From:	Mike Murray
To:	sandy_macpherson@fws.gov
Cc:	david rabon@fws.gov; Michelle Baker
Subject:	Fw: Turtle presentation guidance
Date:	10/31/2008 09:12 AM
Attachments:	Turtlle expert Present OutlineV2.pdf

Sandy,

Here is the "final" version of the subcommittee's list of sea turtle topics hat they are interested in. from what I can tell it is the same (or very similar) to the draft version that I sent you previously. My suggestion is that you consider discussing any questions about it with David and Michelle. May also be worthwhile for them to brief you about issue history here and group dynamics.

Thanks,

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	Subject	Turtle presentation guidance

Please find attached guidance from the workgroup on the presentation coming



up on turtles for the next Committee meeting. This has been developed and reviewed by the work group.

PAT FIELD

<u>eta</u>

Turtlle expert Present OutlineV2.pdf

TURTLE MANAGEMENT PRESENTATION AND DISCUSSION

The below provides a detailed framework for how a presentation on turtle management to the Cape Hatteras National Seashore stakeholders might be organized. This was developed by interested members of the Negotiated Rulemaking Committee. It is recognized that this is an extensive annotated outline and may not be covered within the full time allotted, but the members ask that as much ground as possible be covered.

Presentation and Discussion Goals:

- Educate the Committee about turtle management (some know a great deal, some know very little)
- Provide context for how turtles are managed at CAHA versus elsewhere for comparison and contrast
- Share draft Recovery Plan changes as they pertain to CAHA
- Provide recommendations on CAHA future turtle management

Detailed Outline

A. *Educate*: Provide a brief overview of turtles: species, habitat, status nationally and globally, and how North Carolina turtle populations fit into overall turtle habitat, survival, etc.

B. Context and Comparison:

B1. To the greatest extent possible over the last 10 years, place the CAHA turtle management practices and data in the context of and comparison to the following. Please share what we have learned about what is working, what isn't, and why. Please note how much variation there is or isn't across units/areas where turtles are managed actively.

- 1. The U.S. Southeast
- 2. Adjacent or close-by areas
 - a. USFWS Back Bay Refuge, VA
 - b. USFWS Pea Island Refuge
 - c. CAHA National Seashore
 - d. Cape Lookout National Seashore

B2. Data: To the extent possible, please review and share information regarding the above comparisons regarding the following metrics.

- 1. Number of nests laid.
- 2. Number of nests relocated.
- 3. Number of false crawls and relevance.
- 4. Average number of eggs per nest.
- 5. Number of nests lost.
- 6. % eggs that hatched.
- 7. % hatchlings to enter ocean waters.
- 8. Estimated sex ratio of hatchlings.

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9. Related habitat metrics such as sand compaction and other variables

B3. Impacts. Please discuss the relative ranking of cause for loss of turtle resources more generally, and specifically to CAHA, regarding:

- 1. Weather
- 2. Predation and species of predator
- 3. Human (pedestrian, other)
- 4. ORV
- 5. Stationary lights at night (street lights, homes, etc.)
- 6. ORV lights
- 7. Other

C. *Draft Recovery Plan*. Given the draft Recovery Plan, please describe how that may impact (or not) Cape Hatteras turtle management. Please note how certain recovery plan recommendations may or may not be applicable in North Carolina versus the Gulf, Florida, or elsewhere (i.e., tire rut removal, concentration of nests, turtle hatcheries, etc.)? Consider:

- 1. Light regulations and relation to buffer distances.
- 2. Night driving and recommended times for closures (and how differing choices affect risks and risks to what, such as nesting, hatching, etc.)
- 3. Seasons/dates of actions and measures
- 4. Other

E. *Recommendations for management at CAHA*: Please offer your advice on scientifically-based recommendations for management at CAHA based on the unique characteristics of the area and the previous decades data and for turtle management at CAHA. These include:

- 1. Goals (desired conditions) for:
 - a. Number of nests laid
 - b. % Eggs that hatch into ocean
 - c. Sex ratio
- 2. Protective measures needed. Please be clear when the measures are within a range of choices and what measures are linked to other measures.
 - a. Human disturbance (ORV, pedestrian, other)
 - b. Light pollution
 - c. Predator control
 - d. Weather and waves
 - e. Other
- 3. Please share your views on how CAHA can be as efficient and effective as possible in turtle management given constrained resources in terms of personnel, time, and money. Or, in short, which measures tend to give a management unit the greatest gain per unit expenditure of effort.