Discovery of a new Black-capped Petrel (*Pterodroma hasitata*) nesting location in Haiti.

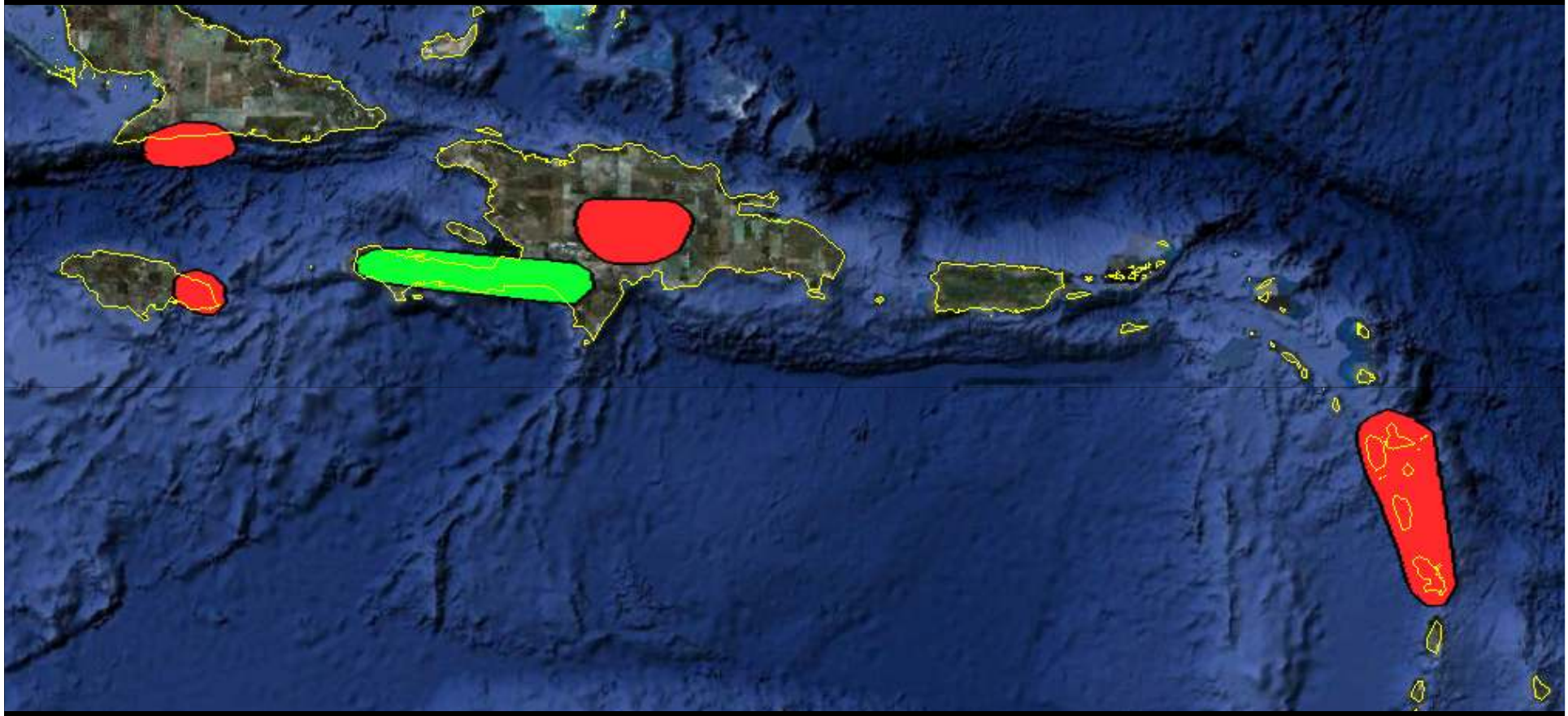
Ernst Rupp*, Esteban Garrido*,
Jairo Isaa Matos*, Gerson Féliz*, José Luis Castillo*,
Jim Goetz, John Gerwin*****

*Grupo Jaragua,
**Cornell Lab of Ornithology,
***NC Museum of Natural Sciences

Black-capped Petrel status

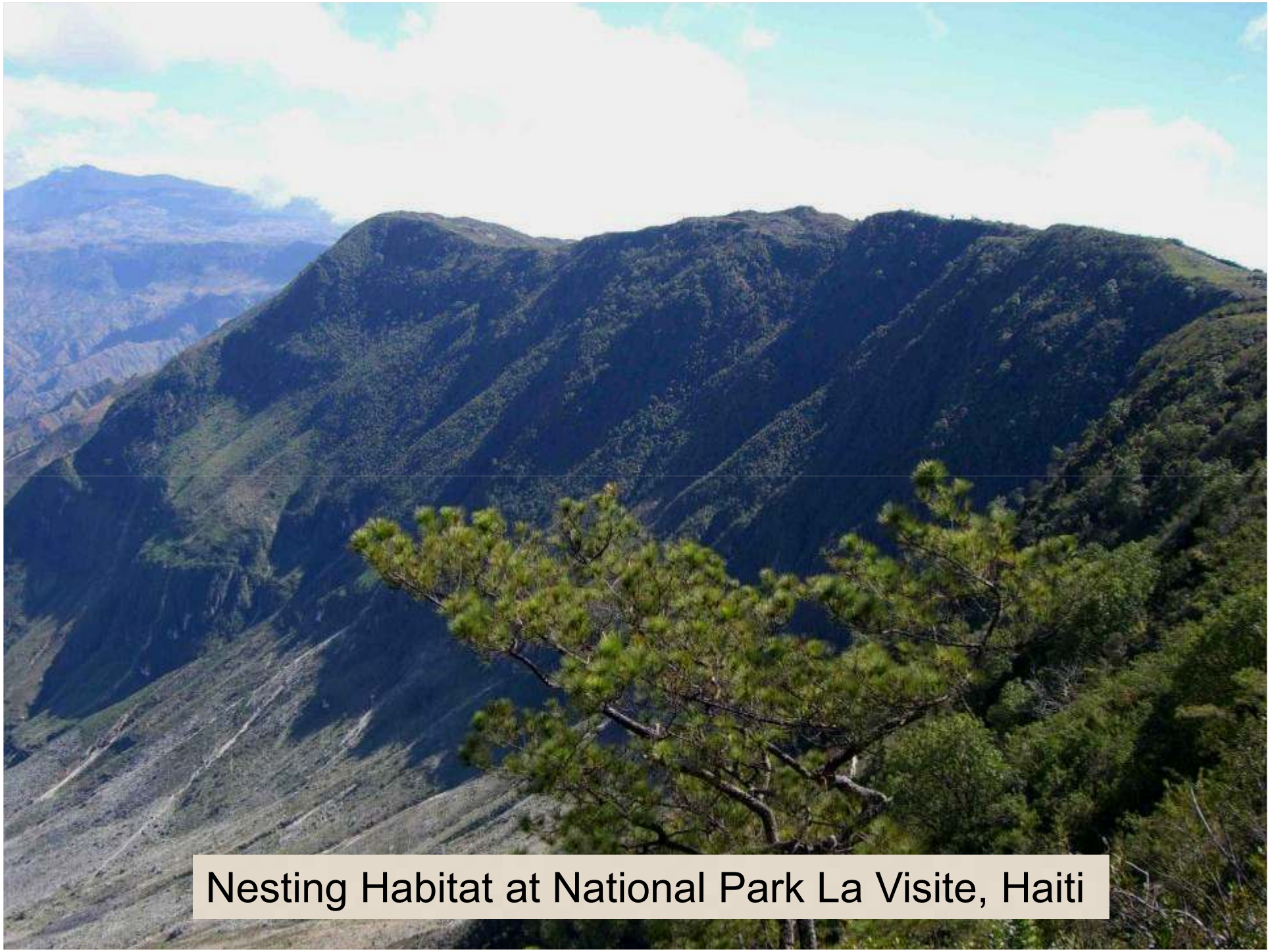
- Historically abundant in Greater & Lesser Antillies
- Extirpated from Lesser Antiles in 1800's.
- Nesting known now only on Hispaniola.
- Main threats: habitat destruction, introduced mammals
- Population estimate: ~ 2000 breeding pairs.
- IUCN Redlist status: endangered
- Urgent need for study of distribution & basic breeding ecology

Current confirmed and potential breeding areas



confirmed BCPE nesting

potential BCPE nesting



Nesting Habitat at National Park La Visite, Haiti

Nesting Habitat at National Park Macaya, Haiti

Nesting Habitat at Loma del Toro, Dominican Republic

Investigations on Hispaniola: 2008-2011

Objectives

- Confirm presence of petrels in historic areas
- Conduct initial evaluation of threats to petrels

Methods

- Survey historic sites
- Search for and monitor nests

Results of Surveys 2008-2010

Ecology

•*Distribution & Abundance*

- ~ 90% of population at La Visite
- ~ 5% each at Loma del Toro & Macaya
- need much better tools to determine abundance

•*Find nests* – yes, but difficult

Threats

- *Habitat loss* – expansion of agriculture and pasture, fires
- *Introduced mammals* - rats, cats, dogs, pigs, mongoose
- *Communication towers* - Chiefly at Loma del Toro

People (mainly at National Park La Visite)

- *Lack of economic alternatives* – no basic or enviro education
- *Poverty cycle* – Hurricanes and earthquake make it worse
- *Lack of resources* – natural, human, and financial

Results of Nest Searching & Monitoring

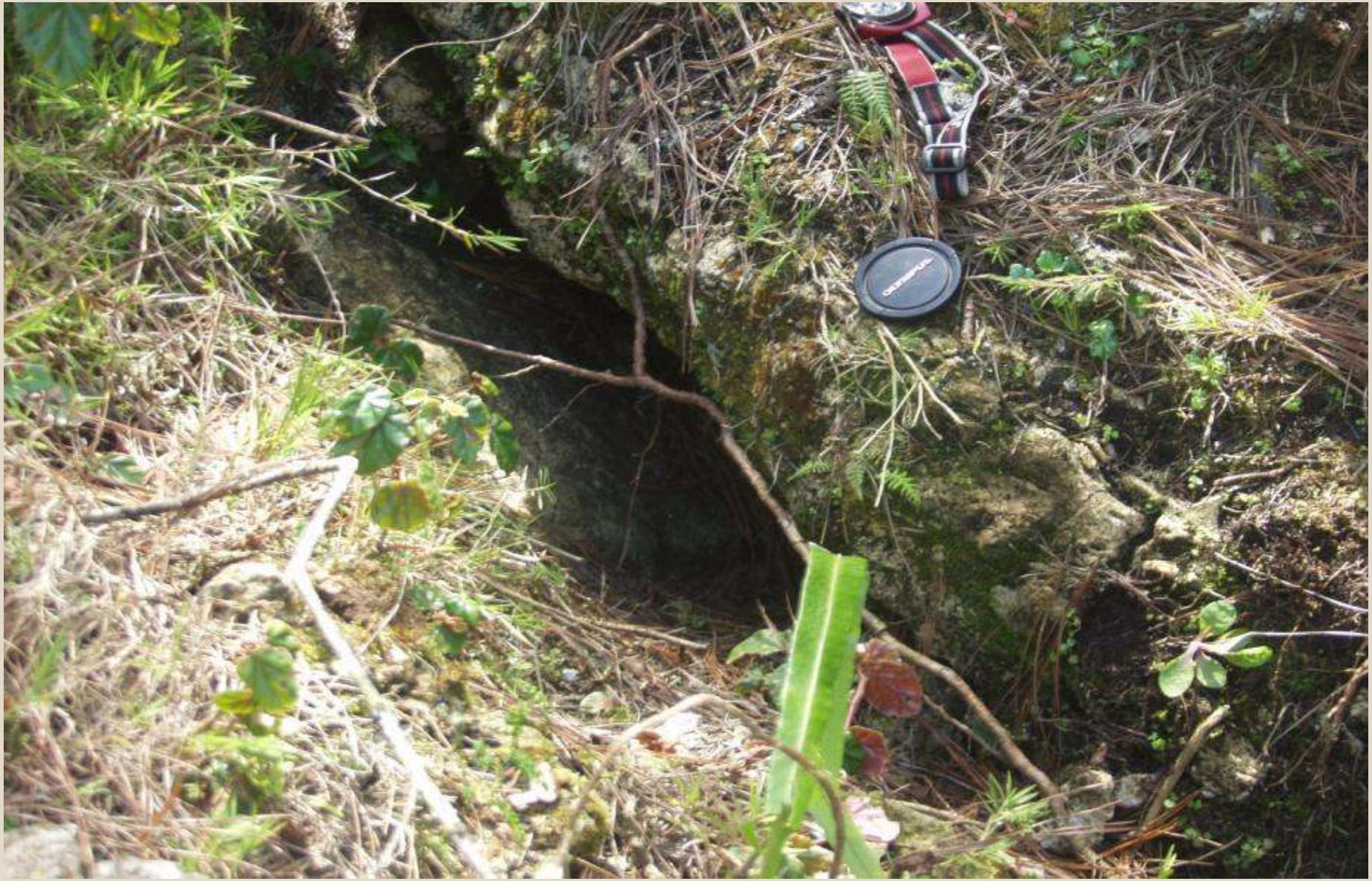
Three nests found on Morne Vincent, Haiti

Nest 1
At the back of a small long cave, 1m high and 8m deep.

Nest 2
In a ravine, in a 0.5 m deep limestone crevice.

Nest 3
In the same ravine, close to nest 2, also in a 0.5 m deep limestone crevice.

Entrance to cave containing Nest 1



Limestone crevice containing Nest 2

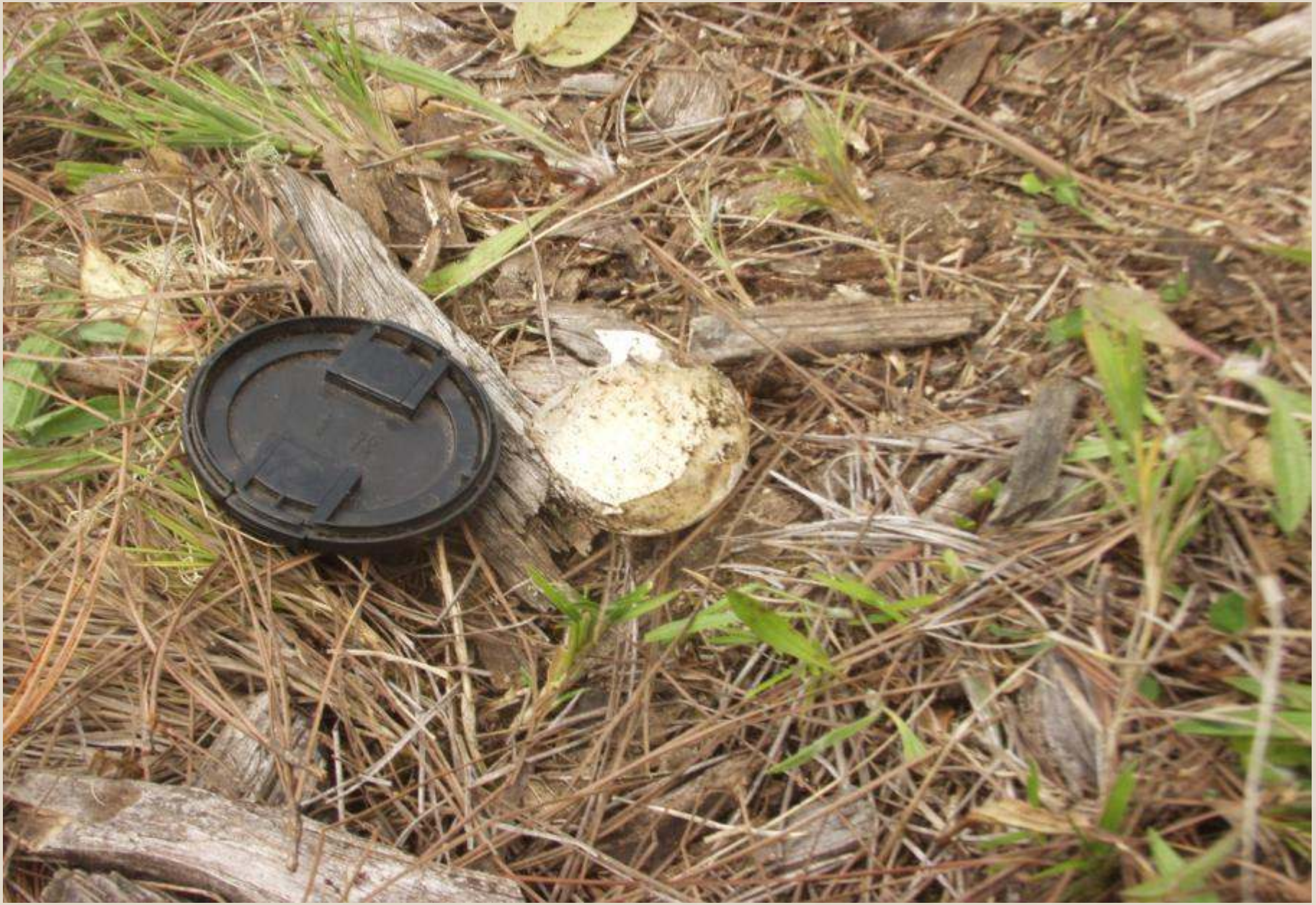
Cronology for nest 2 and 3

Nest 2:

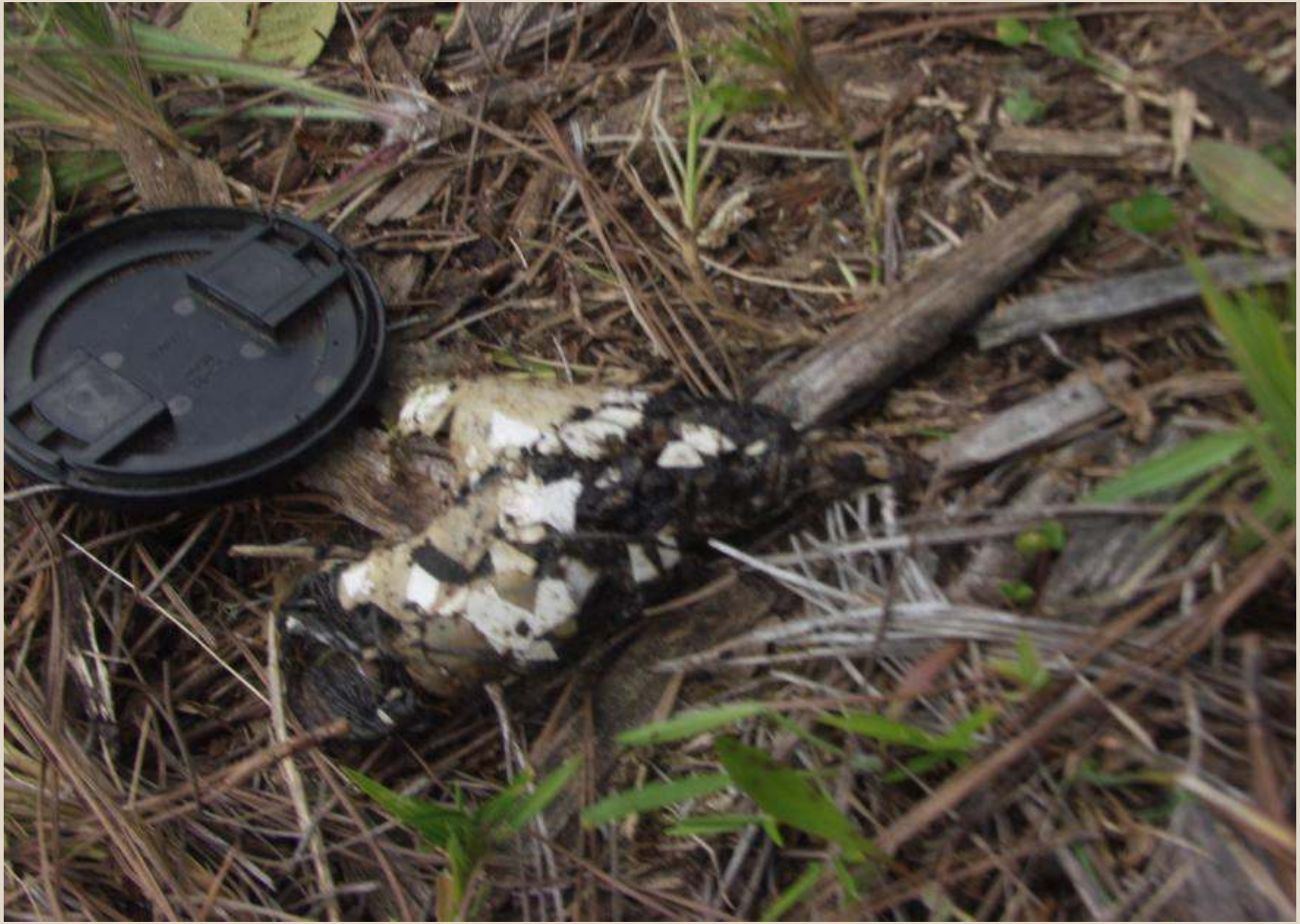
March 13: Brooding Adult
April 23: Eggshells, but no chick

Nest 3:

April 23: Remnants of eggshells with unhatched chick



Nest 2: Remains of eggshell



Nest 3: Remains of egshell and unhatched chick

Nest Monitoring Methods

- Monitored parental activity and chick growth at Nest 1
- Used Reconyx HC 500 camera trap
- Monitored 93 nights from 19 March - 21 June
- Recorded 37 Adult visits
- Monitoring continues
- The two adults can be distinguished by color of neck

Nest Monitoring Results

Adult arrival time at nest

- Range = 21:00-03:00h
- ~85% between 21:00 - 2400h

Duration of adult nest visits

- Range = 30-246 minutes
- ~ 80% ≤ 80 minutes

Duration between adult nest visits

- Range = 1-8 nights
- ~ 70% ≤ 2 nights

•**Count of visits/night**

- 1 vist on 29 nights,
- 2 visits on 8 nights.

Bird A entering the nest

Bird A leaving the nest

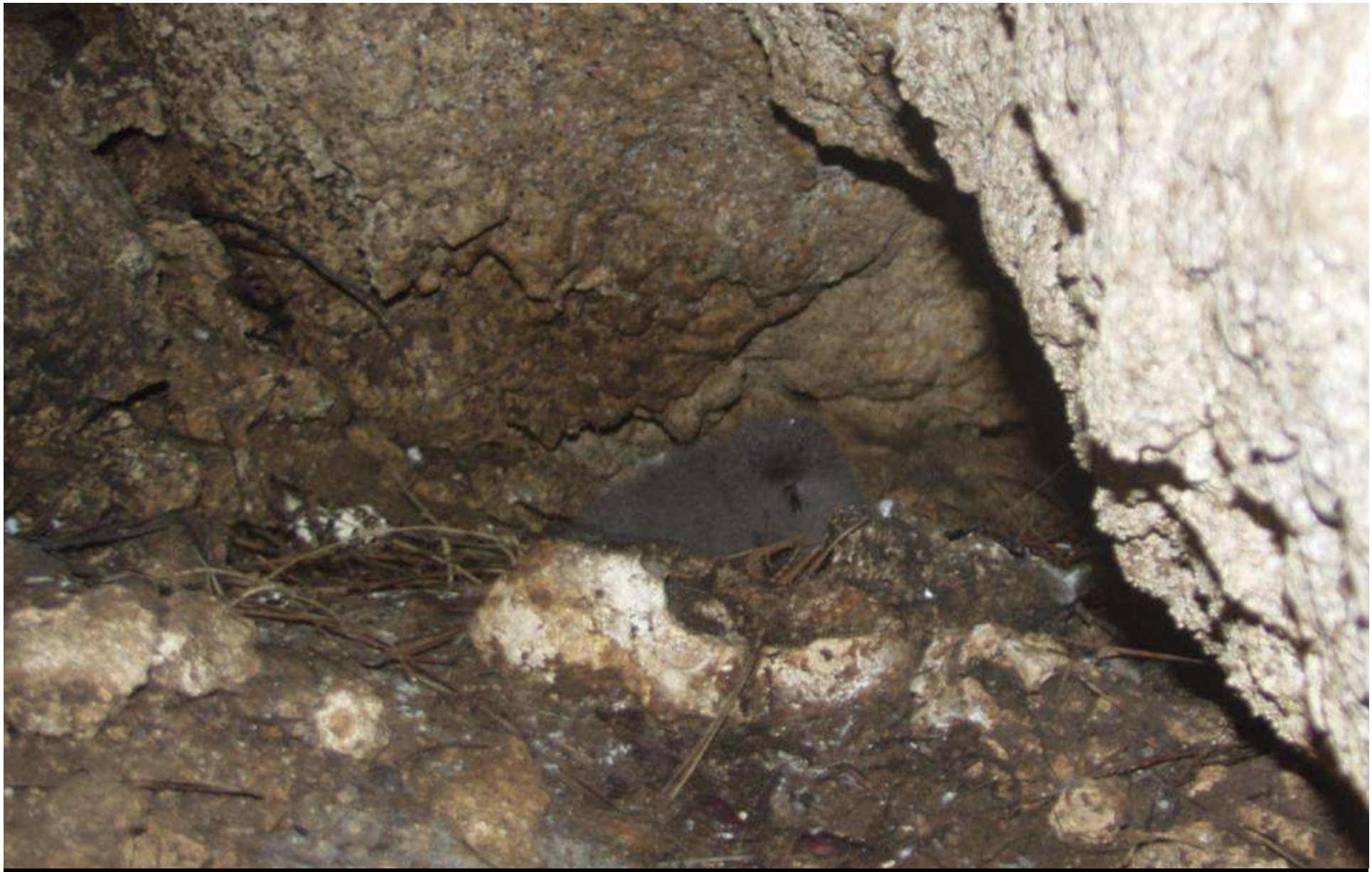
Bird B entering the nest

Bird B leaving the nest

Cronology of Nest 1

March 3:	Brooding adult
March 13:	Brooding adult
April 2:	Small chick (~ size of baseball)
April 24:	Chick somewhat bigger
May 14:	Chick still downy (~ ½ size of soccer ball)
June 21:	Chick with feathers, near fully grown


3 March - brooding adult



2 April - Chick ~ size of a baseball


2 April - Chick is size of large grapefruit


14 May - chick still in downy feathers


24 June - Chick nearly full grown

13 March - Rat nearly full grown

24 May - Dog, fully grown

Future Work

Distribution & Abundance

- Continue surveys to investigate distribution.
- Use advanced methods: radar, infra-red imaging, satellite transmitters.

Breeding ecology

- Search for and monitor natural nests
- Create and monitor artificial nests
- Study & mitigate impact of mammalian predators

Work with communities

- Study community use and of habitat and knowledge of petrels.
- Engage communities to conserve natural resources.
- Create conservation incentives, potentially with payment for ecosystem services


Working with communities

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