

**Proposal:** To remove dense vegetation (American beachgrass (*Ammophila breviligulata*)) from historic breeding areas of piping plovers, black skimmers, and several species of terns at the Breezy Point Tip, during fall 2004 and winter 2005.

**Background:** The Breezy Point Tip is located on the accreting side of a terminal jetty that was installed in the 1940's to maintain navigable shipping channels. An associated result of the jetty construction was a steady build-up of sand along the Breezy Point Tip. This beach expansion was initially a benefit to nesting shorebirds, however, over time the natural processes of a dunal system were altered by this artificially imposed stable environment. The vegetation behind the dunes began to succeed and creep forward, pushing the foredune closer and closer to the high tide line. Since piping plovers (a federally protected threatened species) nest at the foot of the foredune, they are repeatedly forced to place their nests closer to the tidal zone, leaving their nests vulnerable to flooding and human disturbance. Suitable nesting habitat is shrinking for other rare shorebirds as well. Each year nesting habitat is becoming more limited. The number and diversity of rare shorebirds has been decreasing and it has become increasingly difficult to protect these birds while providing beach for fishermen, surfers, beachcombers and Surf Club members. Consequently, disturbance levels to the birds and to the visitors have been on the rise as they have been forced to share a very narrow strip of beach.

**Project Description:** The project consists of removing vegetation, primarily American beachgrass (*Ammophila breviligulata*)) in four locations along the primary dunes of the Breezy Point Tip, starting this fall 2004. By expanding the area of suitable nesting habitat, it is anticipated that the birds will shift their use to these newly available areas, avoiding areas vulnerable to flooding and to human conflicts.

With \$30,000 from Concession Franchise Fee monies (**PMIS # 74852**) Gateway has contracted Dr. Brook Lauro from St. John's University to evaluate the need of such a project and develop a proposal. Dr. Lauro has conducted literature searches, consulted with experts in endangered shorebird management and has spoken with individuals that have conducted similar projects. She has completed a draft report entitled, Habitat Enhancement to Improve Piping Plover Numbers and Visitor Access at Breezy Point, New York. This report provides the park with the necessary framework to carry out the initial steps of this multi-year experiment. Gateway has provided Dr. Lauro with comments and once her report is revised, the document will be circulated to a larger audience for input. In addition to finalizing the document, Dr. Lauro will oversee the actual project and provide the park with a post-project evaluation after the first year and make recommendations for the remaining two years of the experiment.

Dr. Brook Lauro will work closely with park staff in implementing several vegetation removal techniques. In general, the four treatment areas approximately 1.6 acres each, will be scraped with a bulldozer to remove the beach grass and rhizomes. Follow-up techniques such as beach raking or sand sifting will be necessary to remove additional rhizomes and reduce the vigor of plant growth for the following spring.

Maintenance staff (i.e. Jimmy Taunton) confirmed that the equipment necessary to carry out the vegetation removal, a bulldozer, payloaders and possibly a beach rake, are available and operational. The time required to do the vegetation removal is difficult to estimate since it has not been done before, however Mr. Taunton anticipates that the work will take approximately 40 hours, and that such a job could be incorporated into the staff's current work schedule (if stretched through a few weeks). The resource management staff will work closely with the maintenance staff on this vegetation removal. The initial treatment will require the largest amount of time, however the next two years of test plot maintenance should require much less effort.

Pre-treatment activities that have been underway include collecting vegetation density data and mapping the treatment areas with GPS.

**Potential Pros and Cons:** On Tuesday, July 27<sup>th</sup>, natural resource staff from the Jamaica Bay Unit and Headquarters met to evaluate the proposed vegetation removal experiment at the Breezy Point Tip. Everyone had previously received a copy of Dr. Lauro's draft report and had been asked to submit comments. Present at the meeting, Kim Tripp, Dave Avrin, Dave Taft, Chris Olijnyk, Sue Gilmore, Doug Adamo and George Frame.

As part of the evaluation process, staff offered possible pros and cons that may occur if the project is carried out. Listed below are the results of this exercise.

#### Pros

- The action would support the U.S. Fish and Wildlife Service's Piping Plover Atlantic Coast Population Revised Recovery Plan, 1996. Jetties and groins are considered to be a "continued threat" to piping plover habitat, as they are a cause of habitat degradation. "Discourage vegetation encroachment at nesting sites" is listed as a recovery task (Part II, 1.242)
- The action would help sustain historical piping plover habitat, and promote diversity in nesting shorebirds.
- The action could potentially reduce conflicts between visitors and shorebirds by increasing the width of available beach. May reduce frequency for alternate walkway at Surf Club and may increase available beach for members. May reduce the frequency of beach closures at the Tip during ORV fishing season.
- The action would allow the park to gather information on plover management options that could be applied elsewhere.
- This action has the potential to shift plover nest locations to more appropriately managed areas. Example-Birds nesting at Riis and Fort Tilden may shift to the Tip if more suitable habitat becomes available.
- The action has potential to receive significant support from visitors.
- The action would give the park an opportunity to educate the public about some of the management options and techniques associated with the challenge of protecting park resources and allowing continued limited public access.

- This action is representative of Management Objective #4 listed in “Objectives for Protection, Enhancement and Use of the Jamaica Bay Ecosystem” (signed in 2000 by the General Superintendent and Unit Superintendent of Gateway National Recreation Area. The objective states “ Enhance the environmental health of the Jamaica Bay ecosystem by expanding the amount of land dedicated to natural resource habitat and by increasing abundance, distribution and diversity of plant and animal species.”.

#### Cons

- The action could increase areas for visitor use potentially increasing disturbance to the birds.
- The action could set the stage for a variety of visitor groups to argue for habitat modification/disturbance to meet their needs.
- The potential outcomes of the action are unknown.
- The action will require a long-term commitment (3 years) that will require heavy equipment use. (Bulldozer and beach rake.)
- The action may feed into the “anti plover sentiment”.

#### **Staff recommendation:**

Staff agreed to move ahead with the project as “experimental” for a period of three years to allow for adequate time for target species response, and appropriate post-project evaluation to determine whether this type of habitat alteration merits incorporation into a revised piping plover management plan for the Jamaica Bay Unit.

The Division of Natural Resources, in support of the project, agreed to check into the NEPA compliance aspects of the project and advise the Unit on how to proceed.

alternate paths is very labor intensive, often requiring the use of bulldozers, brush cutters and 6-8 staff members.