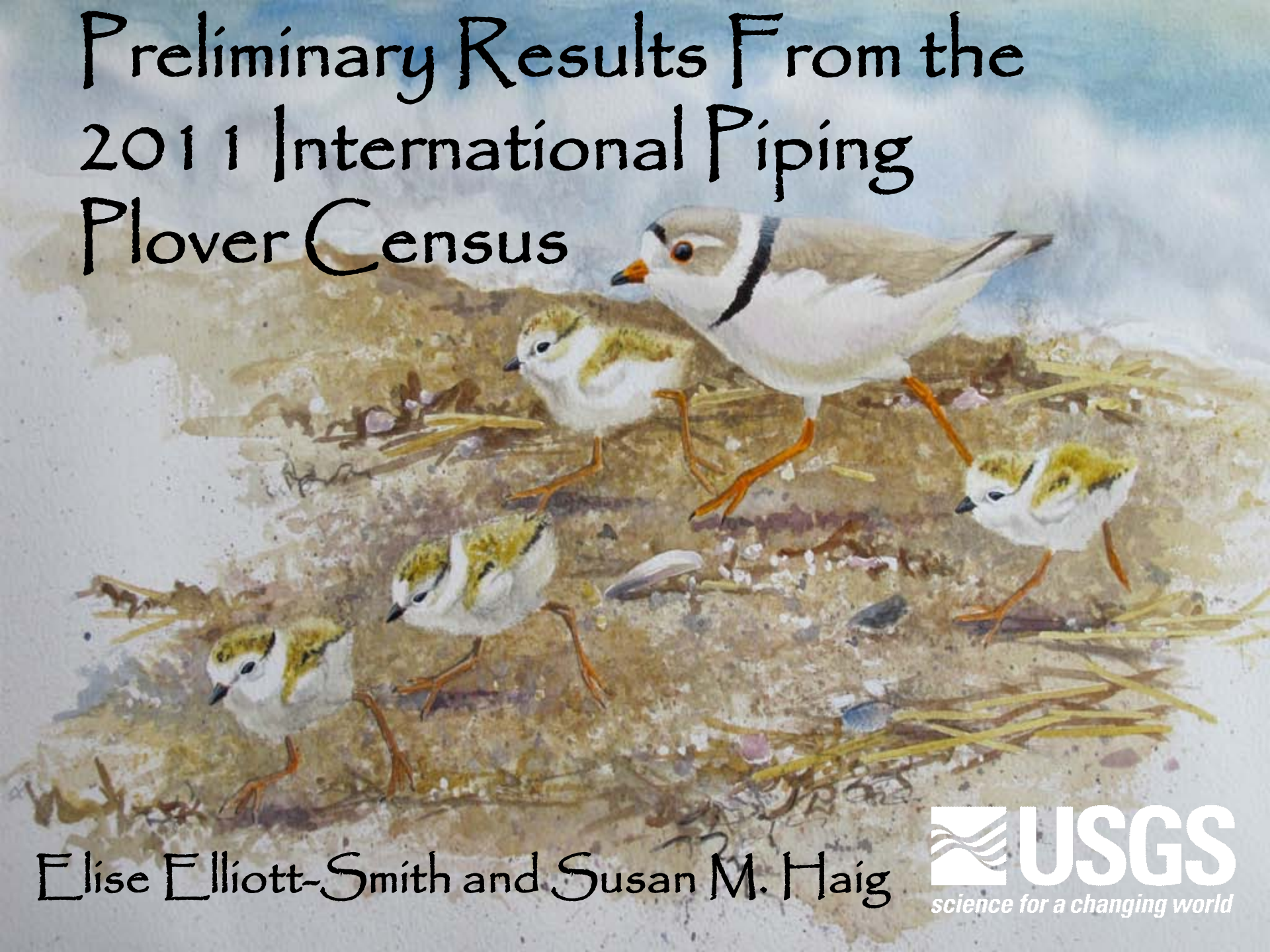
Preliminary Results From the 2011 International Piping Plover Census



Elise Elliott-Smith and Susan M. Haig

USGS
science for a changing world

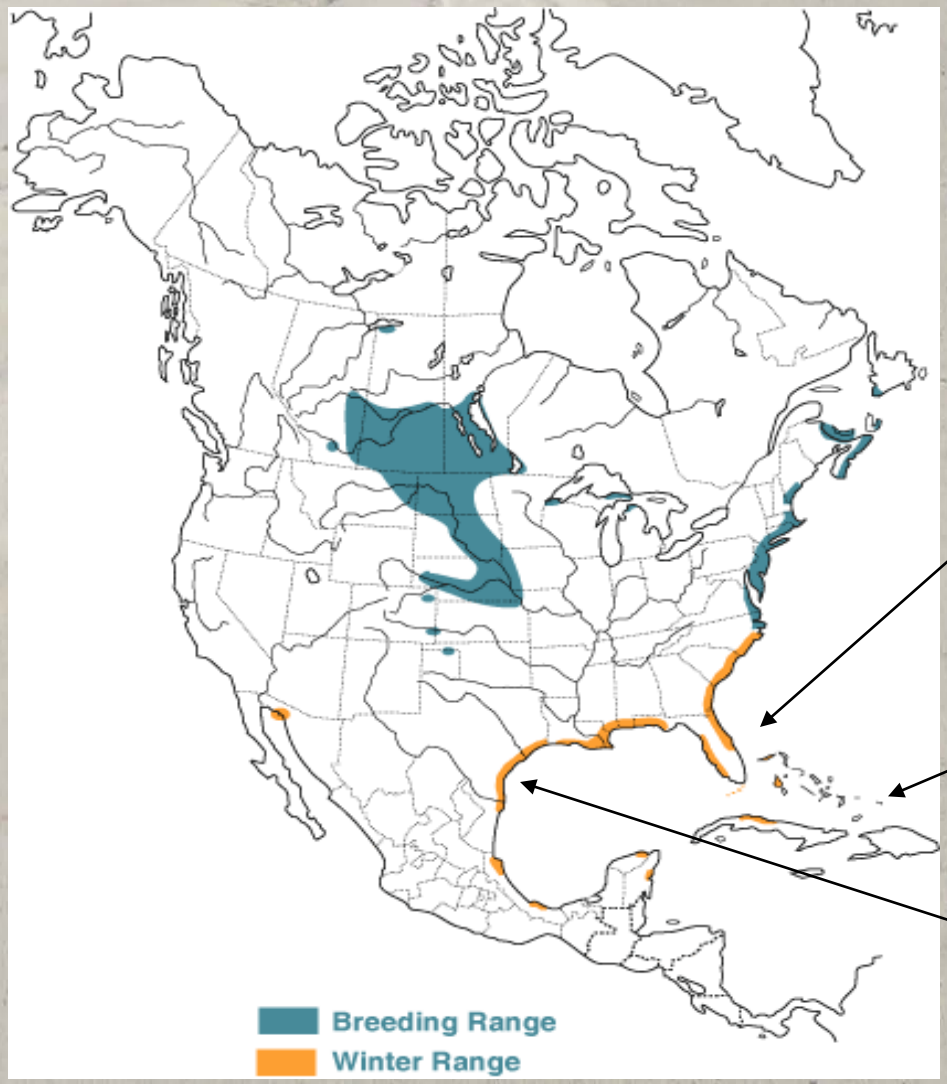
History of the Piping Plover Census

- **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

- Generally the same in 1991, 1996, 2001, 2006
- 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



Florida

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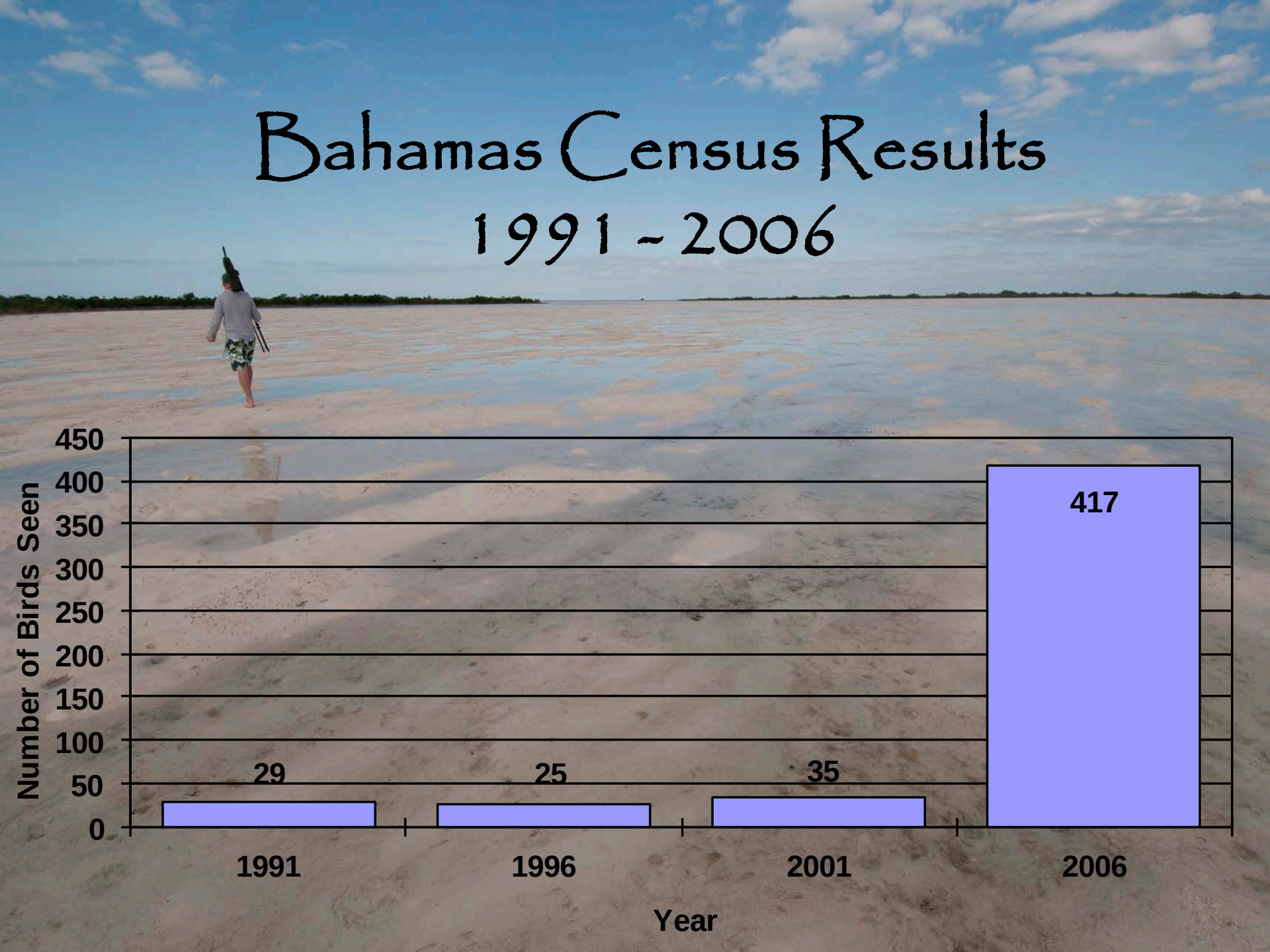
Texas and Louisiana

Bahamas Census Results
1991 - 2006



2011 Census Goal: Explore Importance of the Bahamas for wintering Piping Plovers

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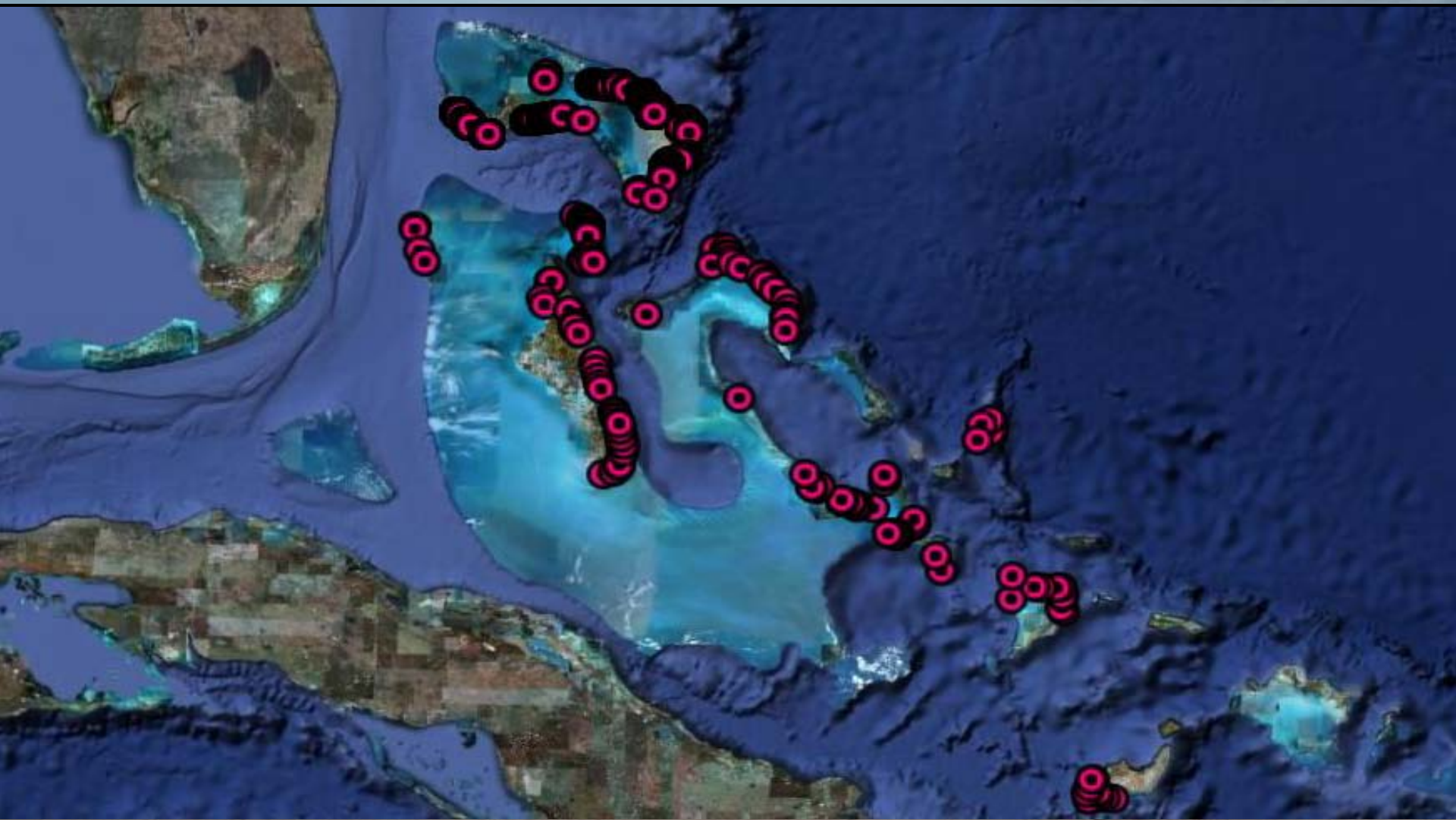
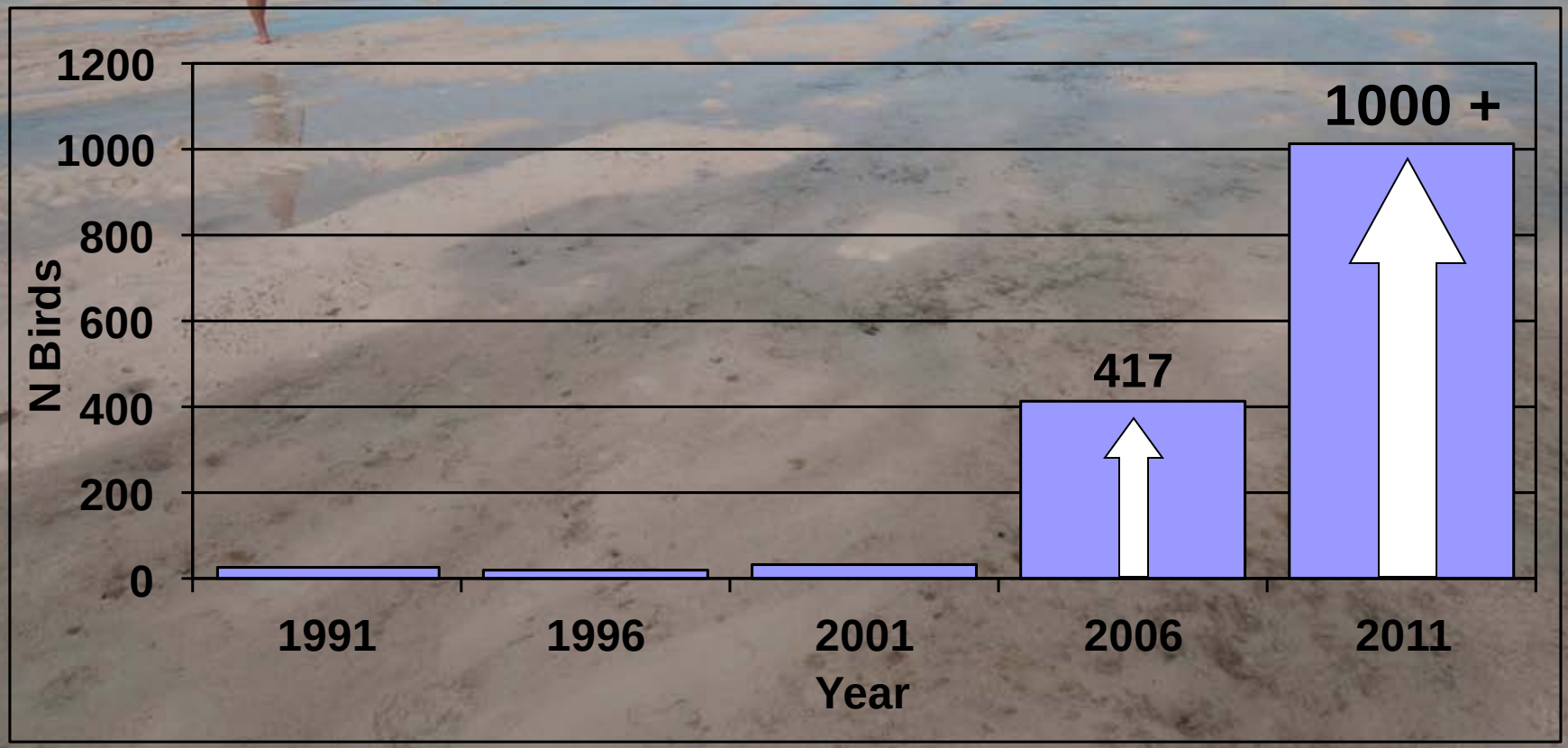
Bahamas Census Locations

2011



Bahamas Census Results 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

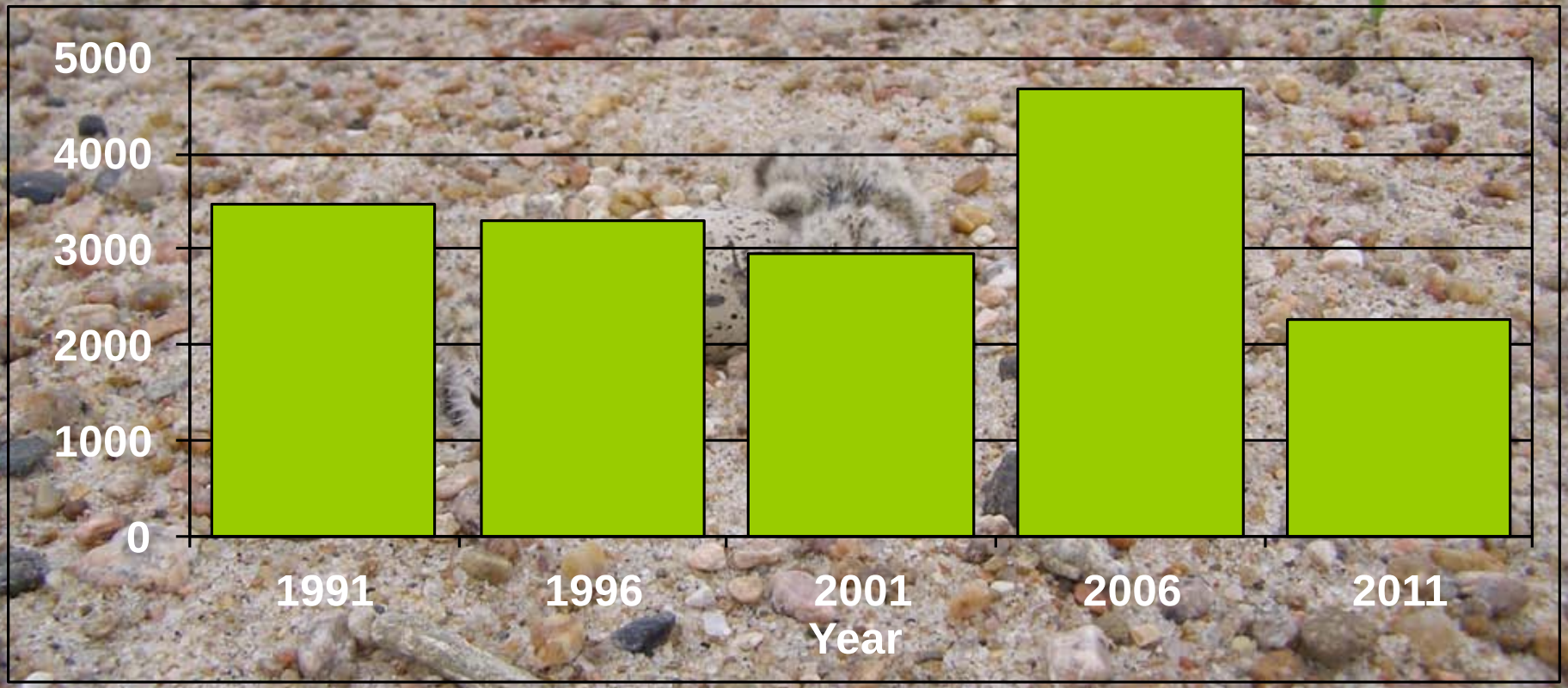
- **High water levels**
- **Lack of habitat and difficulties surveying**
- **Lower numbers observed almost everywhere**

Missouri River
RM 761
Constructed Complex
Nebraska
South Dako
RM 755
Backwater Complex

2011 Missouri River Floods

Unusual Nesting Locations

Census Results – Breeding Great Plains and Prairie



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!!**

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