

Rookery Monitoring and Protection in Estero Bay Aquatic Preserve

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Estero Bay Aquatic Preserve
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Introduction

- Estero Bay - Florida's 1st Aquatic Preserve (1966)
- Monthly Surveys
1998-2007 (April)
2008-2009 (Feb – Aug)
- Management Issues
Recreational Use
Environmental Factors
Water Quality



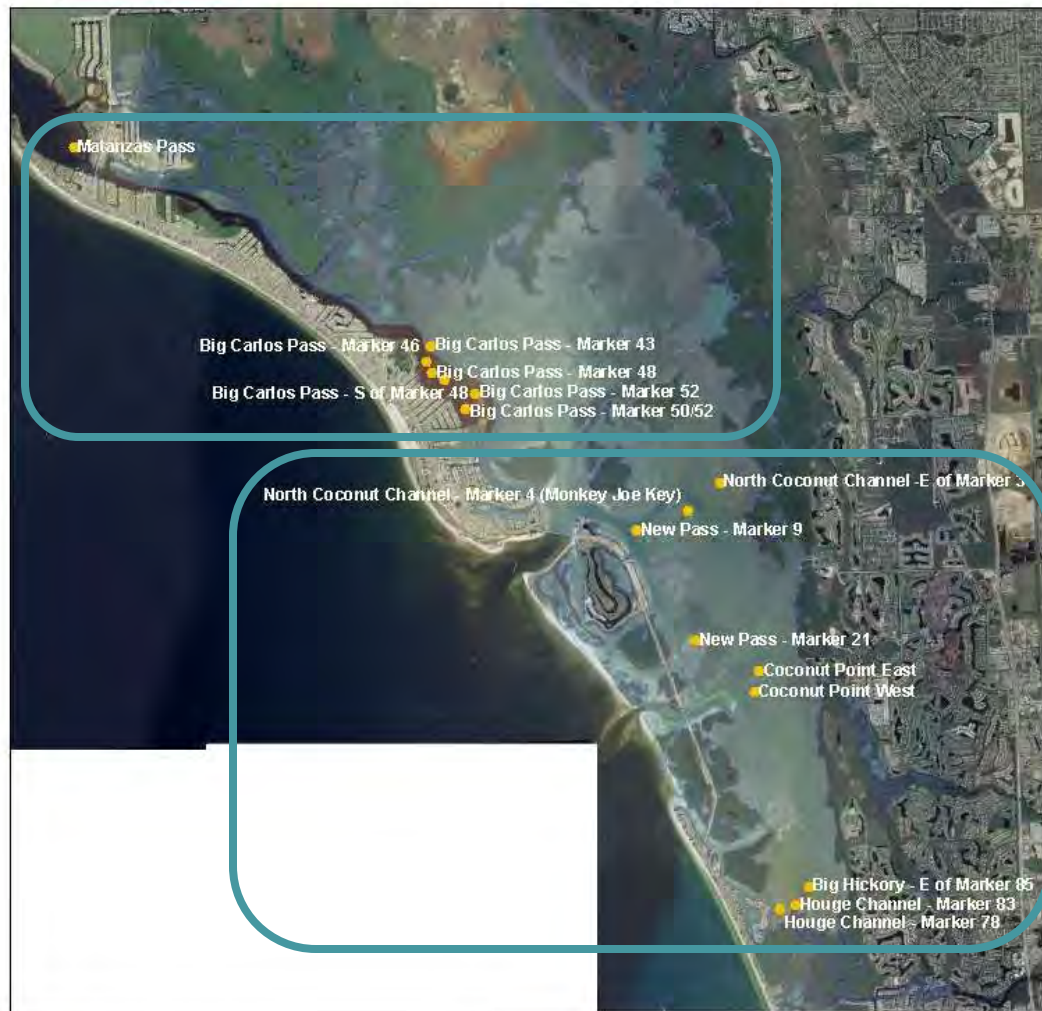
Program Objectives

- Provide peak estimates of nesting effort for each species of colonial nesting bird.
- Monitor population trends.
- Document movement of colonies.
- Document human disturbance and bird fatalities due to fishing-line entanglement.
- Reduce the number of entanglements and fatalities due to fishing-line and trash within the Bay.
- Provide recommendations for long term monitoring of nesting wading bird colonies in Estero Bay Aquatic Preserve.



Estero Bay Aquatic Preserve Colonial Bird Nest Monitoring and Protection Program

Project Location



- Rookery Islands
- Estero Bay Aquatic Preserve Boundary
- DOQQ 2004 (aerial photos-Image Server)**
- Red: Band_1
- Green: Band_2
- Blue: Band_3



0 0.5 1 2 Kilometers

Volunteer Training



Materials and Methods



Data Collection

Unknown



Incubating



Chick(s)

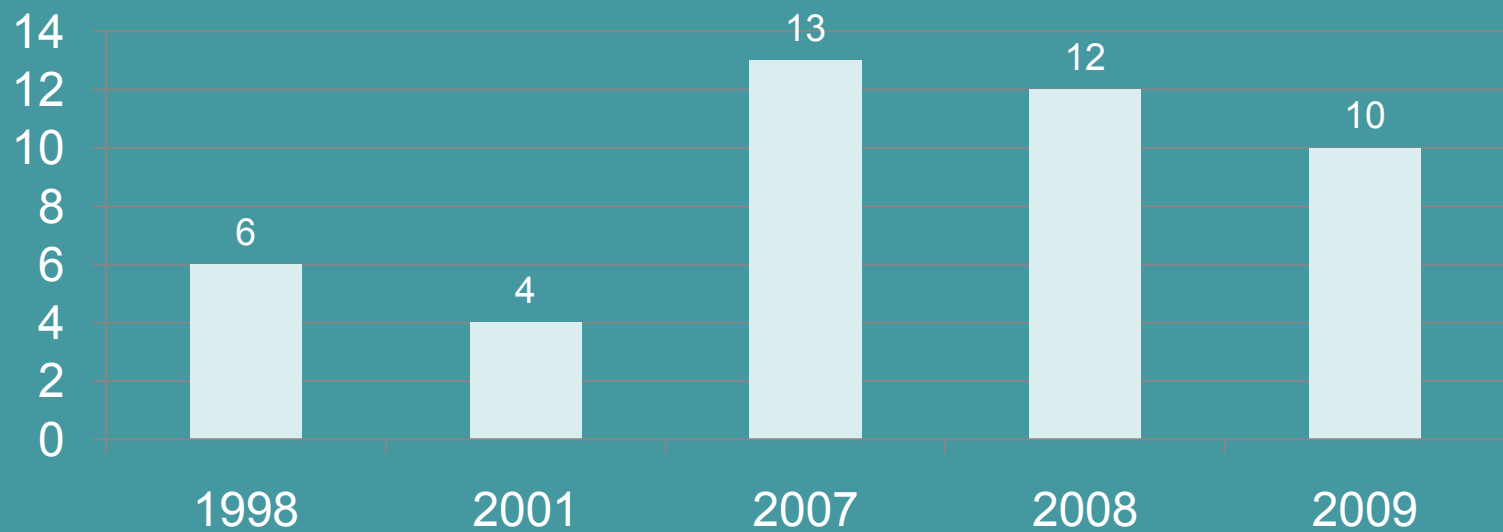


Results



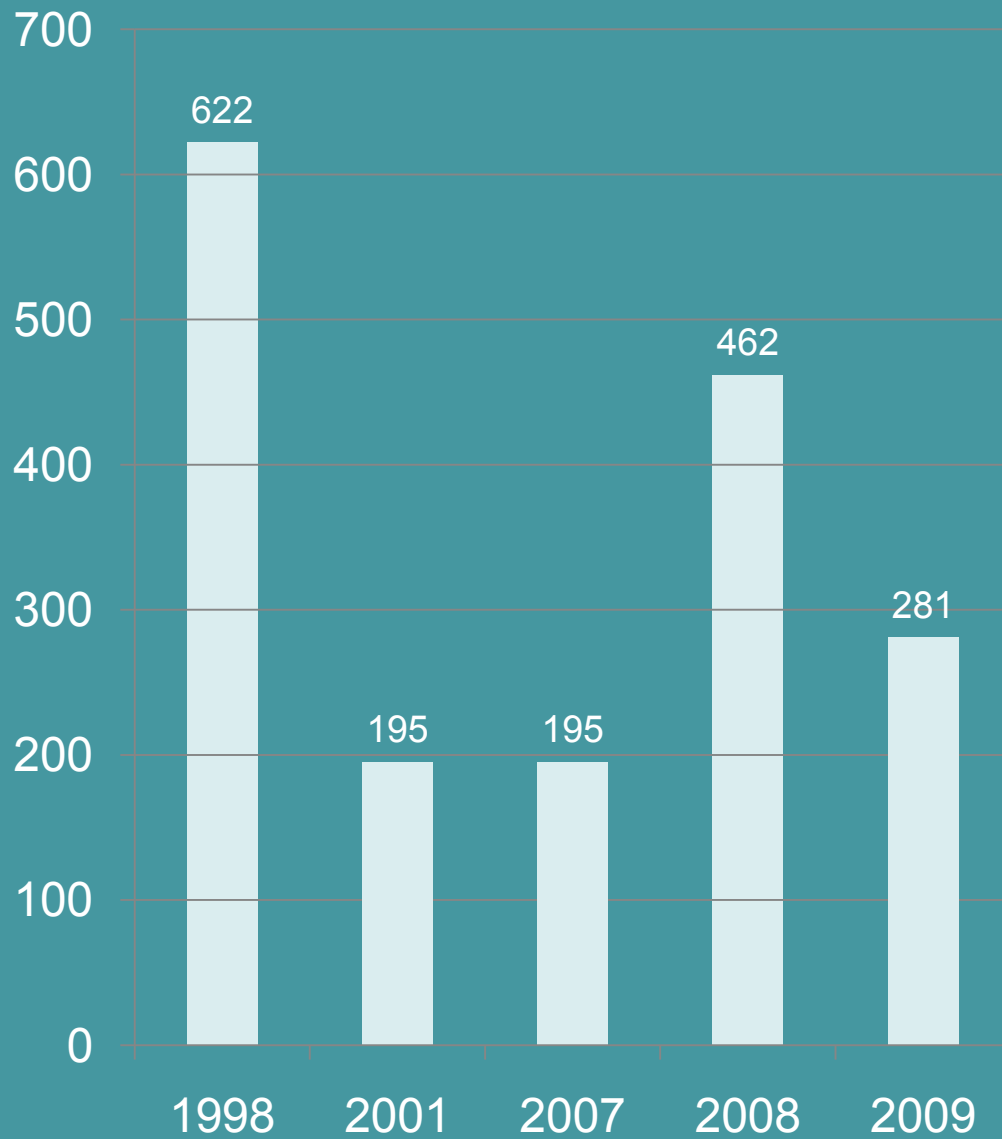


Number of Active Rookeries during April Surveys in Estero Bay

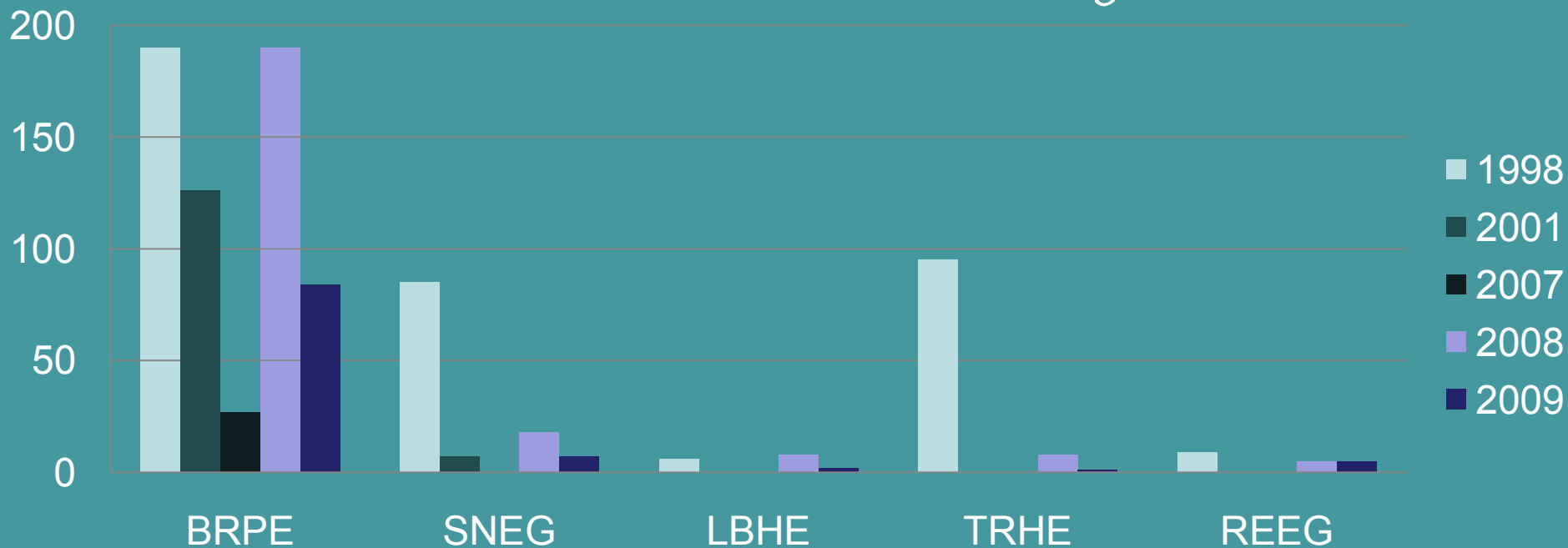




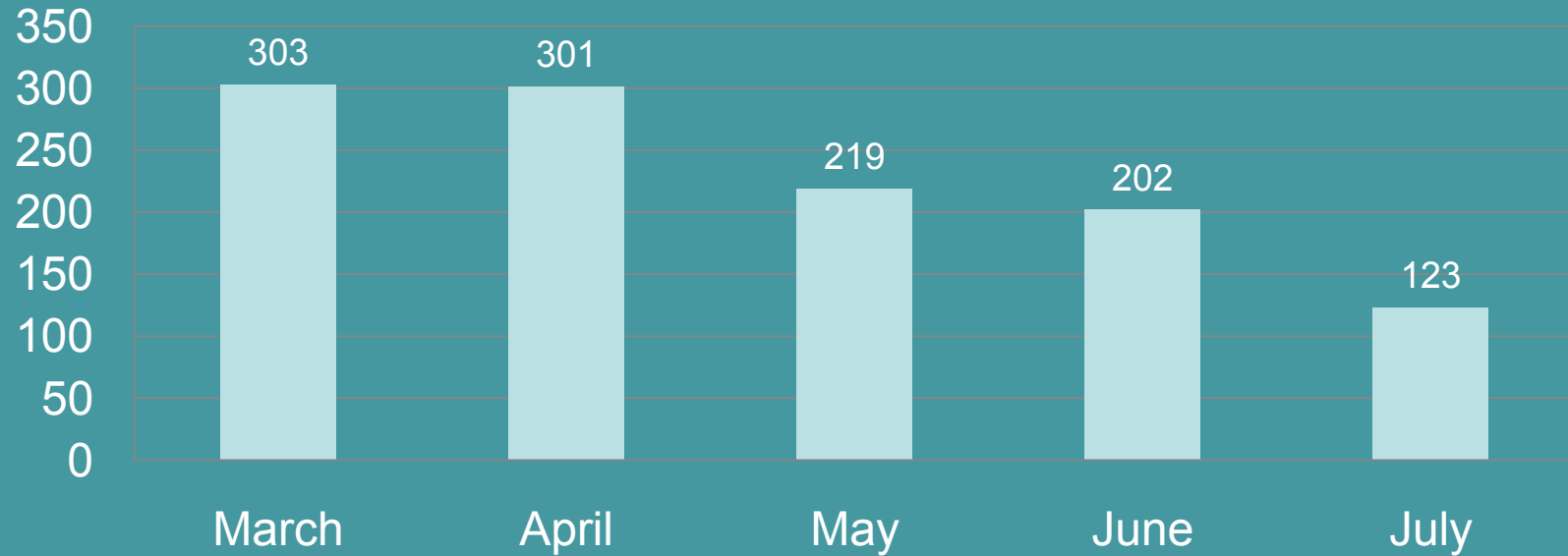
April Survey Counts of Active Nests in Estero Bay



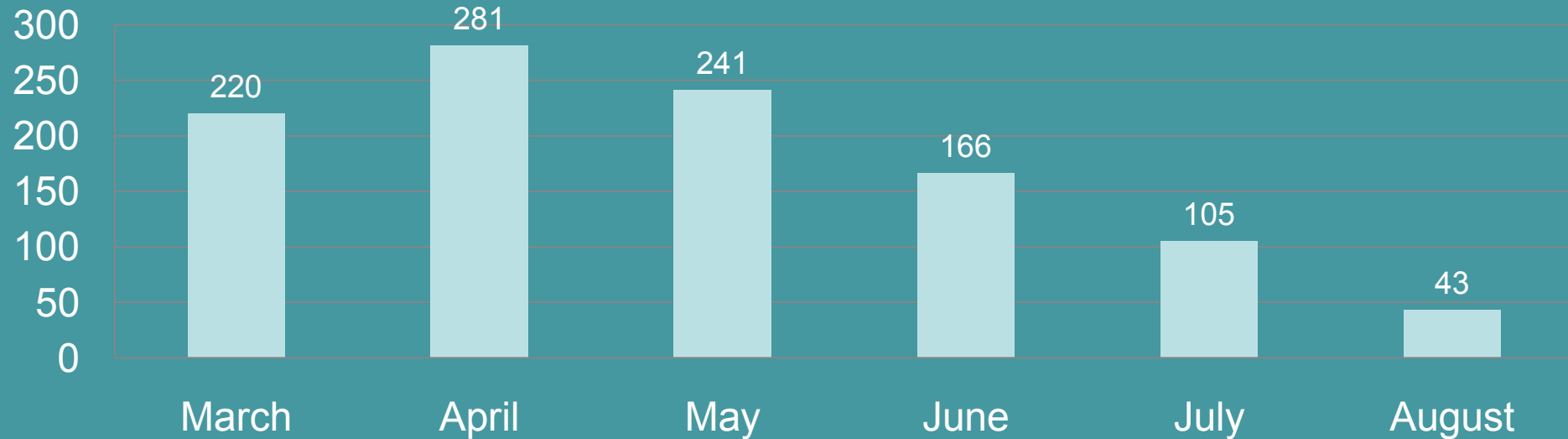
Species of Special Concern; April Survey Counts of Active Nests in Estero Bay



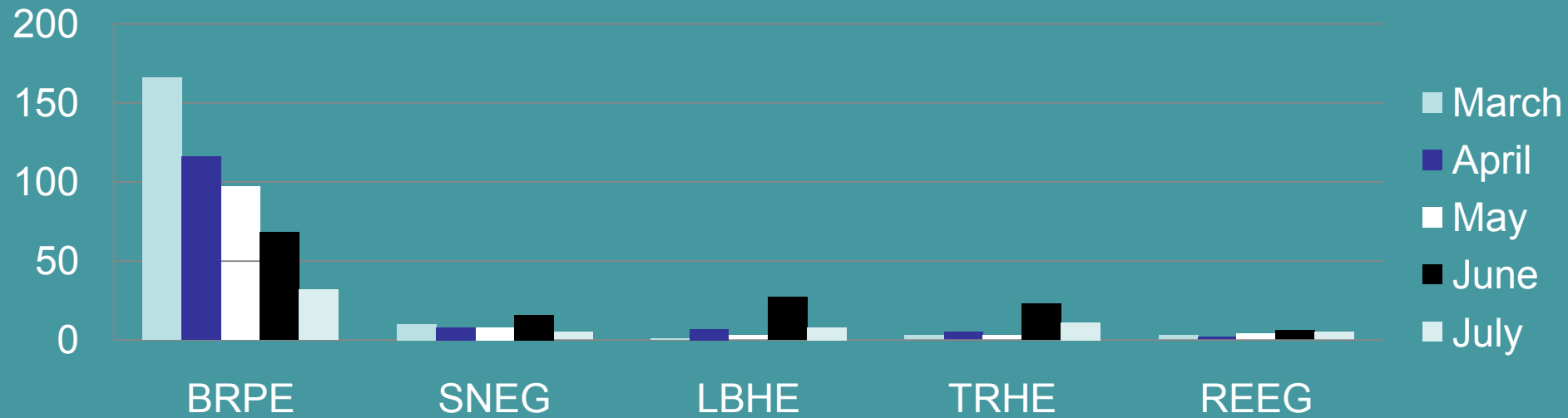
2008 Monthly Survey Counts of Active Nests



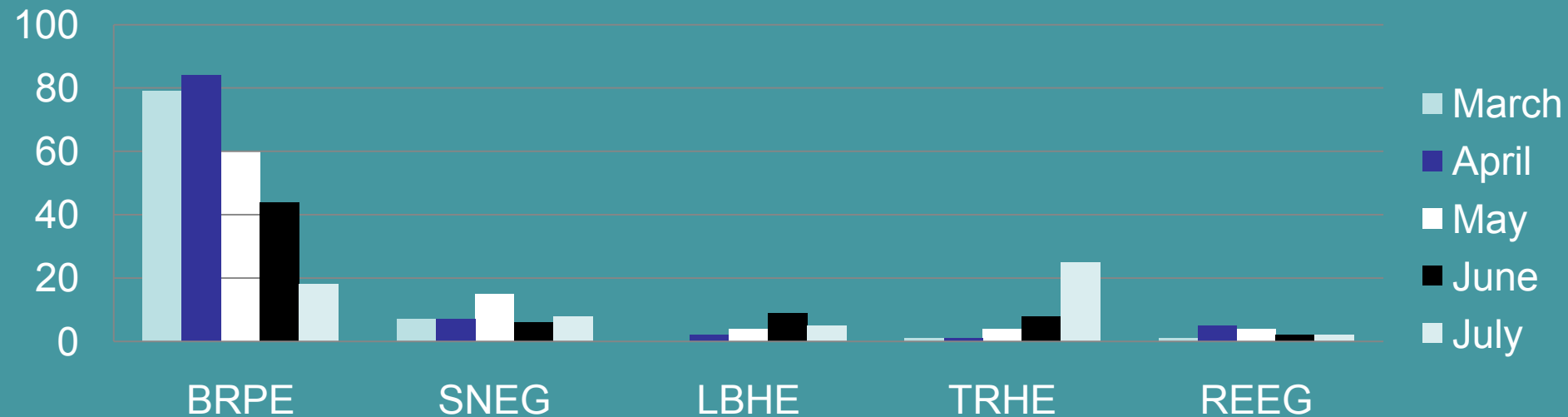
2009 Monthly Survey Counts of Active Nests



2008 Species of Special Concern Monthly Counts



2009 Species of Special Concern Monthly Counts

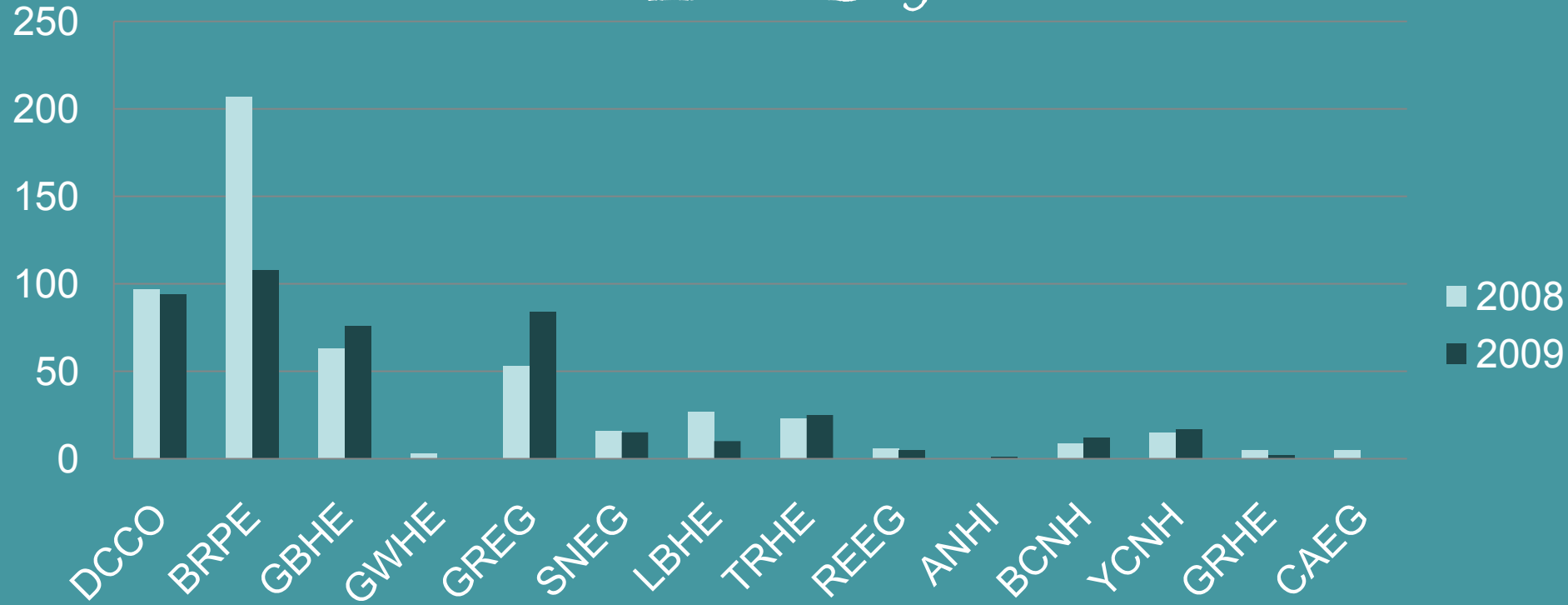




Peak numbers of nests found in Estero Bay Aquatic Preserve colonies between February and August 2009														
Colony	DCCO	BRPE	GBHE	GWHE	GREG	SNEG	LBHE	TRHE	REEG	ANHI	BCNH	YCNH	GRHE	Total
Big Carlos Pass M-43	5	15	8	0	10	0	0	2	0	0	0	0	0	40
Big Carlos Pass M-48	0	0	1	0	0	0	0	0	0	0	1	0	0	2
Big Carlos Pass M-50&52	0	0	0	0	0	0	0	0	0	0	0	1	0	1
Big Carlos Pass S of M-48	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Big Carlos Pass W of M-46	0	0	1	0	0	0	0	0	0	0	1	2	0	4
Big Carlos Pass W of M-52	10	11	1	0	12	0	0	3	0	1	2	0	0	40
Big Hickory E of M-85	9	1	12	0	3	0	0	0	0	0	0	0	0	25
Big Hickory M-83	9	0	4	0	0	0	1	0	0	0	2	8	0	24
Coconut Point East	0	0	8	0	0	0	0	0	0	0	0	1	0	9
Coconut Point West	13	26	5	0	9	0	0	0	0	0	0	0	0	53
Hogue Channel M-78	3	0	2	0	0	0	0	0	0	0	2	3	2	12
Matanzas Pass*	26	55	11	0	35	13	9	20	5	0	3	2	0	179
New Pass M-21	0	0	5	0	0	0	0	0	0	0	0	0	0	5
New Pass M-9	7	0	6	0	0	0	0	0	0	0	0	0	0	13
North Coconut E of M-3	12	0	12	0	15	2	0	0	0	0	1	0	0	42
North Coconut M-4	0	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	94	108	76	0	84	15	10	25	5	1	12	17	2	449

*surveys were not conducted at Matanzas Pass in February

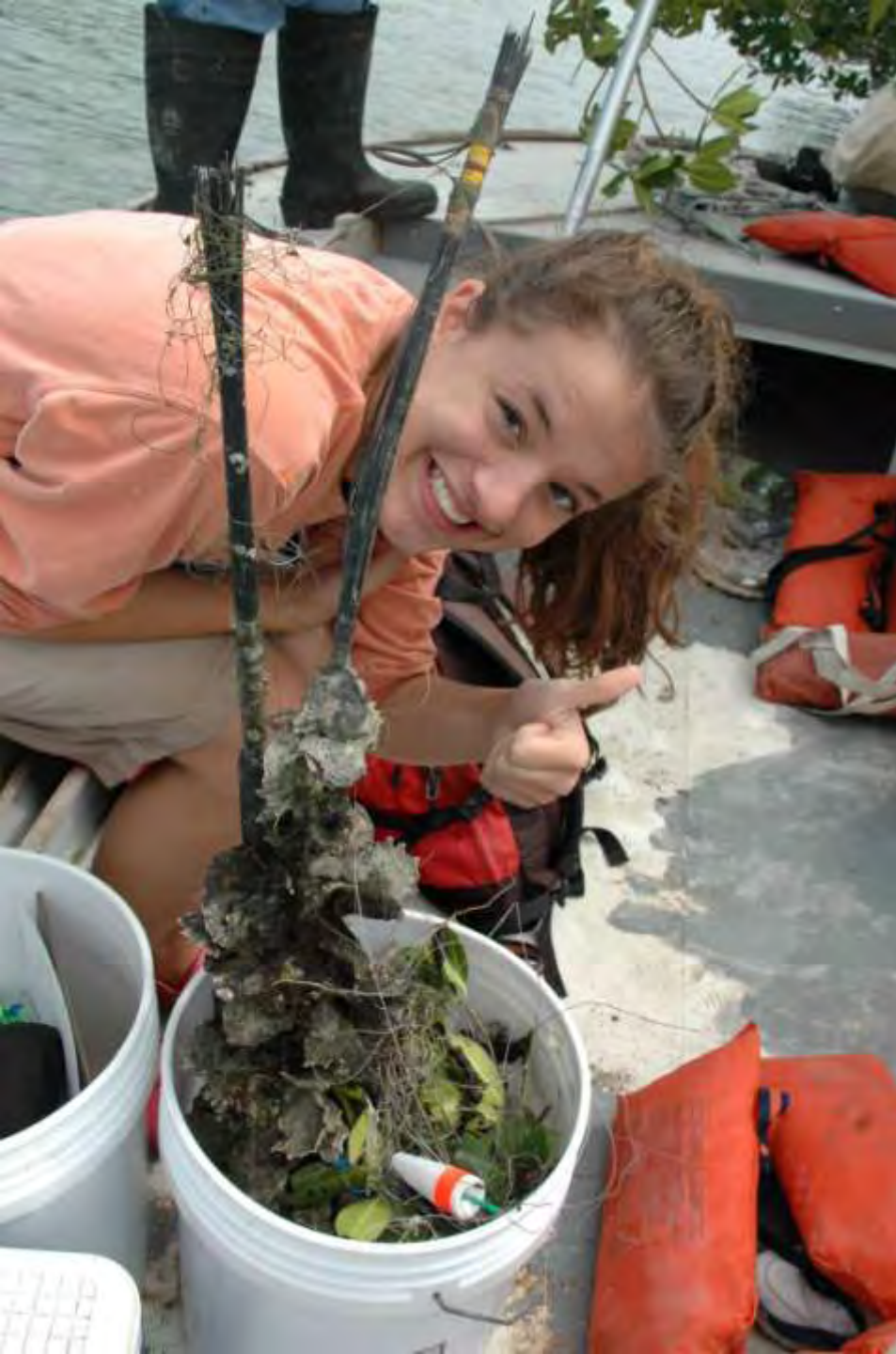
Peak Number of Nests, by species, Observed in Estero Bay



Fishing-line Fatalities

30 bird fatalities were
documented on nesting
islands February through July





Fishing-line Cleanup

Scheduled Events

October 8, 2009

January 7, 2010

Future Monitoring and Protection

- Continue current programs.
- Document species composition related to vegetation type and islands acreage.
- Continue working with FWC and local governments to increase protection of nesting birds.



Acknowledgements and Special Thanks



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