2021-22 Proposed Upland Game Bird Regulations

2021 Upland Stamp Contest Winner – Spruce Grouse by Buck Spencer

Oregon Fish and Wildlife Commission Meeting
April 23, 2021
Mikal Cline
Upland Game Bird Coordinator

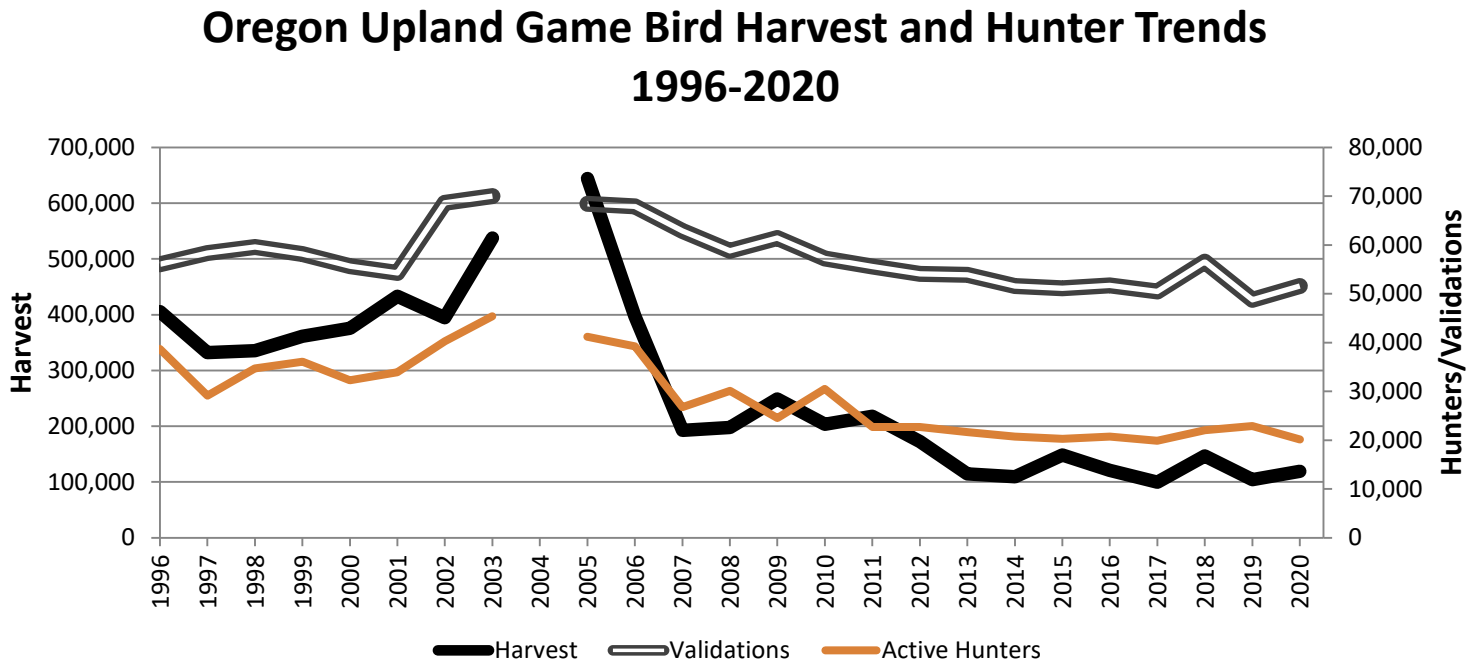
Upland Game Bird Regulations

- Population Status
- 5-Year Regulation Framework
- Regulations Proposals
- Special Hunt Opportunities
  - Youth Hunts
  - Hunting Workshops
  - Fee Pheasant Hunt
- Controlled Sage-grouse Season

Population Status

2020 Harvest Surveys

- Upland bird harvest increased (+16%) from 2019
- Forest-associated harvest down (-23% to -38%)
- Other harvest up (+38% to +85%)
- Spring Turkey up (+18%)

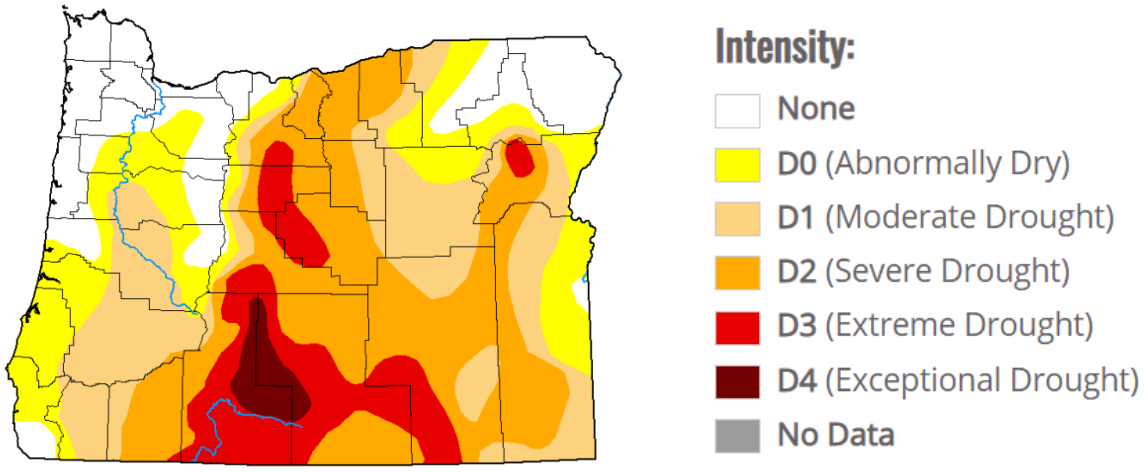


Population Status

Forecasting Fall Populations

1. Summer Production Surveys – July/Aug
2. Habitat and Weather
   - Average winter
   - Watch spring precipitation
   - Hot, dry summer predicted

Current Drought Conditions



Climate Change & Game Bird Management

- Habitat = carrying capacity
- Extreme weather events
- Monitor for long term cycle failure
- Habitat conservation investments
- Research on habitat and population
- Prepare for range shifts



5-year Upland Game Bird Hunting Season Framework *2020-2025*

Why every 5 years?

- Populations fluctuate naturally due to weather patterns
- Long-term trends related to habitat
- Short-lived, high annual death rate
- Hunting typically does not affect overall mortality
- Hunters are self-limiting – hunting pressure decreases in poor years
- No need to change upland regulations every year

2021-22 Upland Game Bird Season Proposals

UPLAND GAME BIRDS	OPEN AREA	OPEN SEASON	DAILY BAG
"Blue" and Ruffed Grouse	Statewide	Sept. 1 – Jan. 31	3 each species
Chukar and Hungarian (Gray) Partridge	E. OR counties	Oct. 10 – Jan. 31	8 (Except Lower Klamath Hills = 2)
Rooster Pheasant	Statewide	Oct. 10 – Dec. 31	2
Quail (California and Mountain)	W. OR	Sept.1 – Jan. 31	10 in aggregate
	E. OR	Oct. 10 – Jan. 31	10 (no more than 2 Mtn Quail)

2021-22 Upland Game Bird Season Proposals

UPLAND GAME BIRDS	OPEN AREA	OPEN SEASON	DAILY BAG
Spring Turkey – General	Statewide	Apr. 15 – May 31	1 (season limit 3)
Youth Spring Turkey – General	Statewide	Apr. 9 – Apr. 10	
Fall Turkey – General Western Oregon	17 W. OR WMUs	Oct. 9 – Jan. 31	1 (season limit 2 Fall Turkey tags) Unlimited tags offered
Fall Turkey – General Eastern Oregon	25 E. OR WMUs	Oct. 9 – Jan. 31	1 (season limit 1) Unlimited tags offered
	WMUs 46, 47, 48 (Ritter area), and 50	**Sep. 1 – Jan. 31**	

SportsPac Turkey Tag Option

Proposal: Allow SportsPac holders to select either a General Spring, Eastern Fall, or Western Fall Turkey Tag beginning in 2022

Special Hunting Opportunities

- **Require special seasons**
- **Opportunities change annually**
- **Not covered by Framework**

2021 Proposed Youth Upland Game Bird Hunts

HUNT AREA	DATES	HUNTERS
Fern Ridge Wildlife Area	September 11 & 12	75
Central Oregon (Near Madras)	September 18 & 19	80
Denman Wildlife Area	September 18 & 19	85
John Day (private land)	September 18 & 19	30
Klamath Wildlife Area	September 18 & 19	80
Ladd Marsh Wildlife Area	September 18 & 19	35
Sauvie Island Wildlife Area	September 18 & 19	50
White River Wildlife Area	September 25 & 26	20
E. E. Wilson Wildlife Area	September 25 & 26	70
Irrigon Wildlife Area	September 25 & 26	15
Coquille Valley Wildlife Area	September 25 & 26	40

Special Hunting Opportunities

2021 Proposed Pheasant Hunting Workshops

HUNT AREA	DATES
Sauvie Island Wildlife Area	September 11 & 12
E.E. Wilson Wildlife Area	September 18 & 19

Special Hunting Opportunities

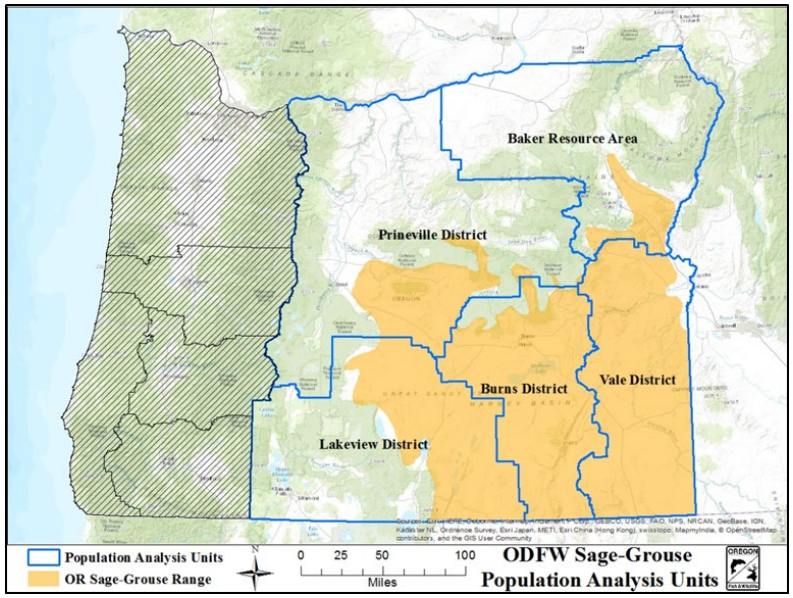
2021 Proposed Western Oregon Fee Pheasant Hunts	
HUNT AREA	**DATES**
Fern Ridge Wildlife Area	September 13 – October 10
Sauvie Island Wildlife Area	September 20 – October 3
Denman Wildlife Area	September 20 – October 8
E. E. Wilson Wildlife Area	September 27 – October 31

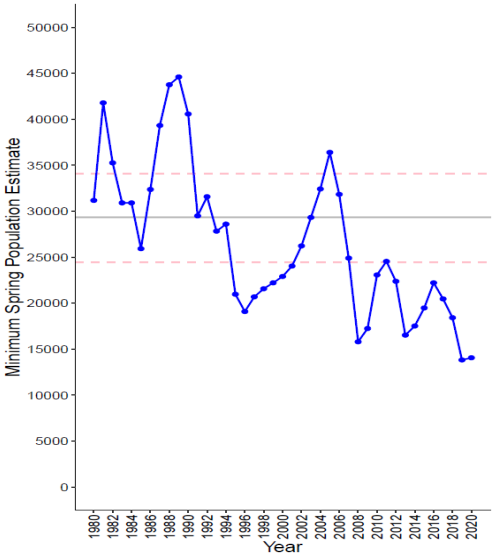
Photo courtesy of Dave Budeau

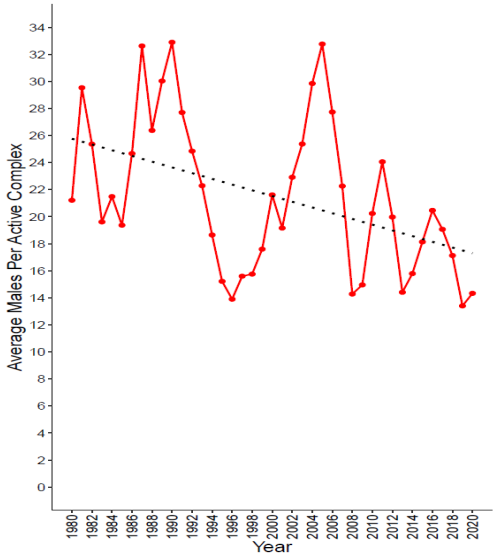
2021 Controlled Sage-Grouse Season

2020 Spring Population Estimate

- **Burns BLM District: +12.7%**
- **Lakeview BLM District: +12.5%**
- **Prineville BLM District: +12.6%**
- **Vale BLM District: -10.8%**







2021 Controlled Sage-Grouse Season

Why hunt sage-grouse?

- Oregon practices adaptive, conservative season
- Wing collections provide vital data
  - Nest success
  - Peak hatch date
  - Age and sex ratios
  - Annual turnover (adult mortality)

- Upland Stamps fund sage-grouse conservation coordinator, non-federal match for research
- Habitat is the key to sage-grouse conservation

2021 Controlled Sage-Grouse Season

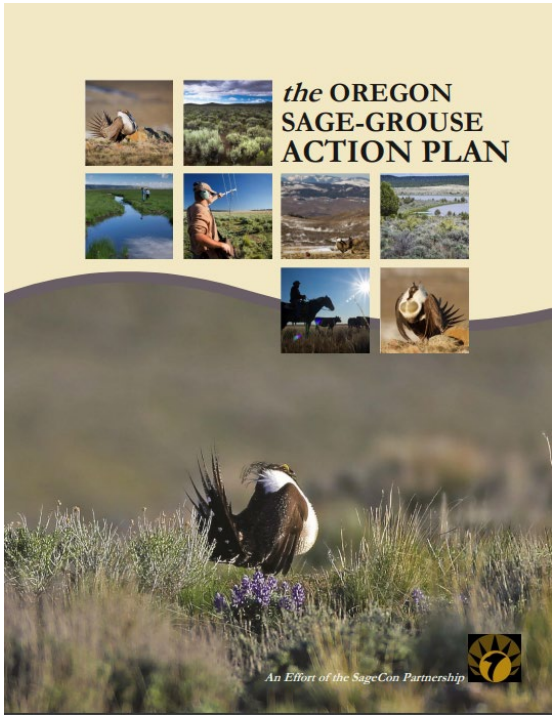
Oregon Sage-Grouse Action Plan

- **Developed by Sage-grouse Conservation Partnership (SageCon) in 2015**
- **Hunting is specifically addressed**

Conservation Objective
Ensure that state-regulated hunting remains consistent with the conservation and long-term viability of sage-grouse populations. Minimize the effects on isolated or declining populations.

Conservation Actions Because of the restrictive and conservative nature of Oregon's current approach to regulated hunting of sage-grouse, this Action Plan does not propose additional immediate restrictions on hunting.

Action HNT-1: Maintain ODFWs harvest policy of less than 5% of the fall population.
Action HNT-2: Do not authorize recreational harvest of sage-grouse in wildlife management units where the estimated spring population is <100 males in consecutive years (*Pages 190-192)*



Thank you, SageCon Partners, for all you have done for Oregon.

Sincerely,

Governor Kate Brown

2021 Controlled Sage-Grouse Season

How are permit numbers set?

Males + Females + Chicks = Fall Population (by WMU)

⬇

Fall Population x 5% = Max harvest allowed (by WMU)

⬇

Max harvest allowed x Avg hunter participation rate x Avg hunter success = Permit recommendation

⬇

*Consider extenuating factors

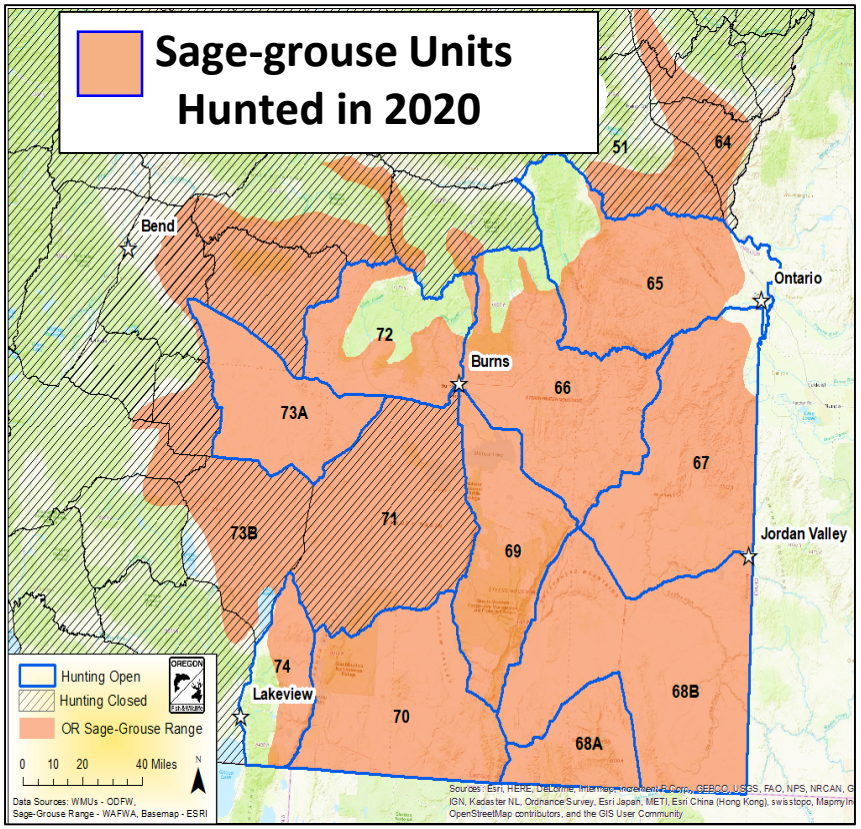
*Consult with Districts

*Temporary Rule for Permit Numbers

2021 Proposed Controlled Sage-grouse Season

- **Proposed Season Dates: September 12-20**
- **Daily/Season Bag Limit: 2 sage-grouse**

WMU	2020 Permits	2020 Harvest	% Fall Pop	2021 Permits
51 Sumpter	0	-	-	TBD July 2021
64 Lookout Mtn	0	-	-	
65 Beulah	150	36	2.4%	
66 Malheur Rvr	100	10	0.7%	
67 Owyhee	70	9	1.0%	
68A Trout Crks	30	30	2.3%	
68B E Whitehorse	70	38	2.5%	
69 Steens Mtn	30	10	1.3%	
70 Beatys Butte	80	59	3.8%	
71 Juniper	0	-	-	
72 Silvies	20	4	0.5%	
73A N Wagontire	20	12	1.7%	
73B S Wagontire	0	-	-	
74- Warner	60	51	4.9%	
Total	**630**	**260**		



Sage-Grouse Hunter Harvest in Oregon

Christian A. Hagen, Oregon State University

Overview

- **Sage-grouse life history**
- **Review data from Oregon studies**
- **Compensatory vs. Additive Mortality**
- **Where does sage-grouse fit on this continuum**

Life History

	r-selection	K-selection
Habitat	Variable and unpredictable	More constant and predictable
Clutch Size	12-14 eggs	7-9 eggs
Length of Life	1-3 years	2-7 years
Leads to	High Productivity	High Efficiency

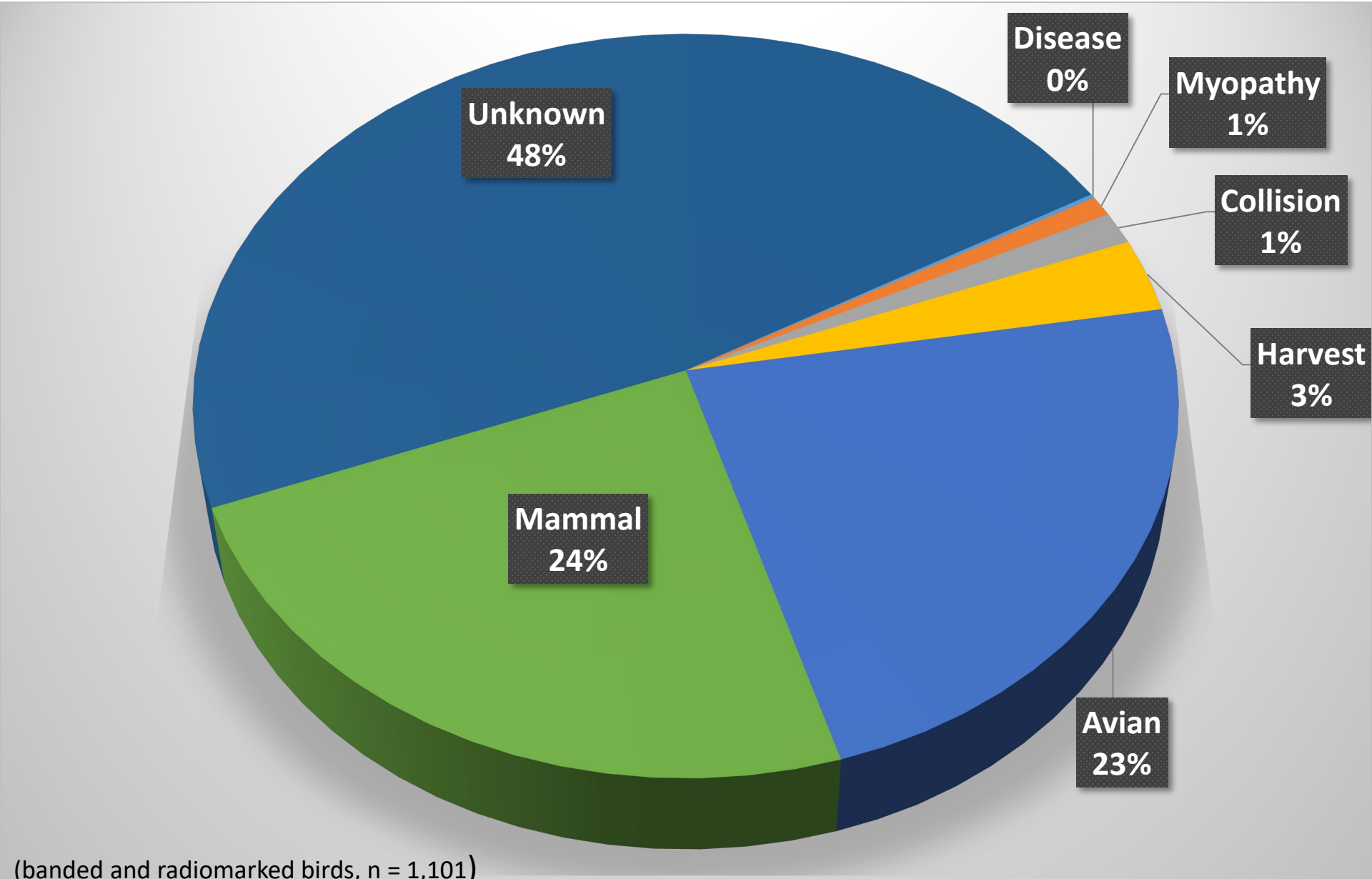
Study Areas for estimating harvest rates of sage-grouse in the Warner and Trout Creek Mountains.

Harvest Study

Goal: estimate harvest rate, and integrate into population model, identify compensatory-additive thresholds

- Before and after control impact (BACI) design
  - Trout Creeks no harvest 2012-19, harvest 2020-202?
  - Warners harvest 2012-202?
- Use combination of radio-marked birds and banded-only birds
  - Estimate harvest rate and model its effect on population growth
- Need min of 5 years of harvest data for analysis

Mortality causes of Greater Sage-Grouse (n = 568) in Oregon, Lakeview & Harney Counties 2009-2020



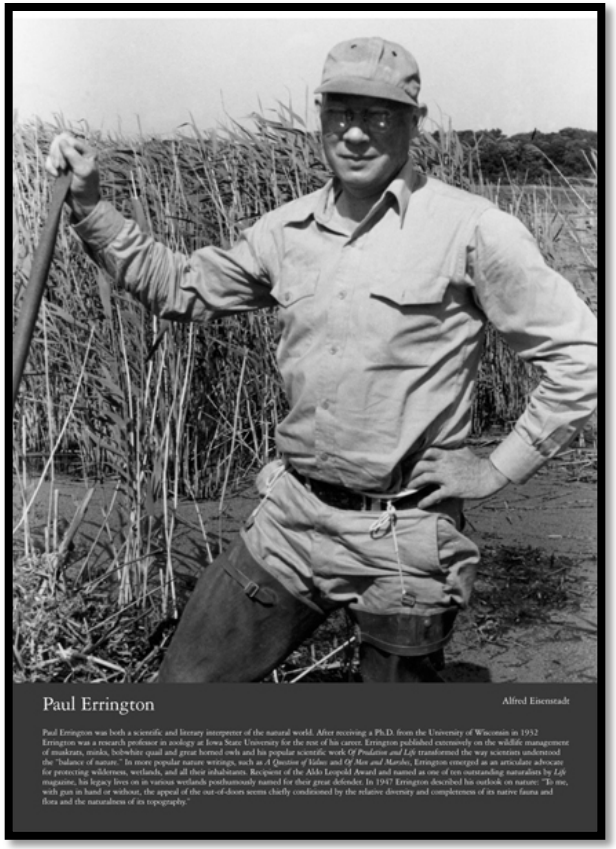
(banded and radiomarked birds, n = 1,101)

Errington's Threshold of Security, and the concept of a "doomed surplus".

"Except in the event of emergencies, populations living below threshold values wintered with slight reduction through predation and self- adjustment. If exceeding thresholds, populations betrayed instability and pronounced vulnerability to predation until again reduced to secure levels." (Errington 1945)

Conclusions based on bobwhite quail

- "shot" &"un-shot" areas = spring numbers
- "new source" of mortality (i.e. harvest) did not reduce of spring breeding numbers
- Errington concluded was due to removal of the "doomed surplus".

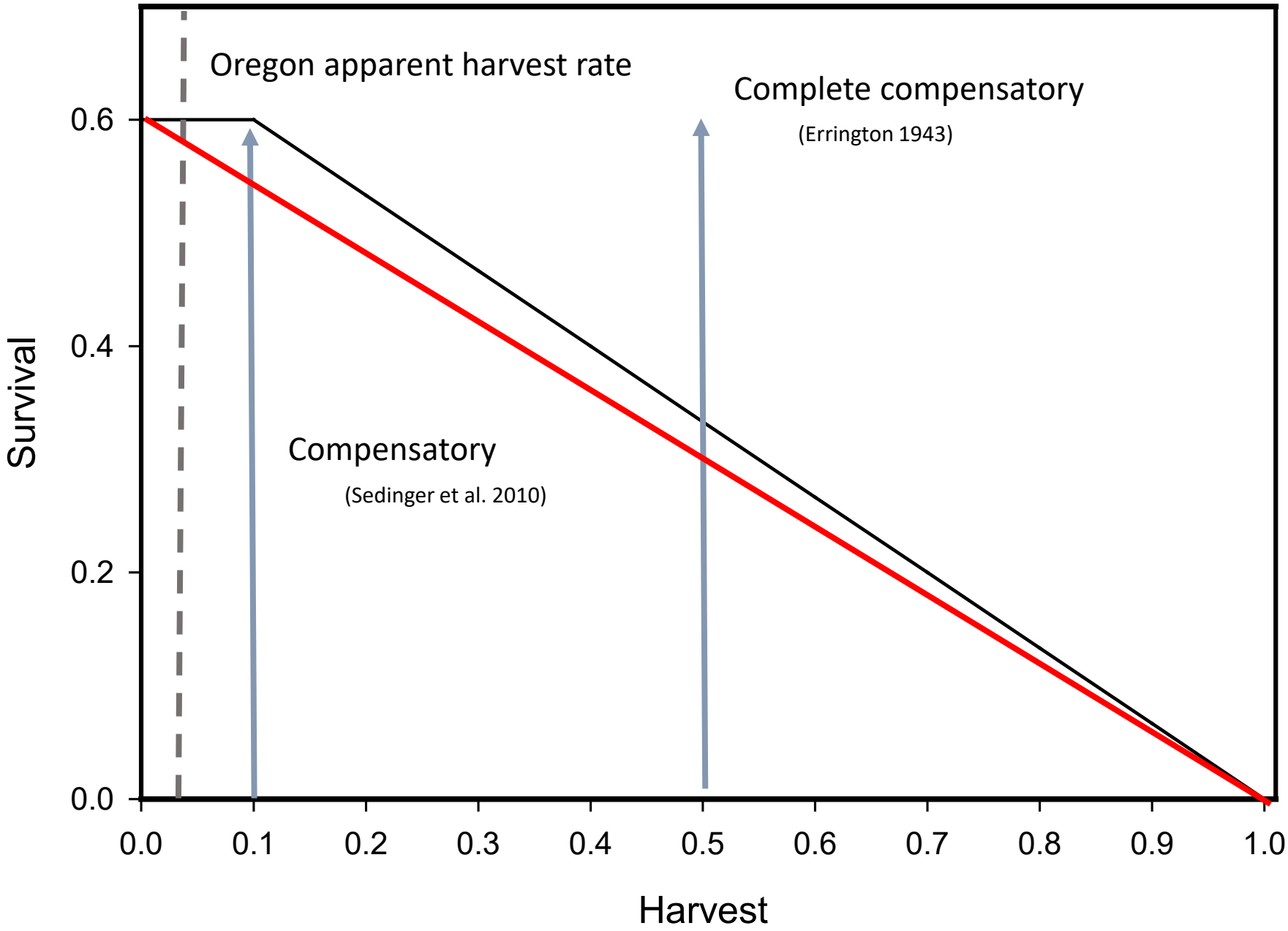


- Under **compensatory mortality**, we assume that an increase in harvest mortality does not result in an increase in total mortality.
  - Because density dependent factors cause a decrease in other forms of mortality after harvest.

- Under **additive mortality** we assume that the mortality caused by hunting reduces the survival rate below what would have been experienced in the absence of hunting
  - No density dependence

- Is there density dependence in sage-grouse?
  - Yes, mechanisms being tested
    - Extreme winters, brood rearing habitat, nesting?

How does Sage-Grouse Fit into the Compensatory-Additive Continuum?



Summary

- Sage-grouse are K-selected
  - Exhibit density dependence
- 95% all mortality was Predation -- Harvest = 3% Partially compensatory & additivity in mortality
  - Refined estimates and modelling forthcoming


Questions?