

Perspective on Indiana Forests

Ruffed Grouse Society and American Woodcock Society



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National Director of Conservation Policy



RUFFED GROUSE  SOCIETY

Healthy Forests - Abundant Wildlife - Sporting Traditions



RGS/AWS supports science based sustainable forest management to conserve forest wildlife.

Early Successional and Young Forest Habitats

- Not identical
- Both absent or scarce in closed canopy stands
- Share conservation and management challenges



Early Successional and Young Forest Birds

Resistance to conservation efforts...

- Cutting trees equated to unregulated logging
- These species as natural component of avifauna

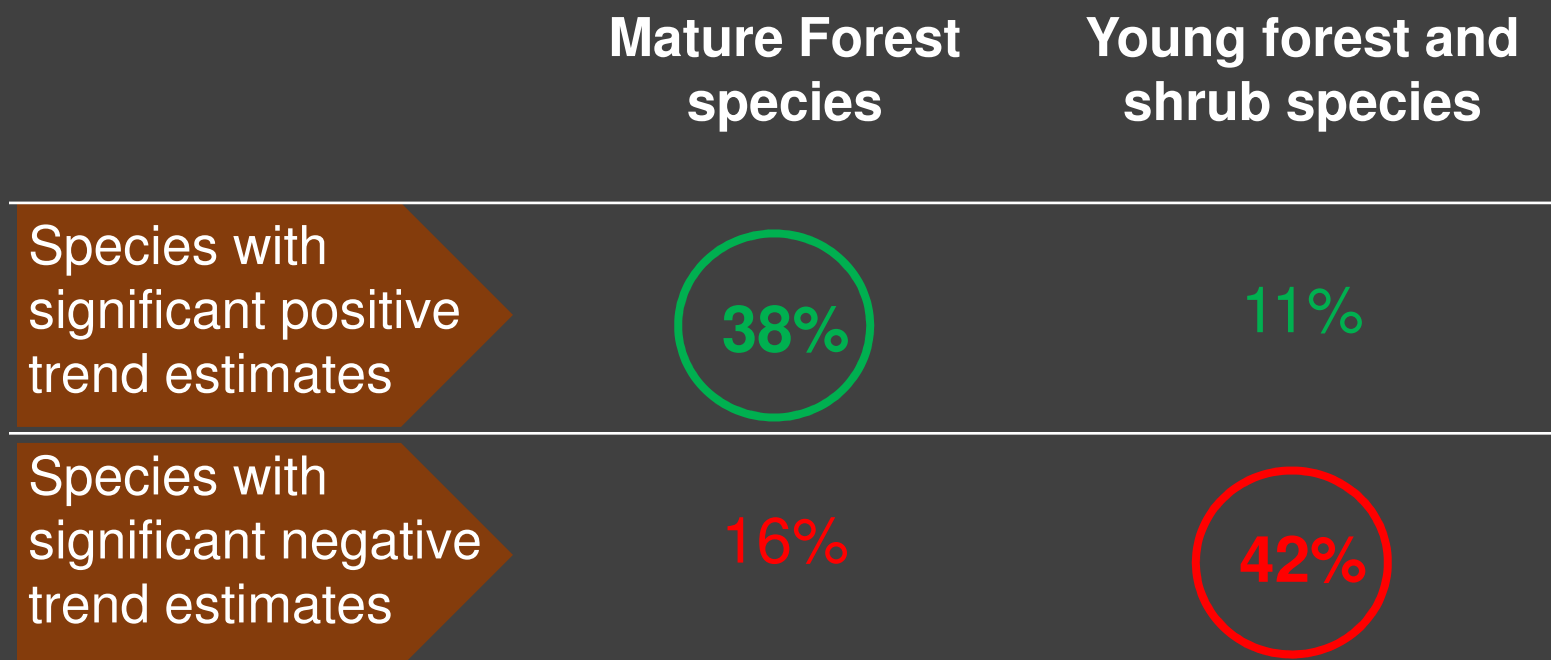
Preponderance of evidence indicates...

- Natural habitat disturbance disrupted
- Large population declines or extirpations



Indiana Bird Population Trends

(Adapted from S. Haulton, Indiana DNR)



1966-2013 USGS Breeding Bird Survey Data (Indiana)

American Woodcock

- Umbrella species
- Easily surveyed 'canary'
- One of eight USFWS National Priority Species



Masse et al. 2015



Higher bird abundance and diversity where American woodcock sing: Fringe benefits of managing forests for woodcock

Woodcock Population Trends, Central Region

(% change/year)

State	1968-2016	2006-2016
Indiana	-4.07	-3.03
Illinois	-1.17	-10.54
Manitoba	0.86	-0.75
Michigan	0.11	-0.25
Minnesota	2.43	0.80
Ohio	-1.56	-1.50
Ontario	-1.85	-0.93
Wisconsin	0.43	-0.35
Region	-0.25	-0.68



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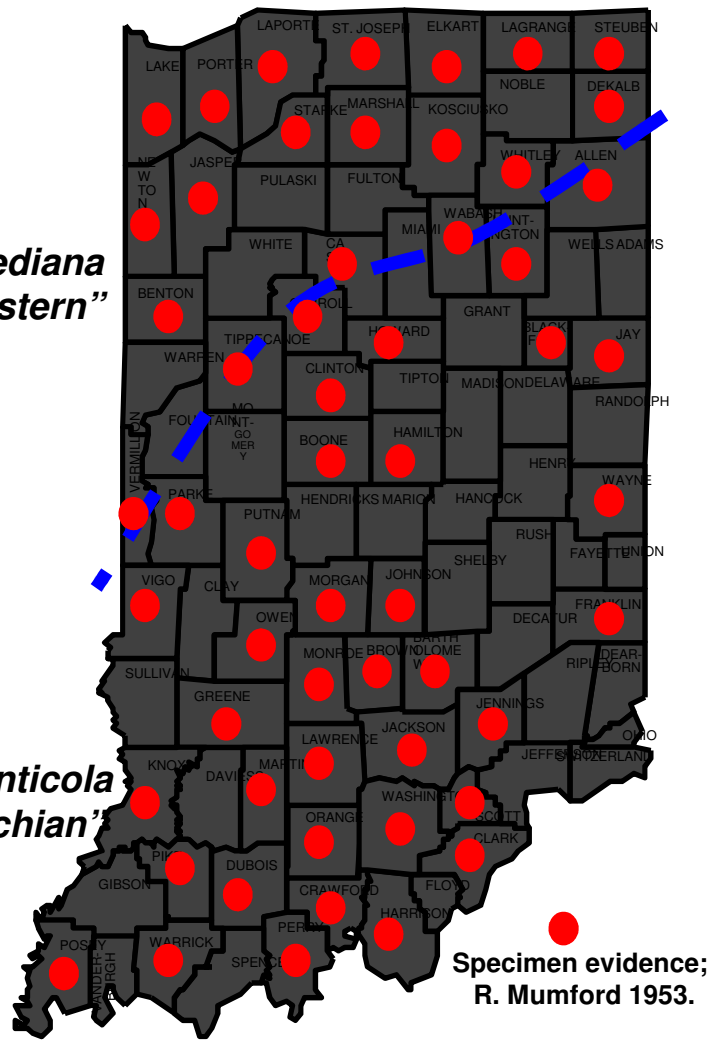
HS1

need to update with 2017

Heather Shaw, 9/22/2017

B. u. mediana
"Midwestern"

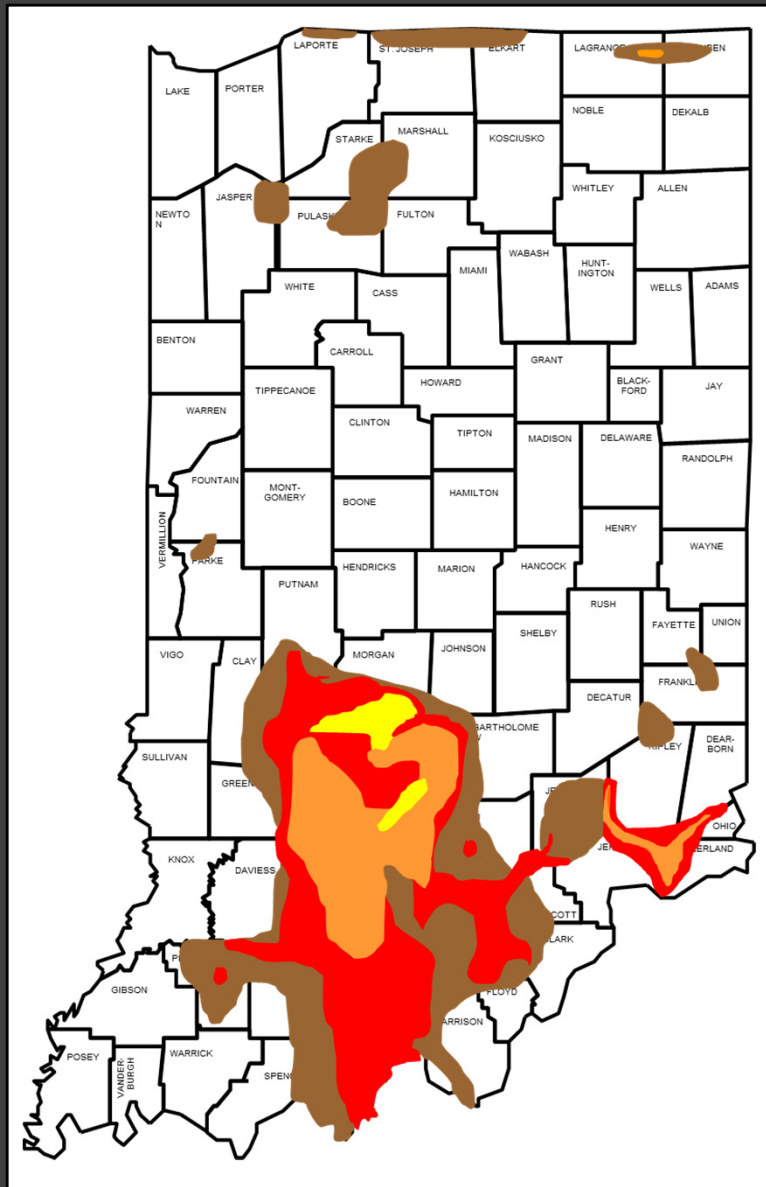
B. u. monticola
"Appalachian"



Subspecies distribution; Aldrich et al. 1955



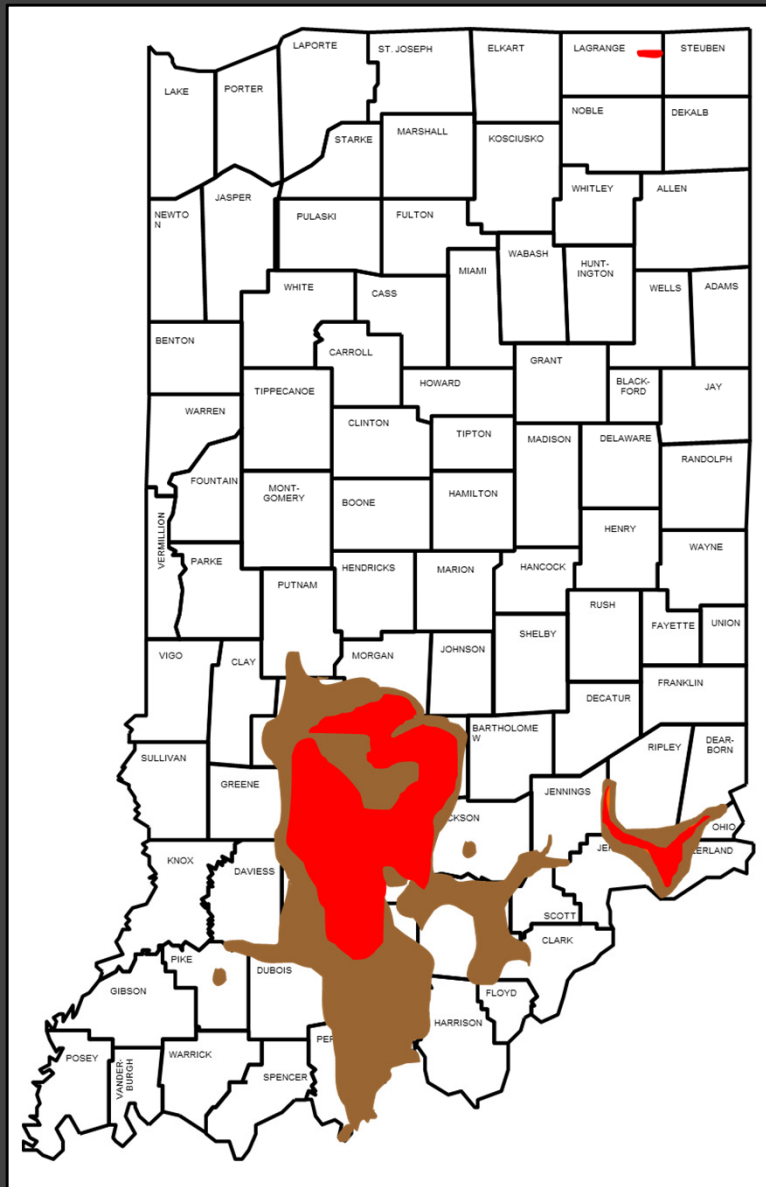
Historic Distribution of Ruffed Grouse in Indiana
(Steve Backs, Indiana DNR)



- Presumed Extirpated
- Possibly Extirpated
- Critically Imperiled
- Imperiled
- Vulnerable
- Apparently Secure
- Secure



2008 Distribution of Ruffed Grouse in Indiana
 (Observations and Surveys – Steve Backs, Indiana DNR)



- Presumed Extirpated
- Possibly Extirpated
- Critically Imperiled
- Imperiled
- Vulnerable
- Apparently Secure
- Secure



2017 Estimated Contraction of Ruffed Grouse in Indiana (Observations and Surveys – Steve Backs, Indiana DNR)

Stand age (20 yr classes)	Total	%	1986-2015 % change
0-20 years	287,090	5.9%	-68.0%
21-40 years	682,416	14.0%	-11.5%
41-60 years	1,494,162	30.6%	+28.8%
61-80 years	1,423,730	29.2%	+64.0%
81-100 years	710,546	14.6%	+56.2%
100+ years	278,049	5.7%	+50.5%
Total	4,875,992	100.0%	+9.8%



USFS Forest Inventory and Analysis Data (Indiana)

Biodiversity

“The loss of species diversity, especially among those [that]... depend on early successional habitat: ruffed grouse, Allegheny woodrat, golden-winged warbler, timber rattlesnake, cerulean warbler, and whip-poor-will.”



Strategy 1: Conserve, manage and protect existing forests...

Component: Increase the percent of forest in the age class of <19 and >100 years old

Yet, from 1986-2015:

- 0-20 years: -68%
- 81-100 years: +56.2%
- 100+ years: +50.5%





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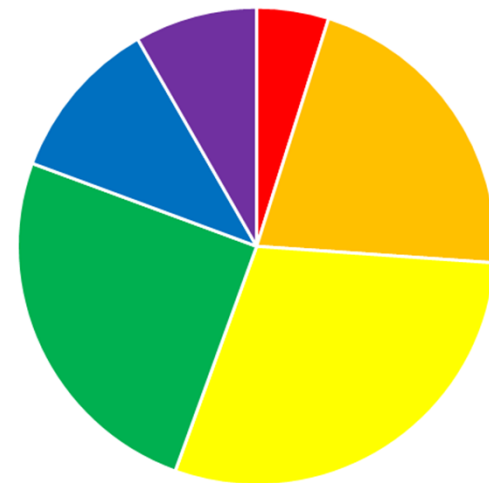
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- 0-20 years
- 21-40 years
- 41-60 years
- 61-80 years
- 81-100 years
- 100+ years

National Forest (4.0%)



Other Federal (3.5%)



State & Local (8.0%)



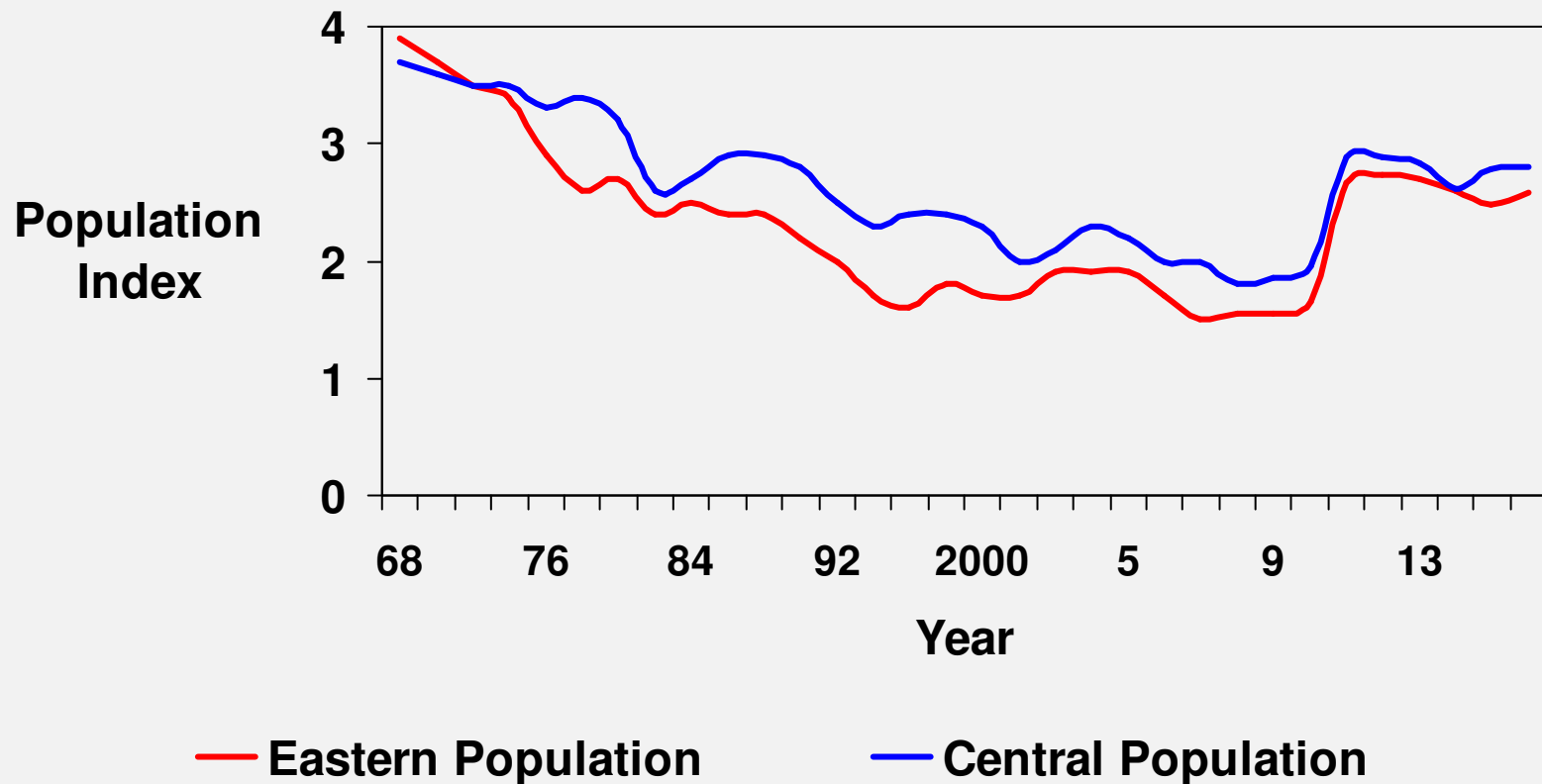
Private (84.5%)



USFS Forest Inventory and Analysis Data (Indiana)



American Woodcock Population Trends Singing Ground Survey Data (USFWS 2016)



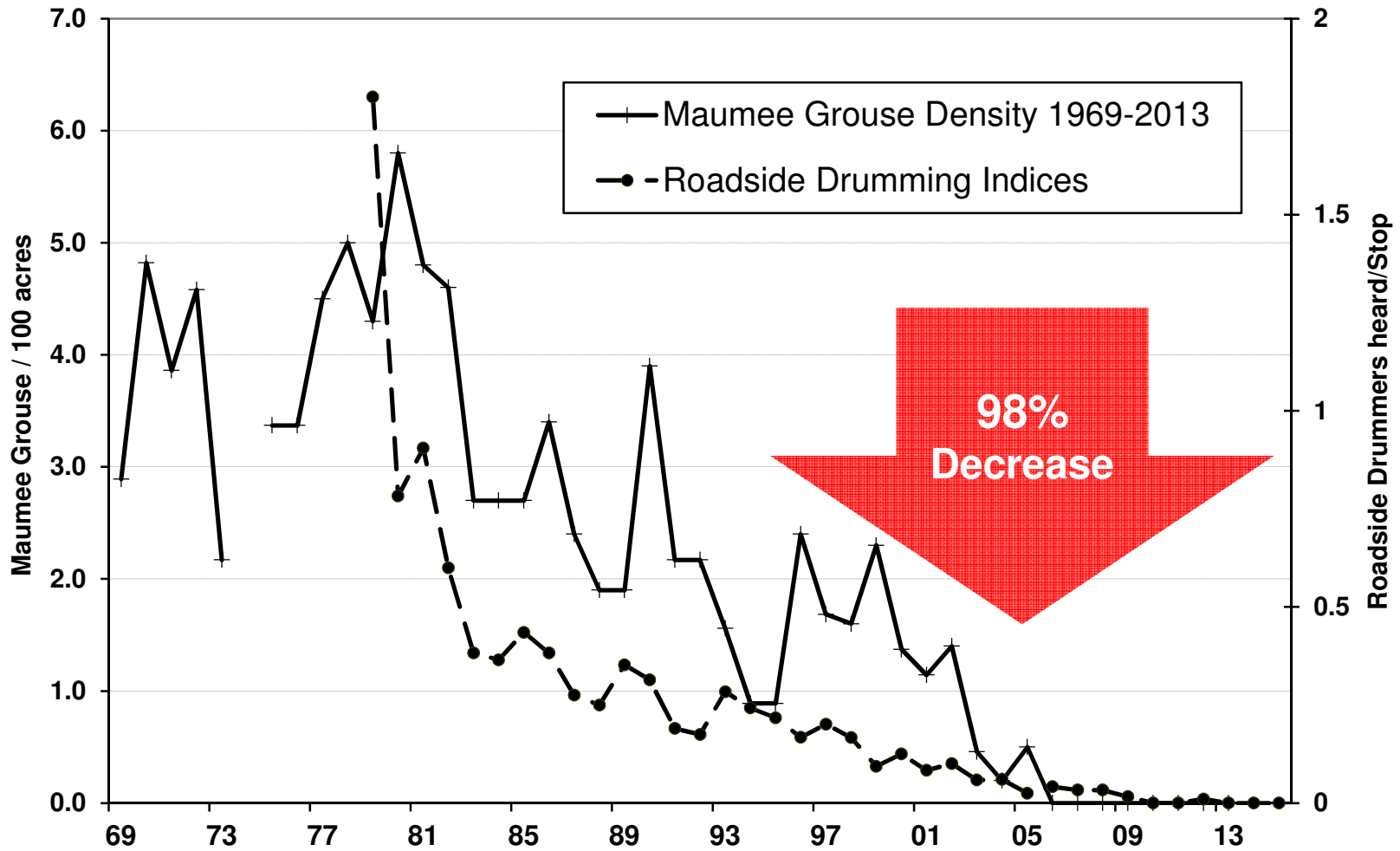
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HS2

update with 2017

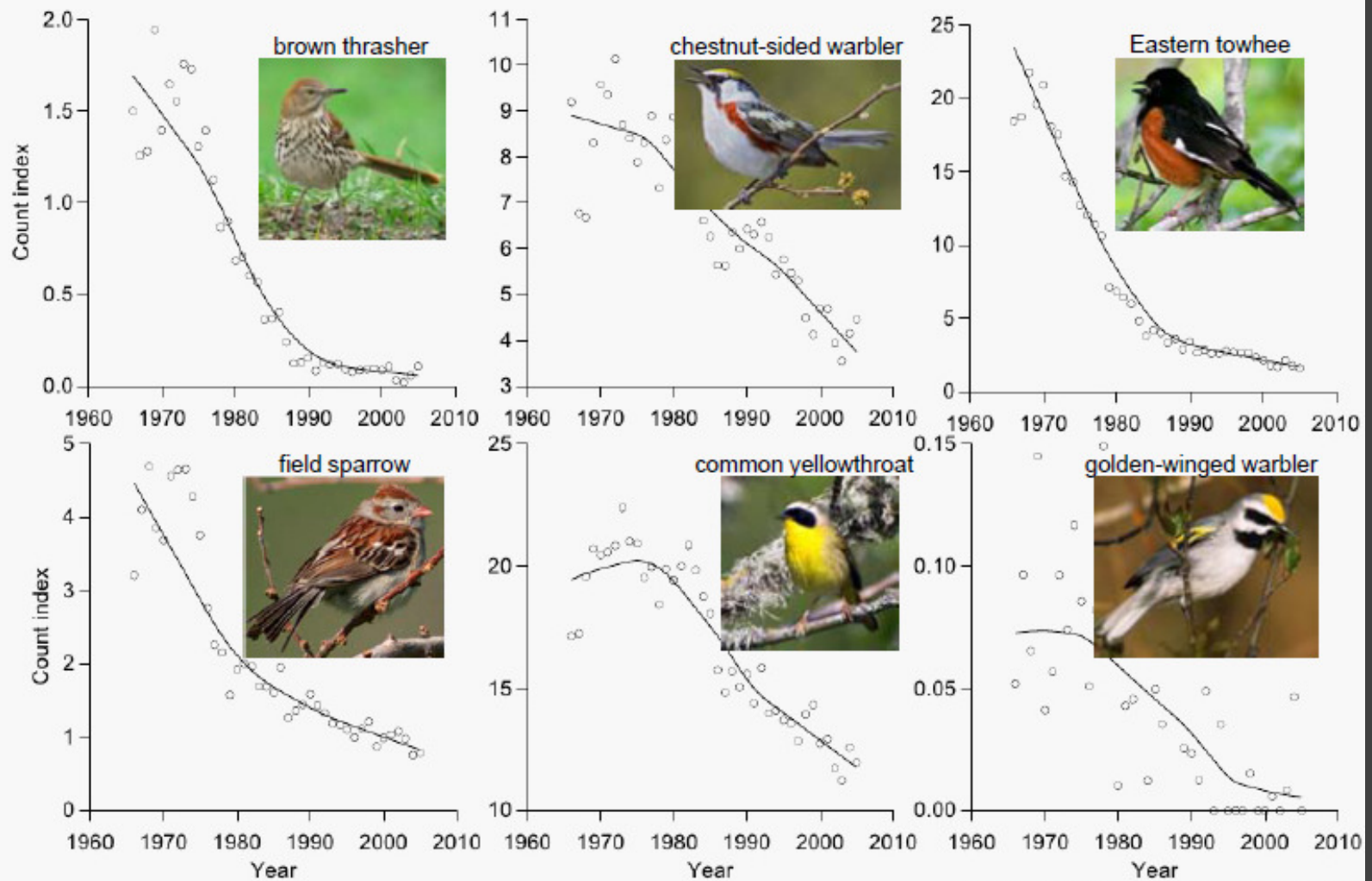
Heather Shaw, 9/22/2017

Figure 1. Indiana Grouse Population Trends



Verge of Extirpation

Declining Young Forest Birds



Schlossberg and King 2007



Disturbance Dependent Songbirds