

Southeast Coast Network

National Park Service
Inventory & Monitoring Program



Standard Operating Procedure (SOP) 1.4.30

Recording Beach Closure Data When Monitoring Migratory and Wintering Shorebirds in Southeast Coast Network Parks

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Summary

Each sampling unit identified in this protocol has a specific designation as being closed or open, however no operational definitions exist. The access status of a sampling unit dictates whether the survey can be conducted or special techniques that must be used to conduct the survey. This Standard Operating Procedure (SOP) defines the types of beach closures, explains how these closures affect conducting line-transect (i.e., sampling unit) surveys, and how to record birds when observed within these closures.

Revision Log

Previous Version #	Revision Date	Author	Changes Made	Reason for Change	New Version #
	1/2013	E. Frey		Original version	1.0

Sampling Unit Status Definitions

A Resource Closure is used many times to protect habitat, nests, and/or chicks of shorebirds. During a survey, the access status of the sampling unit is determined and recorded. Units with no access restrictions are considered open. A closure is defined as an area where public access is prohibited or activities are limited. Access-type definitions are:

Resource Closure – An area that prohibits all public entry and is posted with signs and string to protect natural or cultural resources. Most Resource Closures are established and present during shorebird breeding season (mid-March to mid-August).

Vehicle Free Area – An area that does not allow the public use of off road vehicles at the time the transect is being conducted. These areas can be established for several reasons, including inaccessibility, safety, resource protection, or Park policy.

Open – An area that does not limit public entry or access, including foot traffic, leashed pets, and off-road vehicles.

Closures and Conducting Line-Transect Surveys

Vehicle Free Areas do not affect the completion of the survey as all areas within the closure are visible and can be surveyed in their entirety.

The presence of a **Resource Closure** may or may not affect whether a sampling unit is surveyed. A sampling unit will not be sampled if the area inside the closure cannot be surveyed from outside its boundaries, taking into account that the observer can accurately view approximately 150 meters away (see Byrne et al. 2009). Sampling units that are within a **Resource Closure** will only be sampled if the closure can be bypassed without disturbance to the resource being protected and the observer can continue surveying the transect while walking around the closure boundary. The observer can bypass a closure by either using a shoreline route or an upper beach route, choosing whichever is accessible and allows the observer to best view the area within the **Resource Closure** (Figure 1). The ability to continue surveying the area while bypassing the closure is key to an accurate count; it will minimize the chance of “double counting” birds that may fly from one area of the transect to another without being observed in flight. Continuous surveying will also ensure a more accurate count by minimizing the possibility of a bird flying into an area, then out of the area without being observed and recorded. The observer should not enter a **Resource Closure** that is closed to all public entry.



Figure 1. Example bypass routes when conducting migratory and wintering shorebird surveys in resource closure areas.

Recording Data

The status of ORV access in the sampling unit is recorded and if there is “No” or “Partial” ORV access, the primary reason for full or partial closure should be recorded as “Resource Closure” or “Vehicle Free Area”. For each recorded bird sighting, its location relative to a closure is recorded under the “Closure” column of the data sheet. Birds observed in “open” areas are recorded as “No”. Birds observed in a “Vehicle Free Area” are recorded as “VFA”. Birds observed in a “Resource Closure” are recorded as “RC”. A “Resource Closure” may be inside of a designated “Vehicle Free Area”. When this occurs, the more limiting closure should be recorded for the observation (i.e. – “Resource Closure” limits access more than a “Vehicle Free Area”).