

**Murray State's Digital Commons** 

Scholars Week

2019 - Spring Scholars Week

## The Piping Plover Problem: A Review of Management Issues for a Threatened Shorebird

Andrew Lydeard

Gerry Harris Murray State University

Follow this and additional works at: https://digitalcommons.murraystate.edu/scholarsweek Part of the <u>Ornithology Commons</u>, <u>Other Ecology and Evolutionary Biology Commons</u>, and the <u>Population Biology Commons</u>

Lydeard, Andrew and Harris, Gerry, "The Piping Plover Problem: A Review of Management Issues for a Threatened Shorebird" (2019). *Scholars Week*. 5.

https://digitalcommons.murraystate.edu/scholarsweek/Spring2019/GeneralPosters/5

This Poster Presentation is brought to you for free and open access by the The Office of Research and Creative Activity at Murray State's Digital Commons. It has been accepted for inclusion in Scholars Week by an authorized administrator of Murray State's Digital Commons. For more information, please contact msu.digitalcommons@murraystate.edu.

## **Andrew Lydeard and Gerry Harris**

The Piping Plover (Charadrius melodus) was federally listed in 1986. Since listing, Piping Plovers have been a focus of conservation and management efforts, particularly on their breeding grounds in the Northern Great Plains, Great Lakes, and northern Atlantic Coast. Despite management efforts that have resulted in range-wide population growth of the Piping Plover, growth in individual populations is often slow and reasons for this are poorly understood. A bias towards understanding drivers of declines on breeding sites compared to wintering and migratory stopover sites may be an underlying cause of this lack of understanding. Conducting studies on primarily an organism's breeding grounds has implications that may lead to costly, ineffective management practices with little to no benefits to species conservation. We analyzed the scientific literature on Piping Plover management by systematically reviewing nine ecological journals and searching for all articles published from 1986 – 2019 including the terms "Piping Plover" and "Charadrius melodus". The proportion of studies on Piping Plovers within their breeding range drastically outnumber those studies completed on wintering and migratory stopover sites. These seasonal sampling biases could have negative implications for Piping Plover conservation, and we suggest that research on migratory stopovers and wintering grounds should be prioritized to help reverse local population declines.

Keywords: Piping Plover; Charadrius melodus; Shorebird Management; Threatened Species