

BREEDING SUCCESS OF RED-BILLED TROPICBIRDS (*PHAETHON AETHEREUS*) ON ST. EUSTATIUS AND SABA



Presented by Josh Robertson



IMPORTANCE

Birds globally decreasing

80% of 346 seabirds in decline

Ocean Health Indicators

Several threats:

Habitat loss

Oil spills

Predation

Climate change



RED-BILLED TROPICBIRD

Rarest & most vulnerable Tropicbird

Iconic seabird

Most of life spent at sea

Lay 1 egg – vulnerable

Shared parental care



GLOBAL CONTEXT

Phaethon aethereus



5,000 – 20,000 Individuals

Del Hoyo et al. (1992)



CARIBBEAN POPULATION?

Region	Category	Count	Percentage	Source	
Lesser Antilles					
Sombrero	—	b?		van Halewyn and Norton, 1984	
Redondo	b?	c. 100	(5%)	van Halewyn and Norton, 1984	
Antigua	f	c. 50	(2%)	K. Lindsay, pers. comm.	
Barbuda	c. 10	50-100	(0.2%)	(5%)	K. Lindsay, pers. comm.
St. Maarten	15	15	(0.3%)	(7%)	van Halewyn and Norton, 1984
Saba	50-100	750-1000	(2%)	(35%)	M. Walsh-McGehee, pers. comm.
St. Bartholomew	—	e		Van Halewyn and Norton, 1984	
St. Eustatius	>10	30	(0.2%)		Voous, 1983
Montserrat	—?	c. 100	(5%)	J. Daley, pers. comm.	
Guadeloupe	68	69	(1.2%)	(3%)	Guadeloupe Wildlife Dept., pers. comm.
Dominica	10+	e	(0.2%)		R. Winston, pers. comm.
Martinique	c. 10	c. 50	(0.2%)	(2%)	van Halewyn and Norton, 1984
St. Lucia	?	?			Evans, 1990
St. Vincent	b?	e?			Evans, 1990
Barbados	—	e			P. A. Buckley, pers. comm.
Grenadines	e	b			Evans, 1990
Trinidad & Tobago	—	c. 400		(20%)	Van Halewyn and Norton, 1984
Caribbean Basin	—	c. <100		(5%)	van Halewyn and Norton, 1984

Lee (2000)

CARIBBEAN POPULATION?

Lowrie *et al.* (2012)

Country/Territory	Breeding Pairs	% Global Population
Anguilla	86	0.4
Antigua & Barbuda	402	2
Barbados	5	0.00
Dominica	23	0.1
Grenada	361	1.8
Guadeloupe	999	5
Martinique	101	0.5
Montserrat	213	1.1
Saba	360	1.8
St. Barthelemy	291	1.5
St. Eustatius	340	1.7
St. Kitts	NA	NA
St. Lucia	66	0.3
St. Maarten	5	0.0
St. Martin	144	0.7
St. Vincent	554	2.8







CAMERA TRAP PHOTOS

2015-03-17 9:00:55 AM

M 1/3

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CAMERA TRAP PHOTOS

2014-12-23 8:57:57 AM M 2/3

○ 26°C



CAMERA TRAP PHOTOS

2015-02-18 12:47:22 PM M 1/3

○ 33°C



CAMERA TRAP PHOTOS

2015-02-06 5:05:03 PM M 3/3

33°C



CAMERA TRAP PHOTOS

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26°C



CAMERA TRAP PHOTOS

2015-02-15 7:14:24 PM

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29°C



805



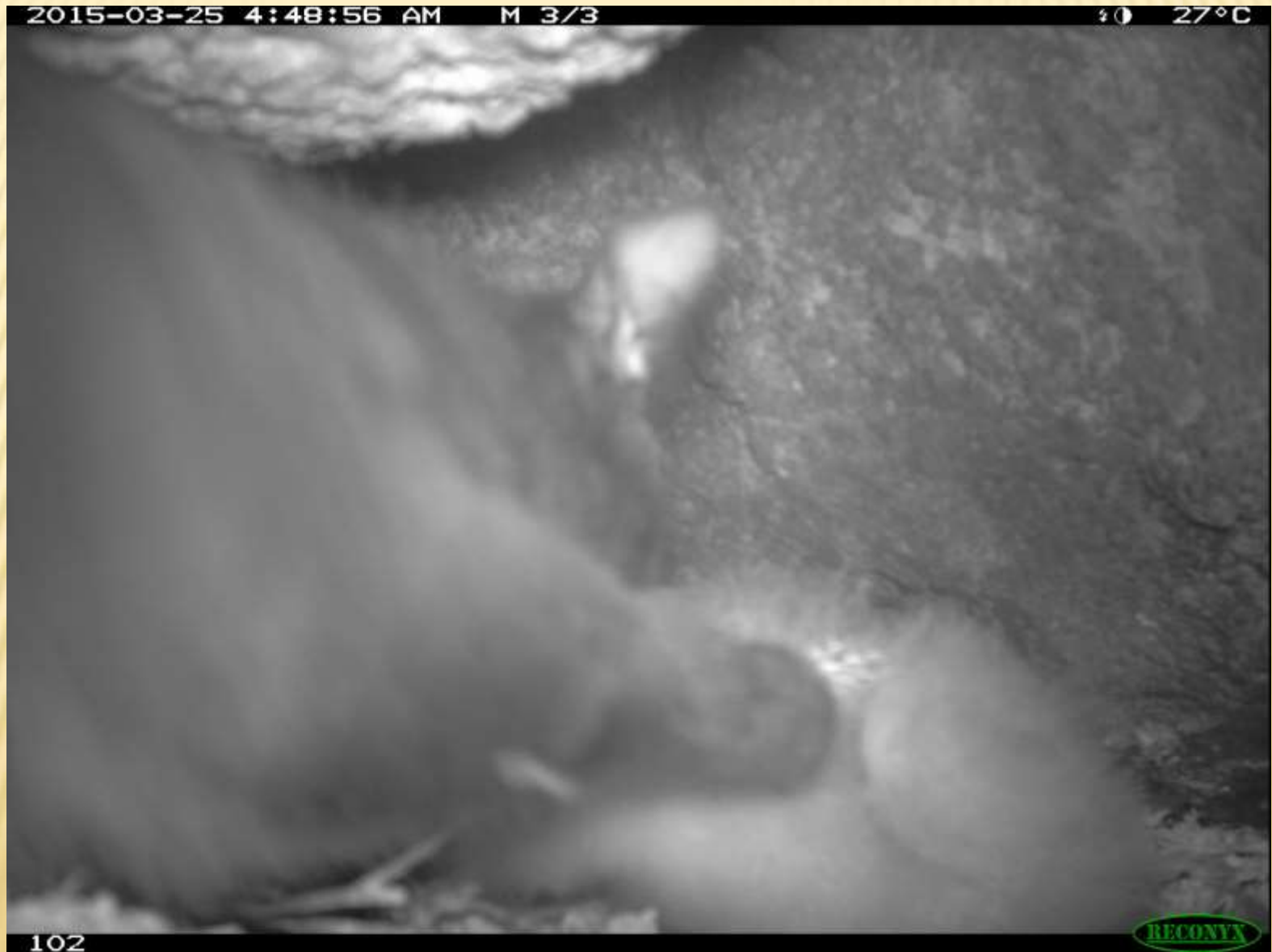
CAMERA TRAP PHOTOS

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32°C

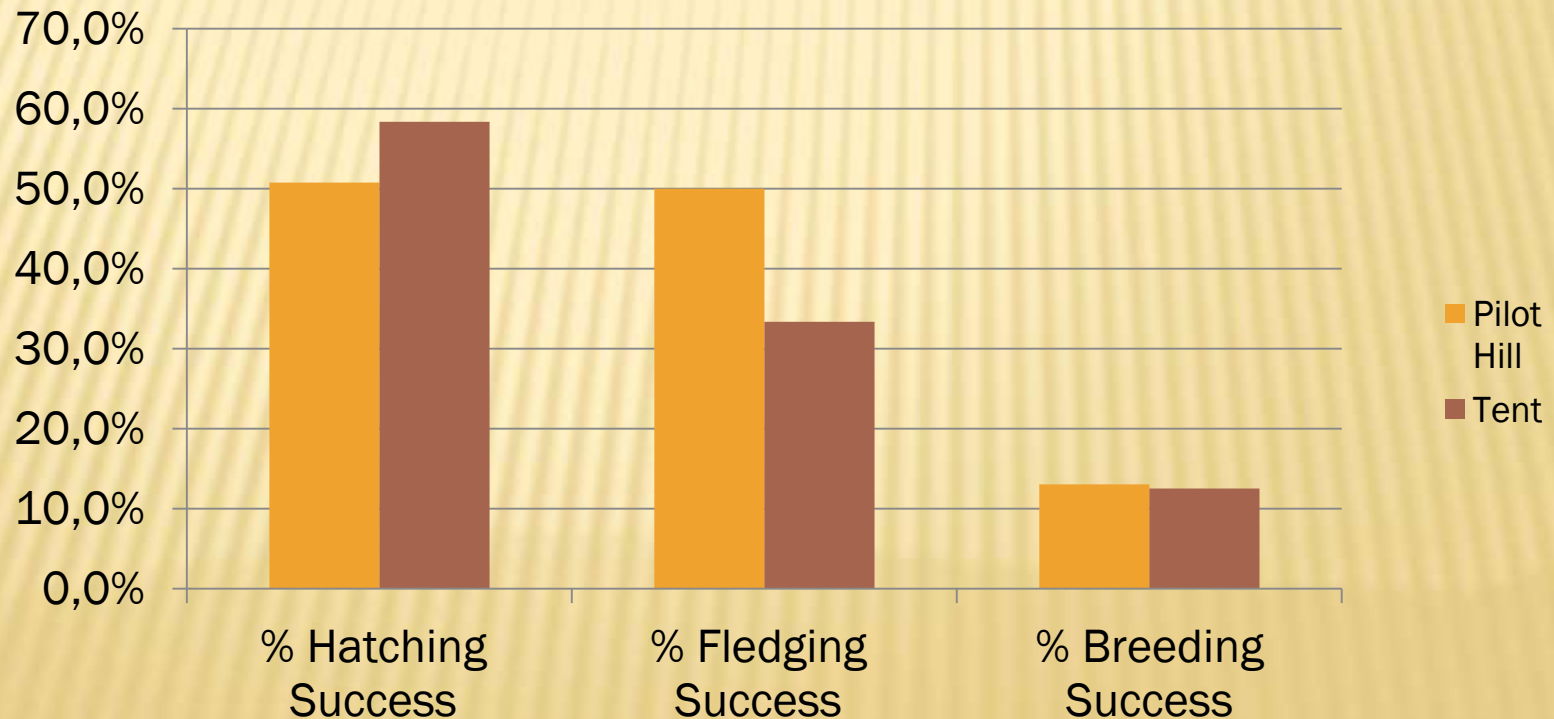


CAMERA TRAP PHOTOS



PRELIMINARY RESULTS

Site	Pilot Hill	Tent
Confirmed Nesting Pairs	70	9
Eggs	72	12
Eggs still in nest	7	4
Chicks	31	7
Chicks still in nest	19	4
Fledged	6	1



THREATS & CONTROL

Saba = Rats and Cats
Simultaneous eradication

Statia = Rats
Rat eradication

Successful on Great Bird Island:
Nests increased by >500%
(Bright *et al.* 2014)



OTHER THREATS

Goats/Erosion

Frigatebirds

Climate change

Avian Malaria?

Coastal Developments



CONCLUSION

Under-researched iconic seabird

Regionally and globally significant populations

Significant threat from invasive mammals

Their fate in our hands



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QUESTIONS?

