

From: [Mike Murray](#)
To: [Britta Muiznieks](#)
Cc: [Thayer Broili](#)
Subject: Re: Additional ORV planning information needed
Date: 01/20/2009 10:14 AM

Britta,

Good idea about possibly separating migrating from wintering habitat protection measures. Is the Winter Monitoring Protocol written down? If "yes," would you please email it to me. I suspect that our response on the winter habitat assessment will lack sufficient detail to satisfy Audubon representatives (not that they will object to it, but they may well say it is still unclear to them what we are doing).

Thanks,

Mike Murray
Superintendent
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▼ [Britta Muiznieks/CAHA/NPS](#)

**Britta
Muiznieks/CAHA/NPS**

To: Mike Murray/CAHA/NPS@NPS
cc: Thayer Broili/CAHA/NPS@NPS, Darrell
Echols/CAHA/NPS@NPS

01/20/2009 09:32 AM

Subject: Re: Additional ORV planning information needed 

Mike-
Here's a stab at your list of questions. Let me know if you need more detail.

Britta

Q. How many people are needed to conduct the morning turtle patrol the ORV areas of beach by 0600 each morning? How many needed to open by 0700?

The most important aspect here is the safety of staff/volunteers and the ability to find nests. Being on the beach that early, regardless of condition, may not be the best idea.

Assuming that safety protocols are met, all ORV areas could be checked by 6 am if there were a total of 8 patrollers in vehicles (i.e. not walking). This number would have to increase if ORV areas became fragmented due to resource closures, as volunteers would not be allowed access into bird closures with a vehicle. In order to check all beaches by 6 am, the number of volunteers would need to be doubled (i.e. from 8 to 16). Even then, beach conditions, number of nests that day, and other factors would ultimately determine the time patrols were completed.

In order to finish ORV areas by 7 am we would need 6 patrollers in vehicles. If we wanted to complete all beaches by 7 am we would need 9-10 patrollers. There are some days with current staffing levels when we can complete patrols by 7-7:30 with only 4 patrollers, but this is only if conditions are right and there are no nests.

Ultimately the answer is yes, it can be done but with reservations. Things to consider include:

1. Starting too early puts both staff/volunteers and nests at risk. We need to have the flexibility to adjust based on observations.
2. Even with unlimited people and resources, the Park couldn't promise that every beach would be checked by a certain time on every day of patrol.
3. The biggest issue is ensuring that all volunteers are well trained and adhere to strict guidelines and regulations. Overall, a volunteer program can be an incredible asset to the resources, and certainly helps with community involvement. However, the number 1 priority is the resource. Volunteers may not always agree with our management practices or may have personal agendas that may put the resource at risk. We need to be very careful about the duties that those volunteers are asked to perform. The Park needs to discuss the ramifications of this internally prior to getting the public involved.

Q. Provide a more detailed description of the migrating/wintering habitat assessment process (e.g., what is the timing of the assessment, what sort of habitat is desirable, what locations will be assessed, etc.). *(Comment: I understand there may have been a draft prepared before the holidays. I don't recall seeing it, and don't know the current status.)*

Background:

The main focus of our winter monitoring protocol is not to identify or count numbers of birds, but to identify migratory and wintering habitat preferences as well as trends over time. If we based it just upon sightings of birds during migration, all beaches would be closed from Whale Bone junction south, as

there is not a single beach on CAHA on which migrant PIPLs have not been observed.

We may want to divide the migratory and wintering seasons – from the end of breeding season to Dec. 1 for migrants and Dec-March for wintering birds. We could then evaluate some closures at the end of November to determine if they can be removed.

Assessment:

Typically assessment should begin as soon after monitoring requirements to the breeding population reaches an end, or is more manageable. Preliminary surveys were performed in 2008 prior to establishing the non-breeding/migratory closures. These surveys gave the Park a baseline to work from in determining current habitat use/habitat changes and should be continued. These surveys were combined with knowledge of past year's habitat use obtained through the Winter Monitoring Protocol to establish the closures. The key habitat types, by frequency of use as determined by the protocol thus far, are; mud/algal flat (54%), sand flat (27%), foreshore (15%), wrack line, backshore and overhead flight make up the remaining observations (4%).

Areas included in the assessment are Bodie Island Spit, Cape Point, Isabel Overwash, Hatteras Inlet, North Ocracoke and South Point, Ocracoke.

Q. Identify what we consider to be the migrating/wintering "hotspots" (i.e., a short list based on our observations and/or any systematic monitoring, overflights, etc. conducted by WRC). In principle, I'm looking for something similar to, but perhaps simpler than, what we have done for the prenesting habitat assessment and the bird breeding hotspots.

South Point Ocracoke, Bodie Island Spit, North Ocracoke .

Q. Provide a good definition of bird "breeding behavior" (i.e., list the various behaviors that are generally accepted as behavioral components of bird breeding activity. (Comment: *There is no definition of this term in the glossary of the Interim Strategy.*)

Breeding displays for PIPLs are: low gliding runs, high-step tattoo, wing-tilts, aerial display accompanied by calls, to include copulation and scraping. (Cairns 1982).

[attachment "Cairns 1982 (Biology and Behavior of Breeding PIPL).pdf" deleted by Mike Murray/CAHA/NPS]

Scraping and territorial disputes by AMOYs signify typical breeding behavior. Territorial disputes can be between two individuals or between two pairs. Pairs or individuals may also defend their territory against unpaired birds. While there is some calling during pair bonding, it can't help distinguish breeding territory.

The fish flashing part of courtship by CWBs can take place anywhere outside or inside of the colony so typically scraping is the only recognizable "breeding

behavior” by which to establish a buffer.

Q. How many AMOY nests occurred within established prenesting areas in 2008 (vs. how many occurred outside of the prenesting areas)? How many of the 2008 AMOY nests would have occurred within one of the "Resource Areas" we've identified in the NPS alternatives for ORV management (vs. how many occurred outside what would be a Resource Area)?

Of the 32 total nests in 2008, 14 occurred within our prenesting areas. If alternative E had been in place 29 of those nests would have been within resource areas. One of the remaining three nests is HIAM05 at Sandy Bay on the soundside. Only two would have occurred on ORV beaches, one north of the Pole Road and one between Ramps 43 and 44. (As a side note, neither of those nests were successful.)

Britta Muiznieks
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▼ [Mike Murray/CAHA/NPS](#)

**Mike
Murray/CAHA/NPS**

01/12/2009 11:56 AM

To Thayer Broili/CAHA/NPS@NPS
cc Darrell Echols/CAHA/NPS@NPS, Britta Muiznieks/CAHA/NPS@NPS
Subject Additional ORV planning information needed

Thayer,

See below for additional information requested of Resources Management.

Q. How many people are needed to conduct the morning turtle patrol the ORV areas of beach by 0600 each morning? How many needed to open by 0700?

Assume the following:

- Patrol of ORV areas is first priority, but all non-ORV areas need to be patrolled too.
- "ORV areas" will be more structured and predictable under the

long term plan than they have been under the interim strategy and consent decree. ORV areas will equal approximately a total of 27-30 miles of beach, as identified in NPS Alternative C or E (or some version of that if there is a Committee alternative). The ORV areas will be various fragments of a few miles each, separated by non-ORV areas.

- Less-skilled patrollers (such as volunteers) could cover the ORV areas in the most efficient way possible (e.g., patrollers could mark crawls and nests, report the information to a coordinator, then keep moving down the beach. The coordinator could send more highly skilled staff to evaluate the reported nests for relocation and/or to install the full buffer fencing)
- Patrol staff would start their shift at 0500 (or be on the beach NLT twilight (1/2 hour before sunrise). See attached sunrise schedule.
- We have as many people and vehicles as you need (e.g., if there are 8 beach segments open to ORVs, then it might take 8 people coming on duty at 0500, with 8 vehicles, per day). "People" may include NPS or WRC paid staff, and volunteers.
- We can work out the logistics (recruiting, scheduling and supervising volunteers; staging vehicles at more locations, etc.)

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I know the staff is very busy and this adds to their workload. It would

be helpful to have the information identified above by **January 19**, if possible. If you or Britta think it would be more efficient to discuss any of the above items with me by conference call before staff spends any more time on it, please let me know.

Thank you,

Mike Murray
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