

**HATTERAS BLACK-CAPPED PETREL PLANNING MEETING**  
**HATTERAS, NORTH CAROLINA**  
**JUNE 16 AND 17, 2009 – MEETING DAYS. JUNE 18, 2009 – ON BOAT**

Attendees, current affiliation

Chris Haney, Defenders of Wildlife, chaney@defenders.org  
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David Wingate, Cahow Project, retired, dwingate@northrock.bm  
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**Discussions:**

David Wingate – Provided a overview of the Cahow (Bermuda Petrel) including the history, lessons learned, and management actions undertaken for the petrel. The importance of working with all stakeholders to conserve a species was stressed.

One key item was that there must be more BCPEs than we know as so many seen at sea! Do a rough ratio of Cahow sightings to known population; could also use sightings of BCPE to estimate abundance.

Ted Simons: Petrel Background:

A number of species have been lost to science. He focused on the Hawaiian/Dark-rumped Petrel (lost and re-discovered). Points covered:

- Probably occurred at all elevations
- Now scattered, in isolated locations (not really colonial – 30 m to 130 m apart)
- Intense research – metabolic, physiologic characteristics of adults, chicks and eggs; pattern of adult tending and feeding, diet and stomach oil
- Management: fencing herbivores out (fences are source of mortality)
- Estimated life history and stable age distribution; clues on where to focus management
- K-selected: Reduce adult mortality! Improve nesting success. Slow returns.
- Predator control and monitoring (look harder = more birds)

Dave Lee: Cuba

Black-capped Petrel in Cuba were seen and collected offshore over an upwelling. Interviewed and spent several nights along the coast watching and listening. Nearly all Pterodroma nesting sites (world wide, including the Caribbean) are on the margins of Tectonic plates.

David Wingate - To find Black-capped Petrels you could look into the geology of the area – they need the vertical faces, or maybe look at the vegetation.

All/Open Discussion: Next Steps

Tag some adults at-sea and possibly find new distributions. This could be done through research at-sea or foraging areas in the Caribbean.

Wingate funded Bahamas cruise when looking for Cahows in the area (fossils found on Bahamas). Observed them in the deep channels between Cuba and Hispaniola.

Birds tagged at sea may lead us to undiscovered populations.

Listening surveys/using playback: Dave Wingate thinks its subadults engaging in courtship calls. Adults (already mated) don't call. In Hawaii, the calling was "cruising teenagers".

Wingate: Found crude ratio of observations to nesting pairs of Bermuda Petrel.

How to capture BCPE at sea for tagging purposes:

BCPE sometimes come to chum, sometimes not. It depends on hunger. Full coverage (seasonally) is not possible since it doesn't pay to go out. Dave Lee tried decoys (injured) since it appears they are attracted to others in distress. It might work to flashlight them in foggy conditions.

Chris Haney: Discussion of Gulf Stream, petrel occurrence

Areas where the BCPE can be found (e.g., tendency to stay on west side of Gulf Stream off of S. Carolina, Georgia); also flight speed and ability and cues needed by these birds cause them to stick to the Gulf Stream. What all this information means to the ability to survey/sample.....the range a BCPE can cover is huge! So it is likely that breeding individuals could be found in the Gulf Stream off North Carolina.

Dave Lee: Birds of Gulf Stream

Hatteras is a biological Mason-Dixon line and thus has high biodiversity where northern and southern birds are mixing. There is low biomass but high diversity. Developed zones based on bottom contours. There is an empty area from 12 miles to edge of the shelf where resources are patchy. Sargassam communities are interesting/unique: found that some species are very Sargassam dependent (Audubon's Shearwater, Bridled Tern, Sabine's Gull) – but not the BCPE. The BCPE is found farther out. In the 70s and 80s specimens were collected and feeding habits and molts were examined. There was a bias in sex and age distribution (60-70% adult males BCPE). Parasite types/feather lice, coils in intestines: information used to work out taxonomy of gadfly petrels.

Concerned about lack of interest in pelagic species (though attitudes changing today). There are concerns about offshore oil drilling; BLM has leases. If lighted structures are positioned at edge of the shelf, then there will likely be mortality. Wind energy is also a looming threat, although NC excludes out to 3-5 miles, fishing hotspots, off of protected areas (National Seashores, military bases). Upon consideration, Dave and others came up with recommended locations (e.g., off of VA banks, where military already tests electromagnetic pulses). There are still concerns however due to a lack of information.

Wind farms might cause upwellings which attract biological resources. An experimental study with

three turbines is currently underway. Also, disturbing sediments causes mercury and other contaminants to be released.

Thought: Look at wind farms in Caribbean and learn from the NC experience?

Thought: List BCPE under ESA? What is the utility of this step? Jurisdiction?

Dave Lee is working on contract with NOAA to look at pelagic long-line bycatch. Have determined there is no risk to BCPE. Greater Shearwaters are caught in the greatest numbers, mostly juveniles.

Wingate: Shearwater bycatch data exists.

Mapping at sea: Ted Simons talked about data sets being produced by Allan O'Connell. Multiple data sets not standardized. Modeling is next. Believes data is available to make a strong case of distribution and probability of occurrence in a particular area. But there is great uncertainty about absolute abundance and trend.

Marcel Van Tuinen: DNA studies

DNA studies provide a taxonomic framework and also answers important management questions. Can use historic samples (feather, skin, bone) and it is not that expensive; \$10 per specimen.

## **AT SEA ISSUES (Action Items in Red)**

**Action Item: Start Draft of Conservation Action Plan – have groups/individuals write up the relevant sections (paragraphs on at sea issues)**

### **THREATS**

#### Oil Gas

Higher Priority: Lighting in the future is the real issue.

#### Ocean Current-driven Energy Technology

Developing priority? Gulf-stream Turbine already exists: Apparatus has blades which are attached to the sea floor. No surface structures ...but would be deployed in petrel zones (very deep water)

**Action Item: Need to research and explore implications - Chris.**

#### Wind

Lower Priority: Not an issue now? Can't be placed where petrels occur now...but future? Wind farms could form upwellings and draw them in?

**Action Item: Dave to write paragraph**

#### Lights on Ships

If multiple, and shining down, not a big deal. Single bright light produces the vertigo. This is exacerbated by fog. Cahow no longer crashes into lighthouse, because of all the housing lighting. There could be some mortality.

**Action Item: Document – who?.**

**Approaches/Tools for All of the Above:**

An ESA listing might help? Bermuda Petrel listed on ESA.

Action Item: Pursue listing - Dave Lee

Recommended best practices.

Important Bird Area (IBA) approach – there is no protected status, but awareness. Marine Spatial Planning (Be sure hotspots are kept in mind.)

Action Item: Explore Policy Solutions – Jessica with Walker, others

Sargassam Harvest - A worry? Sportsfishing interests will protect these areas.

Action Item: Mention this as an issue in the conservation plan, but not of concern?

Fishing: Wary birds. Observations with chum. Other Pterodroma interactions

Action Item: Undertake Literature Review – Dave Lee to write paragraph.

Climate Change - Lower Priority although a huge threat: Melting Greenland ice smothers N.Atlantic drift.

Action Item: Write up scenarios for Gulf Stream (possible implications – range contraction? Salinity changes?) Not much we can do about it. – Chris Haney

[Regarding on-land Rising sea levels: Not known to be of direct concern because of high elevation nesting although people would move upland]

## **INFORMATION THAT IS/COULD BE COLLECTED AT-SEA TO INFORM POPULATION MANAGEMENT**

### Mapping Distribution Based on Sightings

e.g., Allan O'Connell compilation. Don't need much more effort on justifying importance of area off Hatteras. In Gulf of Mexico and Gulf Stream: satisfied with density estimates...statistical rigor off of Atlantic Coast too hard to get. Limitations: birds are so fast, too dynamic.

Recommendation: Don't spend time on surveys in Atlantic and Gulf. Lower Priority.

Females and Younger Bird Distribution – Lower priority, but would welcome additional information from surveys

Action Item: Note that information is lacking for seasons other than summer. Pursue funds for at-sea other times of year (December, April). Improving at-sea knowledge would fill data gaps in information: e.g., population information such as production of young, sex ratios

### Distribution at sea specifically in Caribbean

See above: Lower priority, because technically difficult. Geo-tracking from colony-tagged birds is more likely. But there are good reasons to do this: know little about females and younger birds. Information could be important for wind energy exploration in Caribbean.

Probably lots of local upwellings in the Caribbean (e.g., off Cuba)

Action Item: Find Private boats – undertake observations at sea (and at breeding locations) -- Anyone with contacts – start circulating the idea

Action Item: Find out if anyone posting to eBird/Birds Caribbean – Will

Future actions: Encourage submission of records. Need location and observation time. This will give clues to staging areas, feeding areas. Invest into expert observers for better quality data.

#### Technology – Tagging and individual tracking at sea

Very hard to do and could be risky because it is unclear they'll go back to a colony. One really important result: would potentially lead to a new colony, but risky to the bird. Dave Lee did use decoys, but there is still risk in the use of netting. Experiment with decoys – found a guy that made decoys with specimens. Meanwhile, the technology of transmitters/GPS and netting might evolve. Remote control and animatronics. Lights and recording with petrels.

**Action Item: Write-up of possibilities and feasibility (Attraction techniques, spotlighting, use of decoys, techniques – a contest for decoy development? Testing methods with shearwaters. Continued conversations – Brian, Kate, Pat**

[Optimally – Tagging and individual tracking at colony sites will continue. Goetz is pursuing methods of calls, lights, mist nets... wouldn't even need to find the burrows. (Locating burrows comes with a security risk.)

**Action Item: Write-up of the issue, plans, etc. Stefani, Jim**

#### DNA

Use live-captured birds and historic specimens.

**Action Item: Dave, Marcel, John Gerwin – write up ideas**

Go through and assess all collected samples at once: e.g., vagrants versus collected. 150 samples or so exist. Need Analysis -- costs and coordination

### **ON LAND ISSUES (Action Items in Red)**

**Action Item: Flesh out of the following at Caribbean Workshop, so that sections of Action Plan relating to breeding sites can be developed:**

#### At Known Breeding Sites

Capacity building for species/habitat management. Look at:

Technicians/biologists – exchange at colonies (Cahows), vocalizations, identification,

Educators

Park Managers

- NOAA training? (Include Caribbean folks)
- NPS Training on Outer Banks
- Currently: VCE, Cornell and Audubon (Project Puffin)

#### ***Haiti:***

Revisit/reactivate existing plans (Woods and Sergile)

Jim Goetz attempting to locate and see if can be fitted with transmitters.

\*Track Progress/Continuing support from USFWS R4/Stefani working with Jim

Consider Macaya versus LaVisite for opportunities

Context:

Core redevelopment

Reforestation programs for water capture/quality

Carbon sequestration

USFS, Jadora

Social: Working forests, tree planting, alternative fuels (charcoal provision), Clinton delegation to Haiti

Ecotourism solutions? LaVisite has a lodge? Private enterprise...

### ***Dominican Republic:***

Staff/managers turnover with each new political appointment.

Ecotourism

Better possibilities for secure research and progressive management

Sierra de Bahoruco National Park:

Tossing around idea of active management/attraction to artificial burrows:

Suspicion that it is nesting substrate. Probably losses to predator.

ABC worked with government to do a management plan

Argument that burrows are limiting factor.

Enclave: Artificial burrows where breeding population secured and excellent learning opportunity.

Possible downsides: Competition among juveniles.

Try one in Haiti as well?

“Pro-active, fast-track”

Need a local person who loves the resource

Need long-term commitment so that the construction project is a success

- Project: Housing Project for Prospecting Juveniles.

Action Item: Review developments in Petrel Burrow Design – David Wingate (research into materials – Will, Brian)

Action Item: BallPark proposal for a project – come away from SCSCB with idea of feasibility (David, Will, others)

- Project: Save LaVisite via Ecotourism Lodge

Community Outreach – work with zoos (Port au Prince) and in D.R.

Special Needs and/or Activities of BCPE

Make sure right order...cover your bases...so as not to put breeding sites at risk.

### Unknown Breeding Sites

Similar to above for at-sea distribution in Caribbean:

Expedition approach...a low priority for funding, but seek opportunities:

Beata Island (off of DR) – ask DR’s to look?

Redonda (Antigua/Barbuda)

Provide guidance on how to detect:

Dawn/dusk watches, listening in appropriate seasons.

Find a wealthy enthusiast to undertake a cruise, take on a naturalist, put under the umbrella of an NGO

**Action Item: Pursue contacts via word of mouth -- Everyone**

Draw on clues from DNA analyses, at sea observations, tracking devices

## **PARTNER IDENTIFICATION**

*For all: depends on activity/stage*

*Partnership varies: e.g., funders, writers of letters of support, on-the-ground projects*

*All: Be brainstorming additional contacts*

Groups with overlapping priorities (think Local and International)

### Species and Bird Conservation Focus

ABC, Birdlife International (BirdLife International and the Global Seabirds Programme are looking to establish a Pterodroma and Pseudobulweria Conservation Group), RARE (willing to engage on species but limited to education/community support and requires match), SCSCB, CEPF (CI, Japan?, MacArthur, etc.), CI alone, AZA, IUCN Reintroduction Specialists Group Pterodroma group?, State Department, North Carolina Audubon USFWS – Focal Species Seed Money from Washington Office and Southeast Region, Neotropical Migratory Bird Conservation Act money, Wildlife Without Borders program Alliance for Zero Extinction (AZE), Cahow project (technical exchanges)

Pursue Species Champion/Species Steward? Ask Birdlife

### Caribbean Conservation Interests

Disney

Cruise ships?

### Interest in Marine Conservation

Utilities/Interests in Alternative Energy

NOAA Observer Program

Fisheries

BLM/MMS

DoD – historic ties to Haiti? Or other Caribbean Islands? (explore Legacy Program)

Duke Marine Lab – ships of opportunity

Marine Mammals groups/surveys

### Interest on Caribbean Island Habitat Restoration

Forest Restoration – local plus US Forest Service International Programs

Social/Economic – many huge organizations, UNEP, USAID, faith-based organizations

Island Restoration through Vertebrate Removal – Island Conservation

### Interests in Caribbean Biodiversity:

Iguanas, Jamaica Petrel group, Endemic frogs

Vermont Center for Ecostudies  
Florida State Museum (herps)

Contacts for Hands On/“On-Site” Field Work

RSPB secondments to British OTs  
Cuba Academy  
Peace Corps (status)

DR/Haiti Conservation in particular:

Be sure to remember to include Academia (graduate students from other countries), Public Institutions  
Wycliff Jean - rapper

Research/Science

NSF Dissertation Approval Grants, Pre-Doc stuff, Cornell Lab

Funders

Depends on projects.

## **ORGANIZATIONALLY, HOW TO CONTINUE CONSERVATION PLANNING & IMPLEMENTATION**

**Basic Principles:**

*For anything to happen,  
Need local champion(s)  
Need funded projects*

**Central Coordinator (Elena)**

**Action Groups**

Don't "over-organize"  
Expectation of leader or chair: provide write up of issue/recommendations/intentions for Plan; pursue recommendations/intentions; have quarterly conference calls

**Means of Communications**

Have email list; website\*. Need also active pursuit of appropriate communications.

**Timelines**

Draft up existing information on ideas, recommendations – July 1, mid-July  
Accelerate after SCSCB  
Target completion of Action Plan for the World Seabird Conference (Sept 2010). Wherever plan is unveiled, ensure participation by Haiti/D.R.

**Conservation Plan**

Follow accepted format for other international plans. CMS? Or some convention that applies to the Range States (e.g., CBD, Western Hemisphere Convention, World Heritage Convention?)

**Monograph**

Complete ASAP after SCSCB meeting

**Another meeting**

To be determined if necessary. Decide after SCSCB, or as target deadline for Plan approaches

**Organization**

Range states should have the lead.

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**\*Tidbits on Communications:**

Cross-reference *Pterodroma Hasitata* and *wicbirds* websites. Move *Pterodroma hasitata* off of USFWS and onto *wicbird* server. Add Caribbean IBA References. Note: Jim Wiley's Caribbean Birds Bibliography to be uploaded to *wicbirds*.