



Duxbury Beach Reservation, Inc.

Piping Plover Brood Herding Protocol

Created: March 20, 2020

Purpose: This protocol describes when and how Piping Plover broods may be herded off the back road or away from paved parking lots on Duxbury Beach in situations approved under DBR permits.

Herding due to plovers' use of roadway

When a Piping Plover brood attempted to use the back road for lengthy periods of time (>1 hr) in 2019, MassWildlife authorized the Duxbury Beach Reservation to escort vehicles past the birds at scheduled times during daylight hours. Outside of scheduled times, vehicles had to wait to travel until the next scheduled escort time.

- Details:**

- Initially, a brood may be herded off the road after 30 minutes (following herding protocol below under *Herding Procedure*). If the Plover activity continues in the road, herding will occur at scheduled times.
 - Scheduled times are 7 am, 9 am, 11 am, 1 pm, 2 pm, 4 pm, 6 pm, and 8 pm.
 - Schedule has been set up to accommodate Gurnet-Saquish resident work schedules and monitoring staff shift start and end times. Scheduled times may shift dependent on staffing but will remain every two hours.
 - Schedule will be distributed to Gurnet-Saquish Corporation officers who in turn post on Gurnet/Saquish Corporation Facebook page and distribute via resident emails
 - If the back road is open to recreational vehicles, the schedule will also be posted by the Town of Duxbury on the town website, email blast, and Twitter.
- If the birds are not in the road, travel by Gurnet-Saquish residents may proceed as normal.
- This protocol is not intended for use during active road crossings.

Herding near Pedestrian Pathways

There are several areas of Duxbury Beach that do not provide Piping Plover habitat on the bayside. This primarily consists of saltmarsh but also includes the Powder Point Bridge with associated revetment and footings. In two sections these non-habitat areas border paved parking lots. This includes the length of the paved parking lot at Duxbury Beach Park and the main pedestrian path across from the Powder Point Bridge. In cases where a brood is using the area oceanside or exhibits behavior indicating an attempt to access the parking lots in these areas, a combination of herding and barriers (see *Barrier Use*

Protocol) will be utilized to discourage crossings in these areas. This will not prevent the brood from crossing to the bayside in other sections of the beach.

- **Duxbury Beach Park Paved Parking Lot:**

- Should a pair nest on the oceanside of the paved parking lot at Duxbury Beach Park, staff will erect a barrier according to the DBR PIPL Barrier Use Protocol along the length of the west side of the oceanside dune prior to hatching to prevent entry into the parking lot. This should include all pedestrian pathways north of the boardwalk.
- If a brood moves into the area north of Duxbury Beach Park, a barrier will be erected along the western length of the oceanside dune bordering the parking lot. During the time that the barrier is being erected, a second monitor (two may be necessary depending on brood range) will be stationed at the nearest pathway to discourage plovers from entering. Should it become necessary, the brood will be herded (minimum two staff) away from the path.
- The boardwalk path should be assessed daily at 10:00 and 20:00 to ensure access via this path is not possible by chicks. Should access become possible because of sand build-up, a monitor will remain with the brood and a second monitor will be stationed at the access path to discourage entry. Should it become necessary, herding according to the Herding Procedure outlined below should be implemented until a barrier or other method of preventing access can be erected. Currently there is no access via the boardwalk due to the height difference between the beach and the boardwalk itself. This will continuously be evaluated throughout the season when barriers have been erected.

- **Resident Parking Lot Main Pedestrian Path:**

- Should a brood begin to approach the pedestrian path across from the Powder Point Bridge (move within 10 meters of the pathway and direction indicates they may use the path), staff should immediately begin preparing a barrier that can be erected across the width of the pathway on the east end. Staff will immediately initiate the DBR Herding Protocol (non-active herding).
 - Barrier may consist of landscape fabric or silt fencing, low enough for pedestrians to step over, with stabilizing wooden posts along its length.
 - The barrier should be able to stand up to normal wind but should also allow emergency vehicle access should it be necessary as this is the closest vehicle access path to the Town Pedestrian Beach.
 - Signs will be erected facing east and west at the barrier to inform pedestrians of the barrier and direct them to the nearest alternate handicap access.
 - Fluorescent flagging will be tied along the length of the barrier to increase visibility for pedestrians.
- From 10:00-18:00, a monitor will be stationed with the brood. Should the brood begin moving towards the path, the monitor will position themselves in front of the pathway

to discourage entry. If the brood moves within 3 meters of the pathway, the monitor will proceed to herd the brood away from the path following the *Herding Procedure* below.

- At 20:00, the barrier will be rolled out across the east end of the pathway and signs will be re-erected. Following initial observation of the brood the following morning, the barrier will be rolled off the path to allow use of the limited mobility access path.

Herding Procedure

- Herding at Duxbury Beach may be defined as “Active” or “Non-active”.
 - Active herding is described below and indicated monitors are moving towards a brood to usher them in a certain direction.
 - Non-active herding indicates a monitor is stationed at a certain location to discourage brood movement towards that area by their presence and not movement towards the brood.
- Should herding be deemed necessary and no DBR staff member is present, Beach Operations staff must notify DBR prior to implementing herding to ensure the activity complies with DBR permits.
 - In the case of non-active herding away from the above-mentioned pedestrian pathways, the monitor with the brood should alert the Monitor Supervisor. The Supervisor should instruct the monitor to position themselves at the east end of the pathway and alert the CEP Coordinator.
- Two staff must be present for herding to occur (this may include Beach Rangers, Monitor Supervisors, Shorebird Monitors, and Field Technicians).
 - In the case of herding away from the main pedestrian path at the Resident Parking Lot, this number may be reduced to one if another staff is not immediately present.
- In the case of herding out of the roadway, prior to herding, staff should communicate to determine which direction (east or west) they will attempt to herd the brood. In the case of herding away from a pedestrian path, prior to herding, staff should communicate to determine which direction (north, south, or east) they will attempt to herd the brood. Considerations include:
 - Direction of brood’s movement
 - Predator presence
 - Tide (at low tide bayside may be preferable, at high tide oceanside may be preferable)
 - Access (dense vegetation, etc.)
 - Pedestrian presence
- During herding, staff should line up next to one another (spanning the width of the brood) and move slowly towards the brood. If the brood begins to move off the road or away from the pathway (>5m) independently, staff should stop herding.

- **Road Reopening:**
 - Road reopening following herding should not occur until the brood is at the eastern crest of the oceanside dune OR west of the vegetation on the bayside.
 - A minimum of two staff should be present to reopen the road following herding (additional staff may be necessary depending on number of chicks and tendency to range widely).
 - Monitors must have eyes on all chicks and adults in the brood prior to opening the road.
 - Prior to escorting, staff will explain the procedure to the first car in line north and south.
 - Vehicles should be escorted past the brood (200 ft from the brood north and south)
 - Monitor will walk in front of the northbound line of cars until the last car has passed the brood. The monitor will then lead the southbound cars in the same fashion.
 - 1-2 monitors should be observing the brood throughout the time needed to escort the vehicles past the brood.

Emergencies

- Emergency Vehicles
 - There are no restrictions during emergencies.
 - Emergency vehicles should avoid the birds to the extent practicable under the circumstances.
 - Should beach staff be notified of an emergency vehicle approaching or observe it at an adequate distance, staff should notify a supervisor and attempt to herd the brood out of the road if safe to do so.
- Personal Vehicles
 - Beach personnel should offer to call an ambulance for the person.
 - If person declines emergency personnel, Beach Operations staff should notify DBR who will in turn notify MassWildlife.
 - Following proper notifications, the brood should be herded off the road and the vehicle escorted through (as described above) after notifying DBR.