



# United States Department of the Interior



FISH AND WILDLIFE SERVICE  
400 RALPH PILL MARKETPLACE  
22 BRIDGE STREET  
CONCORD, NEW HAMPSHIRE 03301-4901

May 14, 1992

Mr. William Lawless, Chief  
Regulatory Division  
U.S. Army Corps of Engineers  
424 Trapelo Road  
Waltham, Massachusetts 02254-9149

ATTN: Tom Bruha

Dear Mr. Lawless:

We have reviewed the Memorandum of Understanding (MOU) between The Trustees of Reservations (TTOR) and the Town of Edgartown, Massachusetts regarding the reconstruction of the Dyke Bridge in Edgartown. We realize that no COE permit has been sought by the town to date. However, we offer the following comments about their MOU for your consideration when an application is submitted.

In our February 4, 1992 letter to Richard Taylor (enclosed), we responded to a Notice of Intent filed under the Massachusetts Wetlands Protection Act by the Town of Edgartown for reconstruction of the Dyke Bridge. In our letter, we stated that the reopening of the Dyke Bridge to vehicular traffic will result in harm to the Federally listed threatened piping plover (*Charadrius melodus*) through habitat disturbance and destruction, and disturbance of nesting adults and chicks. Off-road vehicles (ORVs) are a major factor limiting both numbers and productivity of piping plovers on the beaches that would receive vehicular use via the bridge.

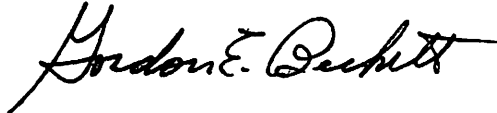
Condition 4 of the MOU attempts to address public use of the beach during the plover breeding season. A number of statements need further refinement in order to prevent adverse impacts to nesting plovers. For example, in Massachusetts, the plover breeding season generally begins about April 1, not April 15 as stated in this condition.

Furthermore, Condition 4 also tries to resolve the conflicts of ORV use on nesting plover beaches by limiting vehicular access to the beach to the early morning and late afternoon hours. The MOU further states that "signs and other means shall be used to route all vehicular traffic on the barrier beach away from nesting and feeding areas during bird nesting season." Unfortunately, the MOU does not elaborate the "other means" used to route traffic from plover nesting and feeding areas. This condition lacks the specific description of actions that would protect nesting adult plovers and their chicks from vehicular and pedestrian traffic. Therefore, Condition 4 provides insufficient protection to piping plovers and their chicks. Regardless of the time of day of vehicular use of these beaches, ORVs may impact piping plover territory establishment, nest site selection and chick survival. In particular, vehicles may impede access of flightless chicks to

intertidal feeding habitat, or worse, crush them. Vehicles may also destroy the wrackline, a preferred feeding habitat in some locations. If unrestricted pedestrian use is allowed, the MOU should clearly state that symbolic fencing of nesting territories and informational signs be mandatory.

Please notify Susi von Oettingen of this office at 603/225-1411, once you have received a permit application for the Edgartown Dyke Bridge, so that we may further discuss our recommendations and the Edgartown/TTOR MOU. We appreciate your close coordination with our staff throughout this process. Thank you for the consideration of our comments and please contact Ms. von Oettingen, if you have any questions.

Sincerely yours,



Gordon E. Beckett  
Supervisor  
New England Field Offices

Enclosure

CC: RO/FWE Reading File  
Rob Deblinger, Trustees of Reservations  
Scott Melvin, MA F&W  
Anne Hecht, RO/SE  
Town of Edgartown, MA  
Richard Taylor, MA Sec. of Trans. & Const.  
FWE: SvonOettingen:5-14-92:603/225-1411



## United States Department of the Interior



FISH AND WILDLIFE SERVICE  
400 RALPH PILL MARKETPLACE  
22 BRIDGE STREET  
CONCORD, NEW HAMPSHIRE 03301-4901

June 15, 1992

Mr. William Lawless, Chief  
Regulatory Division  
New England Division, Army Corps of Engineers  
424 Trapelo Road  
Waltham, Massachusetts 02254-9149

ATTN: Tom Bruha

Dear Mr. Lawless:

This is a follow-up to our letter of May 14, 1992 and telephone conversations with Mr. Bruha, regarding a Nationwide permit for the reconstruction of the Dyke Bridge in Edgartown, Massachusetts. Section 7(a)(2) of the Endangered Species Act of 1973, as amended, requires that Federal agencies, in consultation with and with the assistance of the Secretary [of the Interior], insure that any action authorized, funded, or carried out by such agency is not likely to jeopardize the continued existence of any listed species or result in the destruction or adverse modification of habitat of such species which has been designated as critical ("critical habitat"). The Nationwide permit that would allow the reconstruction and reopening of the Dyke Bridge to vehicular traffic would result in harm to the Federally listed threatened piping plover (*Charadrius melodus*) through habitat disturbance and destruction, and disturbance of nesting adults and chicks.

The Atlantic Coast population of the piping plover was added to the list of threatened species protected under the Endangered Species Act in January 1986. Primary threats to the piping plover cited in the Final Rule were habitat disturbance and destruction, and disturbance of nesting adults and chicks (U.S. Fish and Wildlife Service 1985). In our letter of February 4 to Mr. Richard Taylor, Secretary of Transportation and Construction, we questioned the wisdom of reopening the bridge because of potential harm to the piping plover from associated traffic, in particular, disruption of breeding activity and chick mortality due to vehicular traffic.

The Dyke Bridge, which has been closed to vehicles since 1981 and to pedestrians since 1988, will exit onto the Cape Pogue Wildlife Refuge, a property of The Trustees of Reservations. The Service has identified the beach north and south of the proposed bridge as an area which could contribute significantly to the survival and recovery of the piping plover. Historic reports (Griscom and Emerson 1959) imply that these beaches formerly supported far larger numbers of piping plovers than the two to six pairs recorded during each of the last four years; however, with adequate management, beaches between Norton Point and Cape Pogue could provide nesting habitat for significantly increased numbers of piping plovers.

Off-road vehicles are a major factor currently limiting both numbers and productivity of piping plovers on these beaches. Off-road vehicles disrupt establishment of plover nesting territories, affect nest site selection, impede access of chicks to intertidal feeding habitat, and crush nests and chicks. Vehicles also destroy the wrackline, a preferred piping plover feeding habitat. More information about each of these impacts follows:

- o Disruption of nesting - Piping plovers are particularly vulnerable to disturbance when they are establishing territories and conducting courtship. Strauss (1990) linked vehicle activity with four out of five incidents of territory abandonment recorded during his study at Sandy Neck, Massachusetts.
- o Interference with nest site selection - MacIvor *et al.* (1987) observed piping plovers on North Beach in Chatham, Massachusetts. This area, which had a history of extensive off-road vehicle use, became inaccessible to vehicles following separation from the mainland during a winter 1987 storm. During the subsequent breeding season, 50 percent of plover pairs shifted their nest sites to areas on North Beach that were not available for nesting in 1985 or 1986 due to off-road vehicle traffic. Further, all three colonies of least terns (which frequently nest in the same areas as piping plovers) were also in locations that were formerly unavailable due to off-road vehicle use.
- o Impeding chick mobility - Ruts created by vehicles impede movements of flightless chicks, increasing time and energy that chicks must invest in travel. Jacobs (1988) recorded observations of plovers at Delaware Seashore State Park: "The adult plovers ... tried repeatedly to lead their chicks down to the water to feed, but at each attempt the birds were driven back by vehicles zooming by. In one case, a vehicle came within inches of running over a chick. As the chick ran to avoid the vehicle, it stumbled, rolled, and apparently injured itself, because it did not get up for several minutes. It did survive overnight, but the next day it was limping awkwardly and unable to feed itself."
- o Destruction of wrackline - Off-road vehicles crush wrack (organic matter deposited on the beach above the high tide line). Data from three studies (Goldin *et al.* 1989, Hoopes *et al.* 1990, and Gibbs 1986) found wrackline to be a preferred feeding habitat for plover chicks. Goldin (1991) noted that at Breezy Point, New York, "In 1988, vehicle traffic on the beach compacted the wrack into the sand and little was available to the plovers. In contrast, in 1989 when vehicles were excluded from the beach, wrack was abundant throughout the season." Flightless piping plover chicks are extremely vulnerable to impacts that impede feeding. Cairns (1977) found that piping plover chicks typically tripled their weight during the first two weeks after hatching. Chicks that failed to achieve at least 60% of this weight gain by day 12 were unlikely to survive.
- o Crushing eggs and chicks - Numerous cases of direct egg and chick mortality due to crushing by vehicles have been documented. Of particular relevance for the proposed project, is the case of three chicks found dead in vehicle ruts in 1991 on East Beach, just south of the Dyke Bridge. Increased vehicle traffic in this area will exacerbate this problem.

Because of the severe threat that vehicles pose to piping plovers, it would be irresponsible to increase vehicles access to this area during the piping plover nesting season. However, we do not object to bridge reconstruction, if access is controlled to prevent adverse effects on plovers and other beach resources. Please note that we do not oppose pedestrian access to the area or vehicle activity outside of the plover breeding season.

The Memorandum of Understanding (MOU) between The Trustees of Reservations (TTOR) and the Town of Edgartown, Massachusetts regarding the reconstruction of the Dyke Bridge does provide for management of off-road vehicles during the plover breeding season (Condition 4 in particular). However, the MOU lacks a precise description of actions that would protect nesting adult plovers and their eggs or chicks from vehicular and pedestrian traffic and a detailed commitment on the part of the Town and TTOR regarding continued monitoring. For example, the MOU does not elaborate the "other means" used to route traffic from plover nesting and feeding areas, nor does it identify a commitment to continue intensive beach management.

To ensure that there be no adverse effects to breeding piping plovers as a result of increased vehicular traffic from the reconstruction of the Dyke Bridge, we propose that the Nationwide permit be amended with the following conditions:

1. The bridge will be closed to all vehicular traffic during the piping plover breeding season, April 1 to August 31, unless the alternative protection strategies described in items 2 through 5, below are implemented.
2. The permittee is to provide for mandatory symbolic fencing of nesting and feeding territories, informational signs and intensive monitoring, by a qualified individual(s) throughout the breeding seasons.
  - a. Monitoring to be initiated during the early periods of territory and nest establishment. Frequency of monitoring shall not be less than every second day during periods when public use is high enough to disrupt plovers that might be attempting to establish nesting territories, and not less than twice weekly during periods of low public use.
  - b. When plover behavior indicates territory establishment is observed, an area large enough to prevent disruption will be fenced and posted closed to all public use. Once a nest is established, the closure should extend a minimum of 300 feet in each direction (far enough to assure that incubating birds are not flushed from the nest by passing vehicles or pedestrians). This buffer should be closely monitored and adjusted if the brood moves. From the date of hatch until all chicks are fledged, closures to be expanded to include all feeding habitat being used by the brood. This will necessitate closure from the bay side to the ocean unless brood foraging is consistently limited to one side or the other.

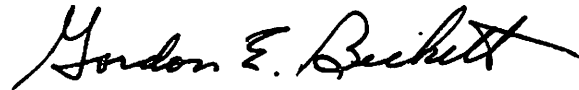
3. The permittee must maintain documentation of plover monitoring in the off-road vehicle corridor. Documentation to indicate date and time of surveys, status of plovers observed, and protection measures in place. Birds must be carefully observed to assure that their behavior patterns are not disrupted by recreational activities in the vicinity. Clearly recorded field notes will be adequate for this purpose.
4. The permittee will inform all drivers about locations of piping plover territories, nests, and feeding areas; and ensure that vehicles are routed as far away from those areas as possible.

It should be understood that these conditions hold true until the piping plover is no longer Federally threatened. In many of these conditions, the applicant may delegate the responsibility to TTOR as agreed in the MOU. The continued implementation of these conditions is contingent on a significant commitment on the part of the Town of Edgartown and TTOR to monitor the piping plovers and to establish and enforce closures.

The incorporation of these conditions into the Nationwide permit will preclude a "may affect" decision and further consultation under Section 7. In the event that these conditions are incorporated into the Nationwide permit and not met by the permittee, the Service understands that the Corps will be responsible for pursuing violations of the permit.

We appreciate your consideration of our concerns regarding this issue. If you have any questions about this matter or if we can furnish any further information to you, please feel free to contact Susi von Oettingen of this office at 603/225-1411.

Sincerely yours,



Gordon E. Beckett  
Supervisor  
New England Field Offices

CC: RO/FWE Reading File  
Fred B. Morgan, Jr.  
Chairman, Board of Selectmen  
Edgartown, MA 02539  
Chairperson  
Edgartown Conservation Commission  
P.O. Box 1065  
Edgartown, MA 02539  
Diane Boretos  
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Middleboro, MA 02346  
Tom French, MA F&W  
Scott Melvin, MA F&W  
Rob Deblinger, The Trustees Of Reservations  
Jay Copeland, MANHP  
RO/SE  
FWE: SvonOettingen:6-15-92:834-4411



#### REFERENCES CITED

- Cairns, W.E. 1977. Breeding Biology of Piping Plovers in Southern Nova Scotia. M.S. thesis. Dalhousie University, Halifax, Nova Scotia. 115 pp.
- Gibbs, J.P. 1986. Feeding Ecology of Nesting Piping Plovers in Maine. Unpub. report to Maine Chapter of The Nature Conservancy. Topsham, Maine. 21 pp.
- Goldin, M. 1991. Reproductive Ecology and Management of Piping Plovers at Breezy Point, Gateway National Recreation Area, New York -- 1990. Unpublished report. 16 pp.
- Goldin, M., C. Griffin, and S. Melvin. 1989. Reproductive and Foraging Ecology, Human Disturbance, and Management of Piping Plovers at Breezy Point, Gateway National Recreation Area, New York. Unpublished progress report. University of Massachusetts, Amherst, Massachusetts. 58 pp.
- Griscom, L. and Emerson. 1959. Birds of Martha's Vineyard. Published privately by Anthoensen Press.
- Hoopes, E.M., C. Griffin, and S. Melvin. 1990. Relationships Between Human Recreation on Piping Plover Foraging Ecology and Chick Survival. Unpublished progress report. University of Massachusetts, Amherst, Massachusetts. 27 pp.
- Jacobs, J. 1988. Report of Observations on Piping Plovers South of Indian River Inlet, Sussex County, Delaware, June 29 to July 5, 1988. Memorandum. U.S. Fish and Wildlife Service. 3 pp.
- MacIvor, L.H., C. Griffin, and S. Melvin. 1987. Management, Habitat Selection, and Population Dynamics of Piping Plovers on Outer Cape Cod, Massachusetts 1985-1987. Unpublished report. University of Massachusetts, Amherst, Massachusetts. 11 pp.
- Strauss, E. 1990. Reproductive Success, Life History Patterns, and Behavioral Variation in a Population of Piping Plovers Subjected to Human Disturbance (1982-1989). Ph.D. dissertation. Tufts Univ., Medford, Massachusetts.
- U.S. Fish and Wildlife Service. 1985. Federal Register 50: 50726-50734.



TOWN OF EDGARTOWN  
OFFICE OF SELECTMEN  
70 MAIN STREET, P. O. BOX 5158  
EDGARTOWN, MASSACHUSETTS 02539

TELEPHONE  
(508) 627-6180

October 8, 1992

Mr. William Lawless, Chief  
Regulatory Division  
New England Division, Army Corps of Engineers  
424 Trapelo Road  
Waltham, MA 02254-9149

Attn: Tom Bruha

Dear Mr. Lawless,

On or about June 15, 1992, this Board received a copy of a letter sent to you by Gordon E. Beckett of the United States Department of the Interior regarding Dyke Bridge in Edgartown, Massachusetts, more particularly, as the reconstruction of said bridge relates to the piping plover.

The Fish and Wildlife Service has requested that the nationwide permit for the bridge reconstruction be amended to include several conditions relating to vehicular traffic. For the most part, we do not have a problem with these conditions, but we think further discussion is necessary regarding area closures that extend a minimum of 300 feet in each direction, and we also feel that the area of management, as it relates to the Town, needs to be clarified.

This Board respectfully requests a meeting with all parties concerned to discuss these issues. Hopefully, such a meeting could be held on the Vineyard.

We look forward to your response.

Very sincerely,

Dana K. Anderson, Chairman

Thomas A. Durawa

Fred B. Morgan, Jr.  
BOARD OF SELECTMEN

cc: Gordon E. Beckett, Supervisor, New England Field Office  
Diane Boretos, Department of Environmental Protection  
Frederic Winthrop, Jr., Director, Trustees of Reservations  
Edgartown Conservation Commission  
Laurence Mercier, Street Superintendent

BOS/hgw



REPLY TO  
ATTENTION OF

DEPARTMENT OF THE ARMY  
NEW ENGLAND DIVISION, CORPS OF ENGINEERS  
424 TRAPELO ROAD  
WALTHAM, MASSACHUSETTS 02254-9149

December 7, 1992

Regulatory Division  
CENED-OD-R-03-199200373

Town of Edgartown  
Att. Dana K. Anderson, Chairman  
Office of Selectman  
70 Main Street  
Edgartown, Massachusetts 02539

Dear Ms. Anderson:

This concerns the Town's application for a Corps of Engineers permit submitted by Mr. Laurence Mercer, Highway Superintendent, to reconstruct the timber bridge (Dyke Bridge) and the repair of the timber abutments and bulkhead located in Pocha Pond. Also, this is in response to your letter to Mr. Lawless, dated October 8, 1992, requesting a meeting with all interested parties to discuss the June 15, 1992 letter from Mr. Gordon Beckett, United States Fish and Wildlife Service (USF&WS) concerning the impacts on the Piping Plovers as a result of the reconstruction of the bridge.

The Corps project manager, Mr. Thomas C. Bruha, has discussed the regulatory procedure with the other Federal agencies and with Mr. Mercer after a site visit last summer whom he believed to be the point of contact. He has also met with Ms. Susi von Oettingen of the USF&WS to discuss the requirements under Section 7(a)(2) of the Endangered Species Act, as amended.

The proposed activity will require authorization from this office for the bridge abutments and the bulkhead with special conditions, based upon USF&WS regulations, to ensure the continued protection of the Piping Plovers located on Leland Beach.

The reconstruction of the bridge will require a permit from the United States Coast Guard. Mr. Gary Kassof, Bridge Management Specialist First Coast Guard has agreed to be the lead Federal agency and will coordinate all activities between the applicant and the Federal regulatory agencies. Mr. Kassof was furnished a copy of your October 8, 1992 letter.

It is our intention to continue processing your permit application and to include, as a condition in our permit, the final recommendations of the USF&WS on managing the Piping Plover.

If you have questions, please do not hesitate to contact Thomas C. Bruha at (617) 647-8058, or use our toll free number 800-343-4789 or 800-363-4367 if calling from within Massachusetts.

Sincerely,

  
Karen Kirk Adams  
Chief, Permits Branch  
Regulatory Division

cc.  
Mr. Gary Kassof  
USCG

U. S. Fish and Wildlife Service  
Att. Susi von Oettingen  
Ralph Pill MKPL.  
22 Bridge Street  
Concord, New Hampshire 03301

SB&H Civil Engineers  
Att. Mr. Martin R. Donoghue, P. E.  
97 State Road  
P. O. Box 339  
Vineyard Haven, Massachusetts 02568-2781

received  
12/14/92

P.