



State of the Birds 2010 Report on Climate Change

by

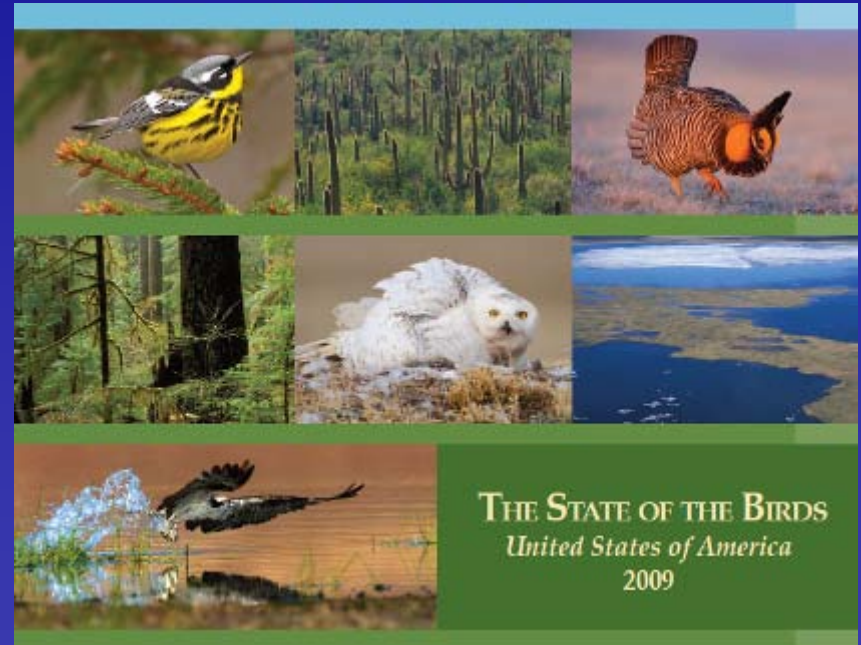
Paul Schmidt

Assistant Director Migratory Bird Program USFWS

State of the Birds 2009 Report

Introduction

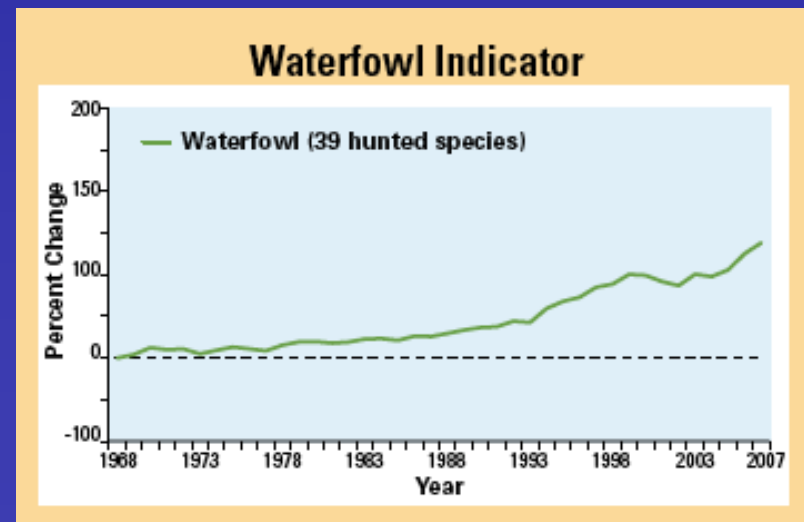
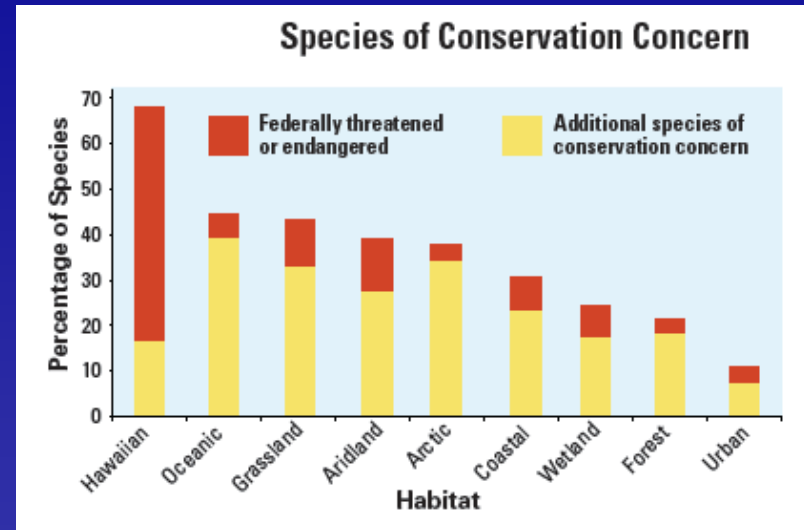
- Unprecedented partnership - and collaborative effort by many – a diverse group of Federal, State, and nongovernment organizations
- Subcommittee of the North American Bird Conservation Initiative (NABCI)
- Partners working together



State of the Birds 2009 Report

Introduction

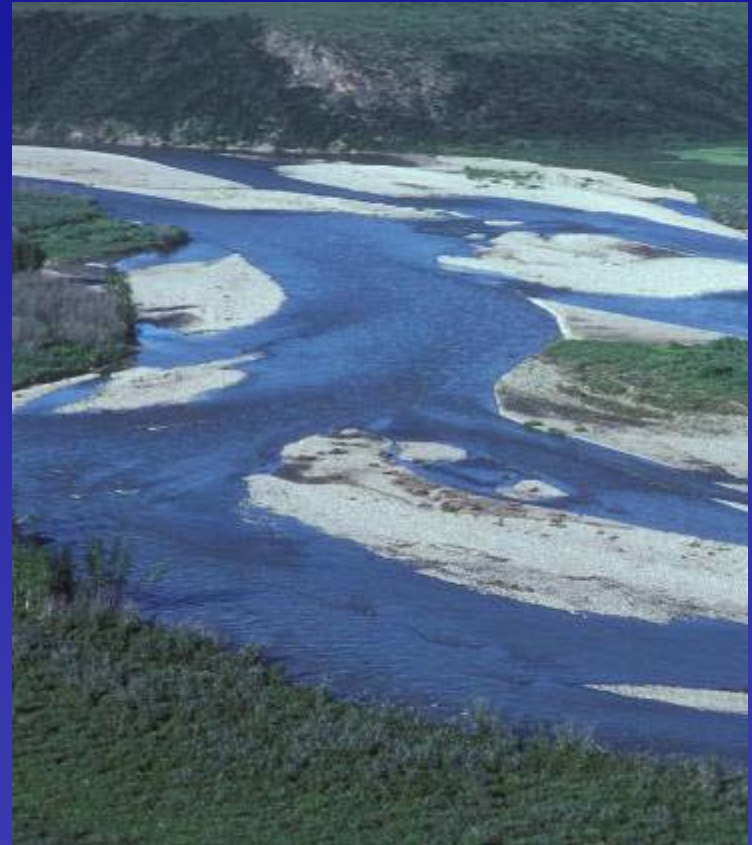
- Troubling declines in bird populations are a warning signal of the failing health of some of our ecosystems.
- The Report illustrated how, by working together, we can have a demonstrable positive impact on the populations of birds in our country.



State of the Birds Report

Ongoing work on the State of the Birds

- Continued updates on the website stateofthebirds.org
- Continued communications to wide range of audiences
- Focused report every year
- Complete report updates every 5 years –



Arctic National Wildlife Refuge/USFWS

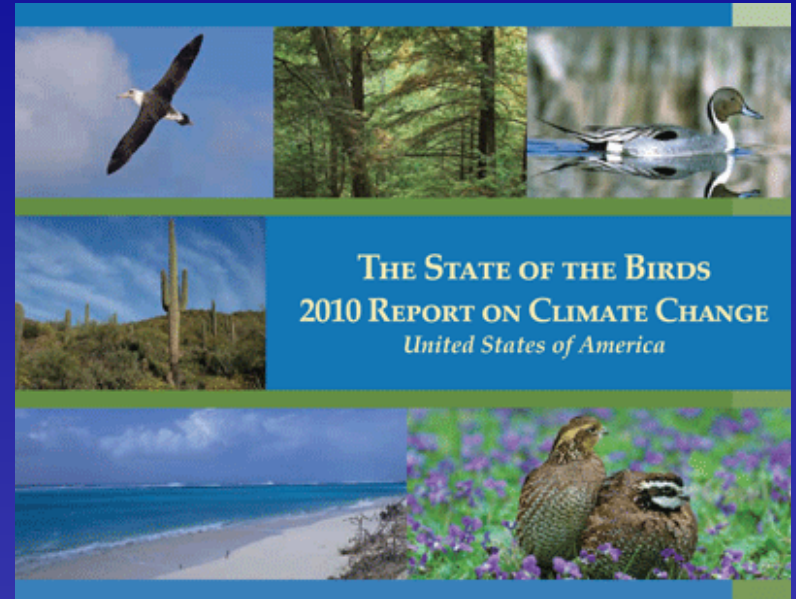
State of the Birds *Partnerships*



www.stateofthebirds.org

State of the Birds *Climate Change*

Instead of describing what has happened to bird populations, the 2010 report predicts what *may* happen to bird populations in the major biomes and habitats of the U.S. as a consequence of climate change.



State of the Birds *Climate Change*

Assumptions

- Birds are good indicators of habitat conditions and therefore can illustrate how ecosystems are likely to change.
- Birds can tell us an important story about climate change.



State of the Birds 2010 - *Climate Change*

Report Focus

- Information about birds and their habitats
- Examples of what could happen
- Outlines efforts to help

To maintain birds and their habitats:

- Proactive measures needed
- Targeted programs remain necessary
- Monitoring programs
- Partnerships - local, State, Tribal, Federal government, nongovernmental organizations, private citizens



State of the Birds *Climate Change*

Assessed - likely threats from climate change to each bird species in the U.S.

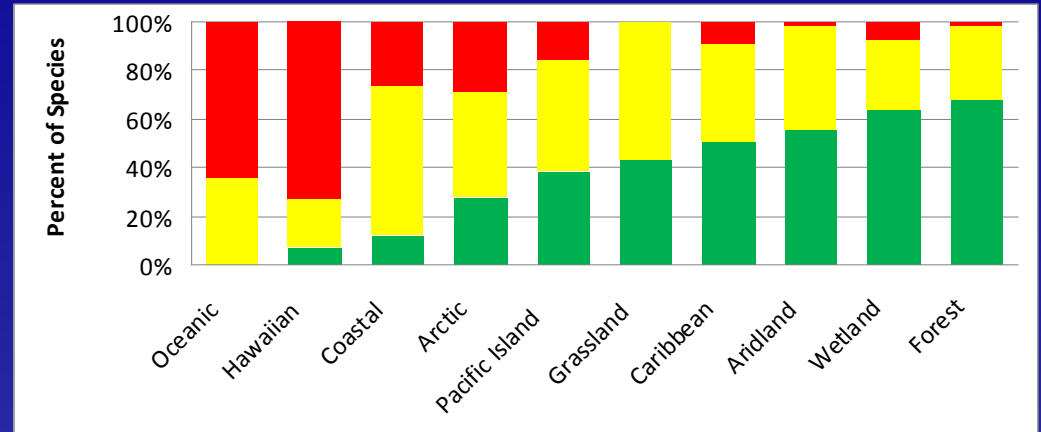
Categorized - possible threats and risks for bird species in major biomes and habitats in the U.S.

- The predicted risk to bird populations is a critical component of planning management activities to mitigate the effects of climate change on bird populations - help maintain viable bird populations.



State of the Birds *Climate Change*

- Some bird species will adapt and succeed, others will struggle and some may disappear.



Red=high vulnerability
Yellow=medium vulnerability
Green=low vulnerability

- Across all habitats, species of conservation concern showed higher levels of vulnerability to climate change than species not threatened by other factors.
- Vulnerability to climate change may hasten declines or prevent recovery.

State of the Birds *Climate Change*

Components of Sensitivity

- Migration Status
- Breeding Habitat Obligate
- Dispersal Ability
- Niche Specificity
- Reproductive Potential

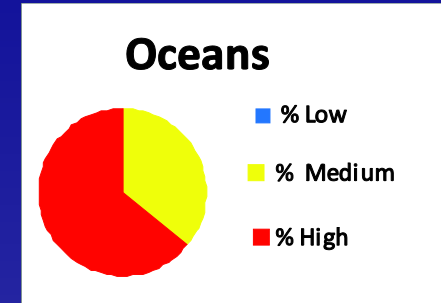
Sensitivity of birds to assessed - on five basic traits and scored as zero (low sensitivity) or one (high sensitivity).



Sage Juniper by Terry Rich

Oceans

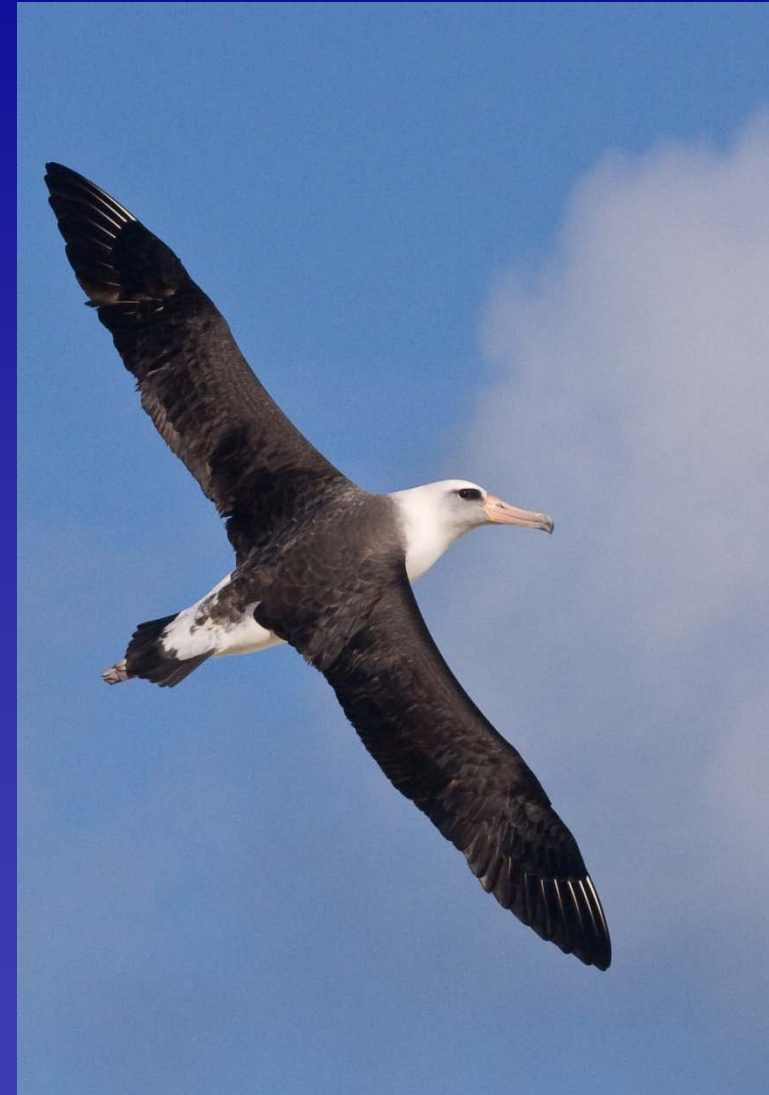
All 67 ocean bird species such as albatrosses, petrels, shearwaters, boobies, tropical terns, tropicbirds, frigatebirds, puffins and related species in U.S. waters show a medium or high vulnerability to climate change.



Horned Puffin/Vernon Bryd

Oceans

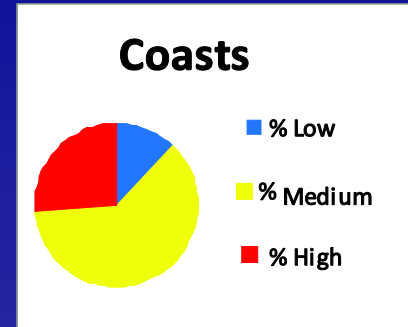
- Existing stressors must be reduced,
bycatch of birds; pollution;
introduced predators and plants,
overharvest of fish
- Restoration, site protection on
higher islands
- New marine protected areas
needed



Laysan Albatross

Coasts

The great majority of coastal species show medium or high vulnerability to climate change.



Bonaparte's Gull/Philina English

Coasts

- Communities must take climate change into account as they develop zoning and building codes.
- Avoid restricting the inland migration of coastal beaches, marshes, mangroves or other wetlands.
- Avoid hard barriers/seawalls in construction and flood control



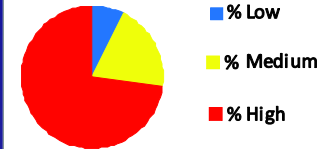
Islands

93% of Hawaiian birds show medium or high vulnerability;

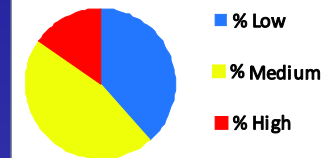
62% of all U S. Pacific island birds exhibit medium or high vulnerability;

49% of Caribbean birds show medium or high vulnerability to climate change.

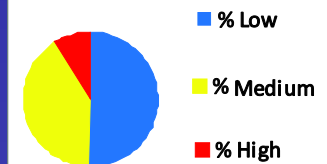
Hawaiian



Pacific Islands



Caribbean



Akohekohe by Jack Jeffrey

Islands – Key Steps

- Protect and restore all natural systems on U.S. islands
- Protected areas need to be large and numerous
- Protect and restore high elevation habitat
- Implement programs to control invasive plants and animals
- Reduce mosquito breeding habitat



Akiapola by Jack Jeffrey

State of the Birds *Climate Change*

- Press opportunity is still growing – 500 media mentions and many blogs and presentations.
- Briefings on the hill
- Opportunity for organizations to use this report to focus on bird conservation.



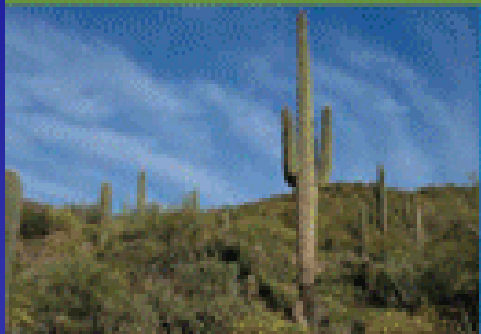
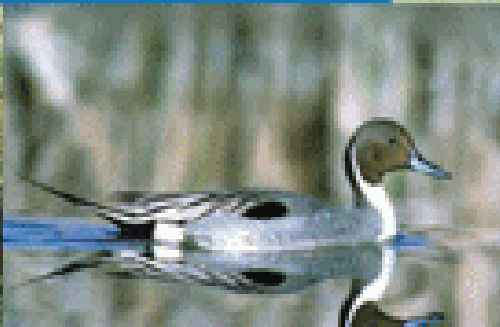
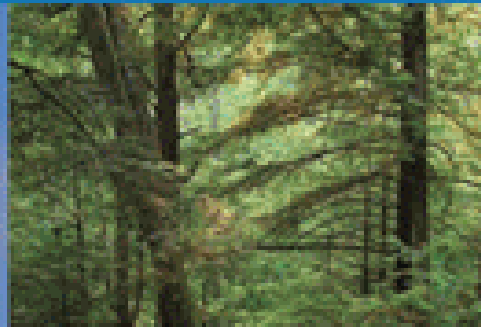
State of the Birds *Climate Change*

“When doctors detect symptoms early enough, they can save lives.

When conservationists can detect problems early enough, they can prevent extinction.”



Albatross chick by Brad Bortner



THE STATE OF THE BIRDS
2010 REPORT ON CLIMATE CHANGE
United States of America

