beach, Costa Rica". Journal of Herpetology, proof pdf. (Annex 10); Bezy <i>et al.</i> 2014. "Olive Ridley Sea Turtle Hatching Success as a Function of Microbial Abundance and the Microenvironment of In Situ Nest Sand at Ostional, Costa Rica". Journal of Marine Biology. http://ldx.doi.org/10.1155/2014/351921 (Annex 11). Bezy <i>et al.</i> 2015. Olive Ridley Sea Turtle Hatching Success as a Function of the Microbial Abundance in Nest Sand at Ostional, Costa Rica. PLOS ONE 1 DOI:1ü.1371/journal. pone.0118579 (Annex 12).	X	
Updates 2017-2018		
As of 2017, Costa Rica had already selected Gates and Valverde Sampling		
Method to estimate nesting numbers of <i>arribadas</i> in Ostional and Nancite nesting beaches, which is why we continue reporting <i>arribadas</i> data in the IAC National reports.  Orrego and Rodríguez (2017), publish the paper "The positive relationship between the Ostional community and the conservation of olive ridley sea turtles at Ostional National Wildlife Refuge in Costa Rica". Marine protected areas: Interactions with fishery livelihoods and food security <a href="http://www.fao.org/3/a-i6742e.pdf">http://www.fao.org/3/a-i6742e.pdf</a> According to Resolution CIT-COP7-2015-Rl recommendation 1	X	
After a long process of critical recovery of accumulated experience from Ostional Integral Development Association (ADIO), the Ostional National Wildlife Refuge of ACT-SINAC, the University of Costa Rica, and INCOPESCA, coming from the annual plans implementation, the annual evaluations, complemented with at least a series of workshops-work sessions where the experiences were valued and different perspectives of the four participating actors were presented; and after a detailed and	X	

The annual report on achievements of the project for egg usage, control, and habitat management of Ostional beach <i>Lepidochelys olivacea</i> nesting population, 2016. Mixed National Wildlife Refuge Ostional. Tempisque Conservation Area (Annex 14), details the information on the activities carried out by ADIO in those years as l. Habitat maintenance and management; 2. Hatchlings release and protection; 3. Surveillance and eggs poaching control; 4. Contribution by ADIO Local Tourist Guides involved in the project; 5. Eggs extraction and marketing; 6. Social aspects of the project, investment, and infrastructure.  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
The Five-Year Plan for the Management and Conservation of Olive Ridley Sea Turtles in the Ostional National Wildlife Refuge was assessed in 2017. The evaluation matrix is attached (Annex 15).  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
According to Resolution CIT-COP7-2013-Rt recommendation 2		
Ostional National Wildlife Refuge Traceability Plan (Annex 13), is an operational manual for trade and traceability of <i>L. olivacea</i> eggs from ONWR, Santa Cruz, Guanacaste in the national territory. It also includes the documents required (photographs, official documents, and invoice formats) to document the activities during <i>arribadas</i> and 3 sub-processes with their corresponding activities, as described in the document attached. Attached, is the traceability process first evaluation carried out in 2017 (Annex 16 a) as well as a report on the procedure including adjustments to those established for the period between October 2017 and October 2018 (Annex 16b).  **According to Resolution CIT-COP7-2015-Rl recommendation 3**	X	
Updates 2018-2019		
The Conservation Areas National System, through Ostional National Wildlife Refuge Management, plans the attention and monitoring of each <i>arribada</i> , establishing a special control and protection operation from the start until the end of the <i>arribada</i> . Subsequently, a report is prepared to summarize the days of the operation, the number of officials implementing the operation, eggs harvest data, visitors, and an <i>arribada</i> estimate size, as well as recommendations, to improve the process (Annex 17).	X	
According to Resolution CIT-COP7-2015-Rl recommendation 2		

Ostional Integral Development Association regency prepares and presents an annual report on achievements of the Project for eggs usage, control, and habitat management of <i>Lepidochelys olivacea</i> nesting in the Ostional beach community. 2017 and 2018. Ostional Mixed National Wildlife Refuge. Tempisque Conservation Area (Annex 18a and 18 b).  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
In response to the Environment Organic Law, indicating that is the State duty to promote the citizens active and organized participation, through local instances with high participation of the civil society and in coordination with public and private institutions, to influence decision-making and the development of actions towards protecting the environment; and based on the Biodiversity Law, establishing the duty of encouraging the participation of local communities in the conservation and sustainable use of biological diversity as well as forming of SINAC's collegiate bodies, including the local council; therefore the Inter-Institutional Advisory Council of the Ostional National Wildlife Refuge known as CIMACO is created. This inter-institutional coordination space began in 2002, meeting each month's last Friday, however, it wasn't formally established until February 2008 by the Executive Decree No-34590-MINAE. CIMACO formed by representatives of the academy, Municipalities, INCOPESCA, SINAC, Fishermen's Associations, and ADIO. The council meets every month to discuss the Refuge issues. Each session includes a memory document, which helps to monitor and comply with the agreements (Annex 19).  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
The Five-Year Plan for Management and Conservation of Olive Ridley Sea Turtles in Ostional National Wildlife Refuge 2017-2021 includes a matrix of the annual operating plan which is reviewed once the year is over to see the percentage of compliance with the activities scheduled. Work sessions were held on February 20 and 21, 2019 with ADIO, UCR, INCOPESCA, and SINAC to evaluate the 2018 operational plan and to plan 2019 actions. There was 75.7% compliance with planned actions (Annex 20).  **According to Resolution CIT-COP7-2015-Rl recommendation 2**  **Control of the control of the control of the commendation 2**  **Control of the control of the control of the commendation 2**  **Control of the control of the control of the commendation 2**  **Control of the control of the co	X	
Control and protection actions in Ostional National Wildlife Refuge are aimed mainly to prevent sea turtle egg poaching and to develop poaching and visitors control actions during <i>arribadas</i> . These are summarized in the document IAC Report on Control Activities 2019 (Annex 21).  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	

For this period there have been great efforts to have physical signs in the Ostional community and informative material on the Refuge's regulations and good practices during <i>arribadas</i> to reduce and guide visitors. Material such as posters and videos are attached (Annex 22).  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
There is progress in the implementation of the Traceability Plan: On January 19, 2018, INCOPESCA regional direction presented the First Olive Ridley Eggs from the Refuge Traceability Assessment to CIMACO. It is concluded that the implementation has not yet materialized due to Ostional Integral Development Association's administrative weaknesses (Annex 16a; Annex 23). The Association recognizes that the lack of financial resources is a problem, but visualizes options for improvement and commitment to manage the situation, and are gradually addressing the deficiencies from the first assessment, such as packaging, sales invoices, resale invoices, and donations (Annex 16b).	X	
ADIO requests CIMACO's approval to make changes to packaging based on what is established in the Traceability Plan. Therefore, approved packaging changed from 10 to 20 units of eggs and the labels will be incorporated into the bag design with the approval of other institutions part of this process (Annexes 24a, 24b, and 24c).  **According to Resolution CIT-COP7-2015-Rl recommendation 3**	X	
INCOPESCA with the support of the University of Costa Rica carried out a second evaluation of the traceability procedure in January 2019, and it was possible to see ADIO's significant progress in the process. The report includes opportunities for improvement and recommendations (Annex 25).  The Association recognizes that the lack of financial resources and capacity of the members slow down the implementation of some processes; however, they have been making great efforts to develop new mechanisms and procedures that allow adapting the document to the context and operational reality without risking the achievement of traceability objectives while trading olive ridley turtle eggs from the Refuge. Based on the analysis and evaluation of the process, adjustments were made resulting in an errata document for the Traceability Procedure for Olive Ridley's Eggs From Ostional National Wildlife Refuge, to update details of the established subprocesses as well as to update ballots and other documents that allow the corresponding follow-up (Annex 26). According to Resolution CIT-COP7-2015-Rl recommendation 3	X	

Updates 2019 - 2020		
April 2019 – June 2020		
We present the monitoring and marking project report including some aspects comparative analysis of 2007, 2009, or 2014 according to the parameter analyzed, this allows a more comprehensive interpretation of the results to overtime (Annex 27).  Estimates of olive ridley's <i>arribadas</i> between 2007 - 2019 show a significant fluctuation between months and between years. The <i>arribadas</i> size trend analysis shows that the population has increased by 6.00% (95% CI: -4.82 - 14.91%), however, this increase is not statistically significant, since the lower confidence interval is negative, which is interpreted as a stable population. This suggests that egg management carried out during the last decades has not impacted the population negatively, and the extraction of eggs as a conservation action can continue in the same way. There is no scientific evidence to conclude that population stability is a consequence of the egg's management since there are no studies to prove it or rule it out.  Regarding the production of hatchlings, estimates indicate that 2,144,080 hatchlings were produced in 2019 (95 CI: 1,587,628 - 2,700,531), a similar figure was observed between 2014 and 2018. At least five more years of data  However, the production of hatchlings can be considered as good given as in 2019 the emergence percentage exceeded 10%, a figure that exceeded Playa Nancite and Ostional estimates in the '80s when this figure was close to 0%.	X	
According to Resolution CIT-COP7-2015-Rl recommendation 1 According to Resolution CIT-COP7-2015-Rl recommendation 4		
The Five-Year Plan for Management and Conservation of Olive Ridley Sea Turtles in Ostional National Wildlife Refuge 2017-2021 includes a matrix of the annual operating plan which is reviewed once the year is over to see the percentage of compliance with the activities scheduled. A work session was held on January 30, 2020, to evaluate the 2019 operation matrix along with ADIO, UCR, INCOPESCA, and SINAC showing compliance with 86% of the planned actions (Annex 28)  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	
We continue monitoring the Five-Year Plan for Management and Conservation of Olive Ridley Sea Turtles in Ostional National Wildlife Refuge 2017-2021 during CIMACO's sessions (Annex 29).  **According to Resolution CIT-COP7-2015-Rl recommendation 2**	X	

Ostional Integral Development Association regency prepares and presents an annual report on achievements of the Project for eggs usage, control, trade, traceability, and habitat management of the <i>Lepidochelys olivacea</i> population nesting in the Ostional beach community. 2019 (Annex 30).  According to Resolution CIT-COP7-2015-Rl recommendation 2	X	
An outreach session on the traceability plan was held at the National University in Nicoya on May 30, 2019, with the participation of representatives from SENASA, INCOPESCA, UCR, GENERAL ATTORNEY, and SINAC.  An outreach session on the five-year plan and the traceability plan was also held in the Ostional community on September 14, 2019.	X	
A brochure was prepared regarding trade and responsible consumption of olive ridley eggs (Annex 31a and 31b).  According to Resolution CIT-COP7-2015-Rl recommendation 2  According to Resolution CIT-COP7-2015-Rl recommendation 3	X	
Publications on research during <i>arribadas</i> at Ostional RNVS considering other parameters are attached (Annex 32, 33, 34 and 35).  According to Resolution CIT-COP7-2015-Rl recommendation 4	X	