

NOTE: Final reports for T-7-R-1 and T-7-R-2 are included below.

FINAL PERFORMANCE REPORT
South Carolina Project T-7-R-1
South Carolina Department of Natural Resources
October 1, 2005–September 30, 2006

Project: Conservation of Water and Seabirds in South Carolina.

Objectives: To maintain continuity in annual monitoring and surveying of water and seabird colonies and bald eagles; maintain and update the existing store of information on distribution, habitat needs, abundance and productivity; and make this information available for managers and planners.

Accomplishments:

1. Documentation of bald eagle nesting activity, chick production and adult mortality using aerial surveys and ground visits as needed (n=250 breeding areas).

Twelve aerial surveys were conducted to monitor nesting activity and fledging success at 250 territories in 33 counties. In addition, forty-three ground visits were made. A record total of 221 territories were occupied and produced 277 young. Seventeen new territories were found for a 7.28% increase over last year. This is below the 30 year average of 10.25%, but is consistent with recent rates of increase. Twenty pairs relocated to new nest trees. Over 250 letters were sent to landowners reporting survey results on their property along with a statewide summary.

Adult eagle mortality rates were estimated based on the return of banded eagles to nesting territories. At the start of this nesting season, seven adults remain from 34- banded eagles found in the breeding population since 1983. Only four were found, but we were unable to check two territories this year due to early nesting failures. The oldest banded eagle is 27 years old. The mortality rate continues at 12.5% dying each year based on 216 banding years monitored.

2. Execution and coordination of Mid Winter Eagle counts as part of the national monitoring effort. Coordinate approximately 100 volunteers and conduct standardized survey routes.

A record high of 581 bald eagles were seen during the 28th Mid Winter Eagle Survey in South Carolina. This included 483 adults, and 98immatures. State surveys are a part of a nationwide monitoring effort. Forty-four surveys covered over 2000 miles of standardized routes involving 136 people. This survey is a joint survey of DNR and volunteers.

3. Provision of technical guidance to land owners and implementation of management as needed to enhance the status of Bald Eagle populations.

Twelve site visits were made to meet with landowners on their property and talk about land use issues. Numerous meetings were held with landowners and US Fish and Wildlife Services to negotiate management zones around eagle nests.

4. Documentation of baseline sources of eagle mortality is essential to evaluating the effects of removing the species from the protection of the Endangered Species Act, which may be proposed in the near future.

Fifteen sick or injured live bald eagles were transported to the International Bird of Prey Center, for treatment. Seven were adults and eight immature. Two were presenting as barbiturate poisonings, two were shot and one was electrocuted. Nine eagles were found dead during October 2005- September 2006. Five were adults and four were immature. Three eagles were hit by vehicles, two were shot, one electrocuted. Three were too decomposed to determine cause of death.

5. Conducting aerial and boat surveys as needed on AVM suspect and control reservoirs throughout the Bald Eagle nesting season to document the abundance of eagles, coots, waterfowl and hydrilla.

This information will be used to document the severity of the disease in the State and to document factors leading to outbreaks of the disease. Avian vacuolar myelinopathy (AVM) disease continues to affect birds in South Carolina and the southeastern US. This is a cooperative project between several divisions and sections of DNR, private industry, other state DNR's and several universities. This project supported four graduate students this year with outside funds. This disease has been responsible for over 100 eagle mortalities since it was first documented in 1994. Multiple samples were collected during 27 surveys at ten locations to monitor the relationship between a novel cyanobacterium and the disease. Birds with brain lesions characteristic of this disease were recovered from three sites in the State. Published "Avian Vacuolar Myelinopathy Linked to Exotic Aquatic Plants and a Novel Cyanobacterial Species" in Environmental Toxicology 20-348-353, 2005.

6. Monitoring and management of colonial nesting waterbirds.

Three hundred and ten wading bird nesting records were entered into the South Carolina Colonial Waterbird Database for the 2006-nesting season. A total of 160 wading bird-nesting sites were surveyed this year, 115 were active, and 45 were not active. Twelve sites that were active during 2005 were inactive this year. Seven new sites were documented. A total of 155 sites were

checked during six aerial surveys and ground surveys were conducted at 19 sites. Activity information was not obtained for 13 sites that were active during 2005 due to the unavailability of aircraft at the end of the season.

7. Monitoring and management of Wood Storks

Since the first documented successful nesting of Wood Storks in South Carolina in 1981, a total of 16,642 nesting attempts have been recorded. During the past 26 years nesting has increased from 11 to a high of 2,057 in 2004. Storks have used 27 colony sites, however, five sites have supported 76.3 % of the nesting. Mean colony size was 118 nests (range 1-547). Colony site fidelity was high (84.4%), particularly where more than 50 nesting attempts have been documented in any one-year. Only three of 27 sites are in public ownership and 21 sites are in wetlands altered or maintained by man.

Wood storks were documented to have nested at 13 sites during 2006. Complete ground counts were made at 12 colony sites. An aerial count was made at one site where ground access was denied. A total of 2,010 nests were counted, an increase of 591 nests compared to last year. Overall, the average colony size increased to 155 nests/colony as compared to 109 nests/colony last year. One nesting site, Whig Swamp, last used in 2004 supported 150 nests this year. The Hunting Island colony, which had one nest last year, had none this year. Wood stork productivity estimates were obtained from 916 nests sampled at 9 sites. There were 11 colony sites with more than 100 nests. The size and coast-wide distribution of these sites suggests that the population is approaching carrying capacity in the number of storks nesting in the state. In addition, nesting storks have moved into North Carolina.

A total of 3,715 young were estimated to have fledged statewide. During the 2005-nesting season 1,419 total nests were counted and 2,798 young were estimated to have fledged. The state's stork nesting has gone from fledging tens of young to hundreds of young and finally thousands of young per year. The effect this has on recruitment to South Carolina nesting colonies is unknown, but substantial numbers of immature storks are now being seen in the state during the nesting season. Ultimately the recovery of the stork population may be limited by the availability of habitat in Florida where the vast majority of the population winters.

Staff worked with several landowners to maintain open water at colony sites and maintain the sites for stork use. Staff worked with USFWS and private landowners to develop management recommendations to maintain nesting and roost sites for storks. Staff worked with other DNR staff and private landowners to enhance the use of managed marsh impoundments during spring drawdowns.

Staff participated in the Region Stork Working Group in an effort to standardize census and coordinate activities for region monitoring. Staff presented A 26 Year History of Wood Storks in South Carolina at a Wood Stork Symposium held in conjunction with the annual Colonial Waterbirds Meeting and submitted this for publication in the journal Waterbirds.

An adult wood stork was captured and released with a satellite transmitter in cooperation with a USFWS study to document the movements and habitat utilization of storks.

8. Monitoring and management of seabirds

Censuses of seabird nesting were conducted on 10 barrier and estuarine islands including 1 island constructed in 2005 by the COE and 1 area within the Savannah spoil disposal impoundments. The statewide totals were black skimmers (1372 total nests at 7 sites), gull-billed terns (289 total nests at 6 sites), royal terns (9386 total nests at 5 sites), sandwich terns (2706 total nests at 3 sites), common terns (4 total nests at 2 sites) and Forester's terns (5 total nests at 1 site). Eastern brown pelicans (3954 total nests) nested at 5 sites this season, including the first recorded nesting of this species on Tomkins Island (76 nests). Royal terns (4341 nests), sandwich terns (493 nests), gull-billed terns (28 nests) and black skimmers (203 nests) included in the above statewide totals utilized this site. At the Savannah Harbor Confined Disposal Facilities managed by the Army Corps of Engineers, the 2 islands (12A, north & 12A, south) created within a disposal impoundment during 2005 were again used for nesting. The statewide totals above include gull-billed tern (122 nests) and black skimmer (11 nests) counted on these islands. The immediate use of manmade sand islands by nesting seabirds demonstrates the potential as a management tool and represents a significant mitigation tool.

All seabird nesting sites were posted and roped off. Closure of islands to low mean water resulted in increased nesting by black skimmers in areas not previously used. Staff collected avian ticks from these seabird colonies for the Center for Disease Control. Tests were conducted on the ticks for presence of harmful viruses. Co-authored *Borrelia*, *Coxiella*, and *Rickettsia* in *Carius capensis* (Acari: Argasidae) from a brown pelican (*Pelecanus occidentalis*) rookery in South Carolina, USA. In Exp. Appl. Acarol. (2006) 39: 321-329.

9. Monitoring and management of least terns

A total of 40 historic (used for nesting since 1999) least tern-nesting sites were surveyed this season, 18 were active, and 22 were not. Nine (50%) of the active sites were rooftops, 5 (28%) were beach sites, and 4 (22%) were man-made or spoil sites. Two new sites were documented; one roof-nesting

site and 1 beach site. Four rooftop sites, 1 beach site and 1 man-made site that were active during 2005 were inactive this year. Activity information was not obtained on 6 rooftop sites that were active last year. Censuses were conducted at 3 Cape Romain beach sites and one developed beach site (190 total nests) and the spoil site islands (146 total nests). Censuses conducted at these sites during 2005 documented 852 nests. Letters were sent to building managers prior to the nesting season to encourage maintenance activities prior to the nesting season.

10. Monitoring and management of American oystercatchers

Staff participated in an American oystercatcher workshop that set regional conservation and research goals for this shorebird. Captured additional wintering and breeding oystercatchers for color banding. Completed a statewide winter survey for color-banded oystercatchers. This survey contributed to a regional understanding of migratory patterns and identified important juvenile winter roost sites. Birds from all states with banding projects north of us were seen, documenting the importance of South Carolina as a wintering area. Monitoring continued of approximately 50 color-banded local breeding adults in order to determine adult mortality rates. Site fidelity and survivorship remain high although nesting success continues to be low despite repeated nesting attempts by individual pairs. Nesting failures resulted from mammalian and avian predation and over-wash of nests during high tides.

Significant Deviations: None

Project Cost: \$78,326

FINAL PERFORMANCE REPORT
South Carolina State Wildlife Grant [T-7-R-2]
Conservation of Waterbirds and Seabirds in SC
Grant period October 1, 2007–September 30, 2008

PROJECT TITLE: Monitoring and management of waterbird nesting on the South Carolina coastal plain.

OBJECTIVES

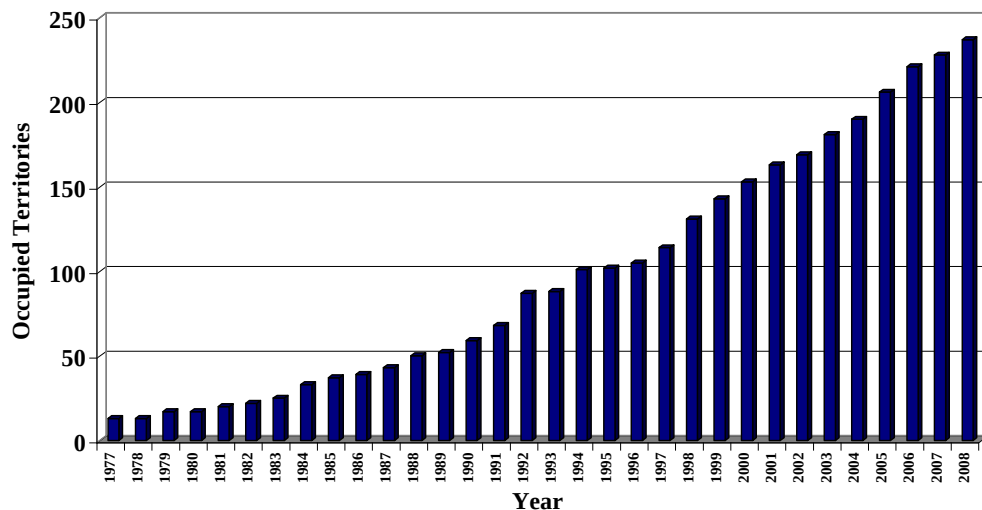
Bald Eagle

1) Document bald eagle nesting activity, chick production and adult mortality using aerial surveys and ground visits as needed (N=261 breeding areas).

Ten aerial surveys were conducted to monitor nesting activity and fledging success at 274 territories in 33 counties. In addition to 514 aerial nest checks, 123 ground visits were

conducted. A record total of 235 territories were occupied and produced 305 young. Thirty-one territories were occupied in 2008 that were not occupied in 2007. However, 24 territories from 2007 were not occupied in 2008 resulting in an increase of 3.1% over last year. This is below the 30-year average increase of 10.25%, but is consistent with recent rates of increase. Since 1999 the annual rate of increase has been less than 10% per year for each year. This may represent recent additional mortality resulting from West Nile Virus and AVM. Letters were sent to 252 landowners or managers reporting survey results for nests on their property along with a statewide summary.

SC Bald Eagle Statewide Nesting 1977-2008



Adult eagle mortality rates were estimated based on the return of banded eagles to nesting territories. At the start of this nesting season, seven adults remained from 34 banded eagles found in the breeding population since 1983. Only four were successfully checked. Two banded adults were re-sighted and two were not present. We were unable to check three territories this year due to early nesting failures. The adult mortality rate continues at 13.5% dying each year based on 220 banding years monitored.

2) Conduct and coordinate Mid Winter Eagle counts as part of the national monitoring effort. Coordinate approximately 100 volunteers and conduct standardized survey routes.

The 2008 Midwinter Eagle Survey (MWES) was the 30th consecutive year for both the national survey and South Carolina's participation. With the help of 94 participants, more than 2,000 miles of standardized routes were completed this year. Data from South Carolina's 36 routes in 27 different counties contribute to regional and national trend analyses used by the US Geological Survey (USGS) partnered with the Army Corps of Engineers (ACOE), who coordinate the count.

This year's results were as follows:	Adult Bald Eagles	514
	Immature Bald Eagles	84
	Unknown Age	<u>3</u>

Total Bald Eagles 601

This survey is a joint survey of DNR and volunteers as well as a variety of other state and federal agencies.

MWES numbers were up slightly this year from last year's total of 564 bald eagles. Also, one immature golden eagle was reported this year.

In 1979, the first year of the survey, 36 bald eagles were counted in South Carolina. This year the number of adult bald eagles counted included 487 South Carolina breeding adults that were known to be on territory during the survey. This means at least 94% of all adults seen during the survey period were resident breeders.

South Carolina Department of Natural Resources participates in the MWES for several reasons. One component of the survey involves monitoring wintering eagles from northern populations; however, these birds represent a relatively small percentage of the total South Carolina population. We also use survey information to locate new breeding areas and determine distribution, abundance and adult to juvenile ratios. The combined data provide a more comprehensive assessment of bald eagle status on a state and national level.

3) Provide technical guidance to land owners and implement management as needed to enhance the status of the South Carolina Bald Eagle population.

Eighteen site visits were made to meet with landowners on their property to provide recommendations based on the needs of nesting eagles as it relates to land use issues. Numerous joint meetings were held with landowners and US Fish and Wildlife Service to negotiate management zones around eagle nests. With the recent delisting of the species, it is expected that these activities will accelerate over the next couple of years.

4) Documenting baseline sources of eagle mortality is essential to evaluating the effects of removing the species from the protection of the Endangered Species Act.

Eighteen sick or injured live bald eagles were treated at the International Center for Birds of Prey for treatment. Seven were adults and 11 were immature. Four were diagnosed as barbiturate poisonings at landfills, one entanglement and one was shot. Five fledgling were treated and released. Recovery of recently fledged eagles has increased with the level of development around nest sites as these eagles are subjected to additional threats. Six eagles were found dead during October 2006- September 2007. Four were adults and two were immature. Two eagles were hit by vehicles, one suffered wounds from intra-specific fighting, one was shot and two died of unknown causes.

5) Conduct aerial and boat surveys as needed on AVM suspect and control reservoirs throughout the Bald Eagle nesting season to document the abundance of eagles, coots, waterfowl and hydrilla. This information will be used to document the severity of the disease in the State and to document factors leading to outbreaks of the disease.

Avian vacuolar myelinopathy (AVM) disease continues to affect birds in South Carolina and the southeastern US. This is a cooperative project between several divisions and sections of DNR, private industry, other state DNR's and several universities. This

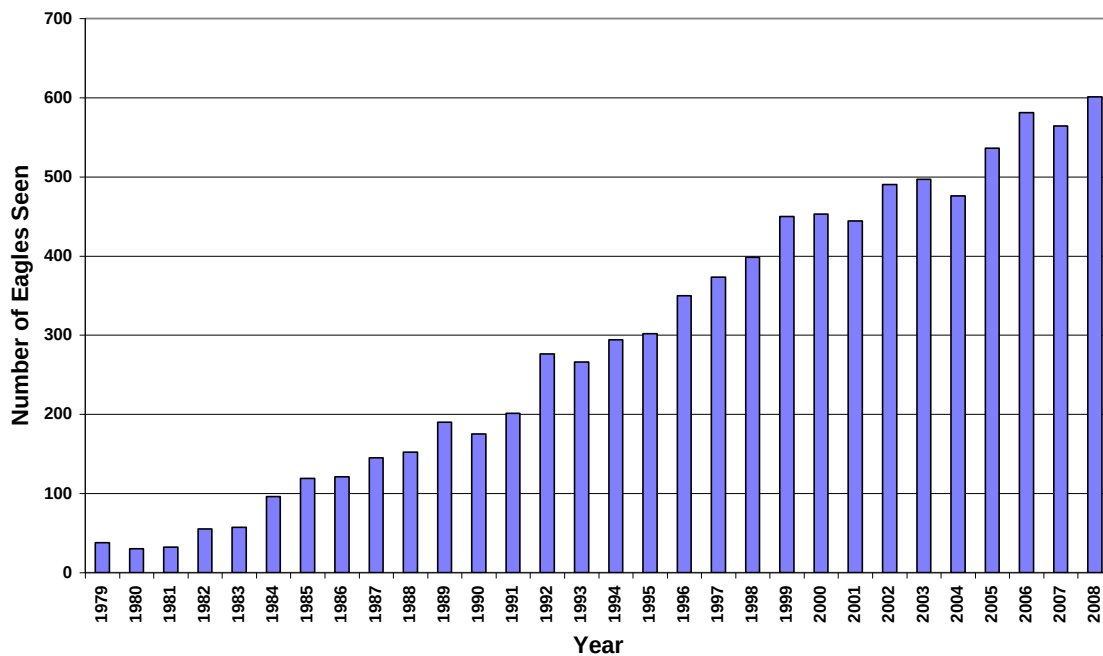
project supported two graduate students this year with outside funds. This disease has been responsible for over 150 eagle mortalities since it was first documented in 1994. Multiple samples were collected at ten locations to monitor the relationship between a novel cyanobacterium and the disease. Both hydrilla and the suspect cyanobacterium were abundant at all sites sampled. Birds with brain lesions characteristic of this disease were recovered from Lake Thurmond. In addition, symptomatic coots were seen at many locations and likely caused extensive mortality.

No significant deviations.

Recommendations:

As a result of recent increased mortality to bald eagles resulting from West Nile Virus and an emerging AVM disease, the rate of recovery has slowed in recent years. If habitat protection is compromised or shooting mortality increases as a result of delisting, the species could begin to decline.

Eagles Counted During the Midwinter Eagle Surveys in SC



Colonial Nesting Waterbirds

- 6) Monitor nesting wading birds (n=182 colonies) and nesting seabirds (n=75colonies) during each annual breeding season.

Three hundred and six wading bird nesting records were entered into the South Carolina Colonial Waterbird Database for the 2008-nesting season. A total of 184 wading bird-nesting sites were surveyed this year, 119 were active, and 67 were not active. A total of 165 sites were checked during five aerial surveys and ground surveys were conducted at

21 sites. Eight new sites were documented. Twenty sites that were active during 2007 were inactive this year. Extended drought continues to impact nesting colonies, with many natural wetland sites drying and being abandoned. New colony sites in constructed wetlands have resulted in increased human- bird interactions.

Wood Storks

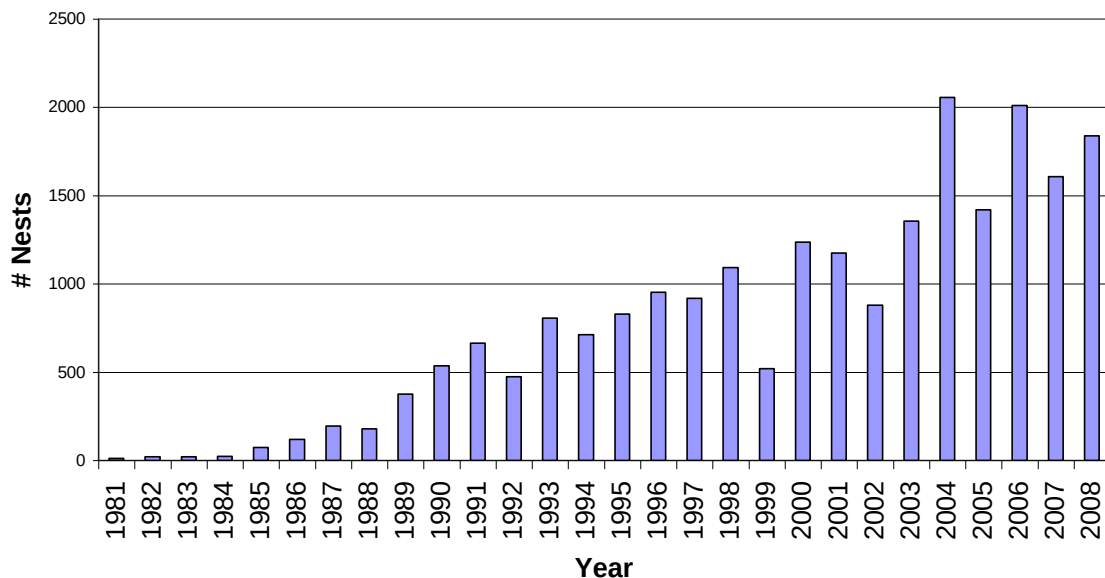
2) Conduct complete ground census of wood stork nesting and estimate chick production (29 colonies).

Since the first documented successful nesting of Wood Storks in South Carolina in 1981, a total of 22,098 nesting attempts have been recorded. During the past 28 years nesting has increased from 11 to a high of 2,057 in 2004.

Storks have used 29 colony sites; however, five sites have supported 71.3 % of the nesting. Mean colony size was 115 nests (range 2-354). Colony site fidelity was high (84.4%), particularly where more than 50 nesting attempts have been documented in any one-year. Only three of 29 sites are in public ownership and 23 sites are in wetlands altered or maintained by man.

Wood storks were documented to have nested at 16 sites this year. A total of 1,839 nests were counted, an increase of 232 nests compared to last year.

**Wood Stork Nesting in SC
1981-2008**



ACTIVITY SURVEYS		PRODUCTIVITY SURVEYS			
SITENAME	TOTAL NESTS	SAMPLED NESTS	SAMPLED YOUNG	YOUNG/ ACTIVE	ESTIMATED YOUNG
WHITE HALL II	354	149	309	2.07	734
YEMASSEE I*	280	65	142	2.18	612
WASHO	237	129	290	2.25	533
SNIDERS CROSSROADS	202	90	189	2.10	424
WHIG SWAMP*	160	NS		2.12	339
BLACK RIVER	125	27	60	2.22	278
TEA FARM	122	38	82	2.16	263
PON PON LAKES	101	57	123	2.16	95
BAPTIST COLLEGE	87	24	55	2.29	231
DWMA, UPPER BACKWATER	64	51	102	2.00	128
BEAR GRASS	44	16	36	2.25	99
HERONWYCK	35	22	48	2.18	190
BULL ISLAND SLEW*	12	NS		2.12	25
HUNTING ISLAND	7	7	0	0.00	0
DILL PROPERTY*	7	3	6	2.00	12
ROSE HILL PLANTATION	2	2	2	1.00	2
TOTAL	1839	680	1444	2.12**	3966

PRODUCTIVITY SURVEYS					
SITENAME	4 YOUNG NESTS	3 YOUNG NESTS	2 YOUNG NESTS	1 YOUNG NESTS	0 YOUNG NESTS
WHITE HALL II	0	29	102	18	0
YEMASSEE I	0	13	51	1	0
WASHO	0	50	61	18	0
SNIDERS CROSSROADS	0	14	71	5	0
BLACK RIVER	0	7	19	1	0
TEA FARM	0	9	26	3	0
PON PON LAKES	0	13	40	4	0
BAPTIST COLLEGE	0	7	17	0	0
DWMA, UPPER BACKWATER	0	5	41	5	0
BEAR GRASS	0	5	10	1	0
HERONWYCK	0	5	16	1	0
HUNTING ISLAND	0	0	0	0	7
DILL PROPERTY	0	0	3	0	0
ROSE HILL PLANTATION	0	0	1	0	1
	0	157	458	57	8

680

Nest counts obtained by ground surveys except as noted by *, * = aerial survey. NS = no survey.

** = for sites surveyed for productivity.

Wood stork productivity estimates were obtained from 680 nests sampled at 14 sites. A total of 3,966 young were estimated to have fledged statewide. During the 2007-nesting season 1,607 total nests were counted and 3,086 young were estimated to have fledged. This is calculated as young per successful nest.

Staff worked with several landowners to maintain open water at colony sites and maintain the sites for stork use.

Staff worked with USFWS and private landowners to develop management recommendations to maintain nesting and roost sites for storks.

Staff worked with other DNR staff and private landowners to enhance the use of managed marsh impoundments during spring drawdowns.

Staff participated in the Regional Stork Working Group in an effort to standardize census and coordinate activities for region monitoring.

No significant deviations.

Recommendations:

Colonial Wadingbirds have not been censused since 1996. Several of our largest colonies have been abandoned in recent years. This suggests that this group may be declining as a result of loss of nesting habitat. Statewide ground census is recommended.

Wood Stork nesting has continued to increase and appears to be approaching carrying capacity. SC should continue to play an active role in the wood stork working group by conducting complete ground surveys.

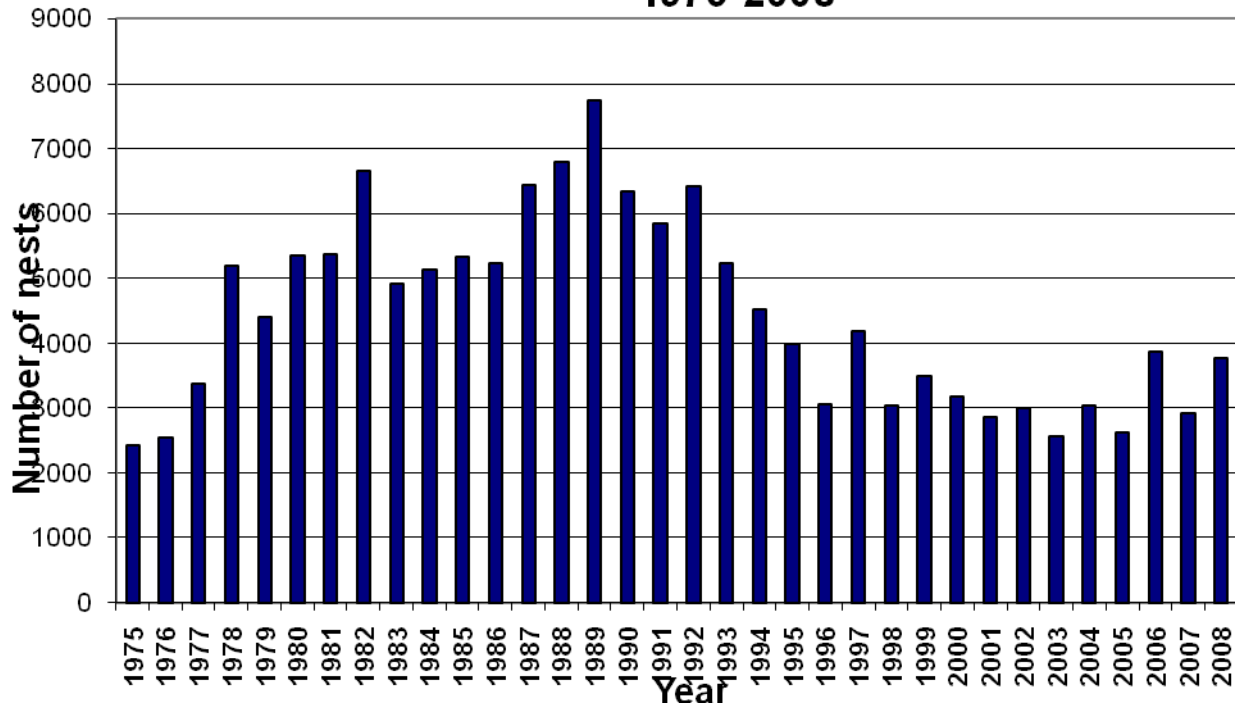
Seabirds

Monitored, posted or conducted site visits for seabird nesting at 17 different islands.

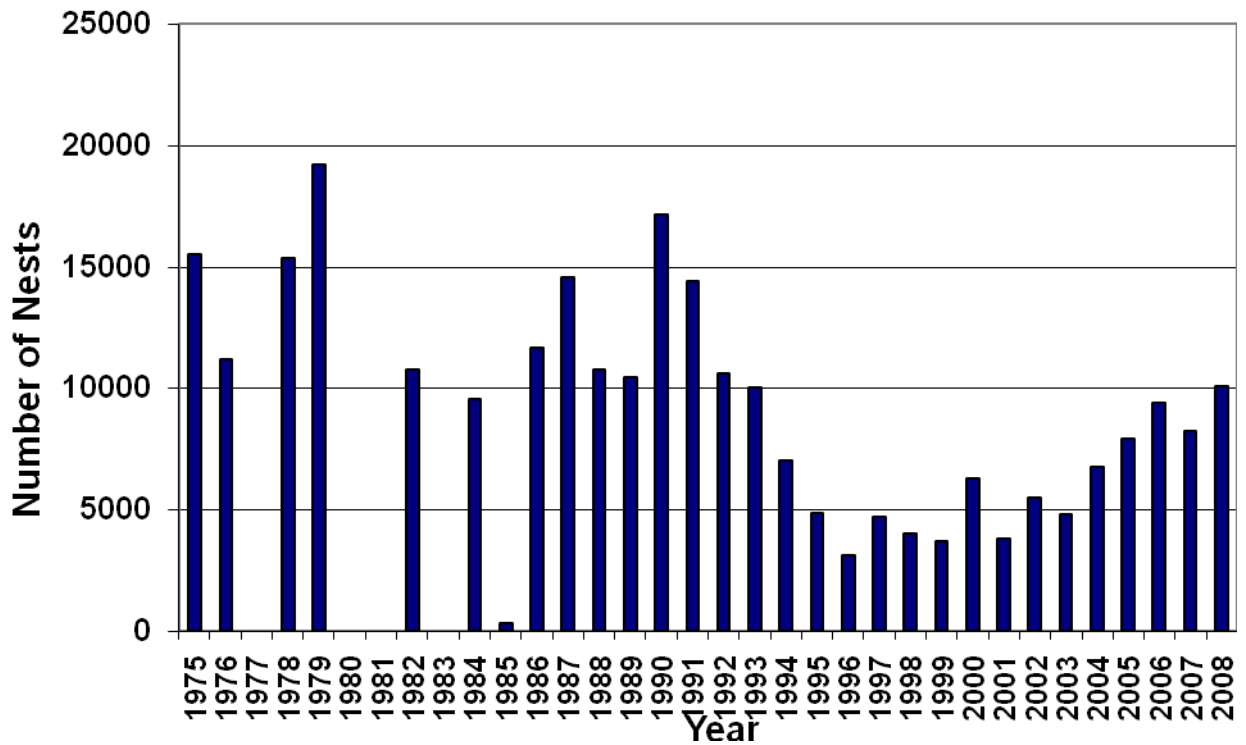
Islands are state, federal or privately owned. Seventeen days were spent placing closed during nesting signs near potential or observed seabird nesting. This includes days spent replacing signs that were washed during storms or high tides. Twenty-six days were spent monitoring and/or counting seabird nests. Three lectures were given to educate the public or NGOs on seabird nesting. Coordinated and assisted with seabird/human disturbance research conducted by Clemson University.

Complete ground censuses of seabird nesting were conducted on 17 barrier and estuarine islands. The statewide totals were black skimmers (682 total nests at 6 sites), gull-billed terns (257 total nests at 10 sites), royal terns (8235 total nests at 4 sites), sandwich terns (3188 total nests at 4 sites), common terns (16 total nests at 1 site) and Eastern brown pelicans (2916 total nests at 4 sites) this season.

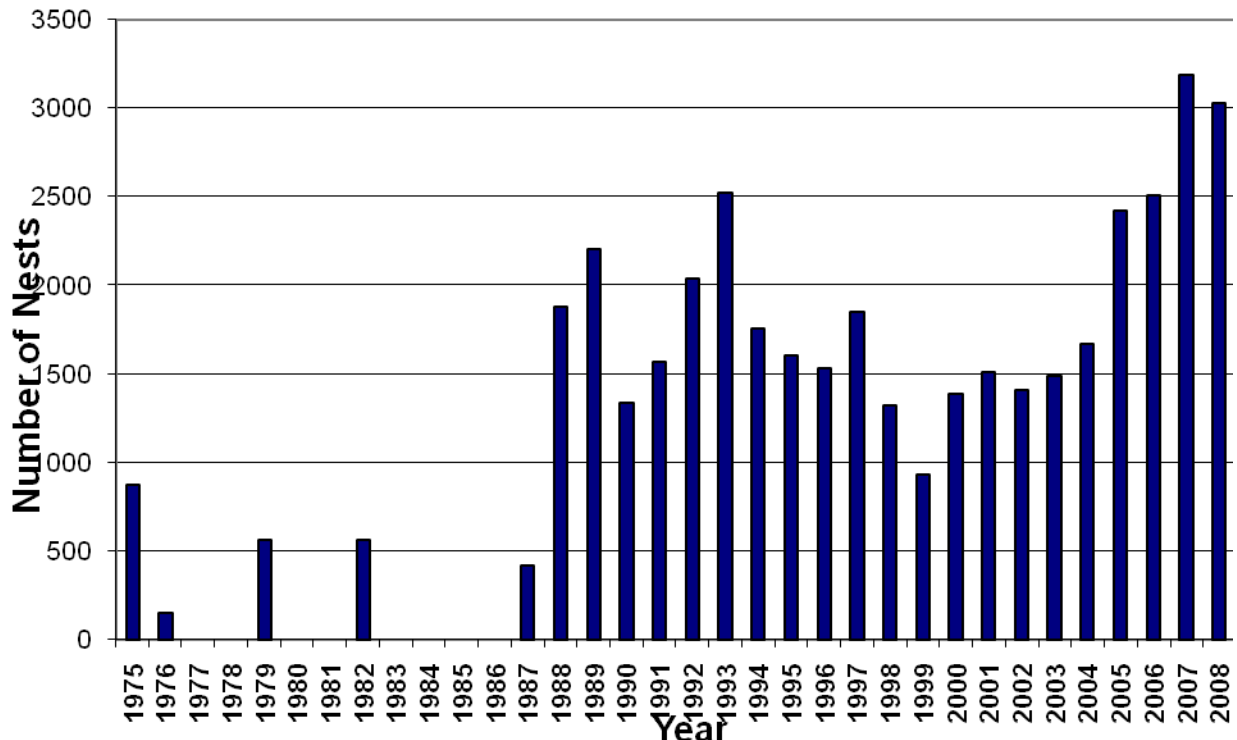
Brown Pelican Nesting in SC 1975-2008



Royal Tern Nesting in SC



Sandwich Tern Nesting in SC



Tomkins Island is a seven-acre island constructed by the US Army Corps of Engineers one mile off of Turtle Island and on the South Carolina side of the Savannah River jetties. This island was constructed as mitigation for activities associated with the spoil disposal site along the South Carolina side of the Savannah River. Construction was completed shortly before the seabird-nesting season in 2005. There were a total of 1,832 pairs of seabirds nesting on the island during 2005. Nesting increased to 5,145 seabird nests during 2006 and again to 7,312 nests during 2007. During 2008 a total of 11,556 nests were counted on Tomkins Island. This has resulted in increased numbers of royal and sandwich terns statewide. Without the nesting on Tomkins, seabird nesting in the State this year would be a small fraction of historic levels. Chick production continues to be high because flooding and predation have a minimal effect on this site. Tomkins Island supported 88% of the state Royal Tern nesting and 79% of Sandwich Tern nesting.

Oystercatchers

4) Document major population demographics and develop management techniques to monitor and enhance the American oystercatcher population.

Color banded 20 adults and 23 chicks as part of a regional monitoring program of movement and survival.

Conducted statewide winter (December) and breeding (April and May) surveys for oystercatchers. Data from these surveys can be used to examine population changes

(number and distribution) from surveys done 5 years ago and to prioritize areas for protection.

Surveys were conducted to look for color banded oystercatchers. Approximately 300 observations of color banded oystercatchers were recorded. Breeding surveys were primarily in the Cape Romain Region, where long term banding and monitoring is occurring. Because breeding adults return to the same site to nest, results from these surveys add to regional estimates of adult survival. Winter surveys were conducted to add to regional knowledge of winter site fidelity and migration patterns.

Dr. Pat Jodice at Clemson University and graduate student, Janet Thibault, continued to partner with SCDNR to work on oystercatcher reproductive success in 2008 in Cape Romain Region. A total of 66 breeding pairs were monitored nesting on the beaches on Lighthouse Island and shell mounds along the Atlantic Intracoastal Waterway (Waterway) and Bulls Bay. Overwash was the major contributor to nest loss. The average number of young fledged varied at sites between 0.13 – 1.12 chicks/pair.

Because we have documented a high rate of nest failure during incubation, we conducted a pilot study to enhance nesting success. Sixteen nests were “headstarted.” This entailed replacing real eggs with wooden eggs. Oystercatcher eggs were placed in an incubator so they were not prematurely lost. When eggs began to hatch they were placed back in nests and parents continued to incubate/brood them. Chick mortality was monitored by placing small transmitters on newly hatched chicks. Chick mortality was much lower at Bulls Bay compared to the Waterway, thus future “headstarting” would benefit Bulls Bay more than the Waterway.

Dr. Jodice’s graduate student, Christy Hand, completed writing her thesis and graduated. SCDNR was a partner and involved in field work and completion of the thesis. Major findings: identified preferred winter forage habitat of largest flock on Atlantic coast, 3 major prey items and time in tidal cycle preferred for feeding. Additionally, differences between juvenile and adult foraging behavior in Cape Romain Region was documented. Cape Romain Region winters many juveniles from northern areas and knowledge of forage ecology is needed to protect this age class.

Participated in American oystercatcher working group meeting in North Carolina. SCDNR coauthored American oystercatcher business plan to prioritize funding by NFWF. NFWF choose American oystercatcher as a “keystone” species in 2008 and will fund projects listed as high priority in this business plan.

Least Tern

A total of 42 historic (used for nesting since 1999) least tern-nesting sites were surveyed this season, 21 were active, and 20 were not. Five of the active sites were rooftops, 5 were beach sites, and 3 were man-made or spoil sites. Two new rooftop sites were documented. Activity information was not obtained on 7 rooftop sites that were active when last surveyed in 2005. Censuses conducted at the Cape Romain beach sites and the

spoil site islands documented 311 total nests, similar to last year's total at these sites of 310 nests. Censuses conducted at these sites during 2005 documented 852 nests.

No significant deviations.

Recommendations:

With over 11,000 nesting pairs, Tomkins Island is the largest seabird nesting colony in the state and should come under State ownership as soon as possible in order to protect this essential nesting site.

Least Terns have not been censused since 1995. Three of the largest roof-nesting sites have been abandoned and no large new colonies have been located. Ground colonies have become fewer and smaller since the last statewide survey. Complete ground surveys should be conducted as soon as possible.

Because of the importance of SC to the east coast population of Oystercatchers, DNR should continue to be a leader in implementing management based research and survey. With very low chick production this population is likely in decline.

Significant deviations: none

Federal Cost: \$74,944.24