Black Bear Season Recommendations

CR - 24-07

No Major Changes

Same Unit Groups And Seasons

Unit Group	2024 Season	
Hunt units 192*, 194*, 195, 196	Sept 15 - Dec 1 (or until	
	harvest limits are met)	
Hunt units 201, 202, 204 and 206	Sept 15 - Dec 1 (or until	
	harvest limits are met)	
Hunt unit 291 and 203	Sept 15 - Dec 1 (or until	
	harvest limits are met)	

Same Hours

- Half hour before sunrise and half hour after sunset
- Must call 1-800 number prior to hunting
- Everyone must attend indoctrination course
 - August 15 from 6-9pm
 - August 17 from 1-4pm
 - Both available on zoom
 - Zoom recording for FCFS tags

2023 Black Bear Seasons 3-year Average Harvest Statistics

- 32% females in harvest
- Mean female age, 9.0 years
- Mean male age, 4.8 years

Parameter	Light Harvest	Stable	Heavy Harvest	
% females in harvest	< 30%	30-40%	> 40%	
Mean age of harvested females	> 6 years	5-6 years	< 5 years	
Mean age of harvested males	> 4 years	2-4 years	< 2 years	

What is a population?

A population is defined as a group of individuals of the same species living and interbreeding within a given area. Members of a population often rely on the same resources, are subject to similar environmental constraints, and depend on the availability of other members to persist over time.



Nevada and California Share a Bear Population



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BIODIVERSITY RESEARCH

WILEY Diversity and Distributions

Natural rewilding of the Great Basin: Genetic consequences of recolonization by black bears (Ursus americanus)

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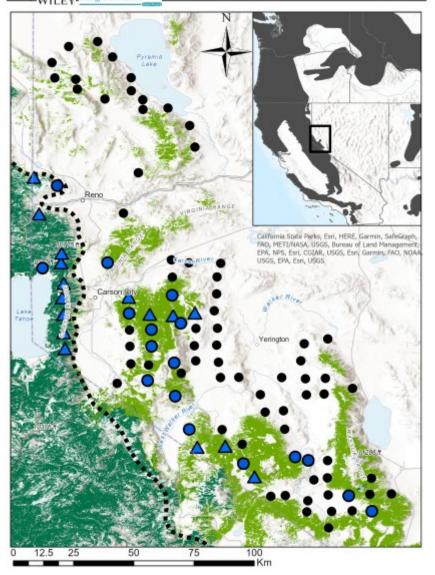
Funding information Nevada Wildlife Heritage Program

Editor: David Green

Aim: In the mid-20th century, many populations of large-bodied mammals experienced declines throughout North America. Fortunately, within the last several decades, some have begun to rebound and even recolonize extirpated portions of their native range, including black bears (Ursus americanus) in the montane areas of the western Great Basin. In this study, we examine genetic variation in source and recolonized areas to better understand the genetic consequences of recolonization. Location: Western Great Basin, USA.

Methods: Using multiple loci, we characterized genetic variation among source and recently recolonized areas occupied by black bears, tested for population structure and applied approximate Bayesian computation to test competing hypotheses of demographic history. We assessed signals of gene flow using expectations of genetic consequences derived from alternative modes of recolonization (bottleneck, metapopulation, island model) and tested for significant signals of genetic bottlenecks in areas recently recolonized by black bears.

Results: As anticipated from field survey data and hypothesized expectations, genetic



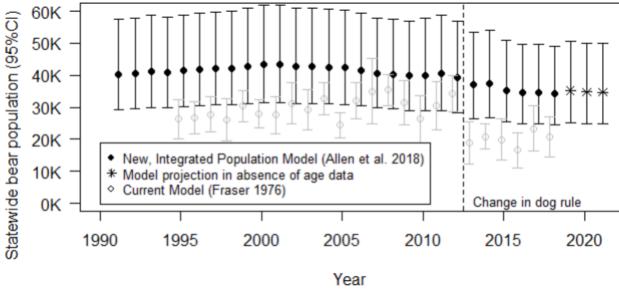


Figure 1. Estimated statewide bear populations by year for California based on an integrated population model (IPM) of age-at-harvest data. The figure shows comparison against the older, less-reliable method used to estimate bear populations. Because laboratory results from recent years' tooth age data has been delayed by the COVID pandemic, the Department used a 5-year average to extrapolate estimates for 2019-2021.

Highest Densities in California

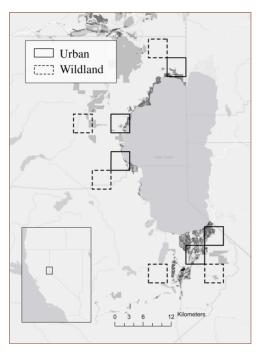
| Received: 10 May 2021 | Revised: 11 February 2022 | Accepted: 11 February 2022 | DOI: 10.1002/wsb.1347

RESEARCH ARTICLE



Use of fecal DNA to estimate black bear density in an urban-wildland interface

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Project 46 Findings

RESEARCH ARTICLE





Black bear density and habitat use variation at the Sierra Nevada-Great Basin Desert transition

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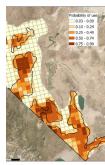
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Abstract

In the first 2 decades of the twenty-first century, American black bear (*Ursus americanus*) populations rebounded with range expansions into areas where the species was previously extirpated. While there are a number of factors that limit range expansion, habitat quality and availability are among the most important. Such factors may be particularly important in western Nevada, USA, at the transition zone of the Sierra Nevada and the Great Basin Desert. We deployed a multi-









3. A) Predicted probability of black bear use at a 5 × 5-km resolution acr vada, U.S.A, as defined by the Nevada Department of Wildlife. The black lin spatial reference. B) The predicted density of black bears at a 2.5 × 2.5-km r lure-recapture-global positioning system model, predicted at the resolution 15 km²). Data included in models were collected with cameras and hair sn: 3A, June-October 2018–2020.

Project 46 Expenditures

	2019	2020	2021	2022	2023	Total
Proposed \$3	\$40,000	\$40,000	\$25,000	\$5,000	\$5,000	\$115,000
Proposed PR	\$120,000	\$120,000	\$75,000	\$15,000	\$15,000	\$345,000
Spent	\$343,955	\$205,383	\$99,858	\$0	\$20,000	\$669,196

Program MARK Estimate

Nevada Black Bear Population Dynamics 1998-2022

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Department of Natural Resources and Environmental Science
University of Nevada, Reno

May 23, 2023

Highlights

- 537 bears captured, marked, and released between 1997–2022 (209 Females, 328 Males)
- 682 Re-sightings of marked bears
- Mean survival rate was 0.84 per year (0.87 females, 0.82 for males)
- Mean population growth was 5% per year
- 2022 Nevada population estimate: 467 (95% CI: 368–592)

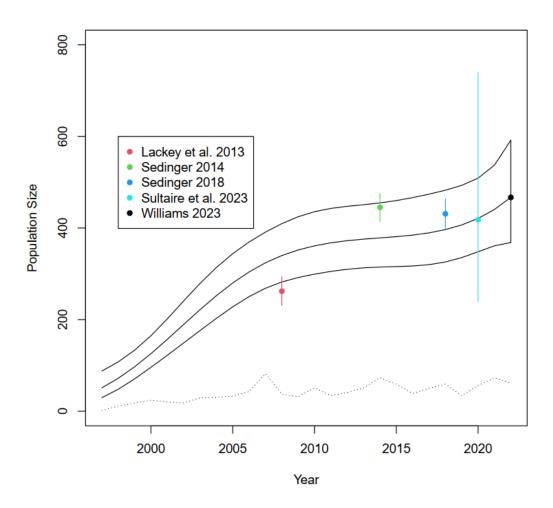


Figure 1: Black bear population size estimates in western NV. The dotted line indicates the number of bears captured each year.

Bear Harvest and Population Dynamics

In some jurisdictions, harvest comprised of 40% females...and harvest rates >20% appear to be sustainable.



Going into the 21st century: a perspective on trends and controversies in the management of the American black bear

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Harvest Rates

California Harvest

32,000 bears / 1,200 harvest = 3.75%

Nevada Harvest (camera model)

418 bears / 19 harvest = 4.5%

Nevada Harvest (MARK model)

467 bears / 19 harvest = 4.1%

Closing Thoughts

- 1. Population could withstand more harvest
- 2. No hunting in Tahoe Basin
- 3. Season closed December 1 instead of December 31

Questions?

