

Kemp's Ridley Recovery Team Meeting Minutes

**Tampico, Mexico
May 9-11, 2005**

Team Members in Attendance:

Alberto Abreu-Grobois - National University of Mexico
Patrick Burchfield - Gladys Porter Zoo
Robyn Cobb - U.S. Fish and Wildlife Service
Therese Conant - U.S. National Marine Fisheries Service
Sheryan Epperly - U.S. National Marine Fisheries Service
Antonio Fuentes - Profepa, SEMARNAT
Luis Fueyo - Profepa, SEMARNAT
Les Hodgson - U.S. National Fisheries Institute
Carmen Jimenez - Mexican National Fisheries Institute
Patricia Lueveno - SOPDUE, State of Tamaulipas
David Owens - College of Charleston
Earl Possardt - (Co-Chair) U.S. Fish and Wildlife Service
Oscar Ramirez - (Co-Chair) Vida Sylvestre, SEMARNAT
Mike Ray - Texas Parks and Wildlife
Georgita Ruiz - CONANP, SEMARNAT
Donna Shaver - U.S. National Park Service, Padre Island National Seashore

Rapporteur:

Kristy Long - U.S. National Marine Fisheries Service

Translator:

Sonia Ortiz, Aventur

Consultants:

Selina Heppell - Oregon State University
Tom Shearer - U.S. Fish and Wildlife Service
Jaime Pena - Gladys Porter Zoo
Thane Wibbels - University of Alabama

Special Guests:

Horacio del Angel - SOPDUE
Ruben Rodriguez - SOPDUE
Millar Alexander - CANAIPES
Rafael Ruiz - CANAIPES
Vicente Mongrel- Tamatan Zoo, Tamaulipas

May 9

Weather conditions in Houston, Texas, created flight cancellations and prevented several team members including Team co-chair, Earl Possardt from attending the first day of the meeting. Team Co- Chair, Oscar Ramirez, was not scheduled to arrive until the second day so Dr. Ruiz led the team through the first day of the meeting. Dr. Ruiz welcomed all team members and visitors,

and following introductions, she highlighted the increasing interest and participation from Mexican federal, state and local agencies, as well as industry in the recovery process for the Kemp's ridleys.

Dr. Ruiz: Update on Transition of turtle programs in Mexico. About 9 months ago, Secretary of Environment put priority species under CONANP. Dr. Ruiz and others were charged with evaluation and design of a legal framework for this transition from Vida Sylvestre to CONANP. Formal transition takes place on May 10, 2005. Funding staff and materials will move with the program. This change will link conservation management of priority species with management of natural protected areas and habitat. Implementation of recovery actions are under CONANP, however, policies are still defined in sub-ministries in Vida Sylvestre, therefore, Vida Sylvestre will still be involved in international issues and permits.

Dr. Ruiz: Laguna Madre Natural Protected Area (LM NPA) - Recently declared on April 14, 2005 for the Laguna Madre de Tamaulipas. This was a long complicated process which required a determination of economic impact. Dr. Luevano pushed hard for the inclusion of Tepehuajes – she sent the coordinates to Dr. Ruiz who passed them along to CONANP Director, Ernesto Enkerlin who was successful in steering the proposal through the process. As soon as area is declared a National Protected Area (NPA), a management plan must be developed within one year.

Dr. Luevano: Mexico Stakeholder Meeting- April, 2005 - Tampico.

Two important points from the prior Recovery Team meeting were addressed:

1. Priority Species Recovery Plan
 - a. Outline of how to work together to recover priority species
2. Stakeholder meetings
 - a. Keep everyone in the loop. First SH meeting was in July 2004, in Ciudad Victoria. Twenty-seven organizations and 56 individuals attended the first meeting. A consensus reached that a second SH meeting was needed.
 - b. April 22, 2005, second stakeholder meeting Tampico. 21 organizations and 36 individuals. Composition of attendees: 4 from Federal agencies, 3 from State, 3 from counties, shrimp industry in Mexico (first involvement in Kemp's recovery plan), fishing cooperative, two tourism developers (first involvement in Kemp's recovery plan), one NGO. The Mexican Marines were represented along with National Defense.

At this SH meeting the group was split into two work groups. Each table discussed the following:

1. threats to parts of the Kemp's life cycle
2. identified information gaps
3. identified strategic actions
4. advantage of bi-national team

Jaime Pena - Strandings at Rancho Nuevo (RN)

In 2005, 33 dead Kemp's strandings observed. There were many reports from fishermen of turtles mating offshore of camps, but not coming ashore. Beginning in March, Jaime and

Dr. Thane Wibbels observed people throwing nets out in waters in front of camps. Subsequently, fresh dead Kemp's started washing in. Necropsies showed evidence of drowning - one was a NMFS Turtle. A circle hook was taken from one Kemp's. The hook will be taken to NMFS in Miami to see if they can identify the country where the hook was made.

Involvement of pelagic long-line fisheries:

- a. Swordfish fishery - lines set such that turtle can get to surface. Mortality is more highly associated with damage from hook to body parts when released
- b. Tuna fishery - lines set deeper, however not as deep in Gulf/Caribbean as in other areas.
- c. Shark fishery. Hooks on bottom. There is drowning associated, and they are using circle hooks

Team members stressed that it is very important to understand the cause of these strandings and to use the information to develop solutions. One team member noted we need to bear in mind that when we have increased turtle populations, we will see increase mortality as well. Once a protocol is developed for Tamaulipas, it should be expanded to other areas, e.g. Veracruz

Carmen Jimenez: Shark Norma: Official NORMA's are a set of orders that regulate all aspects of an activity including processes, products, systems, activities, equipment, etc. The NORMA Elaboration process is: representative, consensus based, and involves public consultation (stakeholder involvement). There is also a modification stage that includes updates and actualization. The first step is to identify the problem. Then draft official norm with goals, proposed measures, discarded alternatives, economic analysis, etc. A Consultative Normalization Committee is formed. There's an Official Norma Project Review stage which is published in Diario Oficial de la Federation with 60 days for comments. If no problems are identified, then the NORMA is published in 45 days. The shark fishery NORMA is NOM 029. The identified problem was regulating shark and other related fishing. Elaboration of draft = SEMARNAT 1999. Consultative Norma Committee included INP, UNAM, UABCS, NGO etc. Official Norma Project was published for public evaluation on July 12, 2002. On October 10, 2002, NOM 029 was cancelled to have more time for analysis. At this time, the Regulatory Impact Manifestation is in review by COFEMER. Modifications include: location of nets and long lines; control of fishing effort; taxonomic guides on boats; protection/conservation of threatened species' and refuge zones such as for shark nurseries and turtle beaches. The circle hooks used in the longline fishery are offset 10 degrees.

The Norma bans the use of drift tangle nets and the fishermen are opposed to this provision. There are some conflicts over designation of fishing zones by boat size: artesanal, mediana, altura.

Dr. Selina Heppell - Reproductive Values/recovery criteria: Dr. Heppell drew a diagram showing conversion factors and justifications for those. At every life history stage, there is high mortality, both natural and human caused. Using RN data, about 65-75% of eggs become hatchlings. Hatchlings entering the marine environment experience high mortality initially. The Expert Turtle Expert Working Group estimated the survival of juveniles ~65% (Ages 2-5 - a 4-year-period). Dr. Heppell assigned Reproductive Value (RV) calculated from survival rates

where hatchlings have a reproductive value of 1 (RV=1). Older aged individuals become more valuable since RV increases with size of turtle (based on females). This allows us to look at different problems for different life stages. Therefore 1 adult = 40-50 hatchlings in this model. Most Recovery Plans developed prior to new draft guidance the USFWS and NMFS only list sources of mortality and don't rank them but agencies are now moving toward ranking threats as a way to better prioritize recovery actions.

Dr. Heppell drew several graphs to illustrate how populations change over time, relative to extinction probability. She used these scenarios to illustrate the effect of downlisting and/or delisting criteria and recommended the criteria include more than just a target number of nests. She also reminded the team that models are tools and there is always a chance of error, plus survival rates can change over time.

Tom Shearer: Kemp's Ridley Website

Mr. Shearer updated the Team on the status of the website: Kempstridley.fws.gov - and noted that there is no www at the beginning of the address. Among the purposes of this website is to keep stakeholders informed.

May 10-11

Ms. Ruiz gave an update on the upcoming **23-27 May Tri-lateral** meeting between Mexico, Canada, and the U.S. She noted that the Mexican government plans to bring a statement about their concern regarding road paving and development plans at and near Rancho Nuevo.

ESA 5-Year Status Review - Ms. Conant gave an overview of the 5-year status review process. She explained that the review examines the original listing factors in light of the best available information at this time to ensure that the ESA designation is still appropriate. This status review is not a petition for rulemaking; rulemaking is a separate process that occurs after the status review, if a change in status is warranted. The public has the opportunity to comment on the review and recommend a change in status also. All comments and recommendations must be accompanied by reliable scientific data. Ms. Conant explained that the 5-year status review is a legal mandate under the ESA, and NMFS and the USFWS cannot wait for Kemp's recovery team to complete revising the recovery plan. The Services are reviewing all sea turtle species simultaneously, and it is not appropriate to omit any one species. The status review process occurs parallel to the recovery planning process. The recovery planning process will review listing factors as well, so the two processes are linked in this way. The recovery planning process takes into account the international nature of the Kemp's ridley.

Ms. Ruiz also explained CONANP's activities relative to recovery planning. There are 25 consulting groups under CONANP tasked with developing consensus recovery strategy documents. Each must contain action plans, implementation dates, and responsible parties. The documents generally apply for 5 years, but some expire in the second year with option to review and/or revise.

Recovery Criteria - Ms. Long presented the loggerhead recovery criteria that were developed by the Loggerhead Recovery Team. The Team then discussed what types of data would be useful for including in the Kemp's ridley recovery criteria. Several team members suggested using female remigration interval and life span. Much of this data (e.g., tag returns 1982-1995, 1998) are available in Mexico. Ms. Jimenez volunteered to work with Dr. Heppell to analyze those data and develop parameters for extrapolating to recovery criteria. One team member noted that they should work with Rene Marquez as well because his data supplement those from the Mexican National Fisheries Institutes. In addition, Mr. Pena has recent data from 1990 through 2004. Team members noted that volunteers are not tagging as many adult females in recent years, which factors into determining nest frequency for example. The Mexican NFI data on the proportion of females observed fluctuates between 65-80% depending on the year and there is no information on females nesting on adjacent beaches. Team members also noted that different types of tags were used and that we don't know the percentage of tag loss. Until 1998, there was no way to evaluate tag performance; after 1988, females were double tagged with pit and monel tags. Results show high tag retention throughout a given season (~90%), but tag loss between years is still undetermined. Therefore, we can estimate the number of nests per female in a season. However, as one team member noted, the number of nests/female also varies with age and reproductive experience. Dr. Heppell explained that recent data are important because currently the population is probably close to a constant proportion of females nesting for the first time. Thus, recent data should be best for estimating numbers of nests/female. Because tagging effort has decreased as arribadas have expanded, the most recent years of data may not be the best for estimating the number of nests/female. This number of nests/female is also used for determining reproductive values. Dr. Heppell calculated the variance in reproductive values, suggested using a range of reproductive values, and then ground truthing the accuracy of reproductive values. Mr. Pena, Ms. Jimenez, and Dr. Abreu-Grobois will collate and analyze those data. There was discussion about including a minimum arribada size as one criteria if we can develop a scientifically credible justification and rationale.

Threats Analysis Process – A working group (Alberto, Therese, Selina, Sheryan, Carmen, and Kristy) met after the meeting ended on Day 2 to modify the threats analysis process. Dr. Abreu presented the modified threats process on the morning of Day 3. The working group aimed to simplify the process while still including as much information as possible. The Team had previously agreed to use the concept of reproductive values, which was retained in the modified process. The first step is to identify known threats and assign order of magnitude – 10^2 , 10^3 , etc. The working group decided to use a matrix similar to the matrix the Kemp's team has already been using and similar to what the Loggerhead Recovery Team used. The Team noted that there is not as much information available on Kemp's ridleys as there is on loggerheads; therefore, the Kemp's Team opted to use a different ranking system for threats. This alternate system uses an order of magnitude within each cell. The Team decided to clearly identify cells where we believe there may be an interaction (mortality), but no data exist and cells for which we believe there is no mortality.

The Team also discussed using reproductive value (scaled to hatchlings) or reproductive equivalents (scaled to adults). For example, 1 adult is equal to 400 hatchlings or 1 hatchling is equal to 0.003 adults. Some team members felt there is a lot of value in showing that it takes

many hatchlings to make one adult, as illustrated by adult equivalents. Additionally, the concept of reproductive equivalents is common in scientific literature.

The Team decided to use two color scales – one for individual cells and one for the summation cells (column cells). Further, the team decided to use two identical tables – one including the magnitude of each threat and then a second table with reproductive equivalents calculated in each cell. The team opted to wait until all the tables are populated to the best of their ability before applying the color scheme. After the reproductive equivalents tables are completed, the team decided to determine the bins and color scheme based on the range of values. The color scheme would indicate the threat severity. Ms. Conant noted that most of the cells in the matrix have already been filled in, but the Team must assign a magnitude if information is available or use a Delphic approach if information is unavailable. One team member noted the importance of data quality in the sum table. For example, 3 out of 4 cells in a particular column may contain information, as opposed to 1 out of 4 in other columns. This approach is similar to the Loggerhead Recovery Team's approach because each cell represents a best judgement based on available data combined with a Delphic approach.

One Team member commented that the post-TED model is based on information that is already 15 years old and does not account for the new larger TED and the effect that has on the population. One Team member also suggested having two trawl fishery columns in the threats tables – bottom trawls with TEDs, bottom trawls without TEDs.

Step-down Outline: The Team discussed the step-down outline at length and developed a draft document.

Next Steps

The Team will complete the threats tables over email prior to the next team meeting.

The Team discussed holding a second 1-day U.S. stakeholder meeting in early November 2005 in Houston (subsequently delayed and planned for February 2006).

The Team suggested writing a letter to the Mexican INP from the Recovery Team and NMFS to highlight Carmen Jimenez's participation and to encourage participation of the Mexican Fisheries Institute in the Kemp's ridley recovery planning process.

It was agreed to hold the next team meeting at the National Conservation Training Center, in Shepherdstown, WVA the last week of September (subsequently cancelled and rescheduled to the second week of November due to Hurricane Rita)