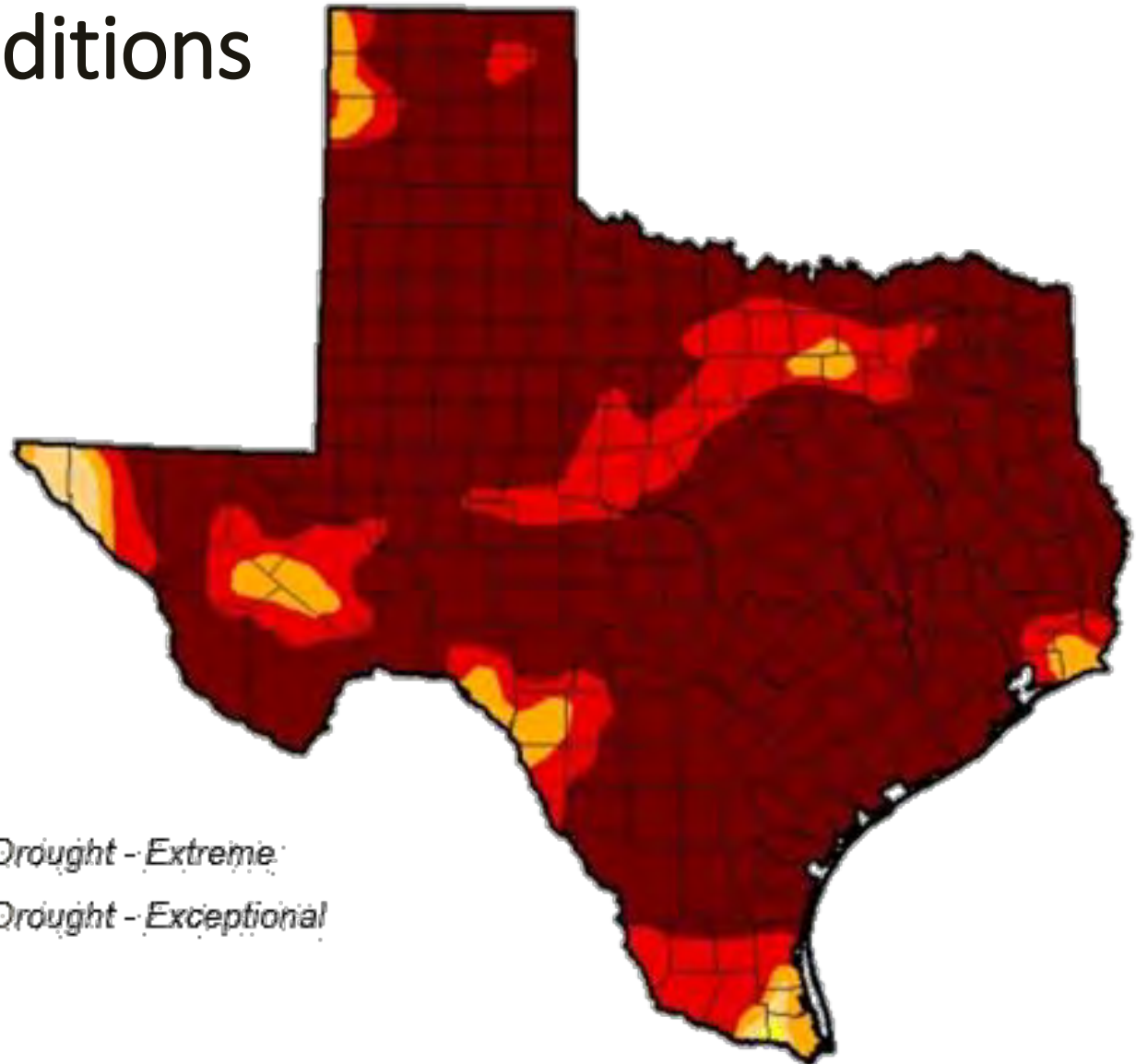




Texas Drought Conditions August 30, 2011

Nearly 99% of Texas
was in Severe-
Exceptional drought
at this time



Intensity:

- | | |
|---|--|
|  D0 Abnormally Dry |  D3 Drought - Extreme |
|  D1 Drought - Moderate |  D4 Drought - Exceptional |
|  D2 Drought - Severe | |



Water for wildlife...and biofiltration

WATER





SHELTER

Complex, multi-level vegetation structure provides for birds' needs throughout their lifecycle





SHELTER



Shane Adams, Flickr Creative Commons

SHELTER



Stephen Little, Flickr Creative Commons

Nocturnal Migrants & Urban Lights

SAFETY

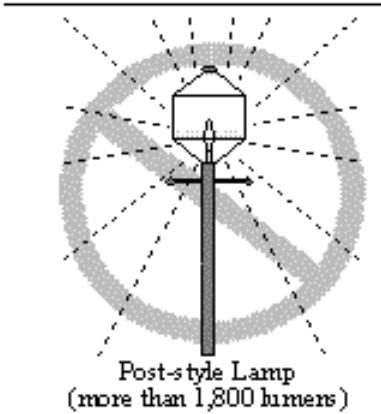
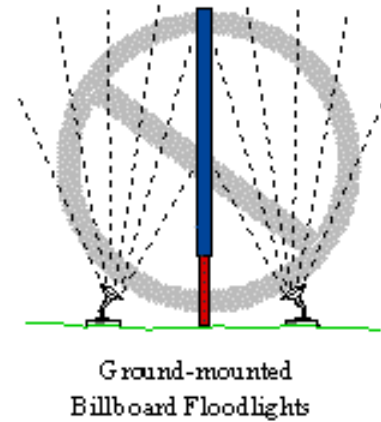
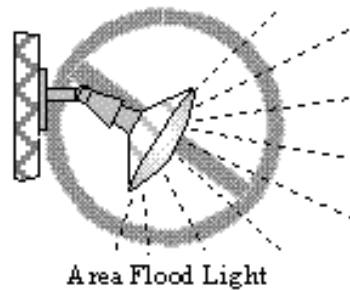
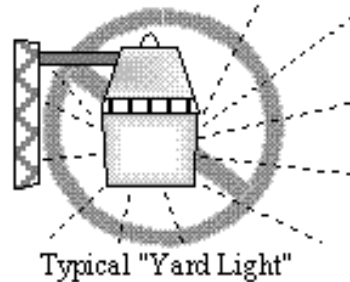
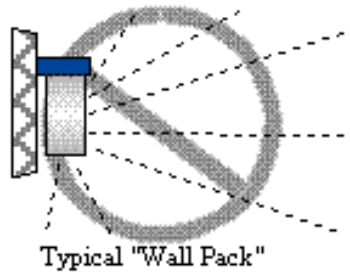
- Lights Out initiatives
 - New York City, Chicago, San Francisco, Toronto, Columbus OH, Minneapolis/St. Paul
 - Minnesota: all state-owned & leased buildings must adhere to lights-out during migration
- Dark Skies lighting
 - Recessed and shielded lighting can reduce light pollution



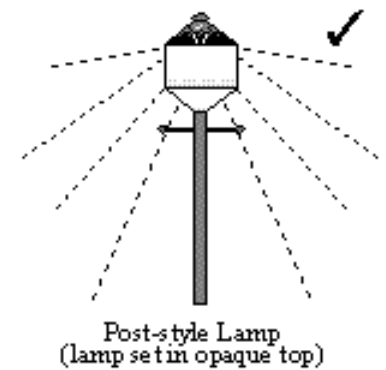
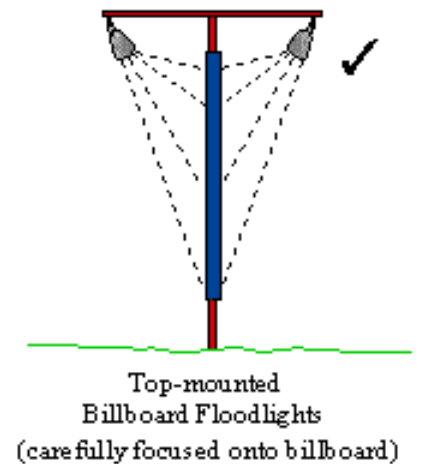
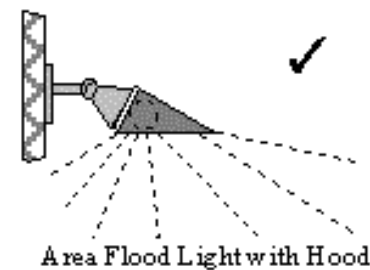
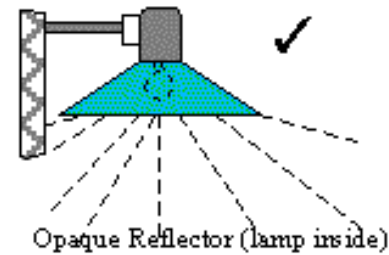
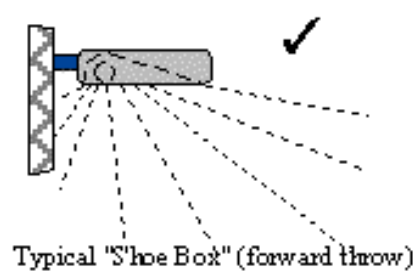
Examples of Common Lighting Fixtures

SAFETY

POOR



GOOD



Doctors issue warning about LED streetlights

THE CONVERSATION

By Richard G. "Bugs" Stevens, The Conversation

Updated 2:00 PM ET, Tue June 21, 2016



Photos: Los Angeles LED streetlights



Bird Friendly Buildings

Strategies for making glass and building design safer for birds.

- New design
- Retrofit existing glass
- Reduce reflectivity
- Increase visibility of glass to birds

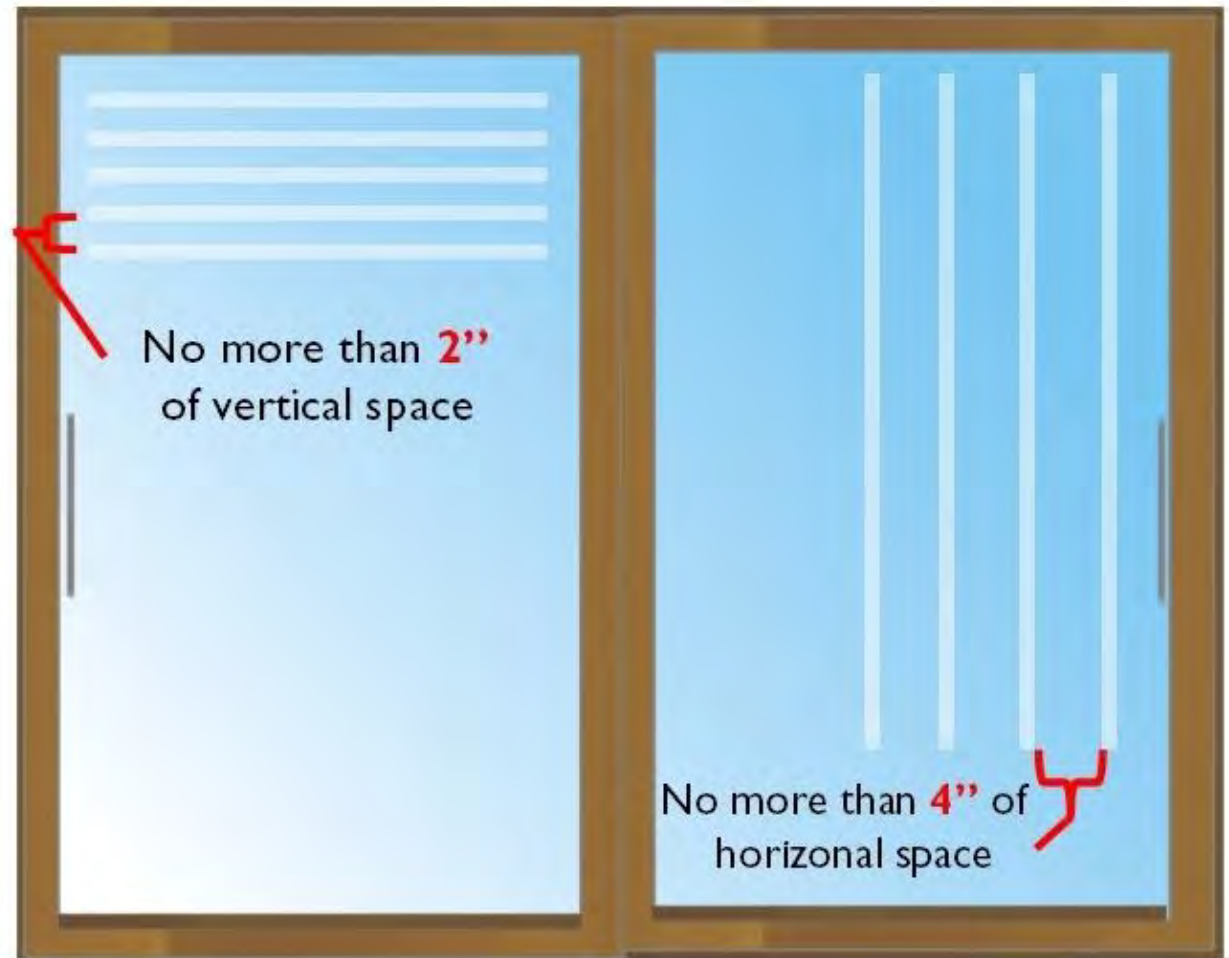




Preventing Window Strikes

SAFETY

The 2 x 4 Handprint Rule





SAFETY

Conservation and veterinary groups agree that keeping cats indoors is best for the health and safety of both cats and wildlife.

yersiniapestis, Flickr Creative Commons

Bird-friendly landscapes are:

- Bio-diverse
- Full of native plants
- Full of native insects
- Good for pollinators like bees & butterflies
- Good for ecosystem health
- Good for people, too!



Working Lands Working for Birds



Texas provides vital habitat to wintering grassland birds

Sparrows (over 80% sp.)

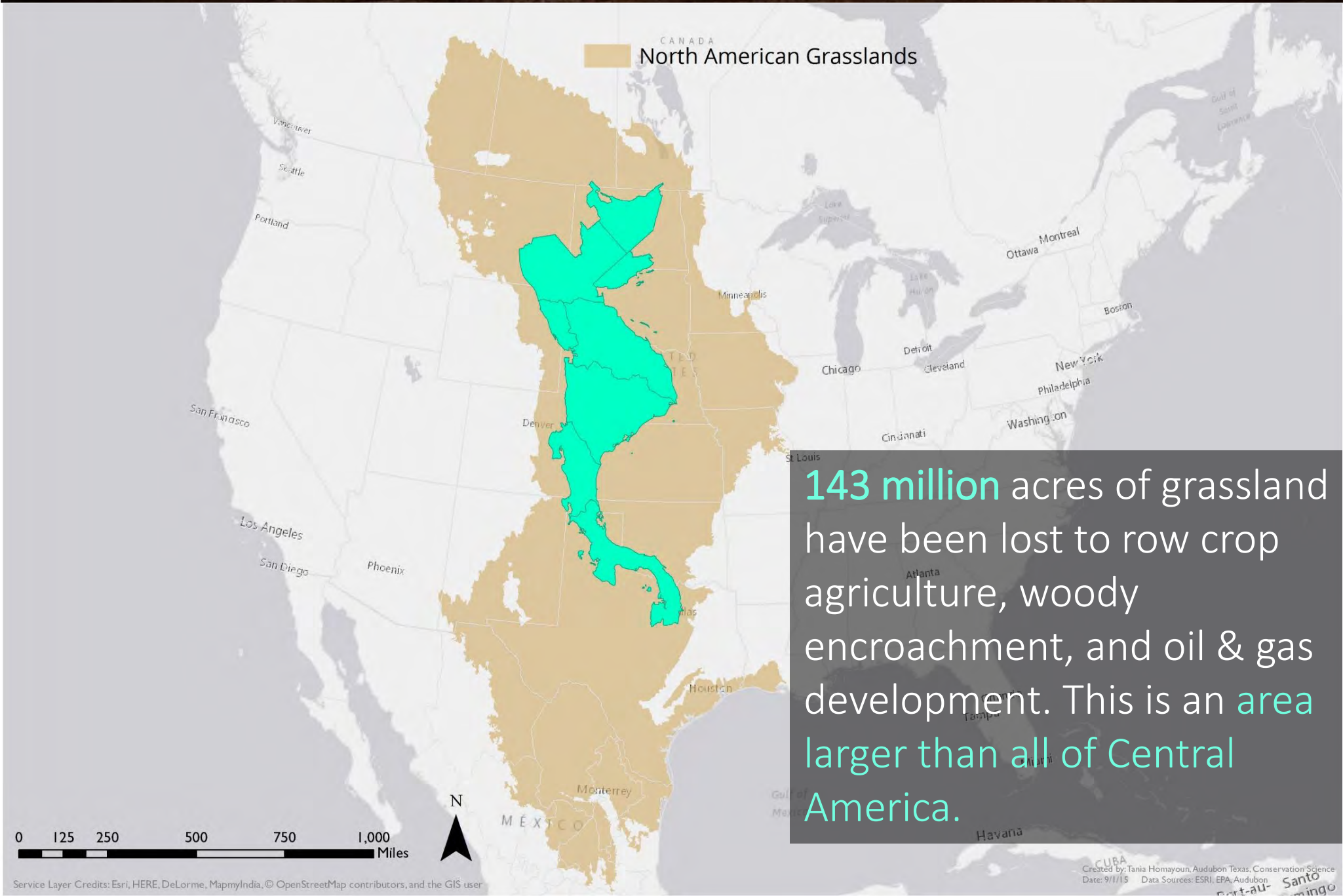
- Of 42 sparrow species in North America, 34 are found in Texas during the winter



Ducks (Over 60% sp.)

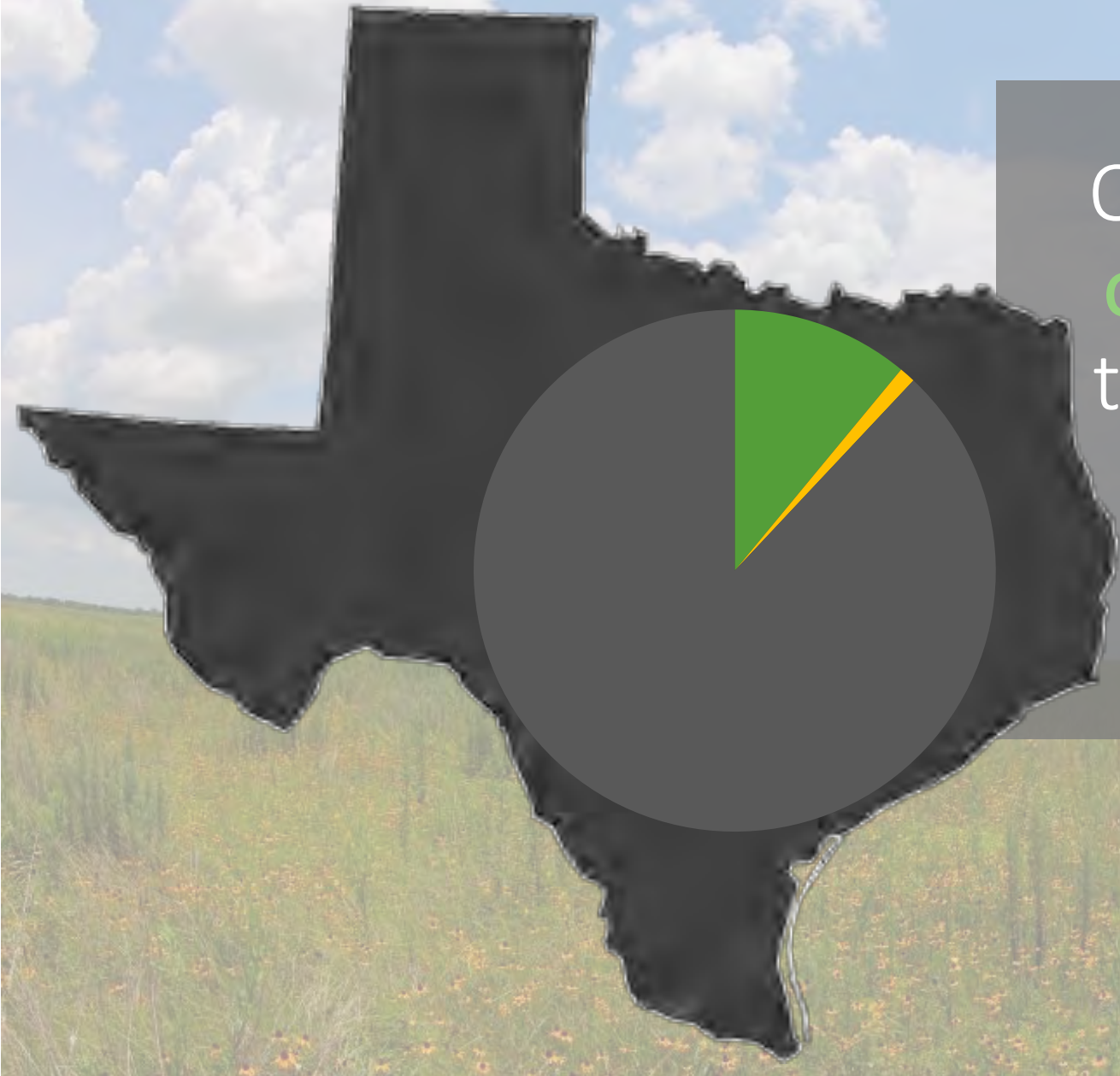
- Of 36 species in North America, 23 are found in Texas during the winter





CANADA
North American Grasslands

143 million acres of grassland have been lost to row crop agriculture, woody encroachment, and oil & gas development. This is an **area larger than all of Central America.**

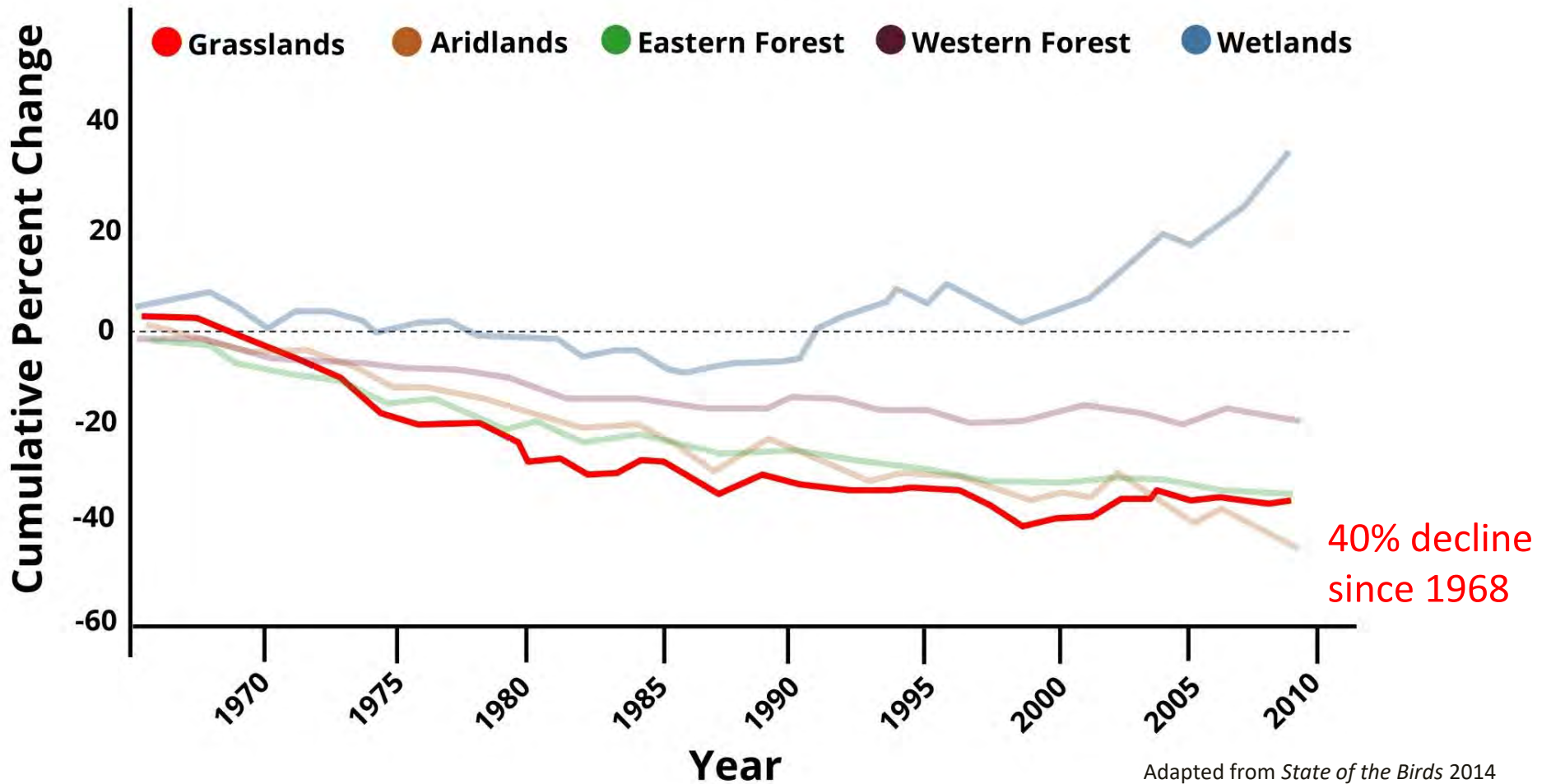


Of 20 million acres of tallgrass prairie that once covered Texas, **less than 1% remains.**



Grassland birds have some of the most dramatic and sustained declines

BIRD POPULATION INDICATORS IN FIVE INLAND HABITATS





Prescribed
Fire



Brush
Management



Prescribed
Grazing



Native Grass
Restoration



Grassland Bird Habitat



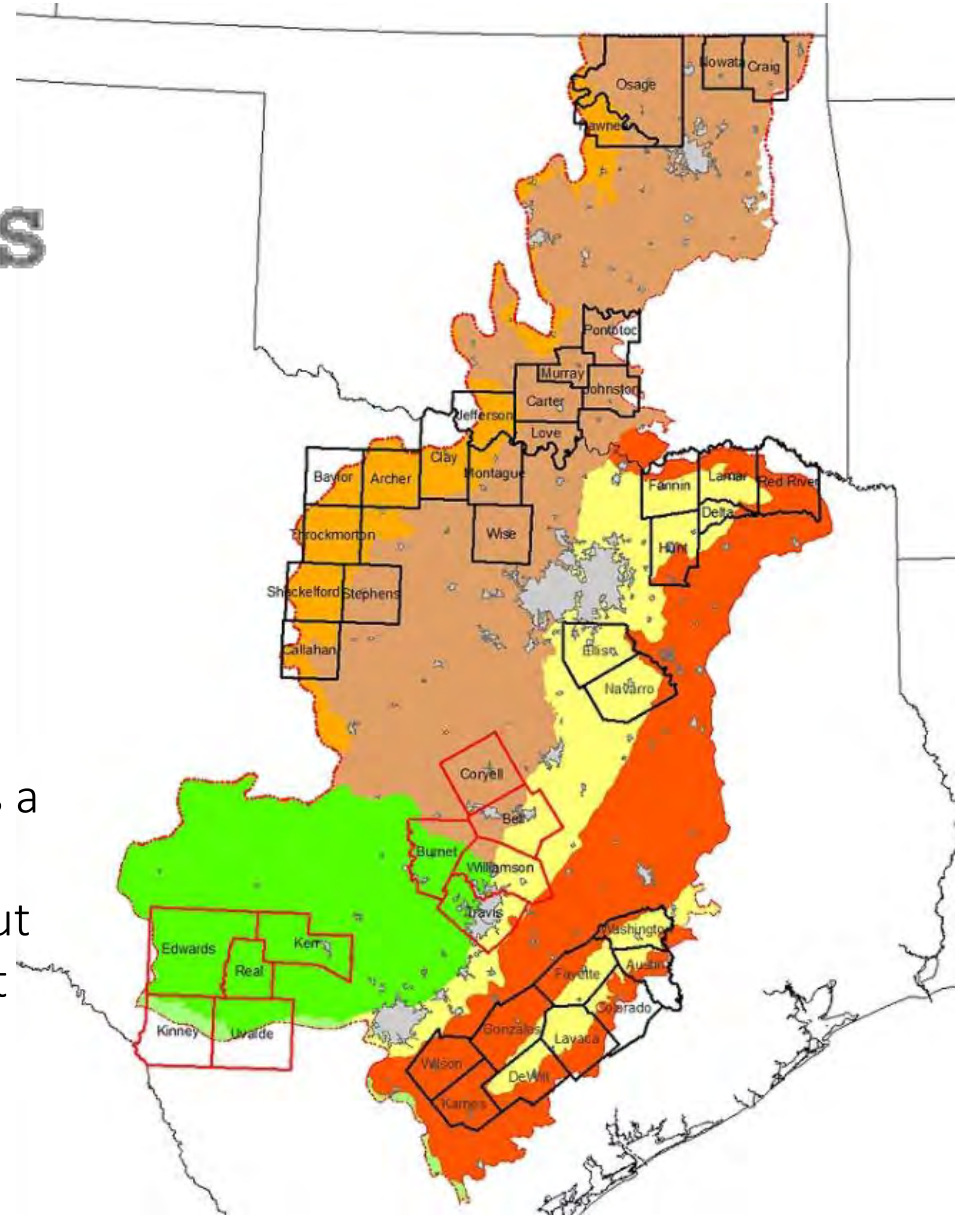
Oaks and Prairies Joint Venture

www.opjv.org



**GRASSLAND
RESTORATION**
INCENTIVE PROGRAM

Grassland Restoration Incentive Program (GRIP) is a multi-organization effort aimed at achieving OPJV grassland bird objectives in focus areas throughout Texas. GRIP provides funding in the form of direct payment to landowners as an incentive for conducting approved grassland bird habitat improvement practices on their property.





“What” & “When” Matter: Creating a Habitat Mosaic



Timing and frequency of disturbance regimes can result in different outcomes in different native ecosystems & on existing land cover.

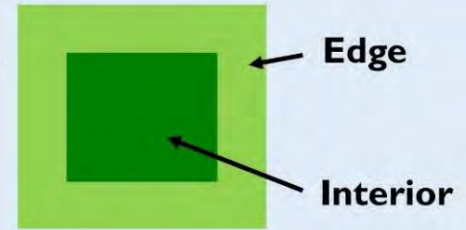
Shape



Too Narrow for Interior Habitat

Better for Wildlife

Rounder & Compact
Increases
Interior Habitat



Size



Too Small for
Interior Habitat

Larger Size
Increases
Interior Habitat



Connectivity



Less Connectivity
Hinders Dispersal

More Connectivity
Assists Dispersal



Fragmentation

More Fragmentation
Decreases Interior
Habitat



Less Fragmentation
Increases Interior
Habitat





On the landscape, we can help birds by:

- Preserving larger intact parcels of land for breeding and wintering birds
- Restoring and connecting smaller scattered parcels as stopover habitat for migrating birds



Justin Meissen, Flickr Creative Commons



At the policy level, communities can help birds by:

- Supporting bird-friendly ordinances & legislation
 - “Dark skies” initiatives to reduce light pollution
 - Pesticide/herbicide limits
- Supporting **sustainable funding** for wildlife & habitat management and implementation of Conservation Action Plans

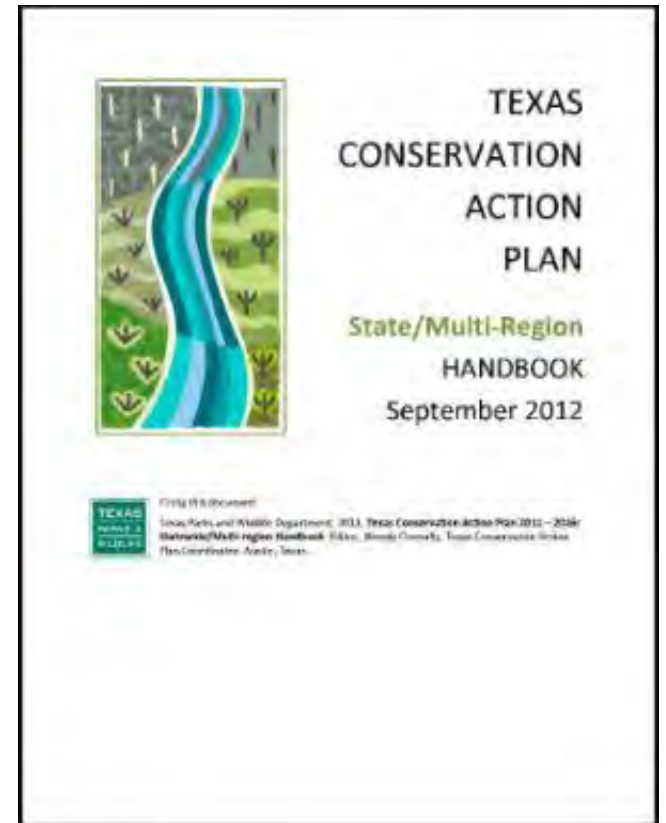




Texas Conservation Action Plan

- Every state has a plan to address their Species of Greatest Conservation Need
- More than 15,000 SGCN nation-wide
- More than 1,300 SGCN in Texas

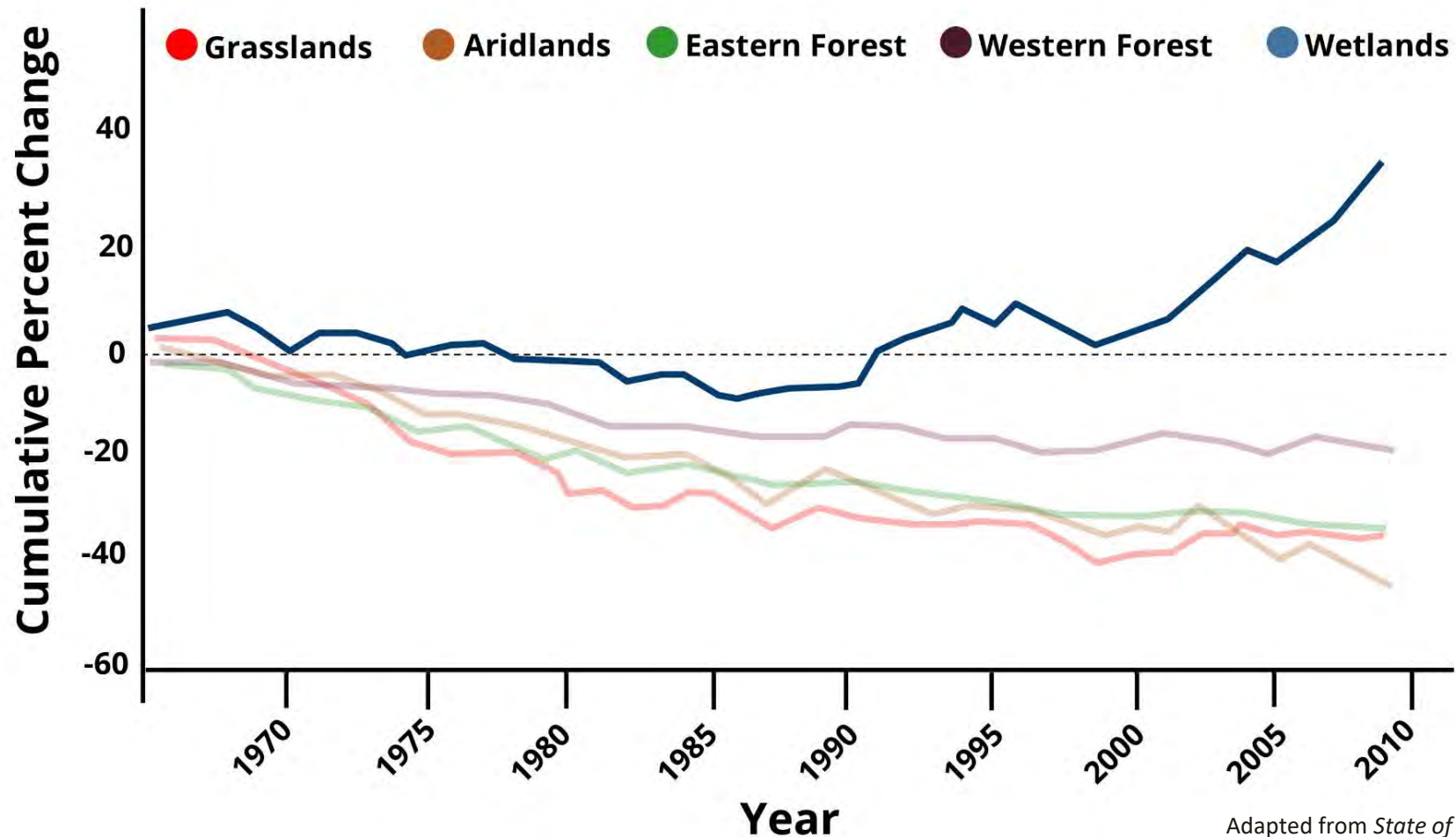
- Texas Conservation Action Plan provides a roadmap to recover our species of concern





Recovery of *wetland birds* shows impact of targeted habitat restoration

BIRD POPULATION INDICATORS IN FIVE INLAND HABITATS



Adapted from *State of the Birds 2014*



Recovering America's Wildlife Act (HR 4647)



- Blue Ribbon Panel on Sustaining America's Diverse Fish & Wildlife Resources tasked with finding mechanism to sustainably fund the conservation of ALL fish and wildlife
- Reps. Fortenberry (R-NE) and Dingell (D-MI) introduced HR 4647 in Dec 2017
- Allocates up to \$1.3B annually from existing federal mineral & energy royalties into Wildlife Conservation Restoration Program
- Dedicated to implement State Wildlife Action Plans to fund SGCN
- Texas could receive \$60M annually



Get Involved, Stay Informed



Teaming with Wildlife: True to Texas has rebranded as the Texas Alliance for America's Fish & Wildlife

- 106 organizations
- 1,000,000+ members
- Outreach & information about the pending Recovering America's Wildlife Act legislation



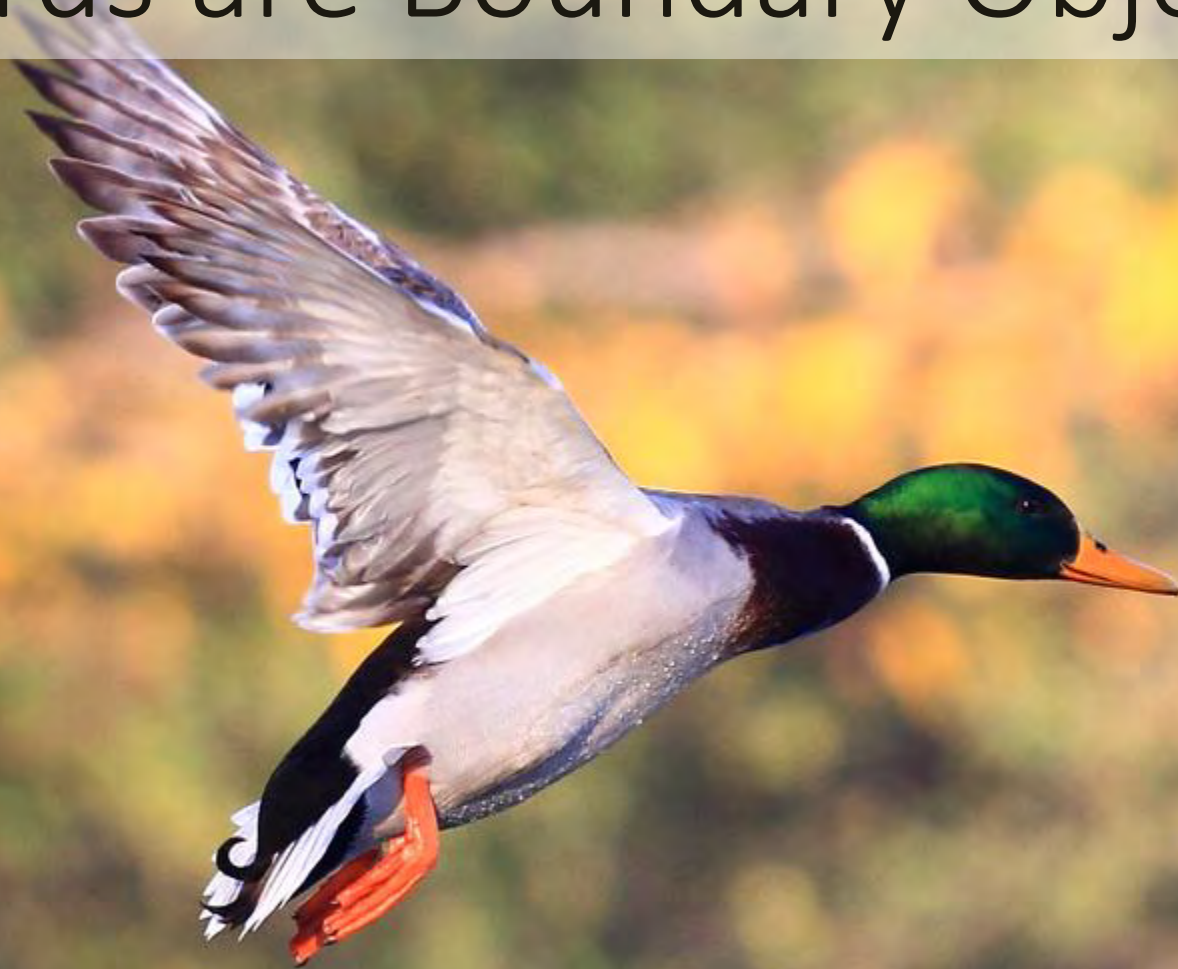
Why Birds Matter

Connecting people to birds & bird conservation





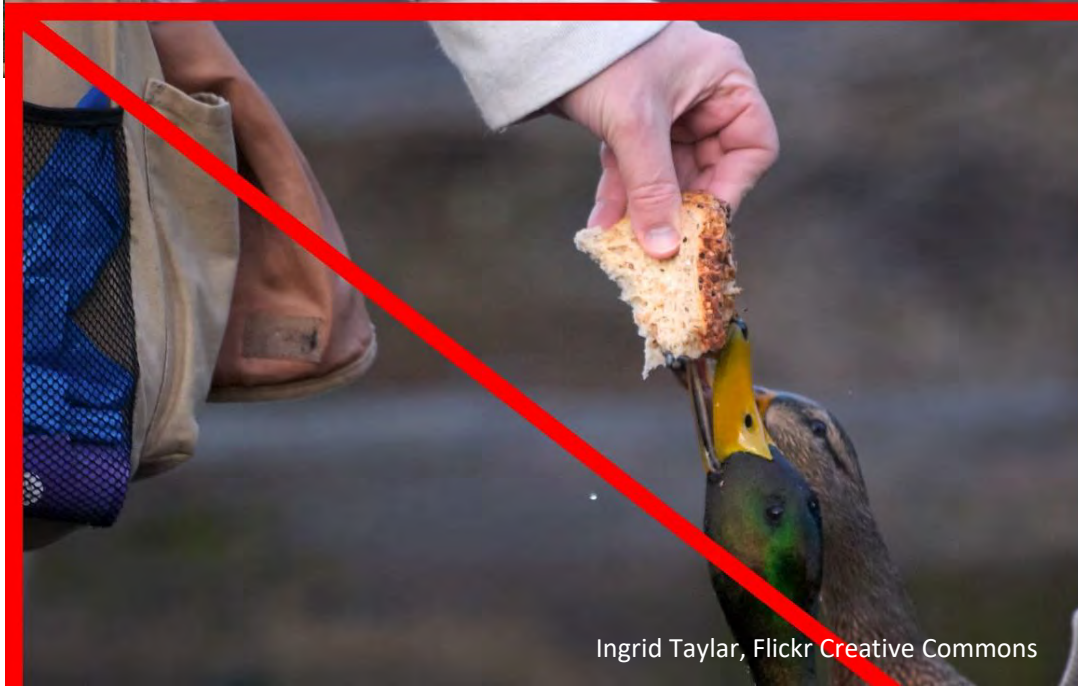
Birds are Boundary Objects



Pierre-Selim, Flickr Creative Commons



Daniel Morrison, Flickr Creative Commons



Ingrid Taylor, Flickr Creative Commons



Peter Firminger, Flickr Creative Commons