SOUTHAMPTON TOWN TRUSTEES

THREATENED AND ENDANGERED SPECIES MANAGEMENT AND PROTECTION PROGRAM

Figure 1 and 2. Two freshly hatched Piping Plover chicks loafing inside of the nest (left) and one adult Piping Plover loafing in the sand dunes (right).

Scientific Report 2020

Threatened and Endangered Species Program Staff

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Executive Summary

During the 2020 piping plover breeding season, areas managed and protected by the Southampton Town Trustees Threatened and Endangered Species Management and Protection Program (T&E program) consists of 9 ocean sites, 16 bay sites and covers approximately 26 miles of coastline. Within these sites, 47 nesting pairs of piping plover were observed throughout the breeding season with 42 piping plover chicks fledging giving an overall productivity of .89 fledges per pair, which is a decrease from the previous year. Also, within the aforementioned management areas there were approximately, 189 breeding pairs of least tern that were observed with 69 least tern chicks fledging for an overall productivity of 0.37 fledges per pair, which was also decrease from the previous year. The breeding process for both the piping plover and least tern were delayed for many of these birds due to inclement weather coupled with high tides and the early arrival of summer residents due to the COVID-19 pandemic. The main obstacle with respect to the reproductive success of both of these species stemmed from nest abonnement due to human interference, intense weather patterns including high tides, and predation by larger avian species and small mammals. Additionally, 15 seabeach amaranth plants were identified at 6 ocean sites and a total of 33 seabeach knotweed plants were identified at 3 bay sites.

Current Species Status

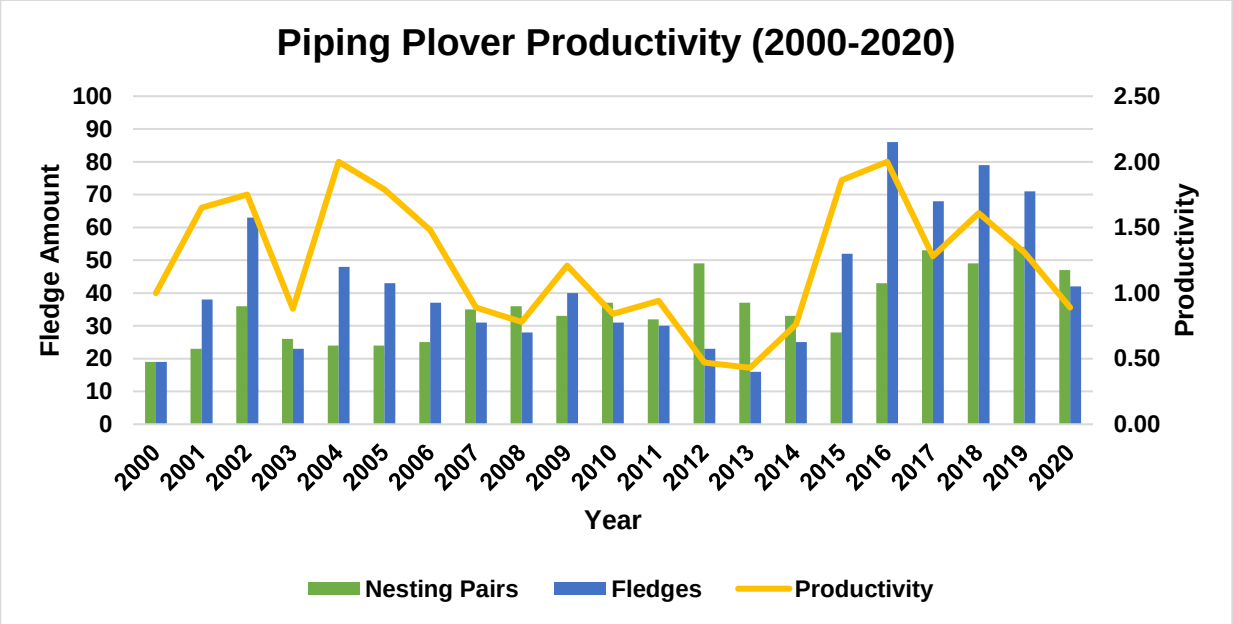
The species protected by this program include two avian species; the federally threatened and New York State (NYS) endangered piping plover (*Charadrius melodus*), and the NYS threatened least tern (*Sternula antillarum)* along with two annual coastal plants: the federally and NYS threatened seabeach amaranth (*Amaranthus pumilus*) and the NYS listed rare species of special concern seabeach knotweed (*Polygonum glaucum*) **(NYNHP, 2016)**.

Program Objective

The T + E Program provides protection for populations of threatened and endangered flora and fauna that are found on coastal beaches, and rely on these zones for breeding and the continuation of their species longevity. Management efforts for these flora and fauna are focused on increasing the annual productivity rate of these species. This is done by assessing the current threats to their populations, and applying the conclusions to form protective action that can effectively minimize and negate the consequences to these species. The objective of this program is to protect the endangered avian species that rely on these nesting locations as well as work closely with the public who also utilize these locations so that both groups can coexist. This can be done through public education about their importance to the ecosystem.

History of the Program

Prior to 1998, the U.S. Fish and Wildlife Service (USFWS), the Nature Conservancy (TNC), and the New York State Department of Environmental Conservation (NYSDEC) jointly managed threatened and endangered species recovery in the Southampton area. However, due to a decrease in staffing and resources provided by the NYSDEC and TNC, the Southampton Trustees initiated their own threatened and endangered species program. Prior to 2011, the Southampton Town Trustees were responsible for 13 miles of ocean beach and 16 bay sites. During the 2011 season, the Trustees worked with TNC to become familiarized with the Westhampton Island sites. In 2012, the Trustees began to manage the 5.5 miles of ocean beach from Roger's Beach Pavilion in Westhampton to Tiana Pavilion in Hampton Bays. The Trustees now manage a total of 18.5 miles of ocean beach and 15 bay sites. The remaining sites in the Town of Southampton are managed by TNC, NYSDEC, USFWS, Suffolk County Department of Parks, Recreation and Conservation (SCDPRC) and a private consulting firm. Throughout the last 20 years, additional sites have been both added and removed altering the distance that is monitored during the breeding season. The total distance monitored has varied between 18.9 and 25.8 miles, and has led to an increased number of breeding pairs that have been observed and recorded throughout the breeding season **(Graph 1)**.



Graph 1. The productivity of the piping plover from the year 2000 to 2020 based on the amount of nesting pairs and fledges observed at all the ocean and bay sites monitored by the Southampton Trustees as a part of the T&E program.

Life History, Conservation, and Recovery Efforts

Piping Plover Life History and Management

The piping plover is a small shorebird that migrates north during the spring to locations like Long Island where they utilize the bay and ocean beaches for breeding. They are identifiable by their light grey to sand coloration, a white underbody, and a well-defined black neck and brow band, which is on full display during the breeding season **(Figure 3)**. Males will arrive first, around mid-March, to establish their nesting territories, followed shortly thereafter by the females. These solitary nesters utilize open, sparsely vegetated sandy and moderately rocky shoreline habitats such as over-wash areas, gently sloped fore dunes and sand flats to make their nests. The ideal nesting habitat is usually located in close proximity to prime foraging grounds in preparation for brood rearing. Plovers exhibit nesting site fidelity, which means that the birds will return to the same nesting grounds year after year. In preparation for the breeding season, historic and suitable nesting habitats are fenced off with "symbolic fencing", which is made up of wooden/metal posts encased with string with flagging and signs that are attached **(Figure 4)**. This is done to insure that they are not disturbed during their breeding season and are less likely to abandon a nest should a perceived predator get to close.

Figure 3. An adult piping plover performing "broken wing" display to distract predators and defend the nest.

Figure 4. Symbolic fencing utilized to protect the breeding sites of the piping plover and least tern.

From their arrival in mid-March through May, males will establish their nesting territories while courting female plovers to form a pair bond. During this process, males will create multiple scrape nests, which the female will inspect as a potential nesting option. Scrapes are shallow depressions in the sand that are often decorated with seashell fragments by the female. They are difficult to see and are often mistaken for a footprint or a depression left by a shell that had been picked up or moved **(Figure 5)**. The symbolic fencing is rearranged to reflect the birds' behaviors during this time in order to provide them with an optimal buffer from disturbances. After copulation, the female will lay one egg every other day until a full clutch if formed, which is usually three to four eggs. If a nest failure occurs, the pair will attempt to re-nest up to four times within a breeding season. Nest failure can be caused by many factors including disturbance while incubating, exposure, predation, abandonment, infertility, vandalism and nest washout caused by wave or tidal inundation. It is typical to see fewer eggs in re-nested attempts which will lead to lower reproductive success and productivity. In areas with a high predatory presence, an enclosure will be installed around the nests to aid in their protection from predators **(Figure 6)**.

Figure 5. A piping plover scrape between dune vegetation surrounded by piping plover footprints.

Figure 6. An enclosure made up of 10 feet of wire mesh and a mesh top installed around the piping plover nest, which is at risk of predation from predators.

Both piping plover parents share the responsibility of incubating the nests, which begins after the final egg is laid and the clutch is complete. The incubation period lasts for approximately 25-28 days, before the chicks begin to hatch **(Figure 7 & 8)**. After estimating the hatch date of a nest, snow fencing will be placed perpendicular to the dune at a distance of 1000 meters (m) in either direction from the nest location, restricting vehicles from driving in the area. This is done 3-5 days in advance of the estimated hatch date. Piping plover chicks are precocial and therefore begin foraging within 24 hours of hatching, scurrying between the foredune and intertidal zones. Without the ability to fly, the chicks are at risk from predation, as well as human disturbance. Their most useful defense is their camouflage, which they use by crouching and staying still when they feel threatened by a perceived predator (vehicles included). After hatching, the chicks take approximately 25-35 days to fledge, during which the brood will remain within close proximity of each other for protection from the elements and predators. Once observation of a fledgling's ability to fly for a minimum distance of 15m, they will be considered fledged and factored into the species' productivity. After fledging, plovers will begin to congregate in small groups in preparation for the long distanced migration back south as early as July, and as late as October.

Figure 7 & 8. Piping plover chicks hatching from their nest (left) and beginning to locomote for the very first time (right).

In order to remove the Atlantic Coast populations of piping plovers from the Federal List of Endangered and Threatened Wildlife and Plants, the USFWS has developed recovery criteria that must be met. Delisting will occur when there are 2,000 breeding pairs, maintained over five years. Of the 2,000 pairs, 575 of those must be located within the New York/New Jersey region. Additional delisting criteria requires a five-year average productivity of 1.5 fledged chicks per pair throughout the region and instituting long term agreements among cooperating agencies, landowners, and conservation organizations in order to maintain populations and productivity **(USFWS, 2009)**.

Least Tern Life History and Management

The least tern is a small migratory coastal bird that utilizes Long Island's shoreline for breeding and reproduction. These colonial nesters, found in groups ranging from 5 to upwards of 100 pairs, are identified by a grey back, white underside and a black capped head with a white brow band. Adult terns arrive to the nesting grounds between late April and mid-May, prior to the common terns and black skimmers. The least terns nest in scrapes although their scrapes tend to be shallower than a plover scrape. They select similar habitats types as the piping plover for nesting areas; such as sand flats, gently sloped fore dunes and flat expanses of beach above the high tide line. They can be seen sharing nesting habitats, as they do not compete for food. Due to infringement on these habitats they have been observed taking to dredge spoils. Pairs will commonly lay a full clutch of one to three eggs per nest from late May through June and both parents share the incubatory responsibilities. Incubation will last approximately 20-23 days at which point the chicks will begin to hatch.

Figure 9. A recently hatched least tern brood loafing inside the nest.

Within a few days of hatching, chicks will begin to move outside of the nest although being semi-precocial; they depend on their parents for feeding and protection. Terns are loud and extremely protective of their young and nesting territories and are known for swooping at intruders when they feel threatened **(Figures 9 and 10).** The chicks will be seen sheltering in the shade of beach debris and foliage as well as in tire tracks and footprints. Nesting colonies are protected in a similar fashion to the piping plover, having symbolic fencing arranged around the colony followed by snow fencing a few days prior to the hatching of nests. At approximately 20 days old, the chicks will fledge, and shortly thereafter, they depart for their wintering grounds, which can happen as early as August and typically no later than the end of September **(NYNHP, 2016)**.

Figure 10. A least tern adult from a nesting colony swooping at perceived predators to protect the colony.

Seabeach Amaranth Life History and Management

For many years, it was assumed that this annual beach grown plant had been eradicated from the coastal ecosystems of Long Island until 1990 when it was rediscovered. However, it has lost approximately 2/3 of its historic range. This plant grows in the dynamic areas of the beach profile on accreting shorelines between the dunes edge and the high tide line, often in the same areas as nesting shorebirds. Germination of seabeach amaranth occurs between June and July on Long Island, coming to maturation between August and September. During the maturation period, plants will continue to grow, bloom and disperse seed by wind at the same time acting as sand- binders fortifying the beach profile. Plants can range in size from a few inches to a few feet in diameter **(Figure 11)**.

Seabeach amaranth plants are protected by small symbolically fenced and signed areas directly encompassing the pant to prevent ORV and pedestrian traffic from damaging the plant prior to end of its growth and seed dispersal. In order to be considered for delisting, seabeach amaranth should be found within a minimum of six states that fall within its historic range in conjunction with plants occupying a minimum of 75% of this suitable habitat found within each site for a minimum of 10 years. According to the most recent 5-year review of seabeach amaranth, it was suggested that no changes be made to the plants listing even though the plant is found within six of the states within its historical range given that the data does not encompass the 10-year requirement **(USFWS 2007)**.

Seabeach Knotweed Life History and Management

Seabeach knotweed is an annual plant found on bay and ocean shorelines of Southampton Town between the foredune, shoreline and bordering salt marshes. It is typically found in areas that are sparsely vegetated and have a relatively flat topography **(Figure 12)**. Knotweed typically flowers from May to October and fruits from June to November dispersing seed through wind, wave action and birds. In NYS, 43 existing populations are currently recognized, which are relatively stable although due to the dynamic environment these plants grow in, there are fluctuations in population numbers from year to year. In order to determine the quantity and quality, the populations are derived from 5-year averages for species evaluation **(NYNHP 2016)**.

Figure 11. A seabeach amaranth plant found on coastal ocean beaches.

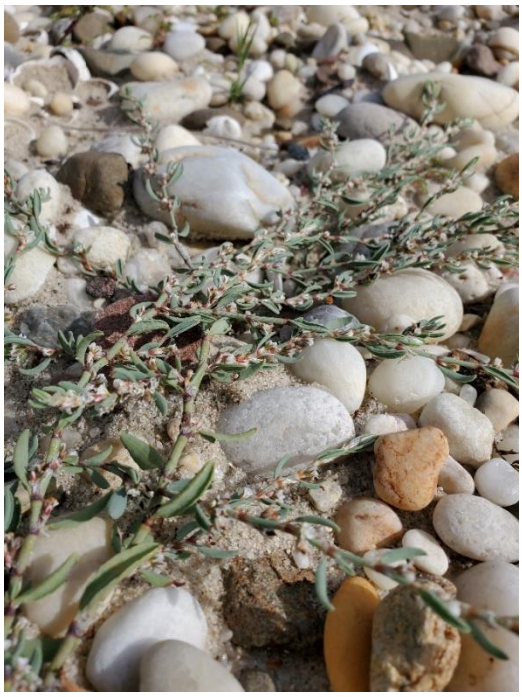


Figure 12. A seabeach knotweed plant found on coastal ocean and bay beaches.

Threats to Species

Piping Plover and Least Tern

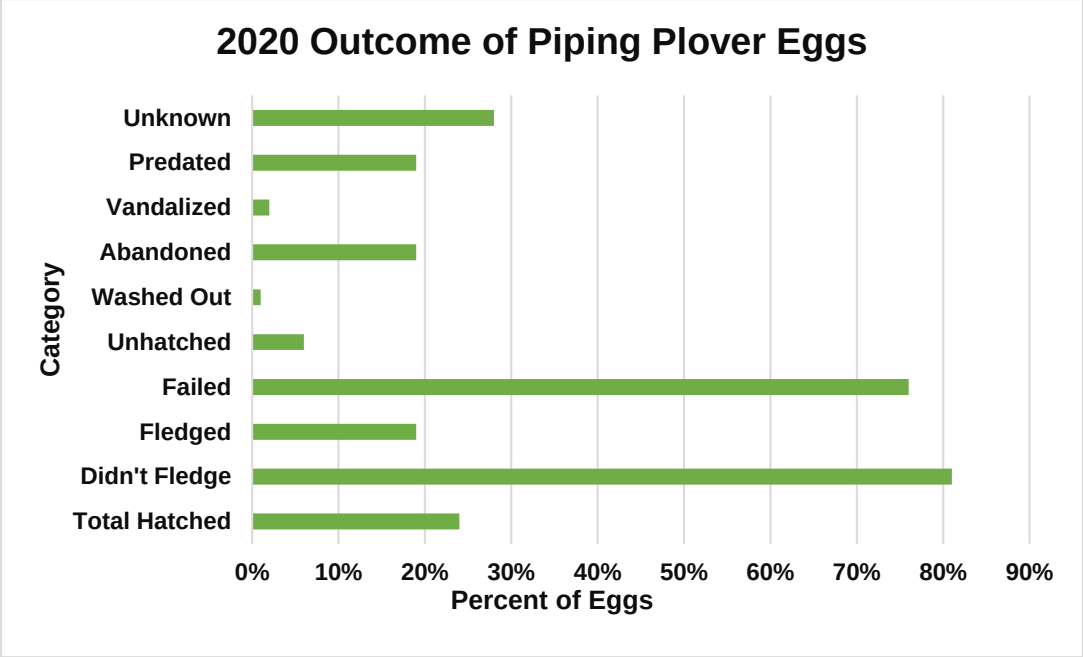
Within Southampton Town, shorebird reproductive success faces numerous challenges and threats. The success is impaired by nest abandonment (due to predator pressures), direct predation, washout events, un-hatched eggs (due to low egg viability or overexposure), or loss of chicks at a young age. The pressure these species face in finding suitable habitat are also impacted by coastal development, recreational activities and storms leading to the loss of physical nesting and foraging habitat. Additionally, excessive recreational use, primarily off road vehicle use and beach events can lead to the disruption of nesting and foraging brood's ability to succeed. In congruence with anthropogenic impacts on their nesting areas opportunistic predators are attracted by garbage and food left on the beach or at the access point garbage cans, putting predators within close proximity of nests and foraging chicks. Predation by fox, crows, raccoons, rats, ghost crabs and cats are threats to shorebird nesting success. In addition to these threats, plovers are faced with climate change, specifically sea level rise, which will result in a decrease of habitat within both their breeding and wintering grounds.

Over the course of the 2020 breeding season, 218 eggs were laid in 63 nests by the 47 pairs of piping plover that nested within the management sites. Of those 218 eggs, 24% hatched with 81% of those hatchlings making it to fledge (19% of total eggs). The loss of the chicks was often by predation pressures and resulted in a loss of about 19% of chicks that did not fledge. It is assumed that they were either predated upon or died from exposure due to the low rate of corpse discovery. Additionally, 76% of all eggs laid did not hatch for a variety of reasons. The primary cause of nest failure and chick loss this season was predation taking its toll on 19% of the eggs laid. Nests that were abandoned (19%) can be attributed to predatory pressures as well as frequent disturbances by beach recreation involving pedestrians and homeowners that have little regard to the symbolic fencing that protects nesting sites. Especially the early arrival of these pedestrians who would normally arrive in late May/early June and instead arrived in March due to the impact of the COVID-19 pandemic and disturbing the birds while they are establishing their nesting territories that would have already been established by May. 6% of the eggs were unviable and did not hatch most likely due to infertility or exposure to the elements. Storms and vandalization made up the least impact on egg failure being 1% and 2% respectively. For the remaining 28% of eggs laid the cause of failure was unknown, there being no signs of any of the other factors **(Graph 2)**.

Seabeach Amaranth and Seabeach Knotweed

Threats to seabeach amaranth and seabeach knotweed propagation includes intense beach driving, coastal development, predation by mammals and insects, beach stabilization efforts and non-native plant introduction. Throughout the season, 15 seabeach amaranth plants were identified at 6 ocean sites and a total of 33 seabeach knotweed plants were identified at 3 bay sites. Since these plants will

continue to flower to at the latest October, there is still the potential for the number of plants to be higher than was surveyed in the middle of August. One of the largest obstacles that these plant species face is destruction by human involvement or intense weather. Civilians will drive their ORV on the beach, which can lead to plant destruction, despite the fact that fencing is placed around the plants for their protection. In addition, between March and August, two tropical storms drastically changed the landscape of the beach and could have buried seabeach amaranth and seabeach knotweed plants under several feet of sand.



Graph 2. The outcome of all of the piping plover eggs during the 2020 breeding season broken down by different categories.

Site Activity Summaries

Across all the sites, 47 nesting pairs of piping plover fledged 42 young piping plover resulting in a total productivity of .89 fledges per pair. Additionally, 189 least tern pairs were observed nesting and fledged 69 young least terns resulting in a total productivity of .37 fledges per pair **(Appendix 1 and 2)**. Throughout the season, coastal stewards would monitor 3 to 7 miles of beach daily recording the health, behavior, nesting locations, disturbances, and threats to the threatened and endangered species. While monitoring, it was common to find unleashed dogs, or people (and their dogs) entering the protected breeding locations. This allowed the coastal stewards to educate the public on the breeding biology, chronology, importance, and impacts they have as recreational beachgoers. In some instances, these conversations would go well, but it was common that pedestrians would leash dogs upon engagement, and then the dog would come right back off the leash afterwards. The general sentiment of the community during the breeding season reflected positivity and support as a whole for this program.

Ocean Sites

Westhampton Island

Westhampton Island consists of approximately 5.5 miles of beach extending from Roger's Beach pavilion to just east of the Round Dune housing complex. This site is broken down into two sub sites: Hampton and Tiana. Eleven piping plover pairs nested at these sites and produced thirteen fledges giving a productivity of 1.18 fledges per pair. Thirty-nine least tern pairs nested at these sites and produced eight fledges giving a productivity of .21 fledges per pair. Three seabeach amaranth plants were observed at the sites. Common nesting disturbances in this area include dogs off the leash, vandalism of fencing, and ORV drivers ignoring/removing fencing throughout the breeding season. The main predatory disturbances were the presence of cats, ghost crabs, gulls, and crows.

Results
Plover Activity: 11 pairs, 13 fledge, 1.18 productivity
Tern Activity: 39 pairs, 8 fledge, 0.21 productivity
Seabeach Amaranth: 3 plants

Hampton Beach

The most western site of Westhampton Island extends from Roger's Beach pavilion to just east of the Round Dune housing complex. Hampton Beach contained six breeding pairs of piping plover who made ten nesting attempts over the course of the season. Only four of these nests were successful and fledged seven plovers with a productivity of 1.20 fledges per pair. The area between Quogue Village Beach and Dolphin Lane experienced extremely low activity due to beach erosion, which effected the amount of beach available for potential nesting spots. The entire site faced constant threat from storms throughout the season, including two tropical storms, and issues with predation along with recreational and residential pressures. These include driving on the beach, and the overpopulation of beaches. Four of the plover nests were abandoned, three of which had attempted to renest. Ghost crabs that live under the sand at these beaches potentially predated upon these failed nests. In addition, one nest was washed out due to Tropical storm Fay, which hit long island in mid-July. At this point in the season, a majority of the nests already hatched, minimizing the nest casualties caused by tropical storms. The least tern colonies within this site attempted to nest in the symbolic fences with little success due to the heavy recreational use of these beaches by the residents of Westhampton, as well as the residents who have houses on the beach. Twenty breeding pairs of least terns attempted to nest at this site with six least tern chicks making it to fledge giving them a productivity of 0.30 fledges per pair. Two seabeach amaranth plants were recorded at the site inside the boxes of symbolic fencing that were set up to protect the piping plovers and least terns. This site saw concerns over the season from ghost crabs, cats, gaps in education among the public about the threatened and endangered species, residents often ignoring arranged walkways or the boxes, tearing down fencing, and having bonfires in close proximity to these fenced in areas.

Results
Plover Activity: 6 pairs, 7 fledges, 1.20 productivity
Tern Activity: 20 pairs, 6 fledges, 0.30 productivity
Seabeach Amaranth: 2 plants

Tiana Beach
This site starts east of the Round Dune housing complex and ends at the Tiana Beach pavilion. Five piping plover breeding pairs resided within the Tiana site and fledged six plovers for a productivity of 1.2 fledges per pair. There were five nesting attempts, three of which were successful. The two nests that failed were abandoned and a second nesting attempt did not occur. There was a least tern colony at the Tiana site that consisted of nineteen nesting pairs, with two least tern chicks making it to fledge for a productivity of 0.11 fledges per pair. Only one seabeach amaranth plants was observed at this site. Overall, the endangered species at this site benefited from the amount of area they had to nest, as well as the spacing between the houses on the beach. This allowed for the boxes of symbolic fencing to be larger, as well as gave the birds room to spread out and nest. ORV were observed on the beach throughout the season and could factor into why not every chick that hatched made it to fledge. In addition, throughout the season there were instances where boxes were vandalized; at one point three boxes as a party was happening on the beach. No predation was directly observed, however many other bird species were observed in these areas either utilizing the same areas for breeding or foraging at the waterline.

Plover Activity: 5 pairs, 6 fledge, 1.20 productivity
Tern Activity: 19 pairs, 2 fledges, 0.11 productivity
Seabeach Amaranth: 1 plant

Southampton Beach (Village)
Located within the village of Southampton, this site extends from the east boundary of the Shinnecock County Park to S. Main Street. Six pairs of piping plover attempted to nest at this site with fifteen young piping plover making it fledge giving a productivity of 2.50 fledges per pair. Four least tern pairs attempted to nest at this site but were unsuccessful. One seabeach amaranth plant was observed throughout this site. There are three sub sites that Southampton Beach is separated into; which includes one of the only areas where twenty-four hour driving is allowed. The concerns for this area were dogs off the leash, ORV drivers running over 4x4 barricades used to protect the precocial plover chicks, beach parties, bon fires, cats, gulls, and storms causing high winds and water encroaching of nests. The main concern was not allowing drive on at the twenty-four drive on area, and the public reaction that came with it.

Plover activity: 6 pairs, 15 fledge, 2.50 productivity
Tern Activity: 4 pairs, 0 fledge, 0.00 productivity
Seabeach Amaranth: 1 plant

Shinnecock County Park to Road D
This site was abnormally active in comparison to years prior where activity was generally low, particularly near the twenty-four hour drive on area. There were three piping plover nesting pairs in the area that produced nine fledges giving a productivity of 3.00 fledges per pair. One of the nests in the vicinity was abandoned and renested successfully. Only one seabeach amaranth plant was observed at this site, and it was within the boxes of symbolic fencing utilized to protect the endangered bird species. Overall the site is a good habitat option for the endangered species; taking up a lot of area as well as consisting of a large amount of dunes that are scattered with dune vegetation. This site had the best piping plover productivity of any of the beach sites. The main concern was the amount of driving that goes on at this site, and the public outrage that can occur when it has to be closed. There were several threats made towards the coastal stewards while the site was closed to drive on, however most of the residents were amicable when the situation was explained to them. None of the nests were lost due to ORV and every chick that hatched ended up fledging.

Plover activity: 3 pairs, 9 fledge, 3.00 productivity
Tern Activity: 4 pairs, 0 fledge, 0.00 productivity
Seabeach Amaranth: 1 plant

Road D to Halsey Neck Lane
Two piping plover nesting pairs were observed between Road D and Halsey Neck Lane fledging four young piping plovers for a total productivity of 2.00 fledges per pair. There were two nesting attempts one of which was abandoned due to predatory pressures from foxes in the area. There were no least terns spotted at this site throughout the breeding season. Other threats to the pairs included ORV drivers disregarding the symbolically fenced areas and barricades. Off leashed dogs especially near Road D and Halsey Neck Lane access points were a constant concern.

Plover Activity: 2 pairs, 4 fledge, 2.00 productivity

Halsey Neck Lane to S. Main Street
One nesting pair was observed at this site, with two chicks making it to fledge giving a productivity of 2.00 fledges per pair. The threats for the endangered birds consisted of unpermitted recreational ORV use and off leash dogs near the access points of Halsey Neck, Coopers Beach, Cryder Lane, and S. Main Street. The biggest threat to the birds was the amount of people at the beach, Cooper's beach being a popular spot to go to during the summer. This could explain the lack of least tern activity observed at these sites.

Plover Activity: 1 pair, 2 fledge, 2.0 productivity

Gin Lane Beach

This site stretches from S. Main Street to Old Town Road and was inactive for both piping plovers and least terns. Between S. Main Street and Old Town Road is prone to extremely high pedestrian and dog walking traffic and does not provide a healthy wrack line for foraging. However, the beach is wide and has the potential to host a nesting pair despite not having activity this year.

Old Town Beach

This site stretches from Old Town Road to Squabble Lane and was not successful this year. Four nesting pairs were observed, but all the nests failed either because they were abandoned or because of predation. One plover pair attempted to renest, but that nest also failed. The same situation occurred with the least terns. There were two nesting pairs whom both failed to produce any fledges. Seven seabeach amaranth plants were observed at this site, the most that was found at any singular site. OId Town Beach is popular for ORV and may explain why the piping plovers and least terns did not do well this season. There is potential that these nests were predated, even though there was no concrete evidence to suggest this as well as not many other animals being observed in the surrounding area. One of the nests was abandoned potentially due to the construction being done on a staircase leading to a house that was next to the nest.

Plover Activity: 4 pairs, 0 fledge, 0.00 productivity
Tern Activity: 2 pairs, 0 fledges, 0.00 productivity
Seabeach Amaranth: 7 plants

Watermill Beach

This site falls just to the west of Fowlers Street and extends out to Jobs Lane. This site is comprised of three sub sites and measures approximately 2.38 miles. There are three town beaches and two additional access roads that provide public access to the beach. Mecox Bay is located between the Flying Point Road access and Scott Cameron Beach. When the water level in the bay is low, mudflats are exposed and become ideal foraging habitats for piping plovers and other migratory shorebirds. This year the direct vicinity of The Cut Beach hosted one plover pair and a four egg plover nest that ended up failing due to predation. The pair attempted to nest again but were unsuccessful. Overall, there were eight nesting pairs that produced three fledges for a productivity of 0.38 fledges per pair. In prior years, least terns have attempted and successfully nested. This year, none of the breeding pairs were able to successfully produce any fledges. Three of our undoubtedly highest disturbances were irresponsible ORV drivers removing and stealing our symbolic fencing and barricades, high predation from cats, foxes and other birds, and destructive storms throughout the season. Other disturbances were off leash dogs and high pedestrian traffic.

Plover Activity: 8 pairs, 3 fledge, 0.38 productivity
Tern Activity: 20 pairs, 0 fledge, 0.00 productivity

Fowlers Street
This site stretches from just west of Fowlers Street to the Flying Point Pavilion. Two nesting pairs made nesting attempts during the course of the season and were responsible for fledging one piping plover giving a productivity of 0.50 fledges per pair. Only one least tern nesting pair was observed but no nests were observed at the site. The 4X4 fencing placed to protect the chicks was taken down several times throughout the breeding season.
Plover Activity: 2 pair, 1 fledge, 0.50 productivity

Flying Point Pavilion
This site extends from Flying Point Pavilion to the Cut Beach. Two piping plover pairs were observed nesting at the site and fledged two piping plover giving a productivity of 1.00 fledge per pair. One piping plover pair attempted to nest by the Cut Beach and was unsuccessful despite attempting to nest two times. The nest failed most likely because of predation and human pressures. A colony of least terns consisting of 10 nesting pairs attempted to nest at the Cut Beach but had no success. At the Cut Beach, tons of dogs can be seen off the leash despite their being signage showing that dogs should always be on the leash when on the beach. In addition, the 4X4 fencing to block ORV access was taken down a handful of times throughout the season, which lead to the site being checked every day to make sure it was still up until the chicks successfully fledged. There was also several times where the box would be damaged, or people would go inside the box despite their being signage stating that it was federally protected as a breeding site for the piping plovers and least terns. However, when explained as to why the box is not allowed to be accessed, the public reaction was mostly positive.

Plover Activity: 2 pair, 2 fledge, 1.00 productivity
Tern Activity: 10 pair, 0 fledge, 0.00 productivity

Scott Cameron Beach
This site extends from the end of Dune Road to Jobs Lane, and was one of the highest predated sites with a number of residents expressing their concerns of feral cats and foxes in the area. Four piping plover nesting pairs attempted to nest at this site but none of them were successful. Three of the four pairs attempted to renest and these attempts were unsuccessful. Ten pairs of least terns also attempted to nest at this site with no success. Scott Cameron beach garners a lot of attention and activity throughout the breeding season. One of the most popular places for these birds to attempt to nest is on the cut of Mecox Bay, which is directly next to Scott Cameron beach. Due to this, the box placed at the cut was constantly being damaged, as well as people ignoring the box altogether so that they could sit by the bay.

Plover Activity: 4 pairs, 0 fledge, 0.00 productivity
Tern Activity: 10 pairs, 0 fledge, 0.00 productivity

Sam's Creek

This site is located between Jobs Lane and Ocean Road. Within the sites vicinity, one piping plover breeding pair attempted to nest but was not successful. There were 12 least tern pairs at the site with one least tern chick making it to fledge giving a productivity of .08 fledges per pair. Three seabeach amaranth plants were observed at the site. Tracks from UTVs tracks were observed on many occasions driving around 4x4 barricades and into the dune and going through 4x4 barricades. Off leashed dogs were also an issue especially near the Ocean Road access.

Plover Activity: 1 pair, 0 fledge, 0.00 productivity
Tern Activity: 12 pairs, 1 fledge, 0.08 productivity
Seabeach Amaranth: 3 plants

Sagaponack Pond

This site stretches from Ocean Road to Gibson Lane. Sagaponack Pond lies in the middle of this site and provides a tremendous amount of foraging and nesting grounds for both the piping plovers and least terns. However, with this abundance of land comes many predators. Three pairs of piping plover attempted to nest at this site with four chicks making it to fledge giving a productivity of 1.33 fledges per pair. Out of the twenty-five least tern pairs that nested at this site, six least tern chicks made it to fledge; giving a productivity of 0.24 fledges per pair. One seabeach amaranth plant was found at this site. Similar to Mecox Bay, the cut of Sagaponack Pond is a popular location for the piping plover and least tern to nest. Two of the three piping plover nests and all of the least tern nests were found at the cut of Sagaponack Pond. However, many of these nests failed due to the high level of predation and pedestrian traffic in the area. Like the other sites that have a high frequency of beach recreation threats present, this location consisted of ORV drivers ignoring fenced areas, bonfires in close proximity to fencing, pedestrians walking inside symbolic fencing, constant boat landings inside symbolic fencing, and off leashed dogs.

Plover Activity: 3 pairs, 4 fledge, 1.33 productivity
Tern Activity: 25 pairs, 6 fledge, 0.24 productivity
Seabeach Amaranth: 1 plant

Fairfield Pond Lane Beach

This site is located between Gibson Lane and Townline Road. Within this site, six pairs of piping plover nested with ten nesting attempts. All of these nesting attempts were unsuccessful. Four of the six nesting pairs attempted to nest again but with no success. There was no evidence to explain why these nests kept failing, but the most likely answer is predation since there was never any trace of the nest by the next site visit.

Plover Activity: 6 pairs, 0 fledge, 0.00 productivity
Tern Activity: 3 pairs, 0 fledge, 0.00 productivity

Bay Sites

Red Cedar Point

Two pairs of piping plover made three nesting attempts at Red Cedar Point. Six piping plover were fledged providing a productivity of 3.00 fledges per pair. There was a least tern colony of twenty-nine breeding pairs who fledged fourteen least terns for a productivity of 0.48 fledges per pair. Predators and disturbances at this site consisted of crows, gulls, light pedestrian traffic, recreational angler, and kayak landings. This site benefited the piping plovers and least terns by being remote, and having minimal pedestrian traffic allowing the birds to spread out and nest without many disturbances.

Plover Activity: 2 pairs, 6 fledge, 3.00 productivity
Tern Activity: 29 pairs, 14 fledge, 0.48 productivity

Red Creek Pond

Seven least tern pairs were observed at this site consistently for the entire season, but did not attempt to nest despite showing territorial behavior when perceived predators came within their territory.

Tern Activity: 7 pairs, 0 fledge, 0.00 productivity

Squires Pond

This site was inactive, piping plovers and least terns not being observed at the site. The highest disturbance factors observed were recreational beach activities and ORV usage as well as off leash dogs.

Meschutt Beach

Bordered to the west by the county park, the majority of the site is lined with residential homes, and is popular for pedestrians, leaving extremely limited amount of habitat space for any breeding birds, which is attributed to the inactivity of birds this year.

Canoe Place Beach

The site was inactive for piping plovers and least terns, despite their being a lot of beach for them to nest and hardly any pedestrian traffic.

Fish Cove/N. Sea Harbor

The site was inactive for both the endangered birds and endangered plants.

Towd Neck

This site encompasses an area with an inlet that separates the location into a western and eastern area. The western area is generally desolate in terms of

wildlife activity whereas the eastern area is a popular location for piping plover and least tern colonies to breed.

Towd Neck West
This site has limited suitable habitat and has an extremely high amount of recreational angler, ORV use, and bonfires. This sub site was inactive for both the endangered birds and endangered plants**.**

Towd Neck East
This sub site has a high frequency of recreational use especially near the Towd Point Road access point. Threats to the site involved ORV drivers, and off leashed dogs whom pose a threat to the nesting birds at this location. Two pairs of piping plover attempted to nest but were unsuccessful due to predation. A least tern colony of twenty-seven nesting pairs fledged fifteen young for a productivity of 0.56 fledges per pair. At the beginning of the breeding season, an above average amount of ORV were observed at the site, but died down by the time the least terns arrived. Seventeen seabeach knotweed plants were observed at the site.

Plover Activity: 2 pairs, 0 fledge, 0.00 productivity
Tern Activity: 27 pairs, 15 fledge, 0.56 productivity
Seabeach Knotweed: 17 plants

Wooley Pond
The site was inactive for both the endangered birds and endangered plants.

Roses Grove
The site was inactive for both the endangered birds and endangered plants.

Fresh Pond
The site was inactive for both the endangered birds and endangered plants.

Pine Neck
The site was inactive for both the endangered birds and endangered plants.

Long Beach
At the eastern most end of Long Beach, one least tern colony was able to breed and consisted of twenty-eight nesting pairs who successfully fledged twenty-three of their young giving a productivity of 0.82 fledges per pair. This location also produced five seabeach knotweed plants. Despite Long Beach being a popular location for pedestrian traffic, the least terns were able to successfully nest, and even produce offspring. The colony was observed nesting further west then they have in past years, usually sticking to the most eastern part of the beach.

Tern Activity: 28 pairs, 23 fledge, 0.82 productivity
Seabeach Knotweed: 5 plants

Short Beach
Eleven seabeach knotweed plants were observed at this site.

Seabeach Knotweed: 11 plants

Genet Creek
The site was inactive for both the endangered birds and endangered plants.

Middle Pond
The site was inactive for both the endangered birds and endangered plants.

Acknowledgements

The staff of the Southampton Town Trustee's Threatened and Endangered Species program would like to give a huge thanks to everyone who supported our program and made the 2020 season a possibility and a success. Thank you Board of Trustees; President Eric Shultz, Secretary/Treasurer Scott Horowitz, Edward Warner Jr., William Pell, and Ann Welker for all of your continued support; Lisa Dunlap, James Duryea, Brandy Campbell, Jessica Goleski, Rachel Longobardi, Jordan King,the Southampton Town Bay Constables, Trustees Marine Maintenance division, Joe Jannsen of the Nature Conservancy, Steve Sinkevich of the USFWS, Michelle Gibbons, Frederick Hamilton and Andria McMaugh of the NYSDEC, the Southampton Town GIS Department, Southampton Village Trustee Mark Parash, Village Department of Public Works Superintendent and the public that had patience, understanding and respect towards the work that we perform. We also would like to thank the Suffolk County Threatened and Endangered Species program consisting of Diana Lynch and her Endangered species staff, for collaborating and making this year's first Picnic Area nest a success! None of this work would have been possible without all of you, your hard work and dedication, Thank you!

Literature Cited

New York Natural Heritage Program. 2016. Biotics database. New York Natural Heritage Program. New York State Department of Environmental Conservation. Albany N.Y.

U.S. Fish and Wildlife Service. 2007. Seabeach amaranth (*Amaranthus pumilus*) 5-Year Review: Summary and Evaluation. *Ecological Services Office*, Raleigh, N.C.

U.S. Fish and Wildlife Service. 2009. Piping plover (*Charadrius melodus*) 5 year review: Summary and Evaluation. Raleigh N.C.

U.S. Fish and Wildlife Service. 2011. Abundance and productivity estimates – 2010 update: Atlantic Coast piping plover population. Sudbury, Massachusetts.

Appendix 1:

2020 Piping Plover Abundance and Productivity

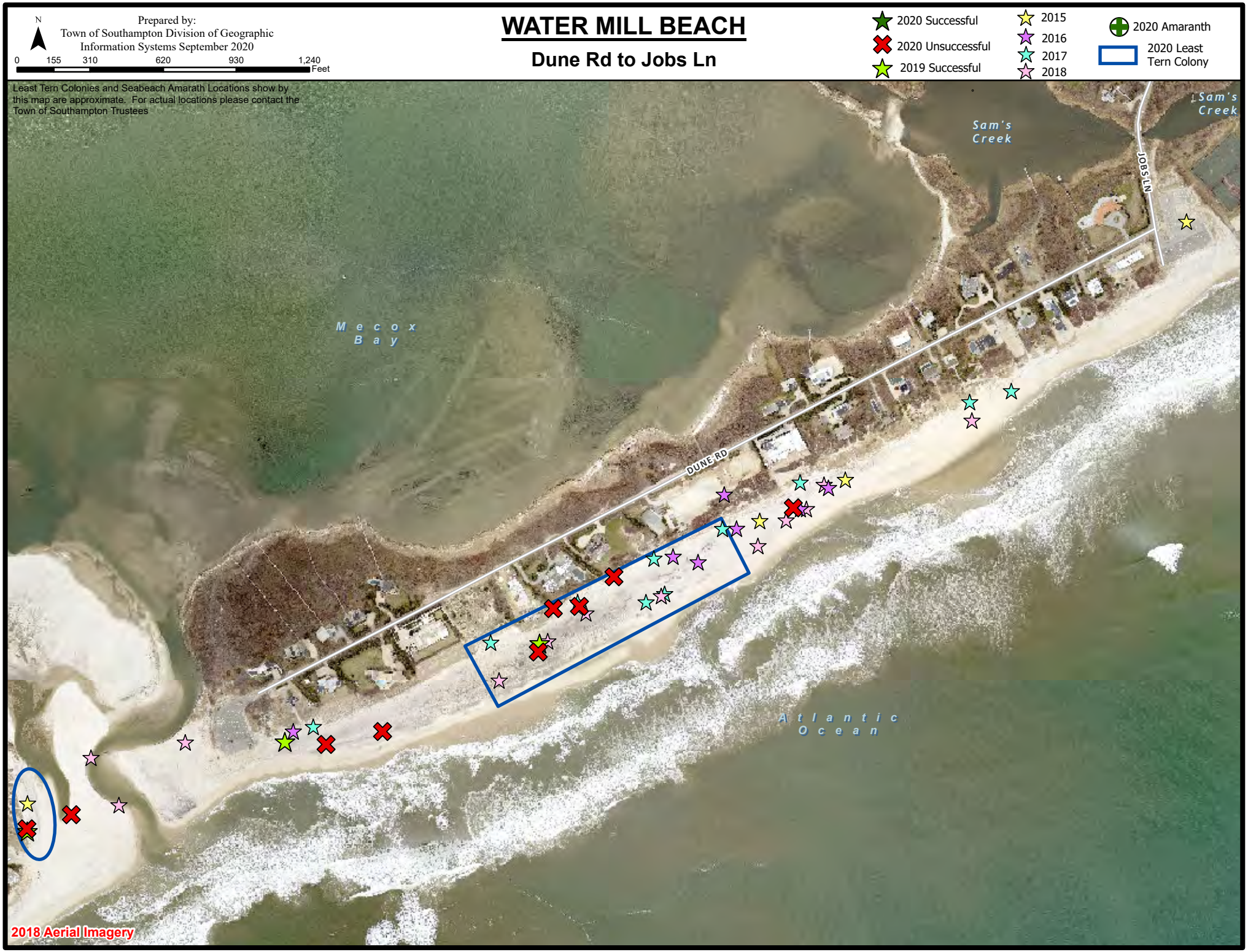
Site Name	No. Nesting Pairs	No. Nests	No. Eggs	No. Chicks	Hatch Rate	No. Fledges	Fledge Rate	Productivity	No. Times Site Visited
Atlantic Ocean Nesting Sites									
Westhampton Island	11	15	57	19	.33	13	.68	1.18	
Hampton	6	10	41	9	.22	7	.78	1.17	21
Tiana	5	5	16	10	.63	6	.60	1.20	21
Southampton Beach	6	7	25	15	.60	15	1.00	2.50	
County Park E to Rd. D	3	4	13	9	.69	9	1.00	3.00	24
Rd. D to Halsey Neck Ln.	2	2	8	4	.50	4	1.00	2.00	26
Halsey Neck Ln. to S. Main St.	1	1	4	2	.50	2	1.00	2.00	21
Gin Lane Beach	0	0	0	0	0	0	0	0	22
Old Town Beach	4	5	18	0	0	0	0	0	24
Watermill Beach	9	12	36	5	.14	3	.60	.33	
Fowlers Beach	2	2	6	3	.5	1	.33	.50	22
Flying Point Beach	2	3	10	2	.20	2	1.00	.67	23
Scott Cameron Beach	4	7	20	0	0	0	0	0	23
Sam's Creek	1	1	4	0	0	0	0	0	22
Sagaponack Lake	7	7	28	7	.25	5	.71	.71	24
Fairfield Pond Ln. Beach	6	10	34	0	0	0	0	0	22
Total for Ocean Nest Sites	43	57	202	46	.23	36	.78	.82	
Peconic Bay Nesting Sites									
Red Cedar Point	2	3	8	6	.75	6	1.00	3.00	22
Red Creek Pond	0	0	0	0	0	0	0	0	22
Squires Pond	0	0	0	0	0	0	0	0	18
Meschutt Beach	0	0	0	0	0	0	0	0	21
Canoe Place	0	0	0	0	0	0	0	0	20
Fish Cove	0	0	0	0	0	0	0	0	21
Towd Neck	2	2	8	0	0	0	0	0	20
Wooley Pond	0	0	0	0	0	0	0	0	19
Roses Grove	0	0	0	0	0	0	0	0	19
Fresh Pond	0	0	0	0	0	0	0	0	21
Pine Neck/Mill Creek	0	0	0	0	0	0	0	0	24
Long Beach	0	0	0	0	0	0	0	0	22
Short Beach	0	0	0	0	0	0	0	0	22
Genet Creek	0	0	0	0	0	0	0	0	22
Shinnecock Bay Nesting Sites									
Middle Pond	0	0	0	0	0	0	0	0	20
Total for Bay Nesting Sites	4	5	16	6	.38	6	1.00	1.50	
Total for All Nesting Sites	47	62	218	52	.24	42	.81	.89	

2020 Least Tern Abundance and Productivity

Site Name	No. Nesting Pairs	No. Fledges	Productivity	No. Times Site Visited
Atlantic Ocean Nesting Sites				
Westhampton Island	39	8	.21	21
Southampton Beach	4	2	.50	26
Gin Lane Beach	0	0	0	22
Old Town Beach	2	0	0	24
Watermill Beach	20	0	0	23
Sam's Creek	12	1	.08	22
Sagaponack Lake Beach	25	6	.24	24
Fairfield Pond Lane Beach	3	0	0	22
Total for Ocean Nesting Sites	105	17	.16	
Peconic Bay Nesting Sites				
Red Cedar Point	29	14	.48	22
Red Creek Pond	7	0	0	22
Squires Pond	0	0	0	18
Meschutt Beach	0	0	0	21
Canoe Place Beach	0	0	0	20
Fish Cove	0	0	0	21
Towd Neck	27	15	.56	20
Wooley Pond	0	0	0	19
Roses Grove	0	0	0	19
Fresh Pond	0	0	0	21
Pine Neck/Mill Creek	0	0	0	24
Long Beach	28	23	.82	22
Short Beach	0	0	0	22
Genet Creek	0	0	0	22
Shinnecock Bay Nesting Sites				
Middle Pond	0	0	0	20
Total for Bay Nesting Sites	84	52	.62	
Total for All Sites	189	69	.37	

Appendix 2:


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 75 150 300 450 600
Feet
FRESH POND
Bulkhead to Lake Dr.
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Little
Peconic Bay
Fresh
Pond
EAST SHORE RD
EAST SHORE DR
BAY VIEW RD
BAY VIEW RD NORTH
BAY VIEW RD WEST
LAKE DR
LAKE DR NORTH
FERN RD
OAK GROVE RD
RED CEDAR RD
2018 Aerial Imagery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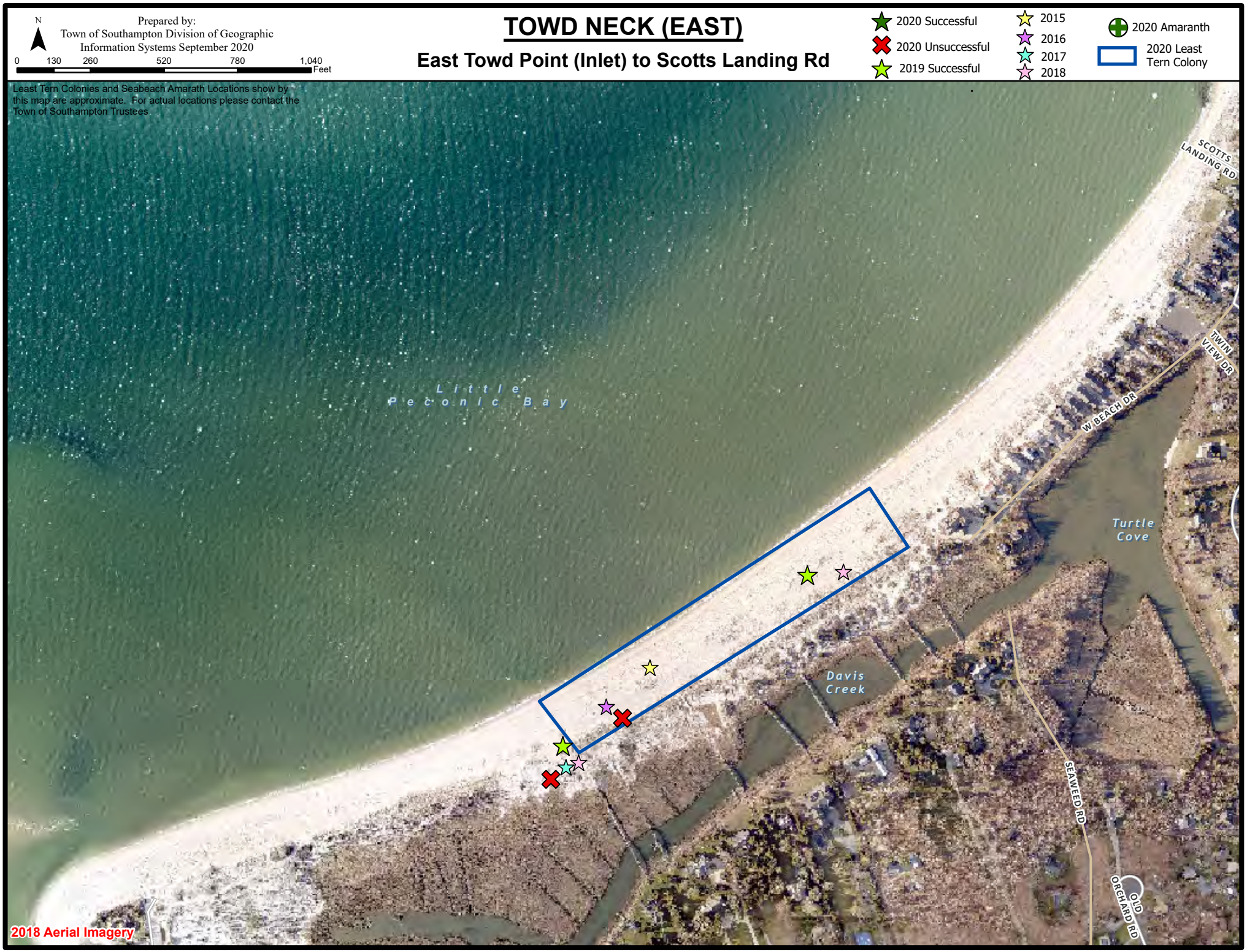
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 155 310 620 930 1,240
Feet
WATER MILL BEACH
Dune Rd to Jobs Ln
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Sam's
Creek
Sam's
Creek
JOBS LN
Mecox
Bay
DUNE RD
Atlantic
Ocean
2018 Aerial Imagery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Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
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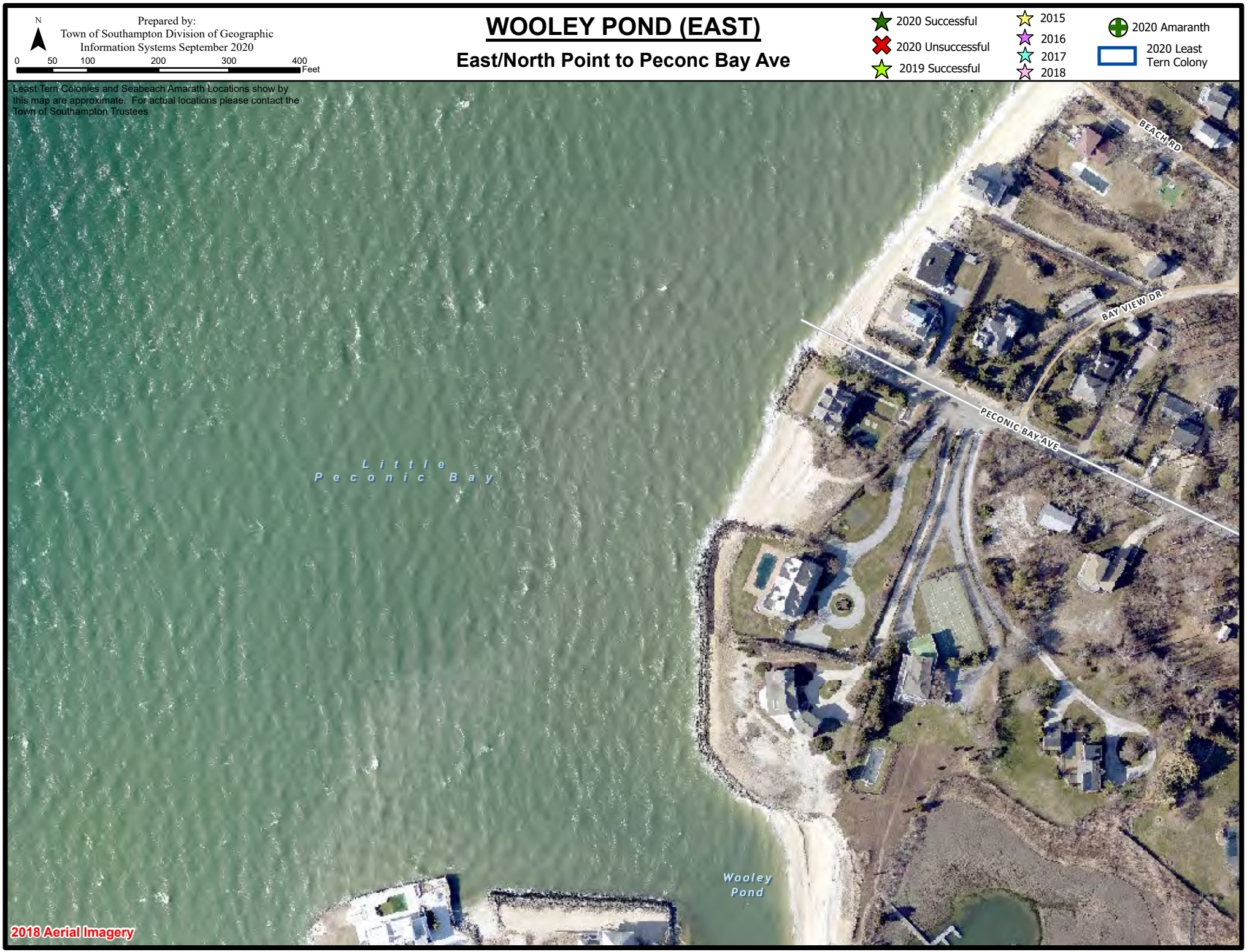
Feet
TOWD NECK (EAST)
East Towd Point (Inlet) to Scotts Landing Rd
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
Little Peconic Bay
SCOTTS LANDING RD
TWIN VIEW DR
W BEACH DR
Turtle Cove
Davis Creek
SEAWEED RD
OLD ORCHARD RD
2018 Aerial Imagery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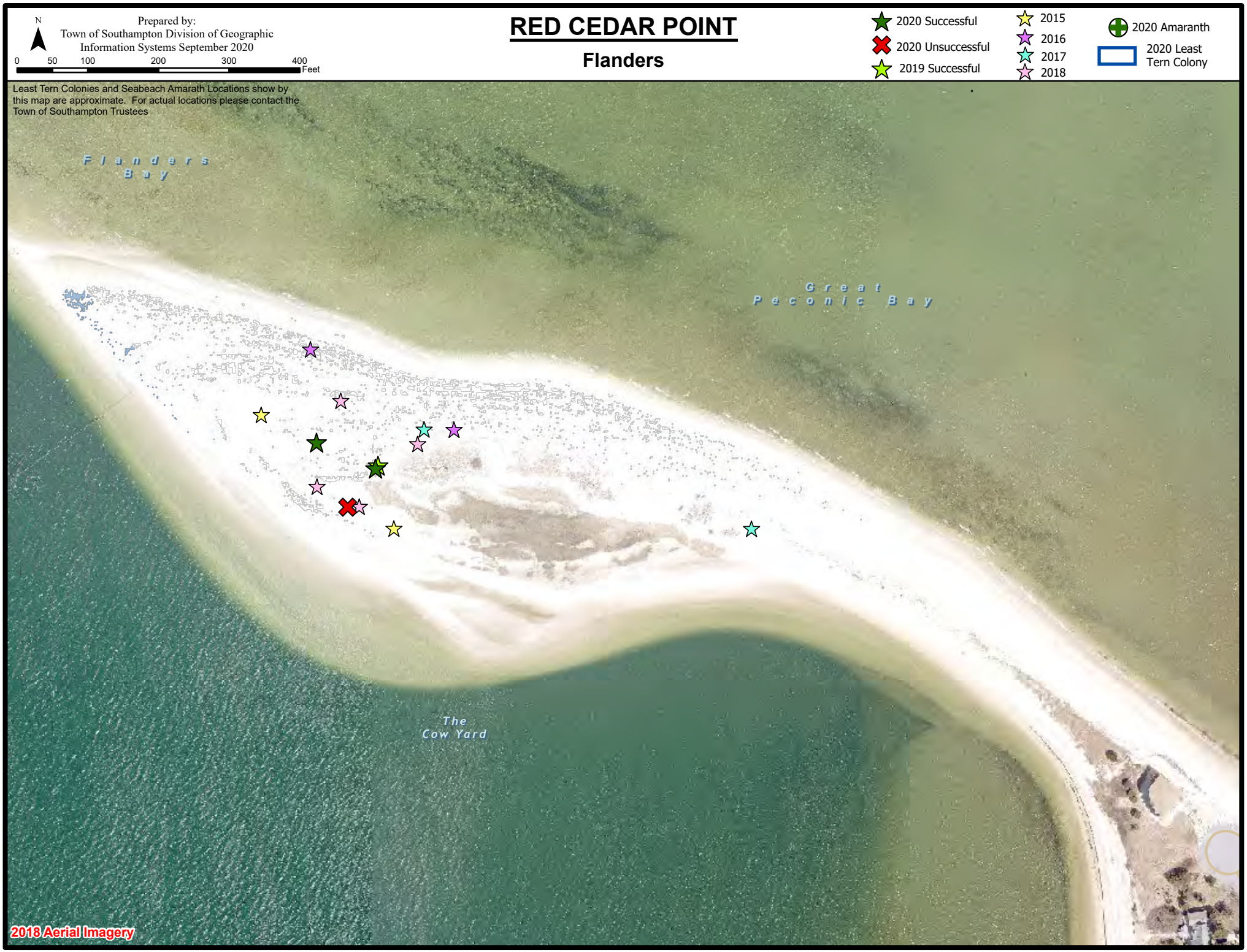
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 50 100 200 300 400
Feet
WOOLEY POND (EAST)
East/North Point to Peconc Bay Ave
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
BEACH RD
BAY VIEW DR
PECONIC BAY AVE
Little
Peconic Bay
Wooley
Pond
2018 Aerial Imagery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Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
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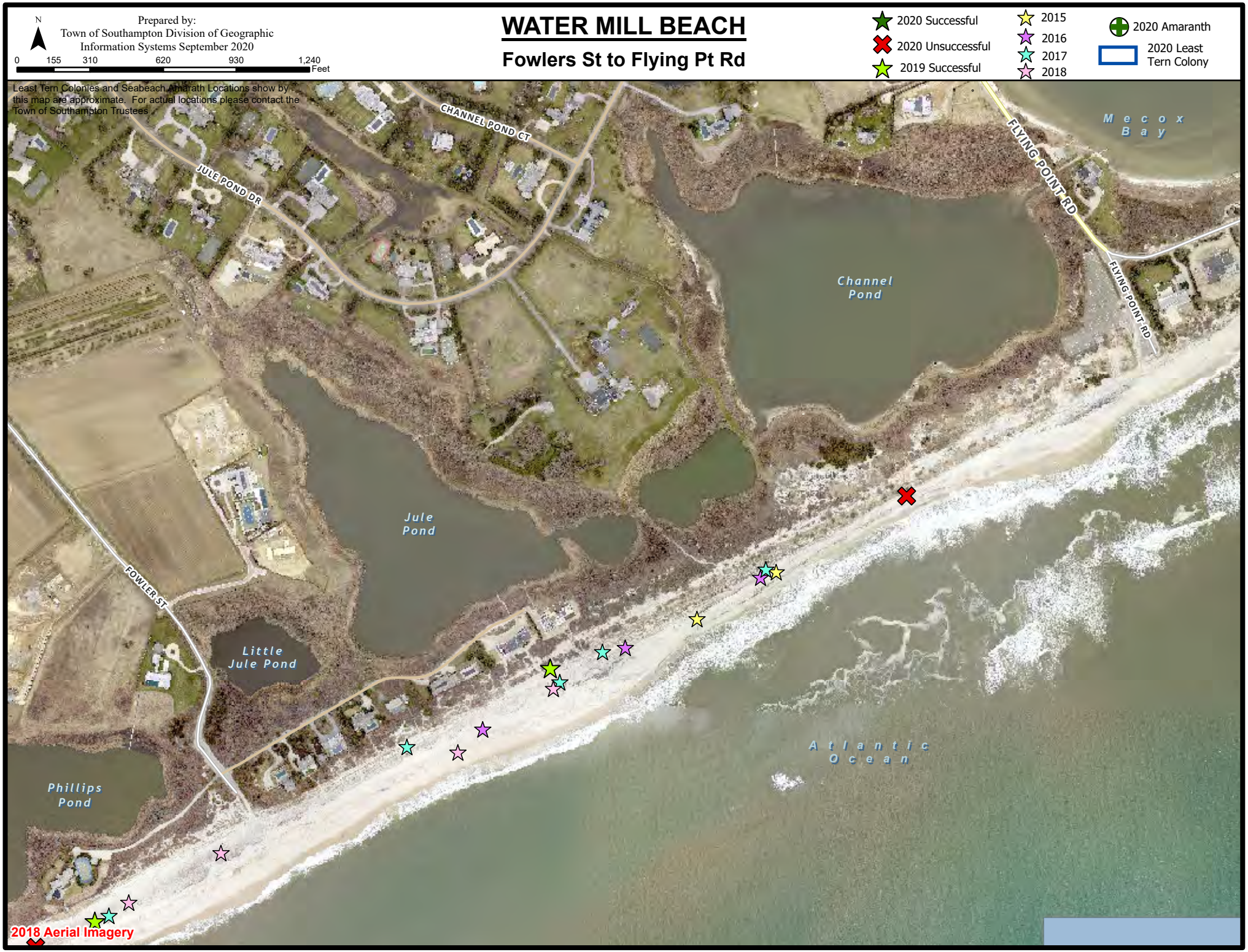
Feet
RED CEDAR POINT
Flanders
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Flanders
Bay
Great
Peconic Bay
The
Cow Yard
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 130 260 520 780 1,040
Feet
WATER MILL BEACH
Flying Point Rd to Dune Rd
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Mecox
Bay
Burnets
Cove
BURNETTS COVE RD
DUNE
RD
FLYING POINT RD
FLYING POINT RD
Channel
Pond
Atlantic
Ocean
2018 Aerial Imagery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Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
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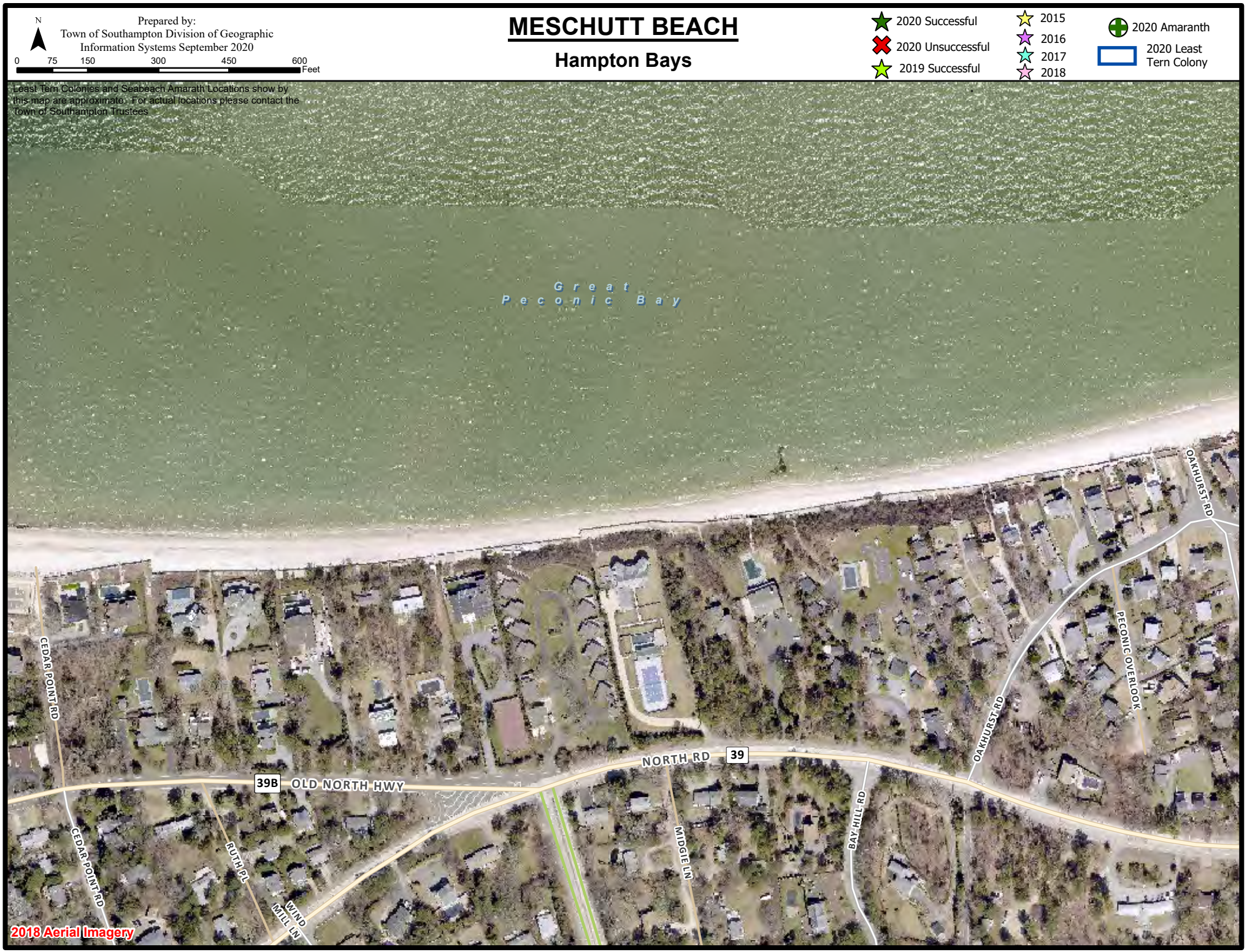
Feet
WATER MILL BEACH
Fowlers St to Flying Pt Rd
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
CHANNEL POND CT
JULE POND DR
FLYING POINT RD
FLYING POINT RD
M e c o x
B a y
Channel
Pond
Jule
Pond
POWLER ST
Little
Jule Pond
Phillips
Pond
A t l a n t i c
O c e a n
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 155 310 620 930 1,240
Feet
FAIRFIELD POND LANE BEACH (WEST)
Gibson Ln to Peter's Pond
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
DANIELS LN
FAIRFIELD POND LN
PETERS POND LN
Peters Pond
Fairfield Pond
CRESTVIEW LN
GIBSON LN
TREES LN
ROW OFF GIBSON LN
Atlantic Ocean
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020
0 210 420 840 1,260 1,680 Feet
SOUTHAMPTON BEACH (VILLAGE)
Halsey Neck Lane to S Main St
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amaranth Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees.
BOYESEN RD
EILEEN DR
MEADOWMERE LN
BOATMANS LN
HALSEY NECK LN
MEADOWMERE PL
COOPERS NECK LN
FIRST NECK LN
GIN LN
CRYDER LN
MEADOW LN
Agawam Lake
Coopers Neck Pond
Halsey Neck Pond
Taylor Creek
Atlantic Ocean
2018 Aerial Imagery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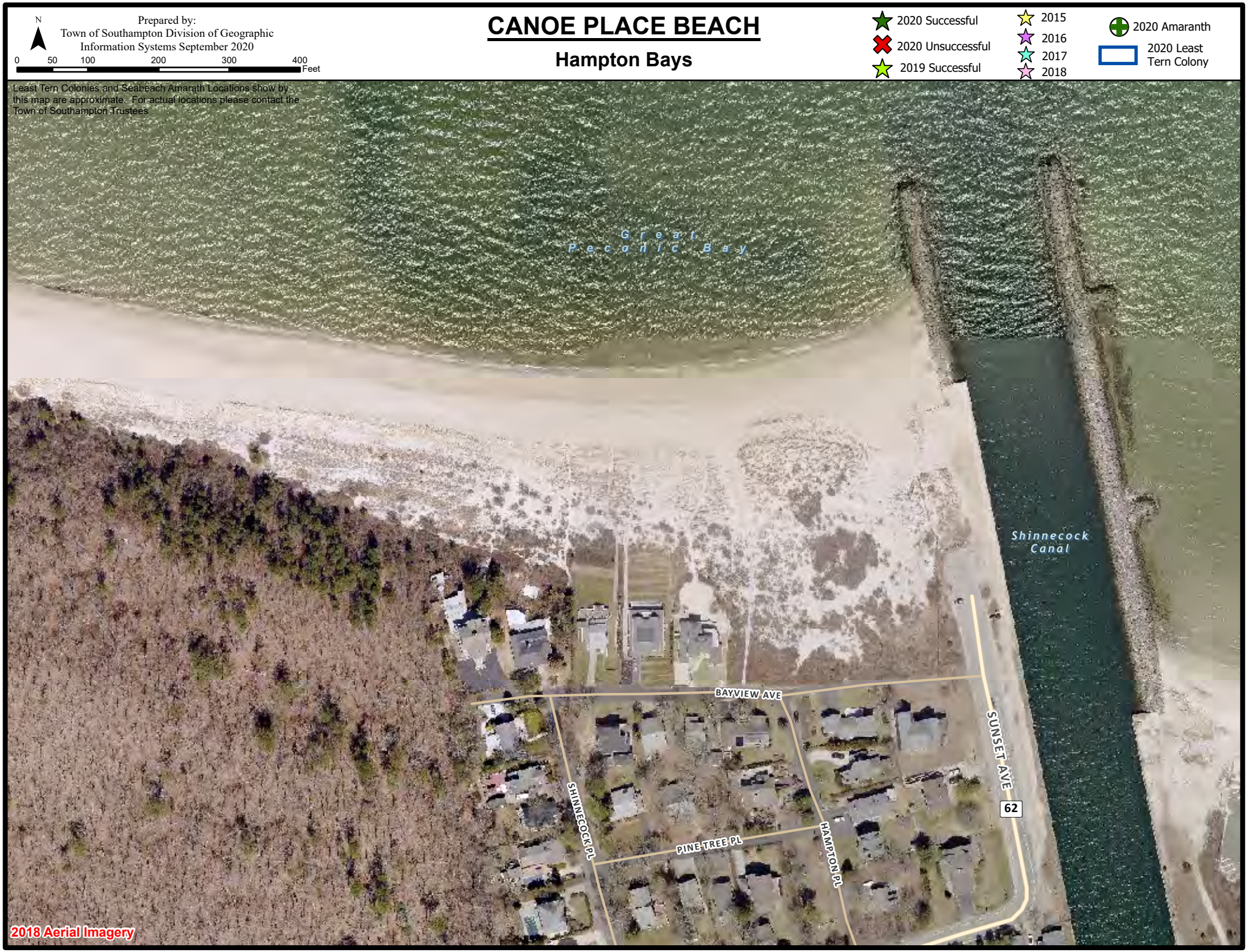
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 75 150 300 450 600
Feet
MESCHUTT BEACH
Hampton Bays
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Great
Peconic Bay
OAKHURST RD
PECONIC OVERLOOK
OAKHURST RD
CEDAR POINT RD
NORTH RD
39
39B
OLD NORTH HWY
BAY HILL RD
MIDGIE LN
CEDAR POINT RD
RUTH PL
WIND
MILL LN
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 50 100 200 300 400
Feet
CANOE PLACE BEACH
Hampton Bays
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Great
Peconic Bay
Shinnecock
Canal
BAYVIEW AVE
SUNSET AVE
62
SHINNECOCK PL
PINE TREE PL
HAMPTON PL
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 75 150 300 450 600
Feet
RED CREEK POND
Hampton Bays
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Great
Peconic Bay
Red
Creek
Pond
Fourniers
Pond
RED CREEK PARK
GATHERING ROCKS RD
2018 Aerial Imagery

SQUIRES POND

Hampton Bays

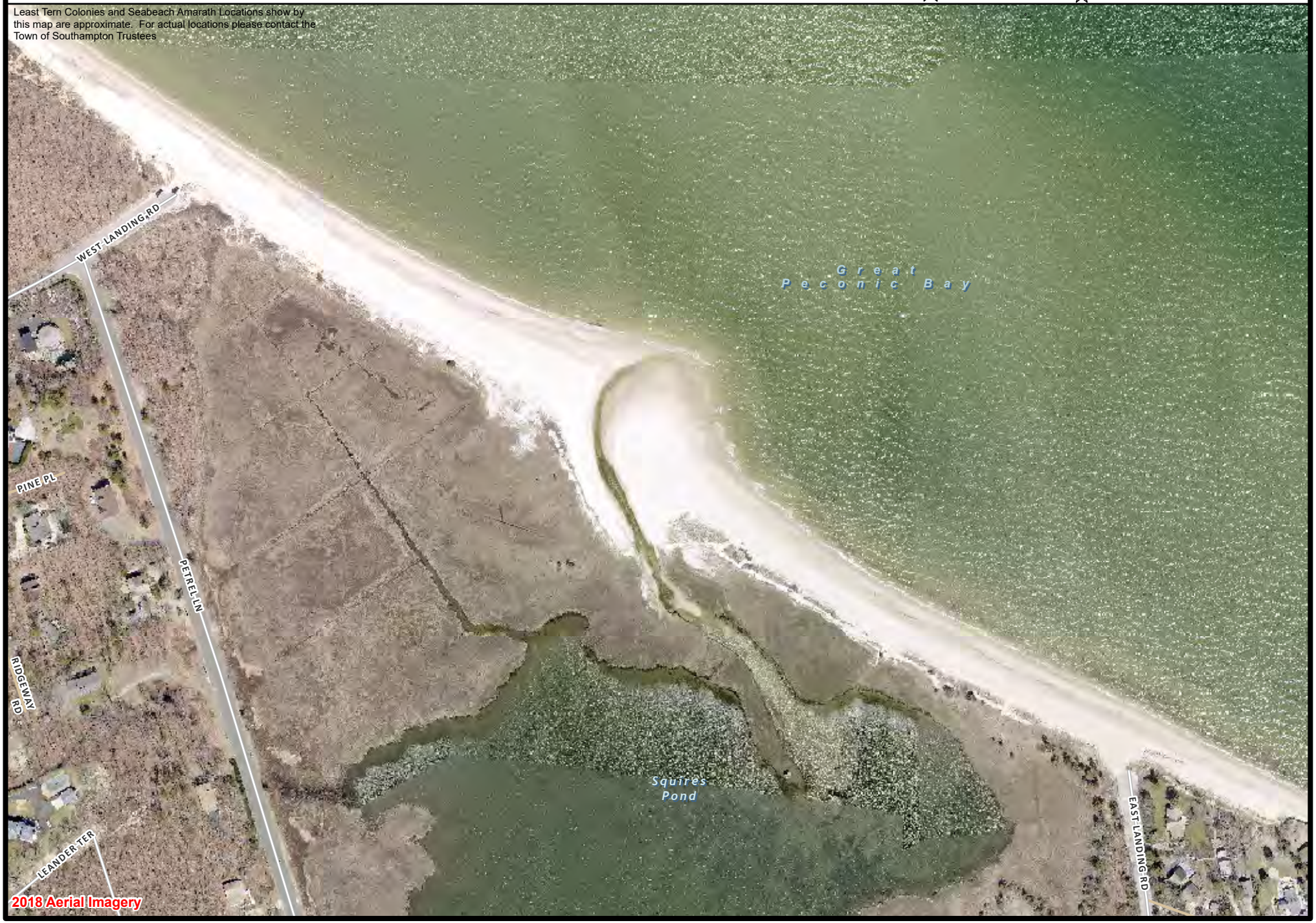
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020

N

0 75 150 300 450 600 Feet

2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony

Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees

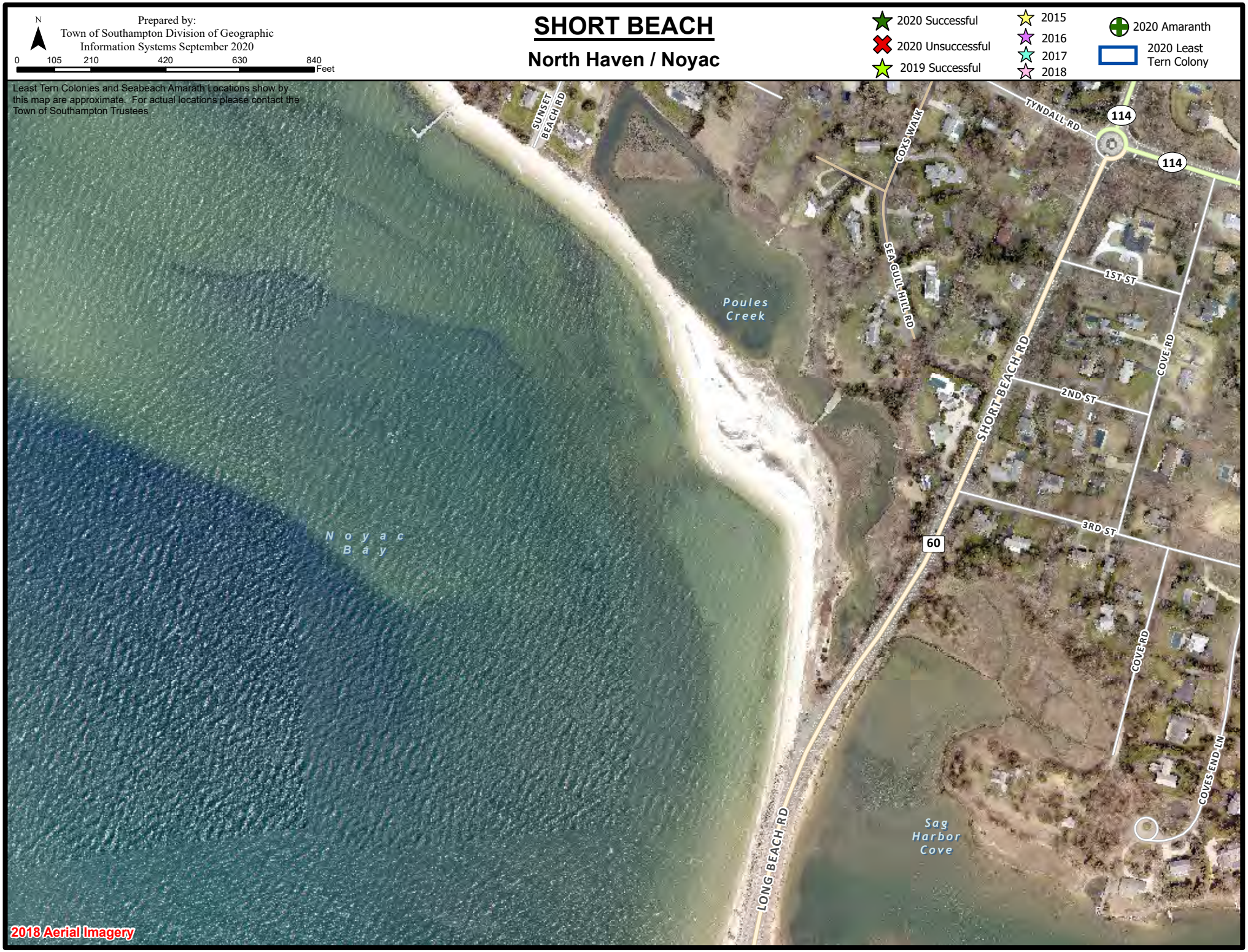



N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 312.5 625 1,250 1,875 2,500
Feet
TIANA BEACH
Hampton Bays
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amaranth Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees.
Shinnecock
Bay West
DUNE RD
TRITON LN
MERMAID LN
PRIVATE RD
PRIVATE RD
DOLPHIN LN
Atlantic
Ocean
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 180 360 720 1,080 1,440
Feet
PONQUOGUE BEACH
Hampton Bays
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
PONQUOGUE BRIDGE
32B
Shinnecock
Bay East
Shinnecock
Bay West
OLD PONQUOGUE BRIDGE
DUNE RD
ROAD I
ROAD K
Atlantic
Ocean
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020
0 155 310 620 930 1,240 Feet
SAM'S CREEK / MECOX BEACH
Jobs lane to Ocean Rd
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
Swan Creek
AMBLESIDE LN
ROSE WAY
ROSE WAY
SAMS CREEK RD
SANDPIPER LN
OCEAN RD
SURFSIDE DR
POINTE MECOX LN
JOBS LN
Sam's Creek
MID OCEAN DR
Sam's Creek
Mecox Bay
Atlantic Ocean
DUNE RD
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 105 210 420 630 840
Feet
GENET CREEK
North Haven
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amaranth Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Shelter
Island
Sound
Genets
Creek
NORTH DR
WEST DR
SOUTH DR
STOCK FARM LN
EZEKILLS HOLLOW
WIDOW COOPERS PATH
SEAPONACK DR
NORTH HAVEN WAY
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 105 210 420 630 840
Feet
SHORT BEACH
North Haven / Noyac
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
SUNSET
BEACH RD
COXS WALK
TYNDALL RD
114
114
SEA GULL HILL RD
Poules
Creek
1ST ST
COVE RD
SHORT BEACH RD
2ND ST
N o y a c
B a y
3RD ST
60
COVE RD
COVES END LN
LONG BEACH RD
Sag
Harbor
Cove
2018 Aerial Imagery

FISH COVE / NORTH SEA HABOR

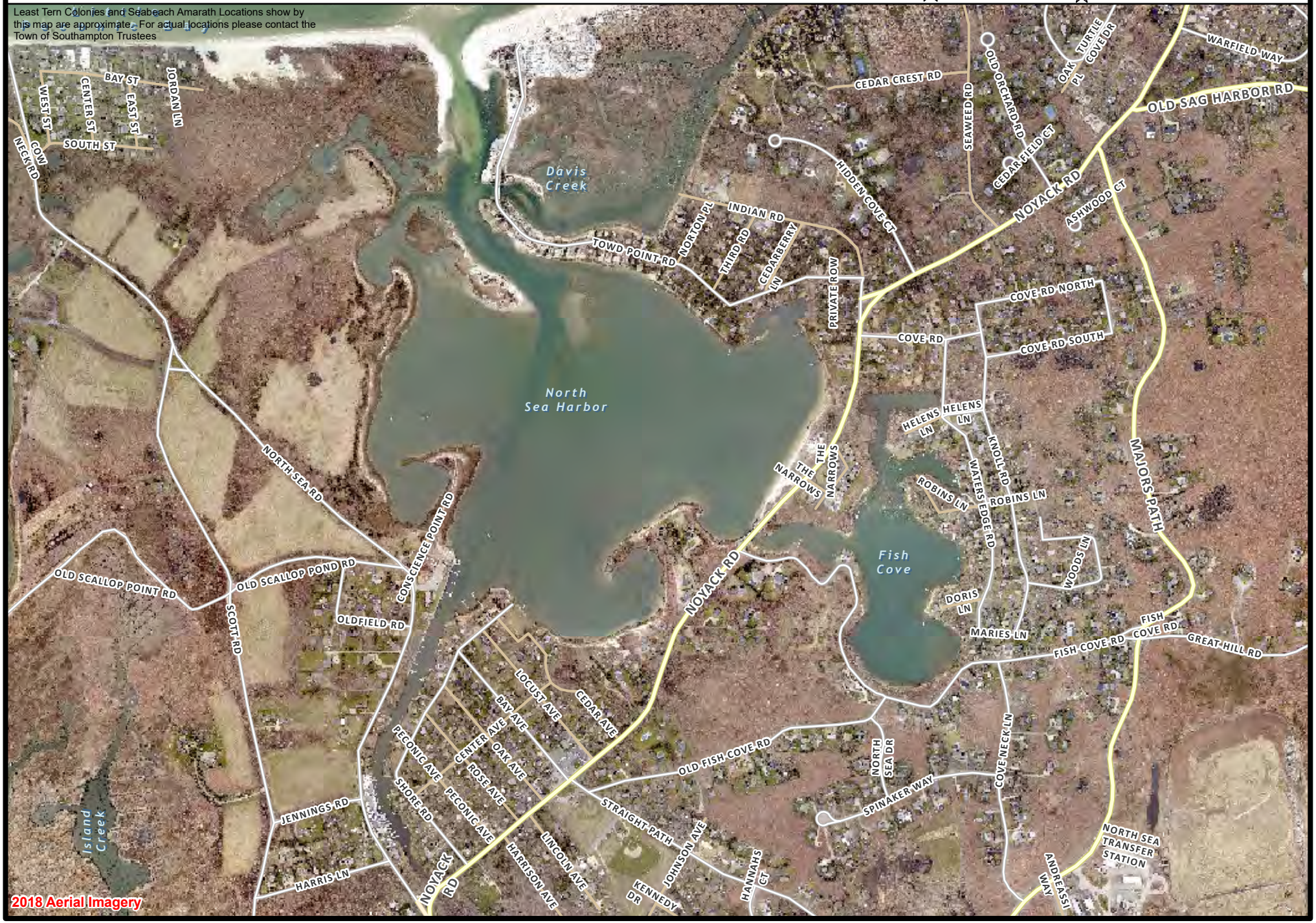
North Sea

Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020

0 287.5 575 1,150 1,725 2,300 Feet

2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony

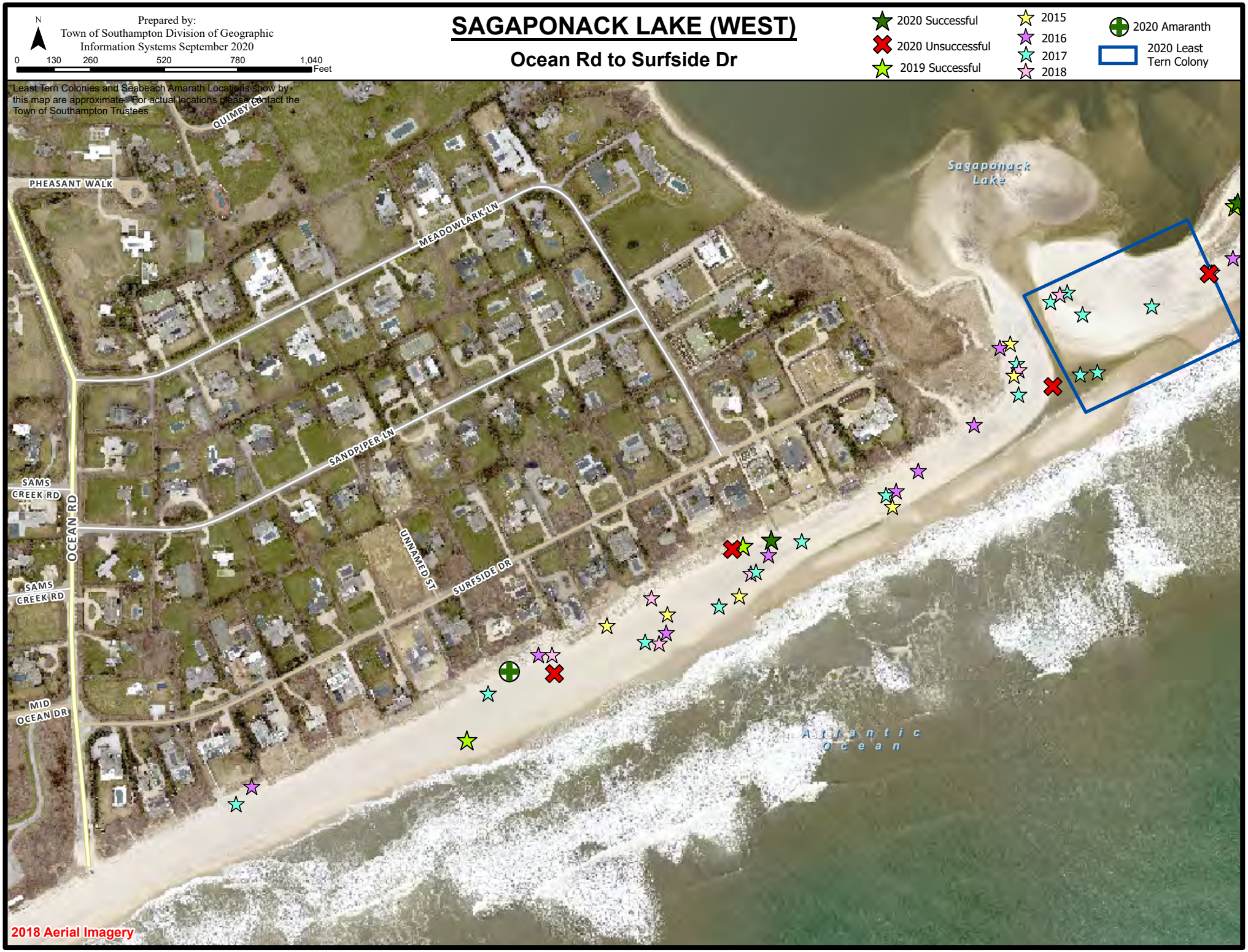
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees

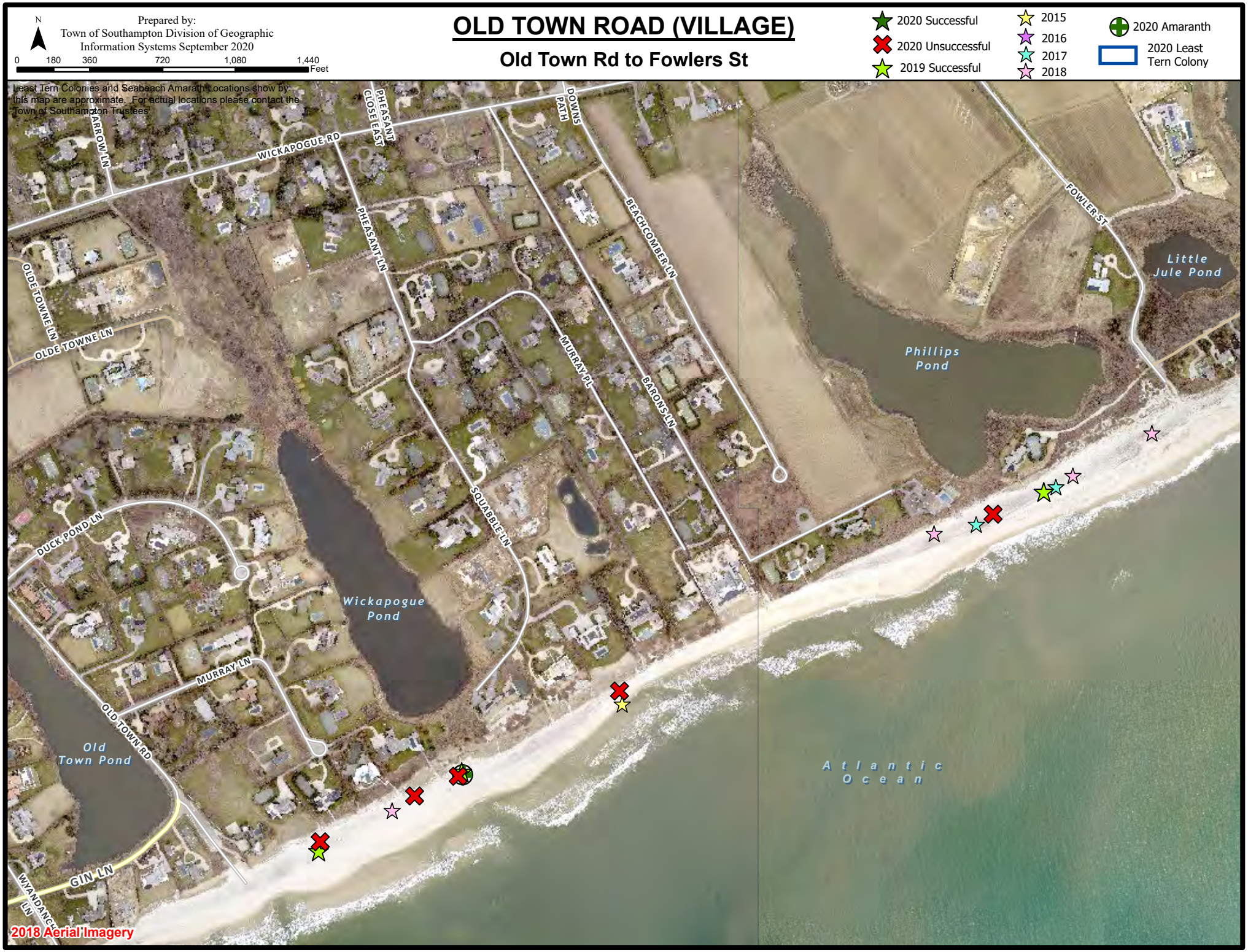


2018 Aerial Imagery

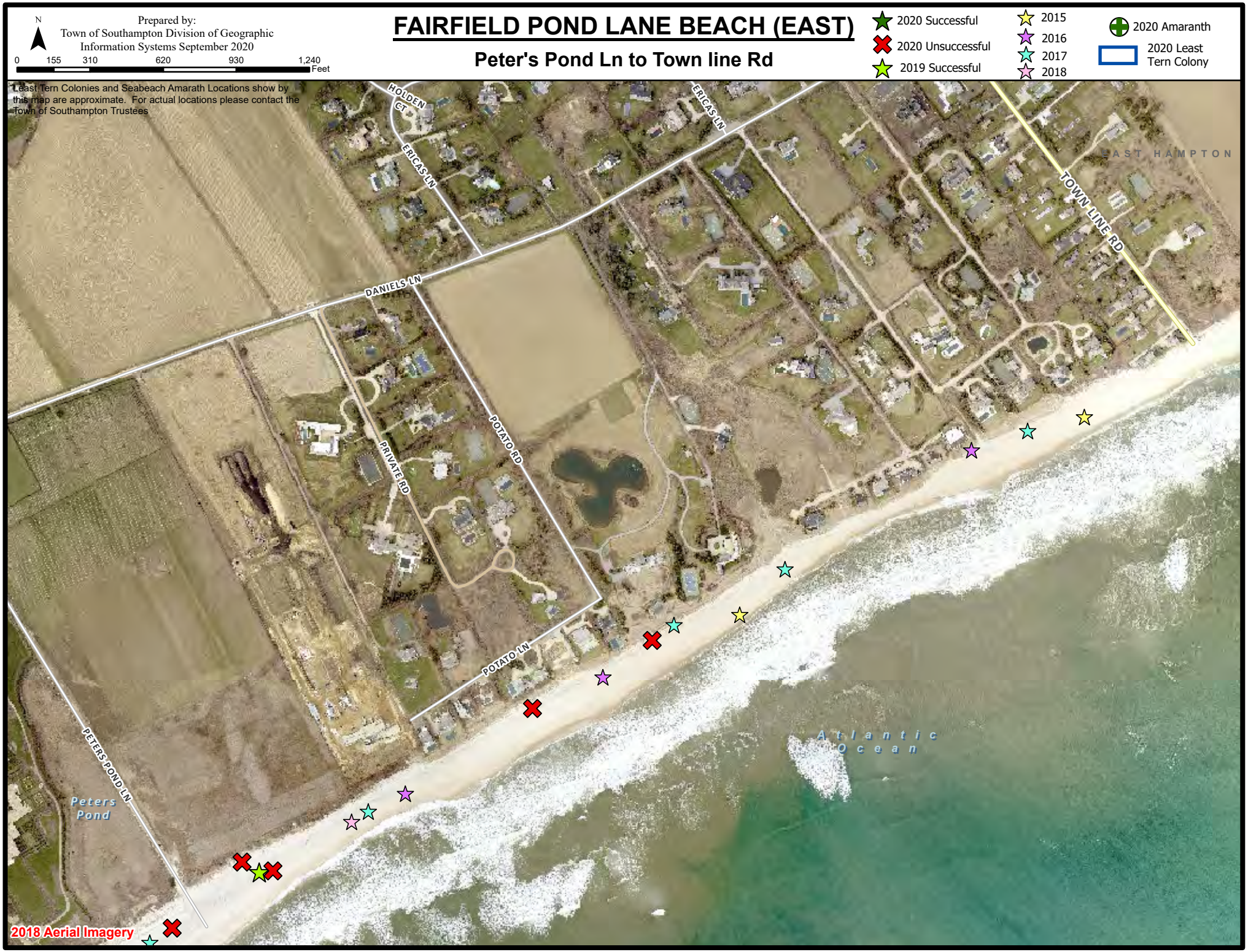

N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 130 260 520 780 1,040
Feet
PINE NECK / MILL CREEK
Noyac
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Noyac
Bay
Mill
Creek
PINE NECK AVE
HAMPTON RD
PRIVATE RD
OAK RD
OAK ST
CEDAR ST
PINE RD
OAK RD
NOYACK AVE
MAPLE ST
RIGHT OF WAY (NOYACK AVE)
BRIAR LN
PINE NECK AVE
CHESTNUT ST
POPLAR ST
BIRCH ST
WALNUT ST
DOGWOOD ST
NOYACK BAY AVE
BERNARD PL
OAK DR NORTH
TREDWELL LN
MILL RD
HARRYS LN
LOCUST LN
MUNCHOGUE DR
NOYACK RD
NORTHVIEW DR
BURKESHIRE DR
2018 Aerial Imagery

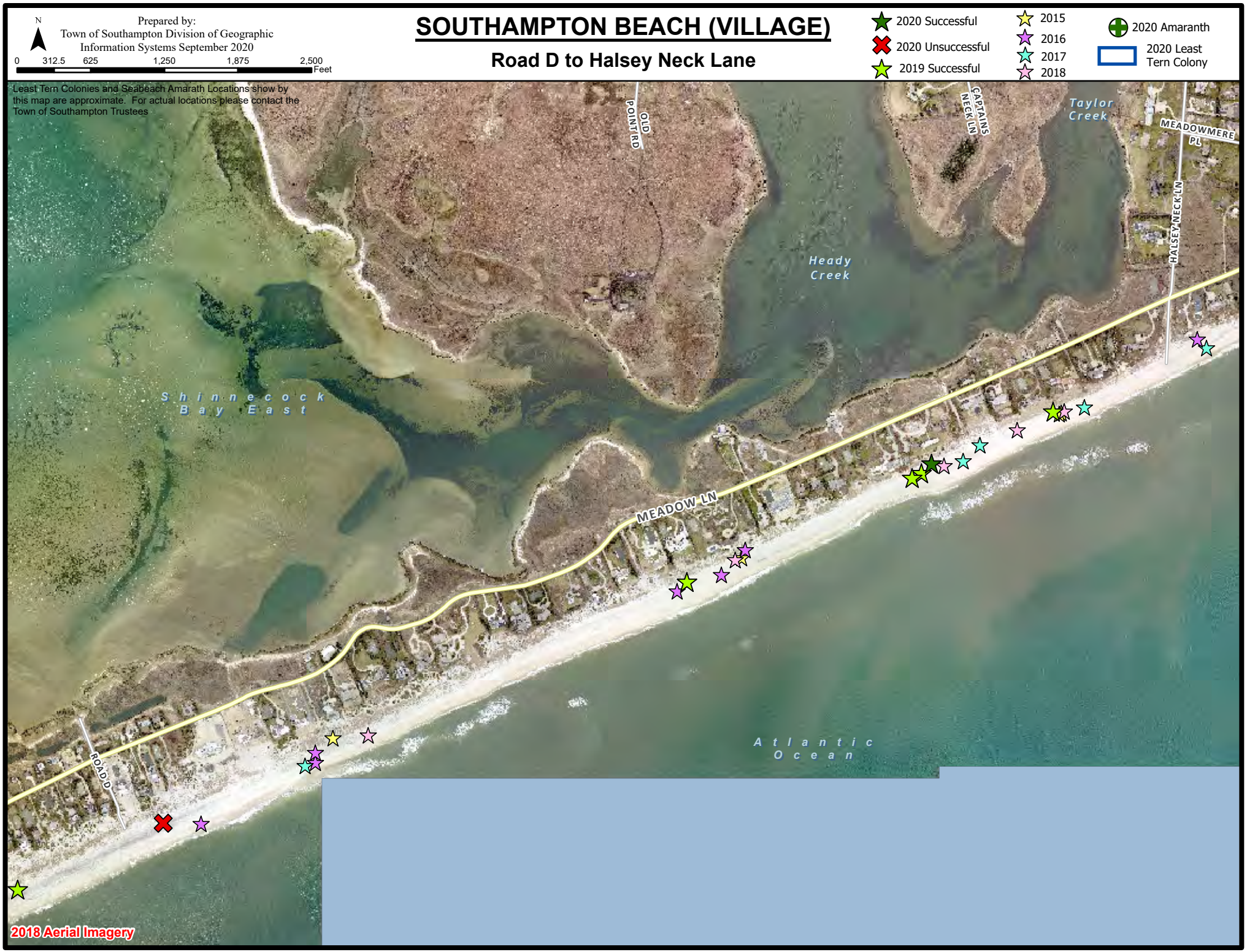

N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 210 420 840 1,260 1,680
Feet
LONG BEACH
Noyac / Sag Harbor
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees.
Noyac
Bay
PARK ACCESS RD
HARBOR DR
CLIFF DR
RIDGE DR
WINDERMERE DR
SUNSET DR
COVE DR
WHALERS WALK
BAY VIEW DR EAST
60
LONG BEACH RD
Sag
Harbor
Cove
CORNELL RD
DARTMOUTH RD
AMHERST RD
PRINCETON RD
REDWOOD RD
DAME NOTRE
Staff
Paynes
Creek
WHITNEY RD
CRESCENT ST
NOYACK RD
TCHER
2018 Aerial Imagery

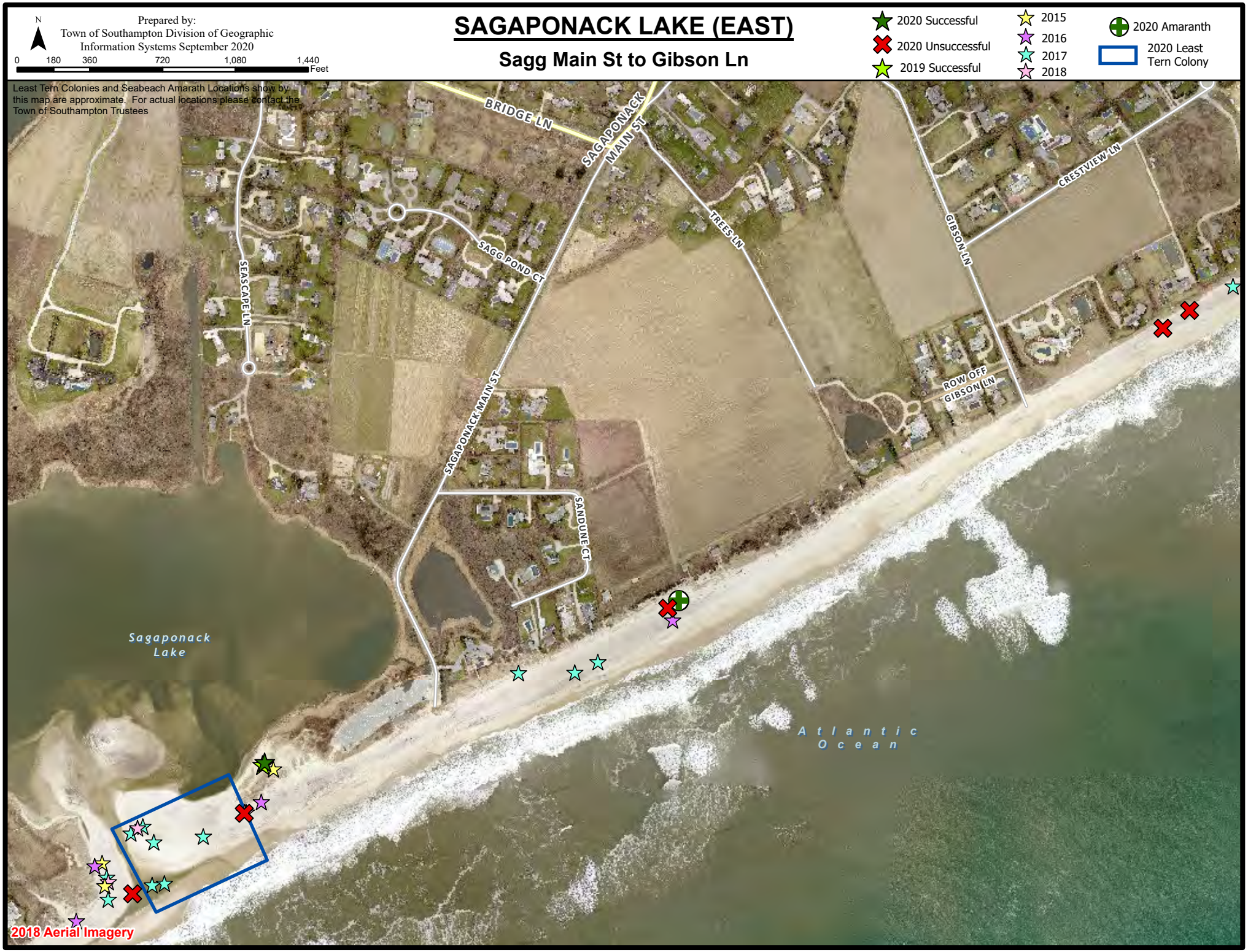

N
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020
0 130 260 520 780 1,040 Feet
SAGAPONACK LAKE (WEST)
Ocean Rd to Surfside Dr
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
QUIMBY LN
PHEASANT WALK
MEADOWLARK LN
SANDPIPER LN
SAMS CREEK RD
OCEAN RD
UNNAMED ST
SURFSIDE DR
SAMS CREEK RD
MID OCEAN DR
Sagaponack Lake
Atlantic Ocean
2018 Aerial Imagery

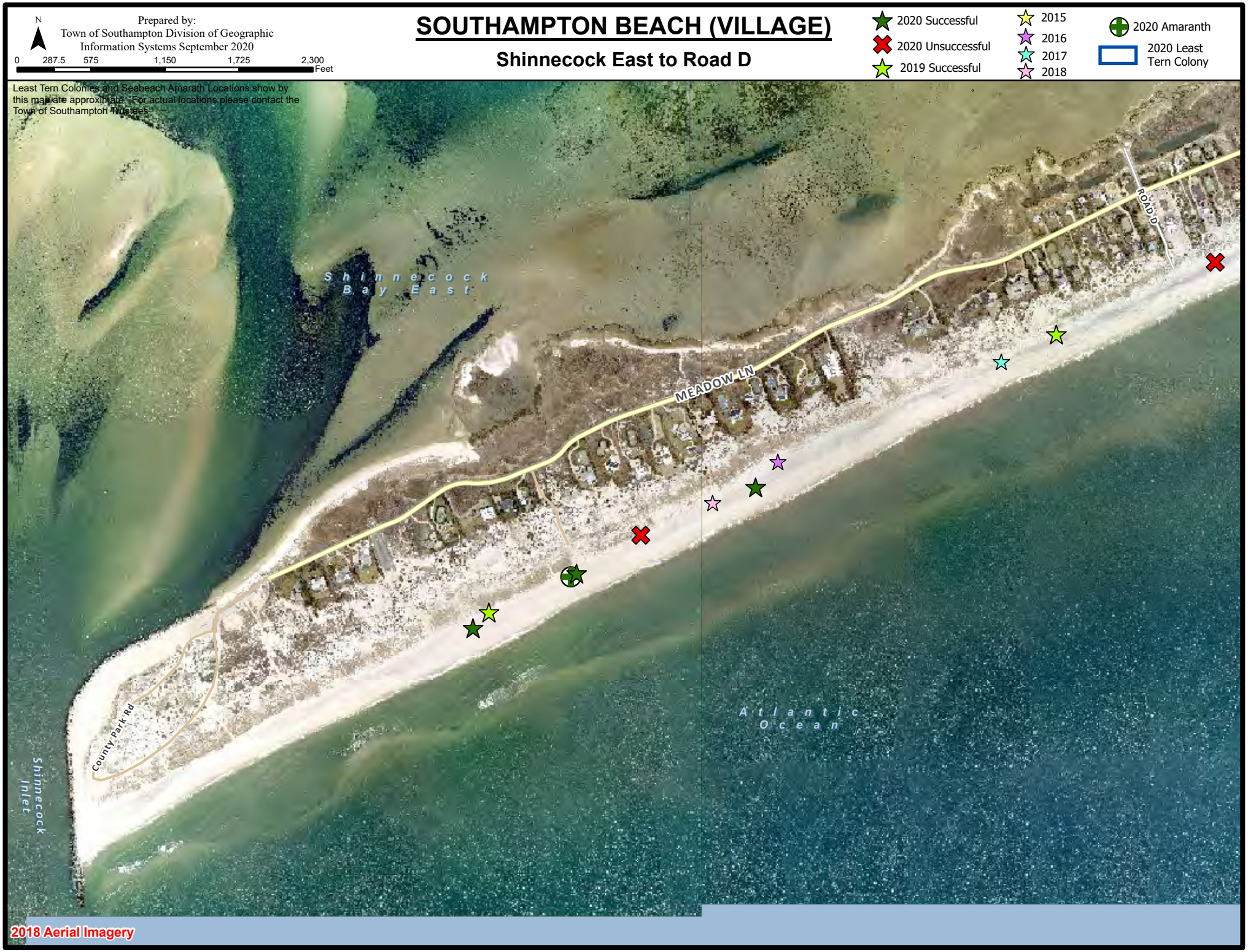

N
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020
0 180 360 720 1,080 1,440 Feet
OLD TOWN ROAD (VILLAGE)
Old Town Rd to Fowlers St
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amaranth Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
ARROW LN
WICKAPOGUE RD
PHEASANT CLOSE EAST
PHEASANT LN
DOWNS PATH
BEACHCOMBER LN
FOWLER ST
Little Jule Pond
OLDE TOWNE LN
OLDE TOWNE LN
MURRAY PL
BARONS LN
Phillips Pond
SQUABBLE LN
DUCK POND LN
Wickapogue Pond
MURRAY LN
OLD TOWN RD
Old Town Pond
Atlantic Ocean
GIN LN
WYANDANCH LN
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 105 210 420 630 840
Feet
ROSES GROVE
Peconic Bay Ave to Oak Grove Rd
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Fresh
Pond
OAK GROVE RD
LAKE DR
Little
Peconic Bay
HERNE PL
EDGEMERE DR
HAMPTON RD NORTH
ROSE HILL RD
NOYACK RD
BEACH RD
WEST SHORE DR
BAY VIEW DR
DORSET RD
BAY WOOD DR
PECONIC
HILLS DR
2018 Aerial Imagery

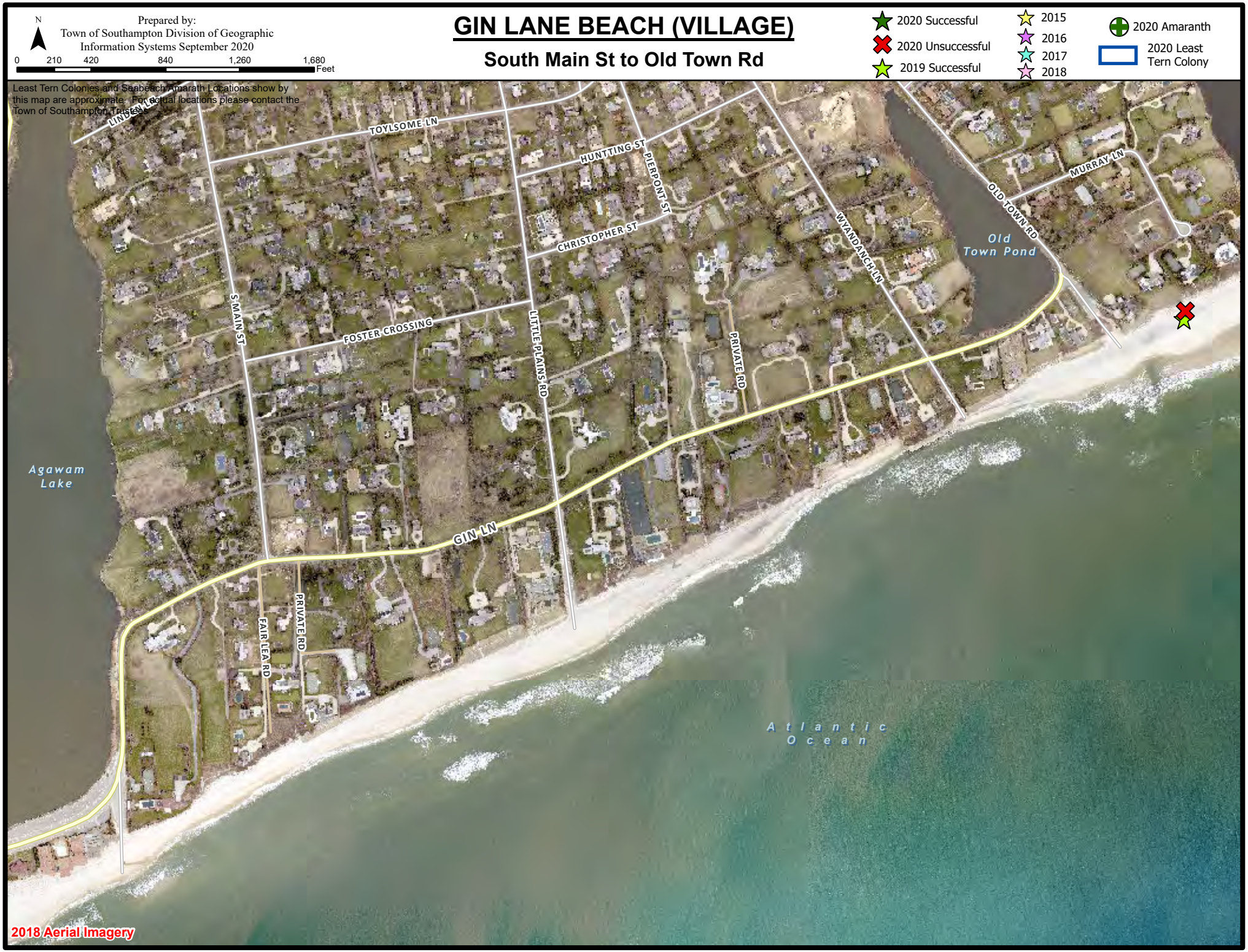

N
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020
0 155 310 620 930 1,240 Feet
FAIRFIELD POND LANE BEACH (EAST)
Peter's Pond Ln to Town line Rd
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
HOLDEN CT
ERICAS LN
ERICAS LN
EAST HAMPTON
TOWN LINE RD
DANIELS LN
PRIVATE RD
POTATO RD
POTATO LN
PETERS POND LN
Peters Pond
Atlantic Ocean
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020
0 312.5 625 1,250 1,875 2,500 Feet
SOUTHAMPTON BEACH (VILLAGE)
Road D to Halsey Neck Lane
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
OLD POINT RD
CAPTAINS NECK LN
Taylor Creek
MEADOWMERE PL
HALSEY NECK LN
Heady Creek
Shinnecock Bay East
MEADOW LN
ROAD D
Atlantic Ocean
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 180 360 720 1,080 1,440
Feet
SAGAPONACK LAKE (EAST)
Sagg Main St to Gibson Ln
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
BRIDGE LN
SAGAPONACK MAIN ST
CRESTVIEW LN
TREES LN
GIBSON LN
SAGG POND CT
SEASCAPE LN
SAGAPONACK MAIN ST
ROW OFF GIBSON LN
SANDUNE CT
Sagaponack Lake
Atlantic Ocean
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 287.5 575 1,150 1,725 2,300
Feet
SOUTHAMPTON BEACH (VILLAGE)
Shinnecock East to Road D
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
Shinnecock Bay East
MEADOW LN
ROAD D
County Park Rd
Atlantic Ocean
Shinnecock Inlet
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 75 150 300 450 600
Feet
MIDDLE POND
Shinnecock Hills
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Far
Pond
BAYBERRY COVE LN
FAR POND RD
Honey
Pot
Middle
Pond
LITTLE NECK RD
Shinnecock
Bay East
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020
0 210 420 840 1,260 1,680 Feet
GIN LANE BEACH (VILLAGE)
South Main St to Old Town Rd
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony
Least Tern Colonies and Seabeach Amaranth Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees.
LINDSEY LN
TOYLSOME LN
HUNTTING ST
PIERPONT ST
CHRISTOPHER ST
WYANDANCH LN
OLD TOWN RD
MURRAY LN
Old Town Pond
S MAIN ST
FOSTER CROSSING
LITTLE PLAINS RD
PRIVATE RD
Agawam Lake
GIN LN
FAIR LEA RD
PRIVATE RD
Atlantic Ocean
2018 Aerial Imagery

HAMPTON BEACH

Village of Quogue

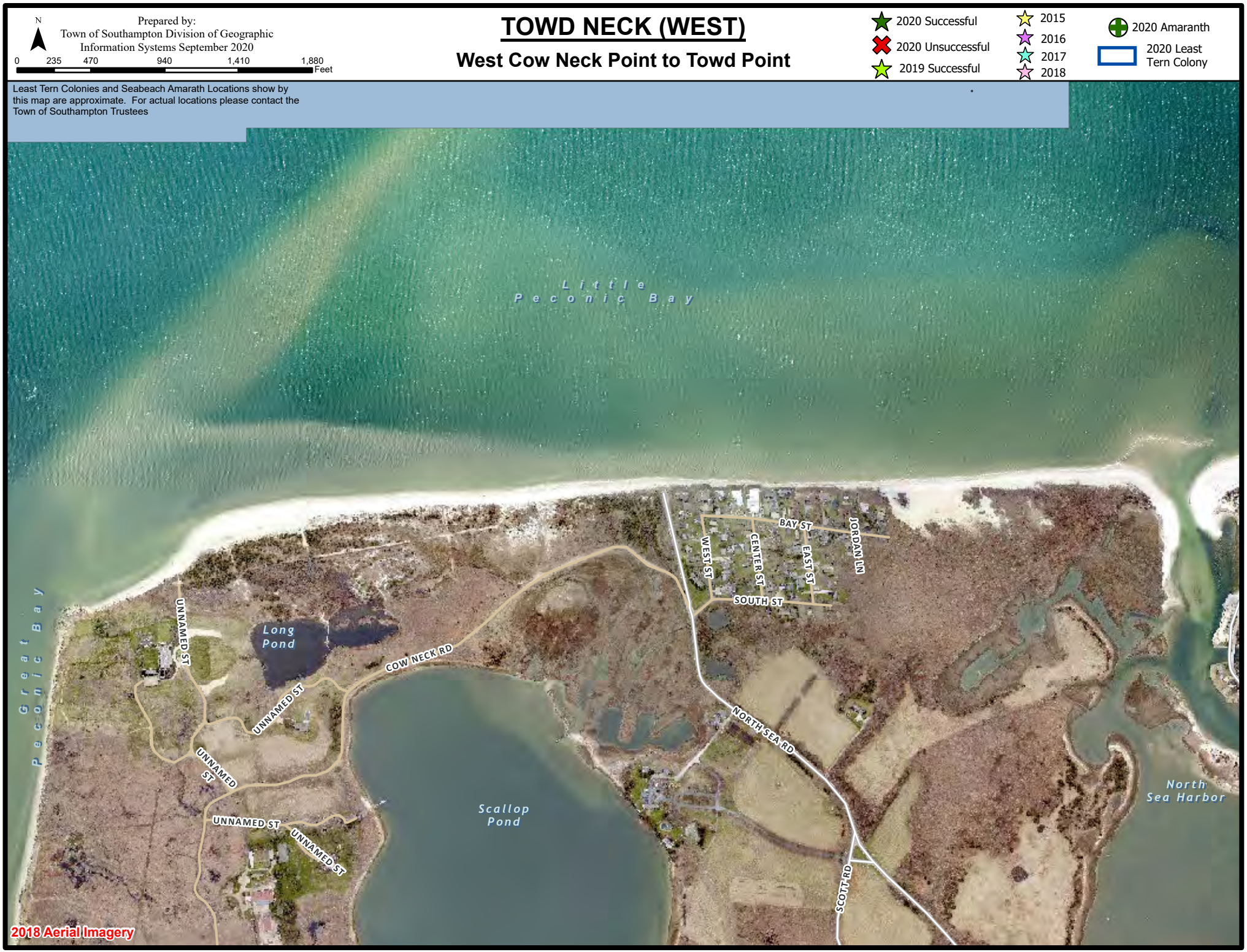
Prepared by:
Town of Southampton Division of Geographic Information Systems September 2020

N

0 500 1,000 2,000 3,000 4,000 Feet

2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least Tern Colony

Least Tern Colonies and Seabeach Amarath Locations show by this map are approximate. For actual locations please contact the Town of Southampton Trustees
2018 Aerial Imagery
Upper Quantuck Creek
Quantuck Creek
Quantuck Bay
Shinnecock Bay West
Penniman Creek
Quogue Canal
Ogdens Pond
Atlantic Ocean
DUNE RD
MONTAUK HWY
104
80
OLD MEETING HOUSE RD
QUOGUE ST
BEACH LN
WATERS EDGE DR
POST LN
OGDEN LN
NIAMOGUE LN
QUAQUANANTUCK LN
SHINNECOCK RD
SECOND NECK LN
PENNIMAN POINT RD
BAY RD
OLD OAK LN
FAIR OAKS LN
VIVIAN'S WAY
ELIZABETH LN
DEER PATH
PHEASANT RUN
TALL PINES DR
FOSTER RD
PRIVATE RD
DOLPHIN LN
CLUB LN
OCEAN AVE
JESSUP AVE
MIDLAND ST
VILLAGE LN
QUOGO NECK LN
JESSUP LN
HALSEY LN
LEAWARD LN
HOWELL LN
BAY VIEW DR
MALLOWS LN
COOPER LN
LAMB AVE
WILLOW LN
QUANTUCK LN
SEASCAPE LN
MEADOW LN
WINNEBOGUE LN
POINT RD
SUNSWYCK LN
COXS COVE RD
SEAFIELD LN
EXCHANGE PL
SEAFIELD PT


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 235 470 940 1,410 1,880
Feet
TOWD NECK (WEST)
West Cow Neck Point to Towd Point
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Little
Peconic Bay
Great
Peconic Bay
Long
Pond
Scallop
Pond
North
Sea Harbor
COW NECK RD
NORTH SEA RD
SCOTT RD
BAY ST
SOUTH ST
WEST ST
CENTER ST
EAST ST
JORDAN LN
UNNAMED ST
UNNAMED ST
UNNAMED ST
UNNAMED ST
UNNAMED ST
2018 Aerial Imagery


N
Prepared by:
Town of Southampton Division of Geographic
Information Systems September 2020
0 75 150 300 450 600
Feet
WOOLEY POND (WEST)
West Scotts Landing to Bulkhead
2020 Successful
2020 Unsuccessful
2019 Successful
2015
2016
2017
2018
2020 Amaranth
2020 Least
Tern Colony
Least Tern Colonies and Seabeach Amarath Locations show by
this map are approximate. For actual locations please contact the
Town of Southampton Trustees
Little
Peconic Bay
Wooley
Pond
EAST BEACH DR
SCOTTS
LANDING RD
EDGEMERE
DR
2018 Aerial Imagery