Why Common Birds Aren’t Common Anymore (and other stuff)

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Outline

• Evidence for declines
• Why they’re declining
• All bad news?
Declining? Says who?

- Smithsonian Meeting in 1966: 
  *The Avifauna of Northern Latin America* 
  (Buechner and Buechner 1970)

  “Many bird watchers have noted an apparent shrinkage in numbers of a variety of more familiar species…” (William Vogt, 1970)
Declining? Says who?

• Breeding Bird Survey (1966-present)
  Chandler Robbins
  – Father of the BBS

“We feel certain that great changes in abundance of birds have taken place in the past as a result of environmental changes, but until recently we have had very little documentary evidence of the magnitude of these changes.”
  -- Aldrich and Robbins 1970
Declining? Says who?

• Terborgh’s (1989) “Where have all the birds gone?”
  – Local, national declines
  – Expanding human footprint here and in tropics
  – Need to act locally and internationally
Partners in Flight

- National Fish and Wildlife Foundation in 1990
  - *Helping Species at Risk*
  - *Keeping Common Birds Common*
  - *Voluntary Partnerships for Birds, Habitat, and People*
  - Technical, Regional and State Working Groups
Declining? Says the BBS

Breeding Bird Survey – Chandler Robbins, since 1965

http://www.pwrc.usgs.gov/BBS/
More BBS Trends
Eastern Woodlands – Neotropical Migrants

Lloyd Spitalnik
Eastern Neotropical Migrants
More BBS Trends

Grasslands – Short-distance Migrants

40-year Grassland Bird Trends

<table>
<thead>
<tr>
<th>Metric</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td>Number of species</td>
<td>28</td>
</tr>
<tr>
<td>Percent with positive trends</td>
<td>14</td>
</tr>
<tr>
<td>Percent with significant negative trends</td>
<td>61</td>
</tr>
<tr>
<td>Percent with significant positive trends</td>
<td>7</td>
</tr>
<tr>
<td>Mean trend (% per year)</td>
<td>-1.48</td>
</tr>
<tr>
<td>Variance</td>
<td>2.647</td>
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</tbody>
</table>
Grassland Birds
Data other than BBS?

– Christmas Bird Counts
– Migration Monitoring – Radar Ornithology
– Hawkwatch International migration sites
Landbird Conservation

North American Landbird Conservation Plan

Saving Our Shared Birds
Partners in Flight Tri-National Vision for Landbird Conservation
Other Than Landbirds?

- Waterbirds?
- Shorebirds?
- Ducks?
State of the Birds

2009

THE STATE OF THE BIRDS
United States of America
2009

2010

THE STATE OF THE BIRDS
2010 REPORT ON CLIMATE CHANGE
United States of America
State of the Birds
2009

Species of Conservation Concern

Percentage of bird species that are threatened, endangered, and of conservation concern in each habitat.
State of the Birds
2010 Climate Change Edition

Relative Vulnerability of U.S. Bird Species by Habitat
Red = high vulnerability
Yellow = medium vulnerability
Green = low vulnerability
Why Common Birds Aren’t So Common Anymore

Darien Gap, Panama
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Unrestrained Cats

1.4 to 2.7 million birds / day
(ABC, Dauphiné and Cooper 2009)
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Glass

1 billion / year in the U.S. is likely conservative (Klem 2008)
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Communication
Towers

4-50 million birds / year (Manville 2005)
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Transmission & distribution line collisions

hundreds of thousands to 174 million birds annually (Manville 2005)
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Electrocutions

Tens to hundreds of thousands (Manville 2005)
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Wind

- Rate: About 2 birds/yr/MW
- Now killing ~40,000/yr
- Projected mortality is ~2-7 million/yr
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Fisheries
Bycatch

?/year from longline and gillnets
Seabirds, diving ducks
Why Common Birds Aren’t So Common Anymore

<table>
<thead>
<tr>
<th></th>
<th>U.S. Annual</th>
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<tbody>
<tr>
<td>Buildings &amp; Windows</td>
<td>98 M to 980 M</td>
</tr>
<tr>
<td>High Tension Lines</td>
<td>50,000 to 174 M</td>
</tr>
<tr>
<td>Cats</td>
<td>500 M to 1 B</td>
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<tr>
<td>Vehicles</td>
<td>60 M to 80 M</td>
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<tr>
<td>Pesticides</td>
<td>70 M</td>
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<tr>
<td>Commun. Towers</td>
<td>4 M to 50 M</td>
</tr>
<tr>
<td>Projected Wind</td>
<td>4 M</td>
</tr>
<tr>
<td>Current Wind</td>
<td>40,000</td>
</tr>
<tr>
<td>Seabird By-catch</td>
<td>?</td>
</tr>
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</table>
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- invasive plants,
- oil and gas developments,
- human induced fires,
- habitat fragmentation
- distribution of feral cats /dogs
- corvids
And then there’s climate change…

- Low-island nesters
- Shoreline habitats
- High elevation species
Hey Mike, Any Good News?

• Birds respond to restored habitat
  – Ducks
  – Hawaiian honeycreepers
  – Nesting seabirds
• And some respond to new ones
  – Peregrines grace our bridges
  – Cooper’s hawks nest in our neighborhoods
  – GOEA nest on transmission towers
• Some species are responding to climate change
• … Partnerships
“By waiting, one risks being too late”
- J. Terborgh

• What you can do:
  – “Conservation Birding” – ABC
  – Help us document the now, the baseline, or the continued change.
    • BBS, CBC, ebird, etc.
Take a child outdoors
Consider your own footprint
Oh, and ....

Save the planet.

Ride a bike.

... if you’re able.