General Session
Kemp’s Ridley Sea Turtles
The Kemp’s Ridley Binational Project:

A 71 year

( and counting )

History of Conservation
The Kemp’s ridley sea turtle has received continuous attention on the part of the Mexican government since 1966, when the National Program for Sea Turtle Research and Conservation began.

The seeds for this National Program, and indeed, for Kemp’s ridley conservation, had actually been planted almost twenty years before.
Andres Herrera, from Tampico, Tamaulipas, Mexico, had heard many stories from locals about the great numbers of sea turtles nesting on a beach near the Tropic of Cancer.

From 1946 - 1947, Mr. Herrera made 32 flights along the Tamaulipas coastline from Tampico 90 miles north during the months of April and June.
1950s
April 15, 1966
The first Kemp’s ridley sea turtle camp is established in the south side of Barra Calabazas, near the town of Rancho Nuevo in Tamaulipas.
1968

Marines at Rancho Nuevo
On July 4, 1977, Rancho Nuevo is declared the first National Reserve for the Management and Conservation of Sea Turtles in Mexico.

It would be recategorized and declared a Natural Protected Area in the category of Sanctuary on July 16, 2002.
In 1978, a collaborative binational program between Mexico and the United States was developed to try and restore this species' population to a self-sustainable level: the Kemp’s Ridley Sea Turtle Restoration and Enhancement Program - one of the longest-running *in situ* conservation efforts in the World.

Gladys Porter Zoo staff have been involved with this conservation effort since 1972, and have administered the U.S. segment of the project since 1981.
1978

Rancho Nuevo
702 nests are registered. Representing an estimated 300 nesting females or less, this number of nests indicated a decline of over 99% in the number of annual registered nests over the past four decades.
The Kemp’s ridley sea turtle becomes the emblematic species for the implementation of TED regulations by NOAA Fisheries in 1989.

On May 28, 1990, Carlos Salinas de Gortari establishes in Mexico a total and permanent ban on the capture of sea turtles and the commerce of products derived from sea turtles.
1996

TAMAULIPAS SEA TURTLE CAMPS

LA PESCA
TEPEHUAJES
RANCHO NUEVO
PLAYA DOS - BARRA DEL TORDO
PLAYA TESORO - ALTAMIRA
PLAYA MIRAMAR – CIUDAD MADERO
Kemp’s Ridley Sea Turtle Camps in Tamaulipas

La Pesca
Playa Dos – Barra del Tordo
Tepehuajies
Playa Tesoro - Altamira
Rancho Nuevo
Playa Miramar – Ciudad Madero
Kemp’s Ridley Project

During the nesting season, close to 150,000 miles are travelled patrolling the beaches of Tamaulipas. This is the equivalent of going six times around the world in 180 days.
The story of the Kemp’s ridley sea turtle was becoming a prime example of how the EFFECTIVE IMPLEMENTATION OF A CONSERVATION PROJECT can save a species from extinction.

Kemp’s ridley nests registered in Tamaulipas

1996 - 2009
The Second revision to the Binational Recovery Plan for the Kemp’s Ridley Sea Turtle anticipated that the Kemp’s ridley would attain its downlisting criterion of 10,000 nesting females in a season by 2011.

And based on the observed annual population growth rates of 19%, it was anticipated that the species could attain its delisting criterion of an average of 40,000 nesting females per season over a 6-year period by 2024.
A 37% decrease in the number of registered nests from 2009 to 2010.
Artist’s representation of the Kemp’s Ridley Project Crew in 2010 – very similar to the Crew in 1985.
2011 was the third biggest year in terms of registered nests in the history of the Project.

2012 was the second biggest.

2013 saw a 25% decrease in the number of registered nests from 2012.

2014 saw a 26% decrease in the number of registered nests from 2013.

2015-2017 saw an average annual increase of 27% in the number of registered nests.

2017 was the biggest year in terms of registered nests in the history of the Project.
2014

Second International Kemp's Ridley Sea Turtle Symposium

2015

Gulf States Marine Fisheries Commission

2016

Deepwater Horizon Oil Spill Natural Resource Damage Assessment
Sea Turtle Early Restoration
Through an agreement with the Natural Resources Trustees for the State of Texas, and the collaboration of several organizations in Mexico and the United States, Gladys Porter Zoo continues to support the conservation efforts at the six Kemp’s ridley sea turtle conservation camps covering close to 140 miles of Tamaulipas coastline encompassing the species’ main nesting grounds.
1966 – 2016
50 years of Kemp’s Ridley Conservation
In the 2017 Season 24,586 Kemp’s ridley nests were registered at the six turtle camps in Tamaulipas – a 35.6% increase from the number of registered nests in 2016 and the highest number of registered nests in a season in the history of the Kemp’s Ridley Project.
2018 Season
The 2018 Season unofficially began on February 21, off the coast of the Barra del Tordo field station.
The first nest of the 2018 Season was registered at the Rancho Nuevo Field Station on March 29. The last nest the 2018 Season was also registered at the Rancho Nuevo Field Station on August 11.
17,945 nests were registered, making 2018 the year with the sixth highest number of registered nests in the history of the Project.
<table>
<thead>
<tr>
<th>LOCATION</th>
<th>REGISTERED NESTS</th>
<th>RELEASED HATCHLINGS</th>
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</thead>
<tbody>
<tr>
<td>La Pesca</td>
<td>334</td>
<td>24,345</td>
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<tr>
<td>Tepehuajes</td>
<td>1,350</td>
<td>94,596</td>
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<td>Rancho Nuevo</td>
<td>12,873</td>
<td>533,661</td>
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<td>Playa Dos - Barra del Tordo</td>
<td>2,009</td>
<td>101,676</td>
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<td>Playa Tesoro - Altamira</td>
<td>615</td>
<td>41,364</td>
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<tr>
<td>Playa Miramar - Ciudad Madero</td>
<td>764</td>
<td>32,820</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td><strong>17,945</strong></td>
<td><strong>828,462</strong></td>
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</tbody>
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**SUMMARY DATA**
72% of the Kemp’s ridley nests registered in the 2018 Season occurred at the 18.6-mile stretch of beach located at Rancho Nuevo.
90.4% of the Kemp’s ridley nests registered in the 2018 Season occurred in these 75.7 miles.
60.6% of the 2018 registered nests at all six turtle conservation camps were protected in corrals and 28.2% were left *in situ* and monitored throughout the incubation period. 97.3% of these *in situ* nests were registered at Rancho Nuevo.
Three major arribadas were registered in the 2018 Season: April 14, May 10, and May 26.
In the 2018 Season, 828,462 hatchlings were released into the Gulf of Mexico.
During the 2018 nesting season we continued work on our long-term data base on nesting beach temperatures and nest temperatures in order to estimate hatchlings sex ratios.

Started in 1998, this database represents one of the largest long-term sea turtle nesting beach temperature databases to-date.
This nesting female was fitted with a satellite transmitter during the 2015 Season and was registered nesting again during the 2017 Season.

The female, named “Julieta” by the Gladys Porter Zoo crew, transmitted for 1,041 days - from June 1, 2015 to April 7, 2018.

This is the longest period of transmission time registered for sea turtle satellite telemetry.
Drones were once again used as an effective means of monitoring the location and behaviors of turtles in nearshore waters throughout the nesting season.

The Tag-Recapture Study started in 2014 also continued in 2018 with 1,369 nesting females checked for tags/tagged.
Our Unmanned Aerial Vehicle (UAV) study also allowed us to record the dynamics of massive nesting aggregations (arribadas), of the Kemp’s ridley sea turtle.
UAV systems also record visually impressive stills and high definition video footage that can in turn be used to capture interest and raise conservation awareness.
EDUCATION PROGRAMS
Tortuga Lora

Es la especie más pequeña de las tortugas marinas. Desde 1970 fue clasificada en peligro, y en 1985 fue listada por la UICN como uno de los 12 animales más amenazados del mundo.

La temporada de cría comienza a finales de marzo y termina en agosto. De mayo a julio es cuando se presentan mayor número de ejemplares.

En 2014, se registraron más de 20,000 nidos de tortuga Lora en las costas de Tamaulipas.

Cuando anida, deposita un promedio de 100 huevos que se incuban durante un período de entre 45 y 60 días.

Este año, nacieron más de un millón de crías que recorrieron su largo camino hacia el océano.

El 90% de los ejemplares de tortuga Lora que existen en el mundo, anidan en una franja de 120 km comprendida entre el norte de Tamaulipas y el sur de Veracruz. El 70% lo hacen en playas de Rancho Nuevo.

En una temporada regular se recorren unos 212,400 km, patrullando las costas de Tamaulipas. Esto equivale a dar 5.3 vueltas al mundo.

La última vez que se vieron tortugas Lora en la Argentina fue en 2010.

Una arribada es el fenómeno en que las tortugas salen a desovar en grupos de cientos, e incluso miles de ellas de manera simultánea.

En Tamaulipas existen 6 campamentos tortugeros habitados por 200 km de la costa.

Es la única especie de tortuga marina que anida durante el día.

Se la conoce como "Lora" debido a la semejanza de su "eco" con el de los loros.
Students from Rancho Nuevo and other rural communities near the turtle camp visit the camp and participate in the education program as part of the Tamaulipas’ Kemp’s Ridley Student Ambassadors Program
Yappopalooza

JUNE 8, 2019

Ridley Rush

At the Gladys Porter Zoo
Kemp’s ridley nests registered in Tamaulipas 1978-2018
REGISTERED NESTS AND RELEASED HATCHLINGS
1978 – 2018
Nests: >296,000
Hatchlings: >14,660,000
Baiji Dolphin declared extinct in 2007

Pinta Tortoise declared extinct in 2012

Caribbean Monk Seal declared extinct in 2008

Formosan Clouded Leopard declared extinct in 2013
The mission of the Playa Miramar Biological Station is to provide a space that is a part of an interactive process focusing in the importance of an environmental culture and becoming an educational outlet for residents and non-residents in Ciudad Madero, Tampico, and Altamira.
Special guests to the presentation included Evangelina Herrera (widow of Andres Herrera) and her family, staff from the San Antonio Zoo, municipal, state and federal authorities, the industry sector, and representatives from various NGOs and Universities.
As 2018 marks the 40th anniversary of the Kemp’s Ridley Binational Project, one of the longest-running conservation efforts of its kind and a model of cooperation between the US and Mexico, the Playa Miramar Biological Station represents that spirit of cooperation.
And now, the real numbers.
THANK YOU