

CONVENTION ON INTERNATIONAL TRADE IN ENDANGERED SPECIES  
OF WILD FAUNA AND FLORA



Seventy-fourth meeting of the Standing Committee  
Lyon (France), 7 - 11 March 2022

Interpretation and implementation matters

Exemptions and special trade provisions

Registration of operations that breed Appendix-I animal species  
in captivity for commercial purposes

Registration of the operation Earth Ocean Farms. S. de R.L.  
de C.V. (Mexico) breeding *Totoaba macdonaldi*

REPORT BY MEXICO

1. This document has been submitted by the CITES Scientific Authority of Mexico.\*

Background

2. Timeline of the registration process of “Earth Ocean Farms S. de RL. de C.V.” as an operation that breeds totoaba in captivity for commercial purposes (Res. Conf. 12.10 [Rev. CoP15]).

Date (dd-mm-yy)	Action	Evidence
17/04/18	Mexico requested the CITES Secretariat to register Earth Ocean Farms S. de RL. de C.V. (EOF) as an operation that breeds Appendix I animal species for commercial purposes (Res. Conf. 12.10 [Rev. CoP15]).	<a href="#">Annex 1 of document SC71 Doc. 17</a>  <a href="#">Earth Ocean Farms Website</a>
30/05/18	The Secretariat published Notification to the Parties 2018/054, where it informs of Mexico’s intention to register EOF as an operation that breeds Appendix I animal species in captivity for commercial purposes ( <i>Totoaba macdonaldi</i> ).	<a href="#">Notification No. 2018/054</a>
10/08/18	Mexico sent to the CITES Secretariat additional information concerning the successful production of F2 individuals.	<a href="#">Annex 1b of document SC71 Doc. 17</a>
27 and 28/08/18	The CITES Secretariat received objections from Israel and the United States of America (USA) and sent them to Mexico and to the Animals Committee for their examination. The main concerns are grouped into three areas: a) technical aspects (reproductive biology of the species in captivity, location in tanks, need to incorporate individuals	<a href="#">Annex 2 and Annex 3 of document SC71 Doc.17</a>

\* The geographical designations employed in this document do not imply the expression of any opinion whatsoever on the part of the CITES Secretariat (or the United Nations Environment Programme) concerning the legal status of any country, territory, or area, or concerning the delimitation of its frontiers or boundaries. The responsibility for the contents of the document rests exclusively with its author.

	from the wild in the near future, etc.); b) traceability (how to prevent the laundering of specimens, markings, revisions, inspections, effectiveness of implementation of controls); c) doubts about the effectiveness or pertinence of increasing the (legal) demand when there is still a significant illegal catch, and its effect on the vaquita porpoise.	
14/01/19	<b>Favorable opinion of the Animals Committee, indicating that the registry information is detailed, adequate and that the proposal largely fulfils the requirements for a registration</b> , and made additional questions (technical and traceability issues) to be resolved within a period of 30 days.	<a href="#">Parr 7 of document SC71 Doc.17</a>
07/02/19	Mexico answered the additional questions of the Animals Committee, as well as the objections of Israel and USA (sharing said information with both countries).	<a href="#">Annex 4a of document SC71 Doc.17</a>
15/05/2019	Israel and USA indicated that they would not withdraw their objections, therefore the decision about the registration is turned over to the Standing Committee at its 71 <sup>st</sup> meeting.	<a href="#">Annex 4b and Annex 4c of document SC71 Doc.17</a>
28 and 29/05/19	High Level Mission to La Paz, Baja California Sur, MEXICO, with participation of the CITES Secretariat, including the Secretary General Ms. Ivonne Higuero. Official visit to the facilities of EOF, in which the representatives of the CITES Secretariat, authorities and observers were able to confirm the process of reproduction of second generation individuals (F2) and Totoaba fattening, verifying that the farm complies with the requirements indicated in Resolution Conf. 12.10 (Rev. CoP15).	<a href="#">Press release about the High Level Mision</a>  <a href="#">Video of the visit to the facilities of EOF</a>
16/08/19 Standing Committee SC71	Mexico sent the Standing Committee (SC71) an information document regarding the history, prohibitions, legal use, national hatcheries, technical and biological aspects of Totoaba, as well as conservation, promotion of alternative livelihoods, traceability and law enforcement. During the 71 <sup>st</sup> meeting of the Standing Committee, <b>Mexico indicated that the registration request does not consider Totoaba maw (<i>buche</i>)</b> , and that, if it considers pertinent to export them in the future, it would again request the opinion and guidance of the Standing Committee. SC71 agreed to postpone a decision on the registration until the 73 <sup>rd</sup> Meeting of the Standing Committee (2020).	<a href="#">SC71 Doc. Inf. 2</a>  <a href="#">Summary records of Standing Committee 71</a>
5-7/05/21 Standing Committee SC73	During the virtual 73 <sup>rd</sup> Meeting of the Standing Committee, the item was not included in the agenda and was programmed for the 74 <sup>th</sup> meeting.	<a href="#">SC73 Documents</a>

Updated information regarding the application to register “Earth Ocean Farms. S. de R.L. de C.V.” (EOF) in the Register of operations that breed Appendix I animal species in captivity for commercial purposes (based on Annex 1 of Res. Conf. 12.10 [rev. Cop15])

- This document addresses only the points of [Annex 1 of Res. Conf. 12.10 \[Rev. CoP15\]](#) for which updated or additional information is available. The information that has been previously presented can be consulted in documents [SC71 Doc. 17](#) and [SC71 Inf. 2](#).
- Regarding number 4) “**Numbers and ages (if known or appropriate) of males and females that comprise the parental breeding stock**”, EOF has not requested new parental breeding stock from wild origin (W), nor has it made exchanges with other hatcheries.
- Information on the parental stock according to its location in the facilities: Laboratory Tanks 1 and 2 (35 wild specimens); Laboratory Tank 3 (seven F1 specimens); Aquapod in open sea (reserve, wild, and F1 specimens).

**4.1 Parental breeding stock in Tanks 1 y 2**, in the laboratory facilities on land: 35 specimens of the parental stock (average weight 29kg), wild origin.

Species	Name of specimen	ID number of specimen	Sex	Age (years)	Date of introduction to the UMA
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F875CE1	Female	8-10	April/2014 DGVS-CR-IN-1485-BCS/12  13/May/2014 Permit DGVS-02151/14
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F878435	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8754AA	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F87526B	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F876198	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F875C69	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8753C6	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8765DB	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F878555	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8759D8	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F878978	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8787CA	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F878A2C	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F875C37	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F875567	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8786EC	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F875AA0	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F876AFD	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F88BE2C	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F87645C	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F878800	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F87652A	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8786BC	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F878483	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F878057	Female	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8780F0	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8784ED	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8762C4	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F875622	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8788C7	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8752EB	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F875B1C	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F876776	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F878320	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-Silvestre	F8760FB	Male	8-10	

**4.2 Parental breeding stock in Tank 3**, in the laboratory facilities on land: 7 specimens of F1 (first generation), with production origin in EOF (Earth Ocean Farms) and CREMES (Centro Reproductor de Especies Marinas del Estado de Sonora). Average weight 25 kg.

Species	Name of specimen	ID number of specimen	Sex	Age (years)	Date of introduction to the UMA
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CF87	Male	6	20/05/2015 Originated in UMA DGVS-CR-IN-1485-BCS/12
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CC65	Female	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88DDCC	Male	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A58E	Female	6	
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F88A1D4	Female	6	29/June/2015 Originated in UMA DGVS-CR-IN-1396-Son/11
<i>Totoaba macdonaldi</i>	Totoaba F1Cremes	F88C0E8	Male	6	
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F88BF83	Female	6	

**4.3 Parental Breeding Stock Reserve; in Aquapod/marine cages:** 7 wild specimens; 90 specimens of F1 (first generation) without sexing, with production origin in EOF, CREMES and UABC (Universidad Autónoma de Baja California Sur). The organisms are maintained in optimal nutritional conditions, and can be used in case of eventuality or contingency.

Species	Name of specimen	ID number of specimen	Sex	Age (years)	Date of introduction to the UMA
<i>Totoaba macdonaldi</i>	Totoaba Silvestre	F87817D	Female	8-10	13/May/2014 Permit DGVS-02151/14
<i>Totoaba macdonaldi</i>	Totoaba Silvestre	F876229	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba Silvestre	F8782C1	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba Silvestre	F876C59	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba Silvestre	F8789FE	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba Silvestre	F875A9E	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba Silvestre	F875A9E	Male	8-10	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F87896C	N/D	6	SEPTEMBER/ 2015 DGVS-CR-IN-1485-BCS/12
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F889FE5	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A497	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88DD79	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88BD9A	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F889B58	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F889EA9	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A1D6	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88D1F2	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88DBF9	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C1B9	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A2B5	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88D34A	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C506	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CA92	N/D	6	SEPTEMBER/ 2015 DGVS-CR-IN-1485-BCS/12
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C917	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C3DE	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A058	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CB10	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88DB16	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A0C1	N/D	6	

Species	Name of specimen	ID number of specimen	Sex	Age (years)	Date of introduction to the UMA
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C12B	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CE6E	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CEF1	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A08F	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A632	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CCAA	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A3BB	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CA50	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A2B3	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88D0BA	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C341	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88A48B	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CA7C	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C634	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C3C1	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F889D98	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CD44	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CAE2	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F889D27	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88DA4B	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C991	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88C32B	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba-F1EOF2015	F88CC2E	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F88CF6B	N/D	6	29/JUNE/2015 DGVS-CR-IN-1396-SON/11
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F889C71	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F88C429	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F88BD72	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F88C3E8	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F88C79C	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba F1 Cremes	F88D0A9	N/D	6	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88C39F	N/D	8	11/AUGUST/ 2013 DGVS-CR-IN-1084-B.C./09
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88C356	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88CC70	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88D5A3	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88BCD5	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88BC59	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88C29B	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88A176	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88D9A0	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F889CFE	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88D482	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88CAAB	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88C3B2	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88C165	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88D17D	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88A39F	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88A16A	N/D	8	

Species	Name of specimen	ID number of specimen	Sex	Age (years)	Date of introduction to the UMA
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88A35E	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88C2F1	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88D059	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88CDF5	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88BD48	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88CEA6	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88A31C	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88A159	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88CC24	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88D232	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F889DC9	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88C7CE	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88D35B	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88BCEF	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88CC09	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88BFAC	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88CB66	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88A097	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88BC07	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F889EAC	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88C66E	N/D	8	
<i>Totoaba macdonaldi</i>	Totoaba EOFF12013	F88CA76	N/D	8	

6. Regarding number 6) “**Current stock (numbers, by sex and age, held in addition to the parental breeding stock above)**”, besides the information provided in number 4 relating to the parental breeding stock, the UMA has -until May 2021- approximately 300 tons of Totoabas 2 years of age, with an average weight per specimen of 4-6 kg. This represents approximately 50,000 to 75,000 individuals for commercial production.
7. For number 7) regarding “**Information on the percentage mortalities, if possible reported by age and sex**”, EOF reports that during the development from egg to larva, the survival rate is 20%. During larval development and until the juveniles reach a weight of 1 g, the survival rate is 20%. The following table shows the birth and mortality rates in the rearing of juvenile and adult Totoabas in EOF facilities. The decrease in mortality is due to the refinement of management and production techniques.

Year	Mortality rate (%)	Age (years)	Sex
2012	38.15	1- 2	Not determined
2013	35.92	1-2	Not determined
2014	30.63	1-2	Not determined
2015	37.33	1-2	Not determined
2016	12.00	1-2	Not determined
2017	10-15	1-3	Not determined
2018	10-15	1-3	Not determined
2019	10-15	1-3	Not determined
2020	10-15	1-3	Not determined
2021	10-15	1-3	Not determined

8. Regarding **number 9) “Past, current and expected annual production of offspring”**, the current and planned productive capacity of the farm is updated. Currently, EOF has a production capacity of 2,000 tons (6 million juveniles); however, it operates at a lower capacity due to market limitations -currently only at a national level-. The production in 2021 was 300 tons, the projected production for 2022 is expected at 350 tons and, for 2023, 500 tons. It is worth mentioning that the harvest rates are calculated according to the estimated production, which must be reported periodically to the General Directorate of Wildlife of the Ministry of Environment and Natural Resources (DGVS-SEMARNAT), which acts as the CITES Management Authority of Mexico, and must correspond to the collection permits requested.
9. With regards to **number 11) “Type of product exported (e.g. live specimens, skins, hides, other body parts, etc.)”**, it is reported that whole frozen fish (**without maw or swim bladder**), fresh whole gutted fish, frozen whole gutted fish, fresh fillets, and frozen fillets are expected to be exported. At the moment **the commercialization and export of the maw (or swim bladder) is not contemplated**. At the national level, the maw or swim bladder is not marketed either, only the fillets.
10. To update **number 15) regarding “description of the strategies used or activities conducted by the breeding operation to contribute to the conservation of wild population(s) of the species.”**, EOF has provided information regarding their release actions for the repopulation of Totoaba presented in its original application as well as Annex 4a of document ([SC71 Doc. 17](#)): to date, the farm has released 146,000 Totoaba juveniles, in public participation events (specially with children in communities surrounding the release location), as can be seen in the [Official Release Video 2021](#).

Releases of Totoaba juveniles per year, with date, size, individuals and location.

Year	Date (dd-mm-yyyy)	Size	# of individuals	Location
2015	16/12/2015	160 gr	1,500	Santispac, Mulegé, B.C.S.
2016	25/08/2016	18.5 gr	15,000	Santispac, Mulegé, B.C.S.
2017	15/07/2017	4 gr	30,000	Santispac, Mulegé, B.C.S.
2018	05/07/2018	7 gr	40,000	Santispac, Mulegé, B.C.S.
2019	19/07/2019	4.5 gr	40,000	Santispac, Mulegé, B.C.S.
2020	No releases due to the Covid-19 pandemic			
2021	23/07/2021	5-10 gr	20,000	Santispac, Mulegé, B.C.S.
2022	*	5-10 gr	40,000*	Santispac, Mulegé, B.C.S.*
2023		5-10 gr	40,000*	Santispac, Mulegé, B.C.S.*

\* Tentative date and location for release.

10. Although the final recruitment success of the released juveniles is not known, there are indications that the specimens can reach stages of maturity: the Autonomous University of Baja California (UABC) and the Federal Attorney for Environmental Protection (PROFEPA) have detected genetic sequences of specimens released by the UABC, in seized individuals of 8 years of age (adult/reproductive stage). In this regard, the Scientific Authority of Mexico (CONABIO) coordinates the implementation of the project "Evaluation of the impact and relevance of experimental releases of Totoaba (*Totoaba macdonaldi*) produced in captivity as a conservation strategy for wild population." The results of the project are expected in the second half of 2022, and these will allow adjusting, if necessary, the conservation strategies of the UMAs.
11. Lastly, regarding the management of **stocks and stockpiles** of swim bladder (maw), as soon as the registration is granted, and due to their value and interest in the illegal market by criminal groups and organized crime, the Totoaba bladders (maw) will be destroyed until Mexico, with the endorsement of the Standing Committee and the interested Parties, establishes a safe procedure for their deposit, storage, marking and possible future commercialization, under continuous supervision of the competent Authorities

## Recommendations

12. The Standing Committee is invited to:

- a) Consider the additional and updated information regarding the application to register “Earth Ocean Farms S. de R.L. de C.V.” as an operation that breeds Appendix I animal species in captivity for commercial purposes, according to la Res. Conf. 12.10 [Rev. CoP15].
- b) Take into account that: The technical-biological and law enforcement issues that the United States of America and Israel indicated have been fully answered by Mexico.
- c) Take into account that, at the moment, the registration is **not requesting to trade Totoaba maw or swim bladder**.
- d) Support the registration of “Earth Ocean Farms S. de R.L. de C.V.” as an “Operation that breeds Appendix I animal species in captivity for commercial purposes”, for Totoaba specimens (*Totoaba macdonaldi*), with the exception of maw or swim bladder.
- e) Collaborate with Mexico in the development of a future procedure for the production, storage, marking, transport and monitoring of totoaba swim bladders, for a possible commercialization of this by-product when convenient.