

JON S. SEMLEAR
PRESIDENT
SAG HARBOR

BOARD OF TRUSTEES
OF THE FREEHOLDERS AND COMMONALTY OF THE
TOWN OF SOUTHAMPTON

FREDERICK HAVEMEYER
BRIDGEHAMPTON

WILLIAM PELL
WESTHAMPTON

ERIC SHULTZ
SECRETARY/TREASURER
EAST QUOGUE



EDWARD J. WARNER JR.
HAMPTON BAYS

116 HAMPTON ROAD
SOUTHAMPTON, NEW YORK 11968
PHONE: 631 287-5717 FAX: 631 287-5723

Threatened and Endangered Species

Management and Protection Program



2010

Program Manager:
Coastal Stewards:

Dawn Ver Hague
Merriah Eberts
Terra Dunlop
Nick Zanussi

Introduction

Established in 1686, the Southampton Town Board of Trustees has long supported the need to protect the town's various natural resources. Located on the eastern end of Long Island, Southampton is home to an extensive coastline of ocean and bay beaches. Within this sensitive coastal habitat resides three federally and state listed threatened and endangered (T&E) species. These include two bird species; the piping plover (*Charadrius melodus*) and least tern (*Sterna antillarum*) and the plant seabeach amaranth (*Amaranthus pumilus*). In addition, the town is also home to seabeach knotweed (*Polygonum glaucum*), a rare plant in New York State.

Prior to 1998, T&E species recovery in the Southampton area was undertaken by the US Fish and Wildlife Service (USFWS), The Nature Conservancy (TNC), and the New York State Department of Environmental Conservation (NYSDEC). However, due to a decrease in staffing and resources provided by the NYSDEC and TNC, the Southampton Trustees initiated their own program. To date, this includes the sole management of approximately 13 miles of ocean beach from Shinnecock County Park East to the East Hampton Town border, and 16 bay sites located throughout the town. Still a vital part of the program, TNC monitors the ocean sites west of the Shinnecock Inlet in addition to two bay sites, while the NYSDEC and US Fish and Wildlife Service monitor the shoreline of Westhampton Beach Dunes. Monitoring is also provided by the Suffolk County Department of Parks, Recreation and Conservation at public beaches in county ownership (Shinnecock West and East County Parks).

Listed as federally threatened and state endangered, the piping plover (PIPL) constitutes the largest portion of the T&E Species Program. Arriving from mid to late March, the piping plover breeding season lasts until late August to early September. Prior to their arrival, pre fencing is erected in areas that have historically been used by nesting plovers. The purpose of this fencing is to preserve the habitat from foot and vehicular traffic. Piping plovers are territorial, in that they will not nest within the direct vicinity of another mating pair. Consequently, the first month is often spent defending a territory and nesting doesn't officially begin until this is complete; usually late April to early May. Once the female lays one egg, she will continue to do so every other day until four eggs are laid. From this point on, both the male and female will share incubating duties for the next 25-28 days. Additional string fencing is erected for any nests not located in the previously installed areas in order to protect the incubating adult from being disturbed and flushed from the nest. If the site is suitable, a ten foot diameter wire mesh enclosure is erected and nylon netting is placed on top. The enclosure is put up so that the plovers can get in and out but predators such as crows, gulls, raccoons, and fox can not. If a nest is not successful and it is still early enough in the season, the pair will reneest, often in close proximity of the previous nest. Failure can occur as a result of abandonment, predation, washout, unhatched eggs or loss of chicks at a young age. During a reneest the number of eggs laid begins to decrease consecutively.

Right before the chicks are due to hatch, snow fencing is erected to close off the area to vehicular traffic. This fencing is erected within approximately 1000 meters on each side of the nest and extends from the toe of the dune to the waters edge. The reason for this structure is, that upon hatching, piping plover chicks are extremely small, camouflage and unable to fly until they are 25-35 days old. In addition, the chicks are precocial; meaning that they are not fed by their parents but must find their own food and begin doing so within the first few hours after hatching. As a result, chicks often run back and

forth along the beach, putting them at risk. Once a plover chick is observed flying approximately 15 meters it is considered a success and is counted toward the management goals.

In order to remove the Atlantic Coast piping plover populations from the Federal List of Endangered and Threatened Wildlife and Plants, the USFWS has developed a recovery criterion that must be met. Delisting will occur when there are 2,000 breeding pairs, maintained over five years. Of the two thousand, 575 of those must be located within New York and New Jersey. Other important delisting criteria include achieving a five year average productivity of 1.5 fledged chicks per pair and instituting long term agreements among cooperating agencies, landowners, and conservation organizations in order to maintain populations and productivity (USFWS, 1995). The preliminary numbers for the 2009 season were a total of 1831 pairs along the Atlantic Coast in which 542 were located in the NY-NJ unit.

Listed as a threatened species in New York State, the least tern (LETE) shares some similarities with the piping plover in terms of breeding and nesting behavior. As a result, beachgoers often mistake the identities of these two species. Arriving to their breeding grounds by late April to mid May, eggs are normally laid from late May through June. Frequently found within the same habitat as the piping plovers, nests are incubated for approximately 21 days. However, unlike the plover, terns nest in colonies and can have anywhere from 1 to 3 eggs per nest, making the use of exclosures impractical. In order to protect their nests, adult terns will actively defend them by dive bombing or defecating on any perceived threat. These birds are also different in that they are semi-precocial. Chicks are capable of moving about shortly after birth but remain in or around the nest and are fed by the adults. Often times the chicks stay within the string fence and hide amongst vegetation until they are nearly ready to fly or have already fledged. Although this is beneficial in regard to safety from vehicular or foot traffic, it makes exact counts more difficult. As a result, least tern counts are estimated. Around 19-20 days after hatching, the least tern chicks are able to fly and most have left for wintering grounds by the end of August to early September.

Seabeach amaranth is an annual low growing plant once abundant in coastal environments from Massachusetts to South Carolina. Believed to have been extirpated for over three decades from the state of New York, small populations were discovered on Long Island in 1990. This is believed to be the result of seeds being transported via storms and hurricanes. Recognized as both state and federally endangered, the population of seabeach amaranth has steadily increased and is now found in seven states, the majority of which are located in the mid Atlantic region. Found along sandy beaches, amaranth is often located between the toe of the dune and the high tide mark. The plants begin sprouting from their seeds between June and July and can grow as large as three feet in diameter. Upon their arrival, string fence is erected to protect the plants and they are individually counted. Seed production begins in August, peaks in September and last until the plant dies, sometimes occurring as late as November.

The main threat facing the future of seabeach amaranth is the loss of suitable habitat. This is often caused by the increased rate of erosion as a result of the use of bulkheads, seawalls, and other artificial dune construction as a means of beach stabilization. Additional threats include off road vehicles and natural factors, such as predators.

Seabeach amaranth facilitates beach growth by trapping wind blown sand and assisting in the production of dunes. It has been recorded that in a few months, a cluster of amaranth plants can build a dune 18" high and 12' across. As with the federally protected piping plover, seabeach amaranth does need to meet certain criteria prior to delisting. This will occur when seventy five percent of the sites with suitable habitat within at least six of the nine historically occupied states are occupied by seabeach amaranth populations for ten consecutive years (USFWS, 1996).

The Town of Southampton is also home to seabeach knotweed. Sharing several similarities with seabeach amaranth, knotweed is faced with many of the same threats. As a result, populations within its range are beginning to decline. Considered a rare plant in New York State, the presence of this species bears significance in terms of its current status. Present from July to as late as November on both the ocean and bay sites, seabeach knotweed plants are identified and counted. The number of plants observed is estimated when plants are found in large clusters.

In total, the 2010 Threatened and Endangered Species Program confirmed the fledging of 31 piping plovers from the 59 nests and re-nests managed by the Southampton Town Trustees. The 37 total nesting pairs of piping plovers produced a final productivity of 0.838 for the 2010 season. Least tern pairs were estimated at 278 and produced approximately 73 fledges; significantly fewer from last year. A total of 19 seabeach amaranth plants were also counted along with an estimated 6,839 seabeach knotweed plants. In 2009 a hurricane in mid August devastated the seabeach amaranth population (252) disrupting the germination process reducing new growth for this season.

Ocean Sites: (See attached maps for nesting locations)

Southampton Beach contains three sub-sites based on the location of road accesses. At approximately 3.5 miles, this is the largest site monitored by the Trustees and is located within the Village of Southampton. Southampton Beach also provides some of the widest beach located within the Town and supplies suitable habitat to all the T&E Species present. Off road vehicle traffic and beach raking are the largest concerns at this site. This season, tracks from a fox and its kits were observed along the toe of the dune from Road G to Halsey Lane.

Overall PIPL Site Productivity: 0.727

Shinnecock East County Park to Road D: One piping plover nest was located within this area of Southampton Beach. This nest was of concern due to its location so close to the picnic area. This area is open to ORV access every day, year round. The nest was exclosed and the adults incubated for 26 days before abandoning the nest. The pair never attempted to re-nest.

No least tern activity or seabeach knotweed was present within this sub-site. Two seabeach amaranth plants were located.

PIPL Site Activity: 1 Pair, 0 Fledge

PIPL Sub-Site Productivity: 0

Road D to Halsey Neck Lane: This sub-site was the most productive for Southampton Beach. However, it is also one of the most difficult to manage. Although there is minimal public access, residents often walk dogs in this area with disregard to the string fencing. Village Officials disregarded ORV restrictive

fences and drove around at low tide. There were a total of eight pairs that laid sixteen nests. Seven chicks were fledged from four of these nests. Four of the sixteen nests were exclosed. Of the four exclosed nests, one was abandoned after incubating nineteen days. One was found predated; an animal had dug under the exclosure. The other two exclosed nests hatched six chicks of which three chicks fledged.

There were 22 least tern nests located within the same fencing as the plovers. Of these 22 nests, 8 tern chicks fledged. This site was the most productive for seabeach amaranth in the 2009 season with 222 plants. The remnants of Hurricane Bill struck the East End of Long Island in late August of 2009, wiping out the entire population of seabeach amaranth. Nine seabeach amaranth plants were found in this sub site in 2010.

PIPL Site Activity: 8 Pairs, 7 Fledges

PIPL Sub-Site Productivity: 0.88

Halsey Neck Lane to South Main St: The beach that lies within this area includes the very popular Coopers Beach and the Southampton Bathing Corp. This area is a high use site and as a result struggles with an increase in predators. In addition, beach raking is also used to maintain the beach, which removes food sources and shelter for both the piping plovers and least terns.

This year, two piping plover pairs nested along this stretch of beach. One nest was located between the Halsey Neck Access and Coopers Beach. The nest was predated and the pair never attempted to re-nest. The second nest was located west of the Cryder access. The nest was exclosed, however, the adults alternated between abandonment and tending the nest until they abandoned twenty-two days later. The pair did not attempt a re-nest.

Three tern nests were located within the symbolic fencing and resulted in 0 fledges. Two amaranth plants were also located in this sub-site. No seabeach knotweed was found.

PIPL Site Activity: 2 Pairs, 0 Fledges

PIPL Sub-Site Productivity: 0

Gin Lane Beach is located within the Village of Southampton. This site does not have a lot of suitable habitat and no piping plover or least terns were recorded here. Zero seabeach amaranth plants or seabeach knotweed was recorded here.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Old Town Beach is the easternmost site located within the Village of Southampton. The beach profile at this site makes it excellent habitat for all T&E Species located within the Town. Two plover pairs laid a total of three nests at this site. All three nests were located in areas that were unable to be exclosed. As a result, all three nests were predated and the pairs did not attempt any additional re-nests.

No least terns or seabeach knotweed were present at this site. Four seabeach amaranth plants were counted.

PIPL Site Activity: 2 Pairs, 0 Fledges

PIPL Site Productivity: 0

Watermill Beach is located within the Town of Southampton and is broken up into three separate sub-sites based on the names of the town run beaches. Fowlers, Flying Point, and Scott Cameron (Mecox) compromise a total of five access points, four of which are designated public beaches with lifeguards on duty. As a result, this is a high use site and struggles with unleashed dogs, predators and ORV access.

Overall PIPL Site Productivity: 0

Fowlers Beach: There was one plover pair located at this site. It made two nesting attempts. The first nest was located high on the dune and was 26 days when it was predated by crows. The pair re-nested below the dune and the nest was exclosed. The chicks hatched but disappeared at 3 days old. One chick was collected by the dune, west of the ORV Restrictive Fencing. The likely cause of the death was due to exposure. No least tern, seabeach amaranth or seabeach knotweed was recorded at this site.

PIPL Site Activity: 1 Pair, 0 Fledges

PIPL Sub-Site Productivity: 0.0

Flying Point Beach: Flying Point did not have any nesting plovers this year. No tern activity or plants were recorded at this site.

PIPL Site Activity: 0 Pairs

PIPL Sub-Site Productivity: 0.0

Scott Cameron Beach: The westernmost and easternmost boundaries of this site are Town Parks and Recreation managed beach areas, and therefore high in human activity. As a result, the birds often nest in a .4 mile stretch between these sections. Although the majority of the residents at this site are extremely supportive and understanding, considering the extent of fencing erected, some vandalism did occur. One resident moved the symbolic fencing even after being contacted by the bay constables.

During the winter/spring, a large feral cat colony in the area was dismantled and cats were humanely trapped and released elsewhere. Due to these measures, no feral cats were observed in the area. There were however tracks belonging to a small mammal seen near a nest.

There were six pairs located at this beach with a total of ten nest attempts. One nest was exclosed but the pair abandoned the nest after twenty seven days of incubating. Abandonment was accredited to observed tracks circling the enclosure as well as another pair nesting 30 feet west of the exclosed nest. The other nests were located in areas that made an enclosure impossible. As a result the nests were predated.

There were 21 least tern nests that fledged 0 chicks. The site was washed out several times. There were no plants located at this site

PIPL Site Activity: 6 Pairs, 0 Fledges

PIPL Sub-Site Productivity: 0

Sam's Creek Beach is a small .6 mile site located between Jobs Lane and Ocean Rd. This site was home to one pair of nesting piping plovers and successfully fledged one chick. The pair nested early in the season high on the dune.

No least tern, seabeach amaranth or seabeach knotweed was found at this site.

PIPL Site Activity: 1 Pair, 1 Fledge

PIPL Site Productivity: 1.0

Sagaponack Lake Beach is separated into two sub-sites with the lake acting as the divider. Usually the lake cut is not maintained (open) during the breeding/ germination season. The cut was closed for the majority of the season, only being opened once. The beach to the east of the cut had a high number of nesting terns. This section of the site was washed out numerous times throughout the season resulting in a low tern fledge rate.

Overall PIPL Site Productivity: 1.667

Sagaponack Lake West: No piping plover, least tern activity or seabeach amaranth was present at this sub-site. One seabeach knotweed was located at this site.

PIPL Site Activity: 0 Pairs

PIPL Sub-Site Productivity: 0.0

Sagaponack Lake East: The westernmost section at this sub-site is the area located by the lake. This area was home to one pair of plovers that made three nesting attempts. The first two attempts were predated while the third was washed out. The easternmost section which suffered from erosion in 2008 was built up quite a bit of the last year. As a result, two pairs of plovers were found nesting on the beach as opposed to high up in the dunes. One pair successfully hatched and fledged 4 chicks. The brood traveled roughly a mile east to the Fairfield site shortly after the nest located 40 feet west hatched. The other pair hatched two chicks and fledged one chick. The nest appeared to have been predated after/during the hatching process.

The number of nesting terns varied throughout the season. As a result, the success of nests and the fledge rate was low. The terns successfully fledged 8 chicks from 55 nests. No seabeach amaranth or seabeach knotweed was found.

PIPL Site Activity: 3 Pairs, 5 Fledges

PIPL Sub-Site Productivity: 1.667

Fairfield Pond Lane Beach Fairfield Pond Lane Beach is located between Gibson Lane and Town Line Road. Fairfield Pond Lane Beach is popular among dog walkers and the residents are mostly supportive of the program. This site suffers from erosion and as a result many of the early nests that were located low on the beach were washed out while those located high in the dunes were predated.

Overall PIPL Site Productivity: 1.0

Fairfield Pond Lane Beach West: A pair of plovers were seen scraping briefly just west of the Peters Pond Lane Access. It is thought that they were a pair that nested just east of the access. There were no least terns, seabeach amaranth or seabeach knotweed found at this site.

PIPL Site Activity: 0 Pairs

PIPL Sub-Site Productivity: 0.0

Fairfield Pond Lane Beach East: This site had five pairs of plovers with ten nesting attempts. Two of the nests were exclosed. One of the nests hatched all

four chicks but the chicks were not seen after one day old. The other enclosed nests hatched three of the four eggs and fledged two chicks. Two additional nests hatched eight chicks and fledged three chicks. A plover adult was observed with bands and it was later concluded that the adult had migrated from the Bahamas. After three nesting attempts this pair successfully fledged two chicks. The five fledges hatched during a hot dry spell where there was no rain and the temperatures exceeded 95°F. The chicks appeared stunted and matured slowly.

Twenty tern nests were located throughout the site and successfully fledged nineteen chicks. No seabeach amaranth or knotweed was located.

PIPL Site Activity: 5 Pair, 5 Fledges

PIPL Sub-Site Productivity: 1.0

Bay Sites: (See attached maps for nesting locations)

Red Cedar Point is located on a private residence in which the homeowner has given the Trustees permission to access the property and manage any T&E species present. This site is closed to driving and is not open to the public. This site has great habitat for both the plovers and the terns. This site was the most productive for the 2010 season. Four nesting pairs fledged eleven chicks. Two nests were located in bushes and fledged 7 chicks. One of the nests was located in an open area and was enclosed. Only one chick fledged from this nest. The last nest was located in an area with some plant coverage and fledged three chicks. Three broods fed on the southwestern edge of the point where the habitat is low and flooded daily. Ten chicks fledged from these three broods. The fourth brood fed along the northeast edge of the point which is rocky and has a steep slope. Only one chick fledged from this brood.

Forty least tern nests were located at this site and successfully fledged fourteen chicks. This is a large improvement from last year. Three seabeach knotweed plants were found at this site and no seabeach amaranth was present.

PIPL Site Activity: 4 Pairs, 11 Fledges

PIPL Site Productivity: 2.75

Red Creek Pond: Six least tern nests were observed and they fledged two chicks. No piping plover activity or seabeach amaranth was found at this site. Six seabeach knotweed plants were found at this site.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Squires Pond No piping plover, least tern activity, seabeach amaranth or seabeach knotweed was found at this site.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Meschutt Beach East did not have any T&E species present this season. This site does not have any suitable habitat as most of it is bulkheaded. In addition, it is very heavily used for recreational purposes. This includes boating activity and beachgoers to the Peconic Beach Club.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Canoe Place Beach: Although there is some suitable habitat at this site, it is limited. The area is also heavily used by the residents of the private community the beach borders. No birds have ever nested here in the past and no vegetative species were recorded as well.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Fish Cove/North Sea Harbor is two separate sites within the same vicinity. Fish Cove is located along Noyac Rd and is very small. This site is used extensively by ORV's and the sand is very firm and not suitable. The North Sea Harbor site is a small island located within the harbor. There is currently no suitable habitat at this site.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Towd Neck is the largest bay site monitored by the Southampton Trustees and is broken up into two sub-sites with the inlet into North Sea Harbor as the divider. Both sub-sites are high use areas but vary in regard to beach profile. The greatest threat facing Towd is the use of recreational vehicles.

Overall PIPL Site Productivity: 0

Towd Neck West: Two immediate threats to successful nesting at this sub-site are human activity and a lack of suitable habitat. Approximately ¼ of this site is bulk headed with the tide reaching the bulkhead, while the remainder is heavily used by ORV traffic. No piping plover, least tern or seabeach amaranth was found at this site. One seabeach knotweed was observed.

PIPL Site Activity: 0

PIPL Sub-Site Productivity: 0.0

Towd Neck East: This site is different from the western sub-site in that most of the habitat here is suitable for nesting plovers and terns. Fencing here is often a challenge as Towd Neck East is buffered by residences, all of which have individual access to the beach. All string fencing is put up in an attempt to leave every walkway open. Although this is not always possible, residents' access to the beach is never blocked off completely.

Two pairs of piping plovers nested at this sub-site with a total of three nesting attempts. Two of the nests were predated. The third nest hatched but the chicks were not seen past three days old. No other re nest attempts were made

A least tern colony was also located at this site with an estimated seventy-six nests, producing twenty fledges. In addition, an astounding amount of seabeach knotweed was found throughout the entire stretch of Town Neck East. Individual counts were not possible and the total was estimated at 5400 plants. No seabeach amaranth was found.

PIPL Site Activity: 2 Pairs, 0 Fledges

PIPL Sub-Site Productivity: 0

Wooley Pond is separated into two sites due to the inlet into the Pond. Both sub-sites have limited suitable habitat and therefore no piping plovers or least terns have ever been

recorded nesting here. Thirty six seabeach knotweed plants were located at the western sub-site.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Roses Grove and Fresh Pond both have a lack of suitable habitat for piping plover and least tern nesting. This may be a result of the extensive use of bulkheading and steep slope of the beach profile. No seabeach amaranth or seabeach knotweed were recorded either.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Pine Neck had one pair of nesting piping plovers this year. While all four chicks hatched, only one chick fledged. One chick was found dying and was collected to be given to the Department of Environmental Conservation.

Seven seabeach knotweed plants were located at Pine Neck. No least tern or seabeach amaranth was recorded.

PIPL Site Activity: 1 Pair, 1 Fledges

PIPL Site Productivity: 1.0

Long Beach is one of the more difficult sites to manage. Approximately one mile long, the site is a public beach run by the towns' Department of Parks and Recreation. The high level of human activity is a major threat to the nesting shorebirds at this site. Long Beach is particularly crowded on weekends and holidays. Another threat to nesting at this location is predators such as gulls, crows and unleashed dogs. The parking lot also runs parallel to the beach, making it difficult to prohibit beach driving once chicks are present. No piping plovers were observed nesting in the area.

A least tern colony also nested in the string fencing to the easternmost area. There was an estimated thirty five nests of which ten chicks fledged. Although no seabeach amaranth was located at this site, 1079 seabeach knotweed plants were counted.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

Short Beach does not contend with a lot of the problems faced by Long Beach. Although relatively close, few beachgoers are found here and the use of recreational vehicles is not a concern as the access is blocked by pilings. In addition, there are limited homes located here. Unfortunately, the presence of predators, specifically crows, is an extremely large issue. No piping plovers were recorded at this site.

No least terns or seabeach amaranth were located at this site. There were 155 seabeach knotweed plants recorded.

PIPL Site Activity: 0 Pair

PIPL Site Productivity: 0.0

Genet Creek had never been monitored prior to 2008. The first nest was found last year and successfully fledged two chicks. This year a four egg nest was located, hatched two of the four eggs and successfully fledged one chick. This is a great site as it is very secluded and is not open to beach driving. The only concern here is the number of hawks that were observed in the area.

Seventy seabeach knotweed plants were recorded. No least tern or seabeach amaranth was found.

PIPL Site Activity: 1 Pair, 1 Fledge

PIPL Site Productivity: 1.0

Middle Pond is the only site located along the Shinnecock Bay System. It is a narrow, secluded beach that is not highly trafficked by people and there is no access for ORV's. Although this site once produced fledges on a consistent basis, there has been no breeding plovers or terns since 2004. This is thought to be the result of an increase in predators and the overgrowth of vegetation where suitable habitat existed. Eighty two seabeach knotweed plants were counted at this site.

PIPL Site Activity: 0 Pairs

PIPL Site Productivity: 0.0

PIPL Nests and Chicks:

For the 2010 season, 37 breeding piping plover pairs produced 59 nests (including renests). Within those nests were a total of 189 eggs, out of which 74 (39.2%) successfully hatched. Of the remaining 115 eggs, 78 (67.8%) were lost to predation, 16 (13.9%) were abandoned, 13 (11.3%) were washed out, 5 (4.3%) failed to hatch and 3 (2.6%) were lost to unknown causes. Overall, 21 (35.6%) of the 43 nests hatched eggs. (See Table 2)

Due to severe pre-season erosion, many nests were found in areas that could not be exclosed resulting in a large number of predated nests. Of the 59 nests, 12 nests were exclosed. Of the 12 nests exclosed, 6 chicks fledged from 4 nests. Of the 12 nests exclosed, 5 nests were abandoned. Two of the exclosed nests hatched but the chicks did not survive. And the final nest was predated.

Out of the 74 eggs that successfully hatched, 43 (22.8%) of them did not reach fledge status while the remaining 31 (16.4%) did. The overall productivity of the 37 pairs was then 0.838. This is a decrease from last year's successful rate of 1.21. There are many factors that can contribute to this, which can include lack of habitat, increase in predators and a lack of understanding by beachgoers. The inability to construct exclosures was detrimental to this year's productivity considering the majority of first nest attempts had been predated and second nesting attempts were never made. It is the goal of the Southampton Town Board of Trustees Threatened and Endangered Species Program to work with participating agencies and the residents to recover all T&E species located within the town.

Acknowledgements

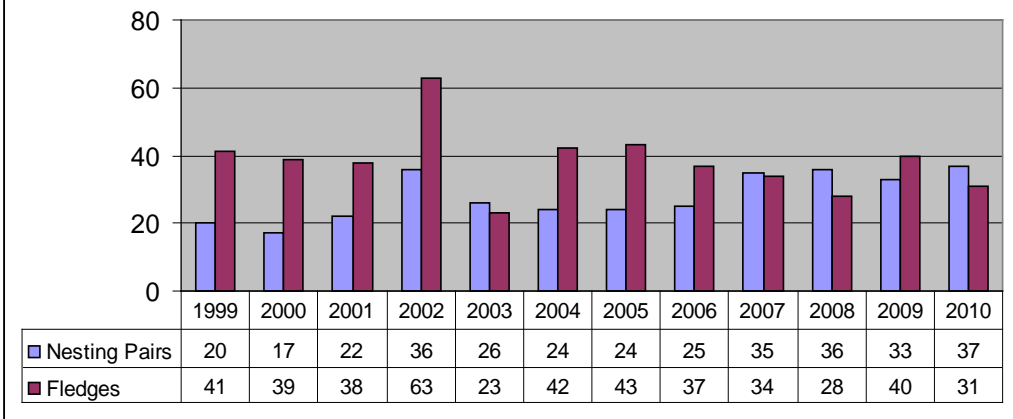
We at the Southampton Town Board of Trustees would like to thank all those individuals who helped make the 2010 Threatened and Endangered Species Program a success. Thank you to the Marine Maintenance Division, the Southampton Town Bay Constables, Joe Janssen of the Nature Conservancy, Steve Sinkevich and Special Agent Paul Chapelle of USFWS, Chip Hamilton and Michelle Gibbons of the NYSDEC, James Gromely and Ross Baldwin with the Towns GIS Dept., NYSDEC Officer Liza Bobseine, and Carolyn Spilman of Audubon New York. Special thanks go out to our volunteers Kathleen and Ken Conrad all of whom were a tremendous help.

Table 1. Piping Plover Pairs and Productivity for 2010

Site Name/ Location	No. Nesting Pairs	No. Nests	No. Eggs	No. Chicks	Hatch Rate (Chicks/ Eggs)	No. Fledges	Fledge Rate (Fledges/ Chicks)	Productivity (Fledges/ Pairs)	No. Times Site Visited
Atlantic Ocean Nesting Sites									
Village Beaches									
1. Southampton Beach	11	19	46	21	0.46	7	0.33	0.73	54
a) County Park Boundary to Rd D	1	1	4	0	0	0	0	0	22
b) Rd D to Halsey Neck Ln	8	11	35	21	0.46	7	0.33	0.88	44
c) Halsey Neck Ln to S. Main St	2	2	7	0	0	0	0	0	24
2. Gin Lane Beach S. Main St to Old Town Rd	0	0	0	0	0	0	0	0	9
3. Old Town Rd Beach Old Town Rd to Fowlers St	2	3	12	0	0	0	0	0	30
Town Beaches									
4. Watermill Beach	7	12	39	3	0.08	0	0	0	58
a) Fowlers Beach Fowlers St to Flying Pt Rd	1	2	7	3	0.43	0	0	0	29
b) Flying Point Beach Flying Pt Rd to Dune Rd	0	0	0	0	0	0	0	0	13
c) Scott Cameron Beach Dune Rd to Jobs Ln	6	10	32	0	0	0	0	0	36
5. Sam's Creek Jobs Ln to Ocean Rd	1	1	4	4	1.0	1	0.25	1.0	26
6. Sagaponack Lake Beach Ocean Rd to Gibson Ln	3	5	15	6	0.4	5	0.83	1.67	46
7. Fairfield Pond Lane Beach Gibson Ln to Town Line Rd	5	10	38	15	0.4	5	0.3	1.0	69
Total for Ocean Nesting Sites	29	50	154	49	0.31	18	0.4	0.62	234
Peconic Bay Nesting Sites									
8. Red Cedar Pt	4	4	16	16	1.0	11	0.69	2.75	28
9. Red Creek Pond	0	0	0	0	0	0	0	0	11
10. Squires Pond	0	0	0	0	0	0	0	0	8
11. Meschutt Beach East	0	0	0	0	0	0	0	0	1
12. Canoe Place Beach	0	0	0	0	0	0	0	0	1
13. Fish Cove/N. Sea Harbor	0	0	0	0	0	0	0	0	1
14. Towd Neck	2	3	11	3	0.27	0	0	0	31
15. Wooley Pond	0	0	0	0	0	0	0	0	20
16. Roses Grove	0	0	0	0	0	0	0	0	6
17. Fresh Pond	0	0	0	0	0	0	0	0	6
18. Pine Neck/Mill Creek	1	1	4	4	1.0	1	0.25	1.0	26
19. Long Beach	0	0	0	0	0	0	0	0	14
20. Short Beach	0	0	0	0	0	0	0	0	14
21. Genet Creek	1	1	4	2	0.5	1	0.5	1.0	17
Shinnecock Bay Nesting Sites									
22. Middle Pond	0	0	0	0	0	0	0	0	6
Total for Bay Nesting Sites	8	9	35	25	0.71	13	0.52	1.625	190
Totals for All Sites	37	59	189	74	0.37	31	0.44	0.838	424

Table 2 Outcome of All Laid Piping Plover Eggs	
37 Nesting Pairs	
Laid 59 total nests	
With a total of 189 eggs	
115 unhatched (60.8% of all eggs didn't hatch)	
78 eggs predated (67.8% of all eggs predated)	
16 eggs abandoned (13.9%)	
13 eggs overwashed (11.3%)	
3 unknown (2.6%)	
0 destroyed (human) (5.1%)	
5 failed (4.3%)	
74 eggs hatched from 21 nests (39.2% of all eggs hatched)	
31 Fledged (43 lost)	

Graph 1: Historical Piping Plover Nesting Pairs and Fledge Data



Graph 2: Historical Piping Plover Productivity Data

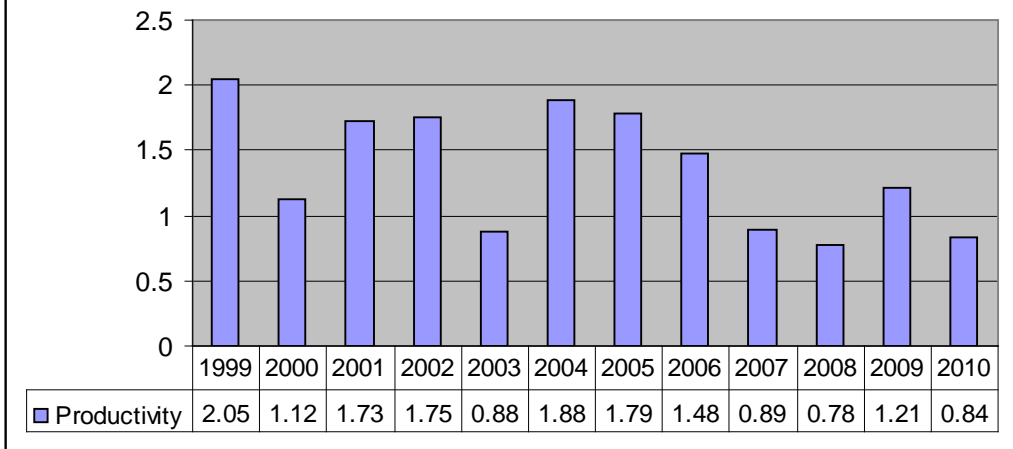
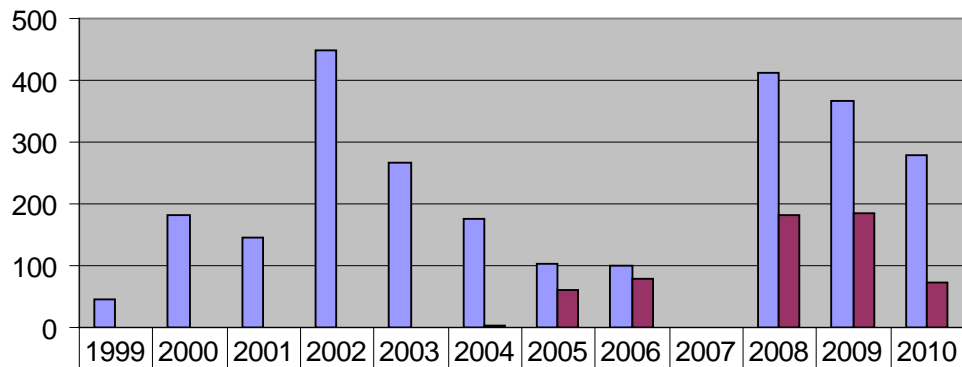


Table 3 Least Tern Pairs and Productivity 2010

Site Name/ Location	No. Nesting Pairs	No. Fledges	Productivity (Fledges/Pair)
Atlantic Ocean Nesting Sites			
Village Beaches			
1. Southampton Beach	25	8	0.32
a) County Park Boundary to Rd D	0	0	
b) Rd D to Halsey Neck Ln	22	8	0.36
c) Halsey Neck Ln to S. Main St	3	0	0
2. Gin Lane Beach S. Main St to Old Town Rd	0	0	
3. Old Town Rd Beach Old Town Rd to Fowlers St	0	0	
Town Beaches			
4. Watermill Beach	21	0	0
a) Fowlers Beach Fowlers St to Flying Pt Rd	0	0	
b) Flying Point Beach Flying Pt Rd to Dune Rd	0	0	
c) Scott Cameron Beach Dune Rd to Jobs Ln	21	0	0
5. Sam's Creek Jobs Ln to Ocean Rd	0	0	
6. Sagaponack Lake Beach Ocean Rd to Gibson Ln	55	8	0.15
7. Fairfield Pond Lane Beach Gibson Ln to Town Line Rd	20	19	0.95
Total for Ocean Nesting Sites	121	27	0.22
Peconic Bay Nesting Sites			
8. Red Cedar Pt	40	14	0.35
9. Red Creek Pond	6	2	0.33
10. Squires Pond	0	0	
11. Meschutt Beach East	0	0	
12. Canoe Place Beach	0	0	
13. Fish Cove/N. Sea Harbor	0	0	
14. Towd Neck	76	20	0.26
15. Wooley Pond	0	0	
16. Roses Grove	0	0	
17. Fresh Pond	0	0	
18. Pine Neck/Mill Creek	0	0	
19. Long Beach	35	10	0.29
20. Short Beach	0	0	
21. Genet Creek	0	0	
Shinnecock Bay Nesting Sites			
22. Middle Pond	0	0	0
Total for Bay Nesting Sites	157	46	0.29
Totals for All Sites	278	73	.26

Graph 3: Historical Least Tern Nesting Pair and Fledge Data



■ Nesting Pairs	45	181	145	447	267	177	102	101		413	366	278
■ Fledges						2	60	80		183	186	73