History of the Piping Plover Census

• Determines species abundance/distribution throughout annual cycle
• Designed by Great Lakes/Northern Great Plains Recovery Team
• Conducted every 5 years
• First Census in 1991, 5th Census in 2011
• Largest known complete avian species census
• Coordinated by
  - Elise Elliott Smith
  - State/Provincial Coordinators
International Piping Plover Census

Methods

• Two week window in Jan/Feb and June
• All sites with birds or habitat in past 5 years
• Count all adults once
• New questions in 2011
  • Disturbance
  • Sea level rise - winter
History of the Piping Plover Census - Winter

Map showing the breeding range and winter range of the Piping Plover with highlighted areas for Florida and Texas and Louisiana.
Bahamas Census Results
1991 - 2006

Number of Birds Seen

Year

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29  | 25  | 35  | 417
2011 Census Goal: Explore Importance of the Bahamas for wintering Piping Plovers
Bahamas Census Results 2011


N Birds: 0, 0, 0, 417, 1000 +

Graph showing the increase in bird population from 1991 to 2011, with a significant increase from 2006 to 2011.
Census Results - Winter Summary

- Overall total similar to 2006
- Highest number in south Texas
- Bahamas is a major winter area
- Missing data from Louisiana
- Coverage gaps
  - parts of Mexico
  - parts of Cuba
  - Elsewhere in Caribbean
Census Results – Breeding Great Plains and Prairie

- High water levels
- Lack of habitat and difficulties surveying
- Lower numbers observed almost everywhere
2011 Missouri River Floods

RM 761
Constructed Complex

Nebraska

RM 755
Backwater Complex
Unusual Nesting Locations
Census Results – Breeding
Great Plains and Prairie

Year


0 1000 2000 3000 4000 5000
Census Results – Breeding Great Plains and Prairie

• What do the low numbers mean?
• Did they breed elsewhere?
• Insights from the winter grounds?
Census Results – Breeding Great Lakes

- Similar to 2006
- Increase in Ontario
- U.S. decline since 2009
Census Results - Breeding Atlantic Canada

- Overall raw numbers slightly lower than 2006
- Slightly higher in NL, QB, NS
- Slightly lower in PEI and NB
Thanks to

• Supported by
  – USACE
  – USFWS
  – Environment Canada
  – USGS FRESC
  – Many others on regional and local levels

• State and Provincial Coordinators
• Thousands of surveyors!!
• Thanks for photographs!!