Interagency Grizzly Bear Study Team
2025 Research & Monitoring Update

USGS science for a changing world

Photo: J. Davis

Study Team Members

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Overview

Research and monitoring update

- Females with cubs
- Occupancy of reproductive females
- Mortalities
- Integrated population model (IPM) estimates

Miscellaneous updates

Demographic Criteria

2024 Conservation Strategy

Maintain distribution of females with young so that at least 16 of 18 BMUs are occupied.

Report all grizzly bear mortalities within the GYE.

Maintain the population in the DMA within or above 800-950.

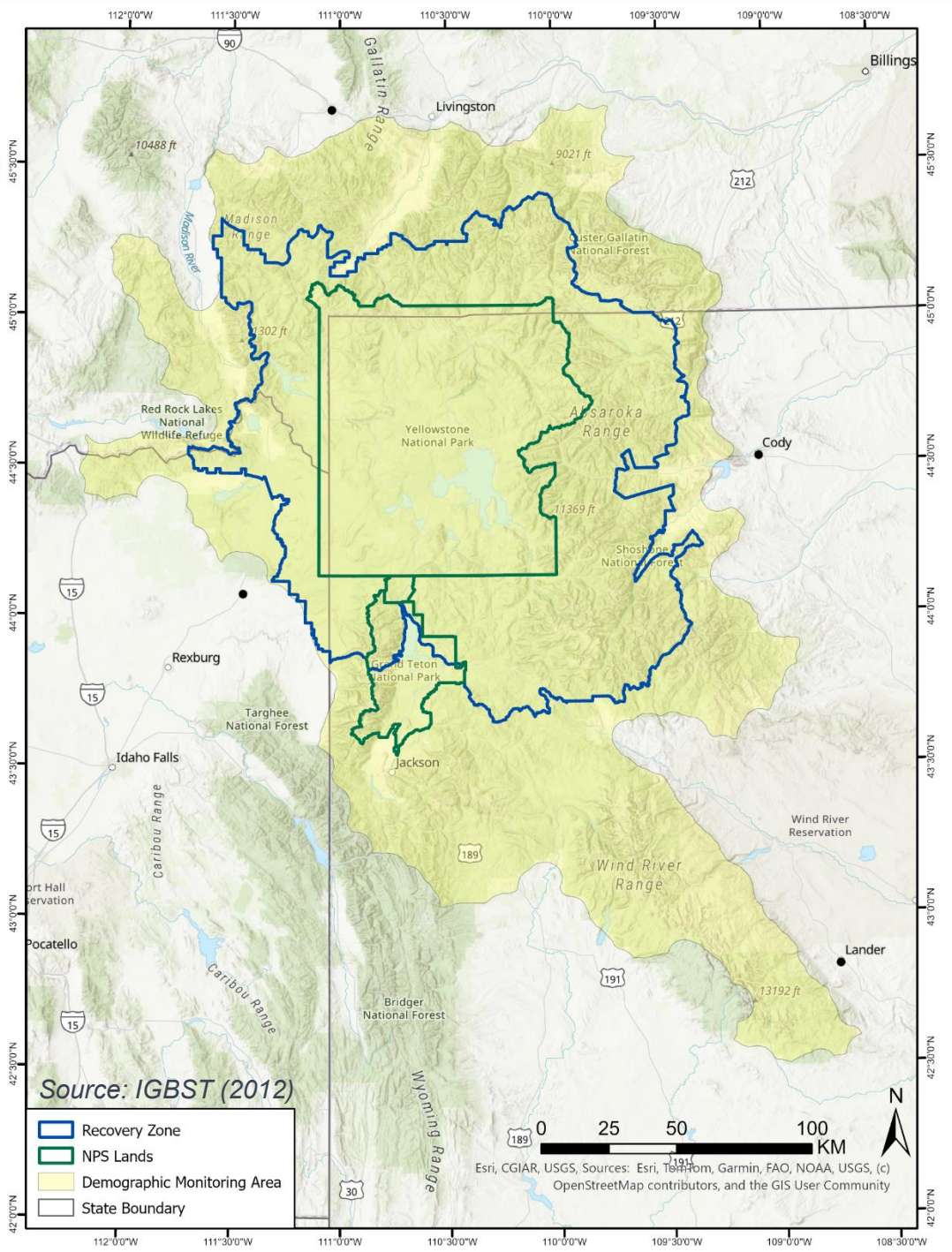
Monitor population trend.

Greater Yellowstone Ecosystem (GYE)

National Parks = 10,344 km^2

Recovery Zone / Primary Conservation Area = 23,828 km^2

Demographic Monitoring Area (DMA) = 49,931 km^2 (19,279 mi^2)



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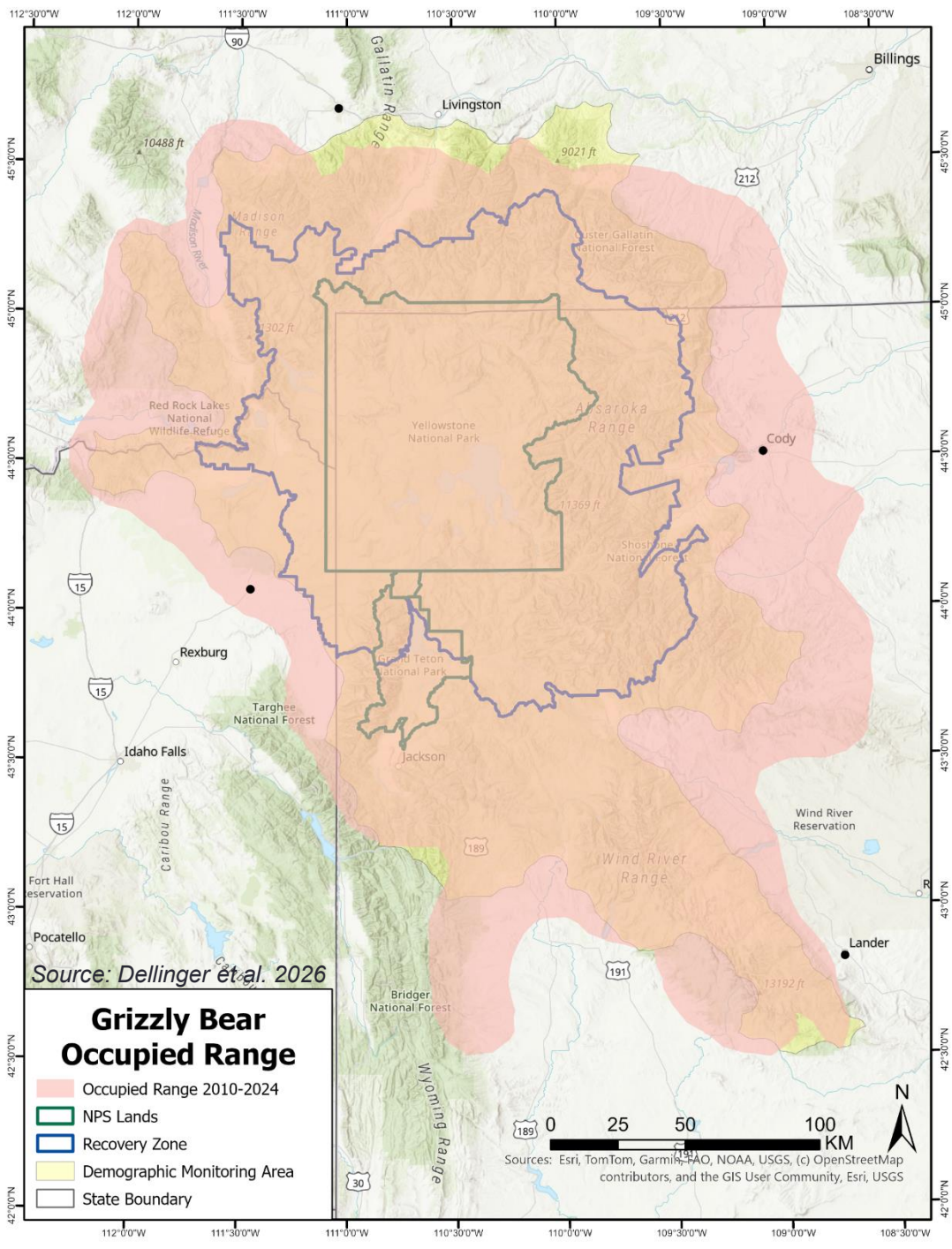
Greater Yellowstone Ecosystem

National Parks = 10,344 km^2

Primary Conservation Area/Recovery Zone = 23,828 km^2

Demographic Monitoring Area (DMA) = 49,931 km^2 (19,279 mi^2)

Estimated grizzly bear range (2010-2024) = 67,608 km^2 (26,103 mi^2)



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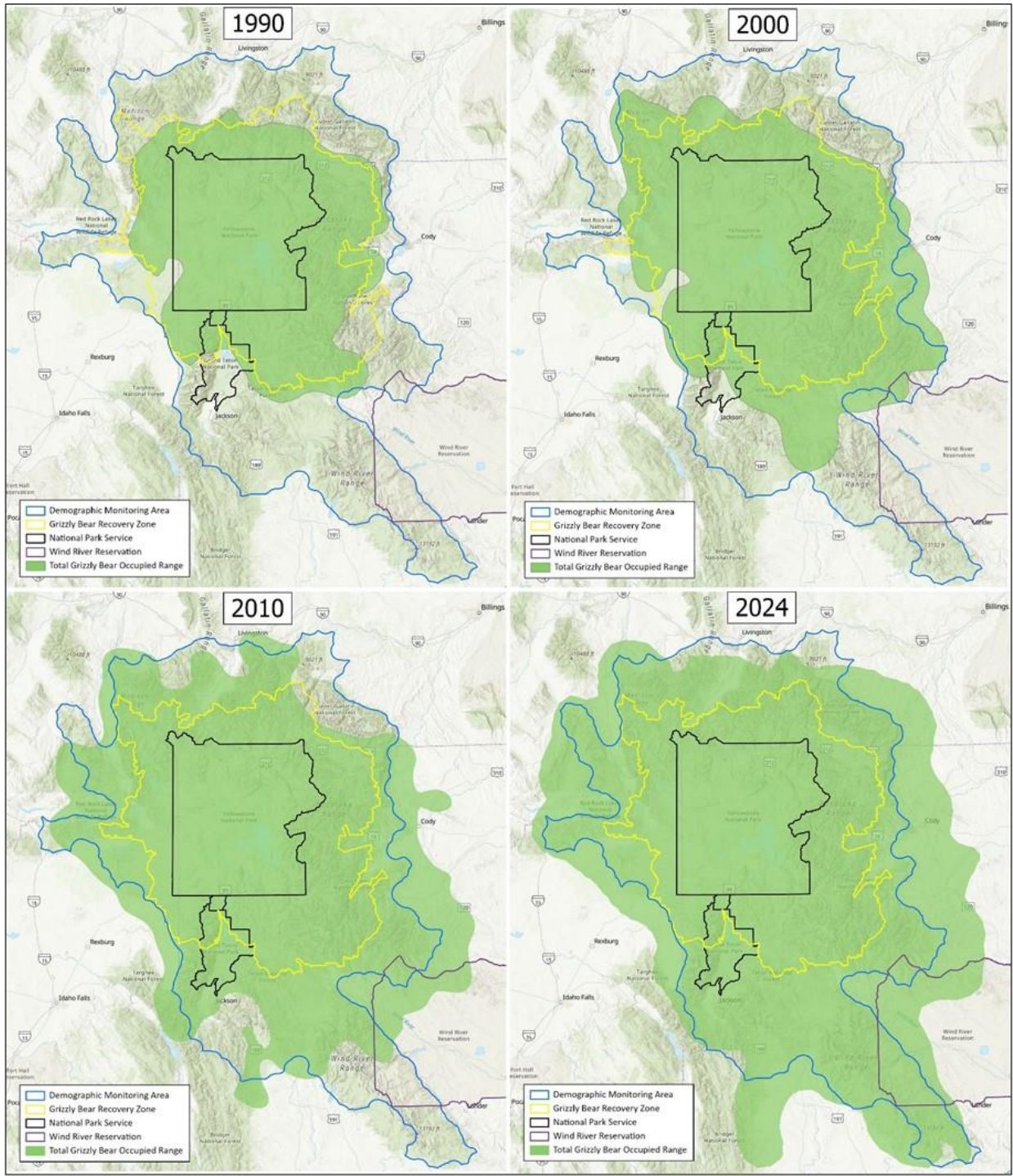
Range expansion 1976-2024

1976-1990:
23,361 km^2

2010-2024:
67,608 km^2



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Source: Dellinger et al. 2026

Females with Cubs and Population Size

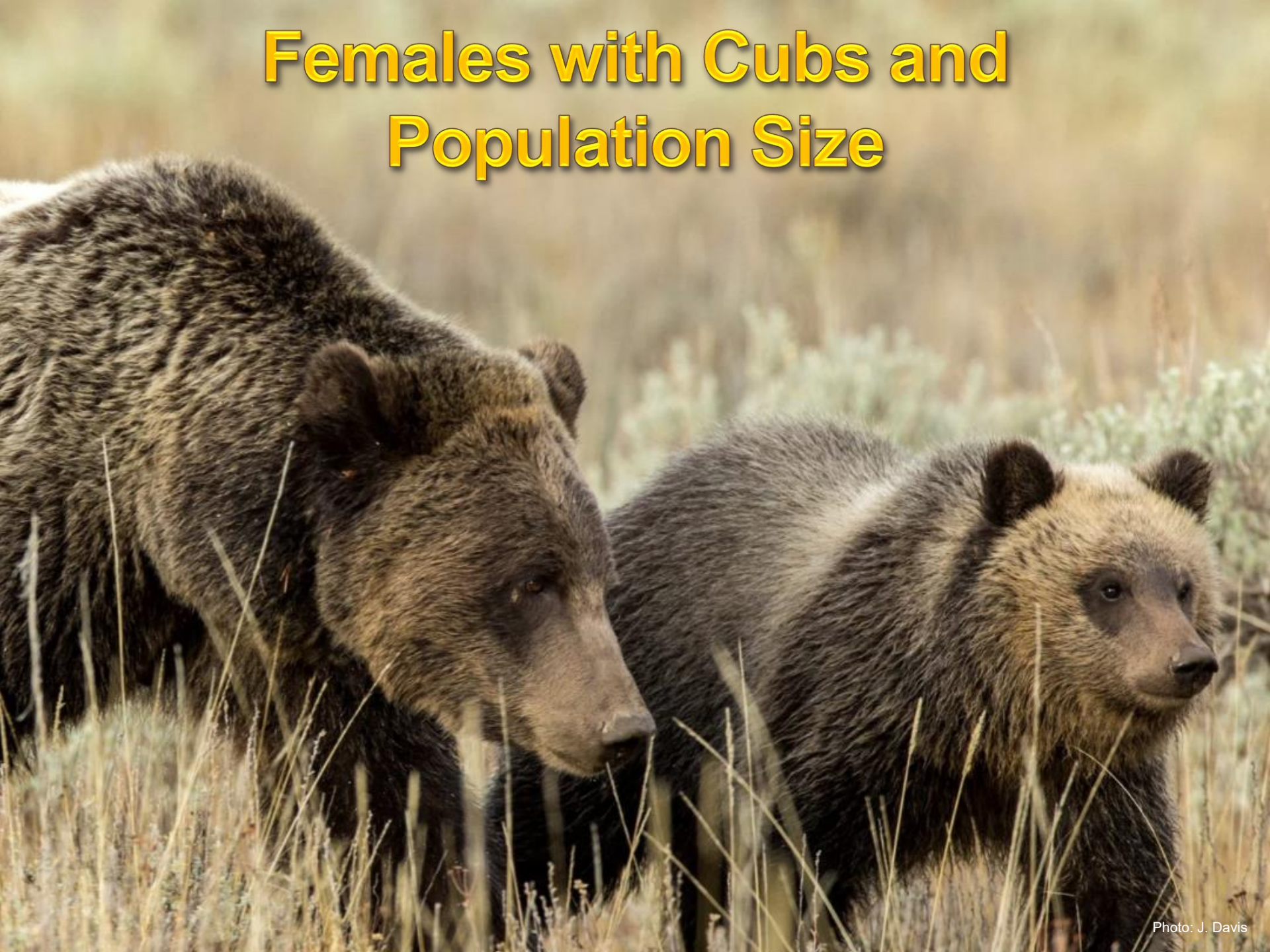
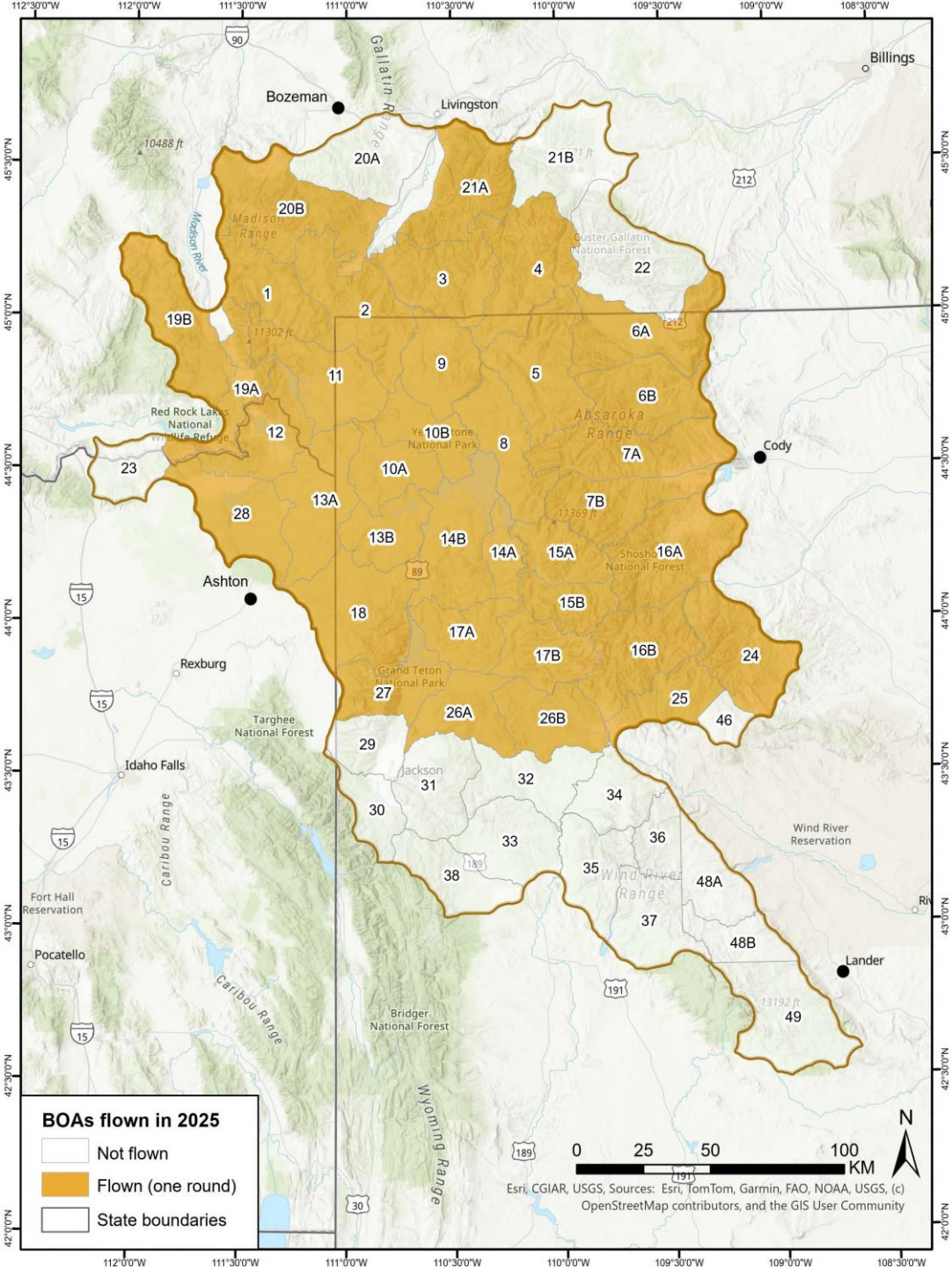


Photo: J. Davis

Observation flights 2025

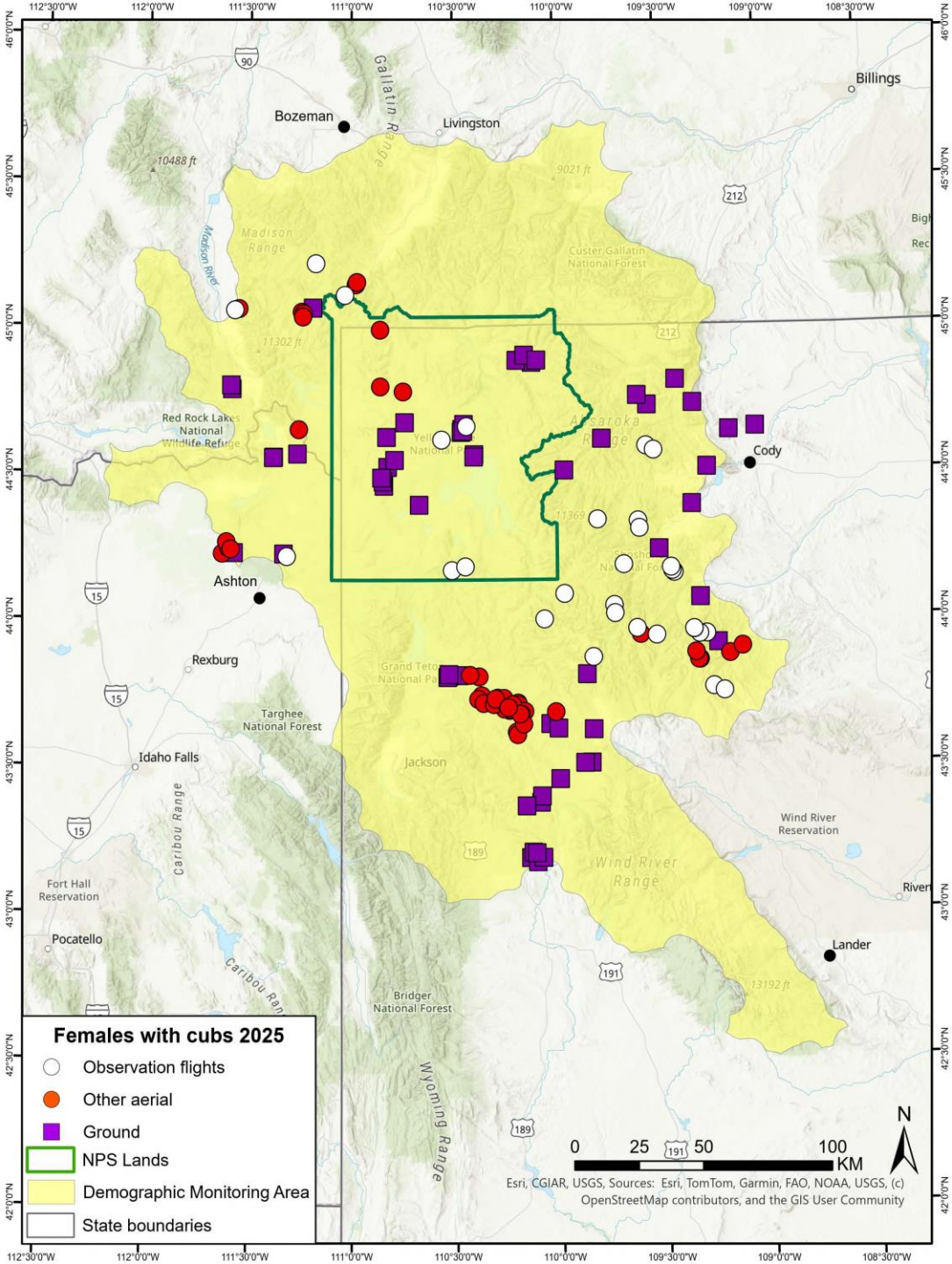
- 36 units flown
- 18 units not flown
- One flight per unit



Females with cubs 2025

142 observations

- 34 observation flights (24%)
- 47 other aerial (33%)
- 61 ground (43%)



Data as of 04/24/2026

Females with cubs 2025

142 observations

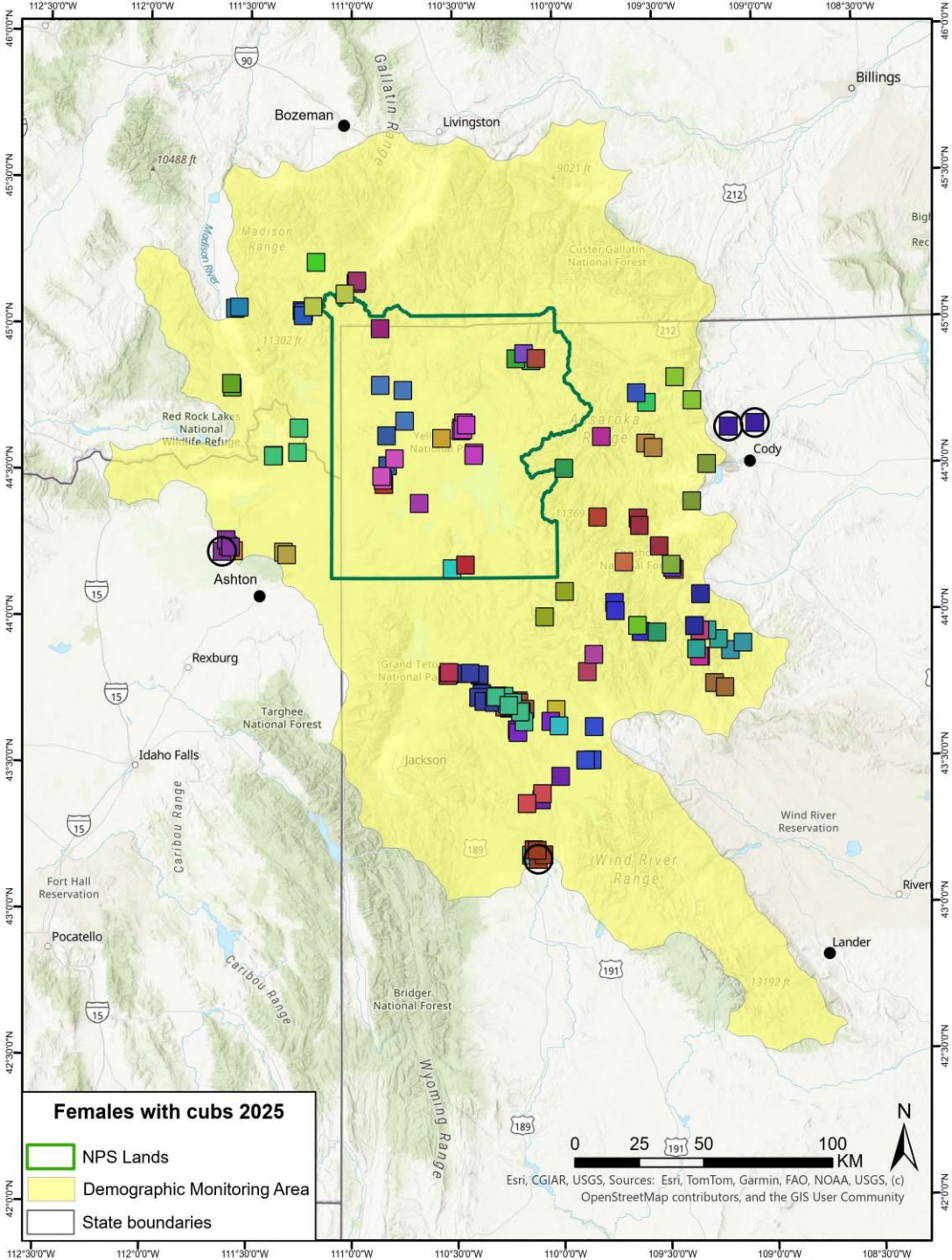
- 34 observation flights (24%)
- 47 other aerial (33%)
- 61 ground (43%)

65 unique females with cubs

Mean litter size = 1.9

- 19 single (29%)
- 36 twins (55%)
- 10 triplets (15%)

Data as of 04/24/2026



Number of females with cubs 2025

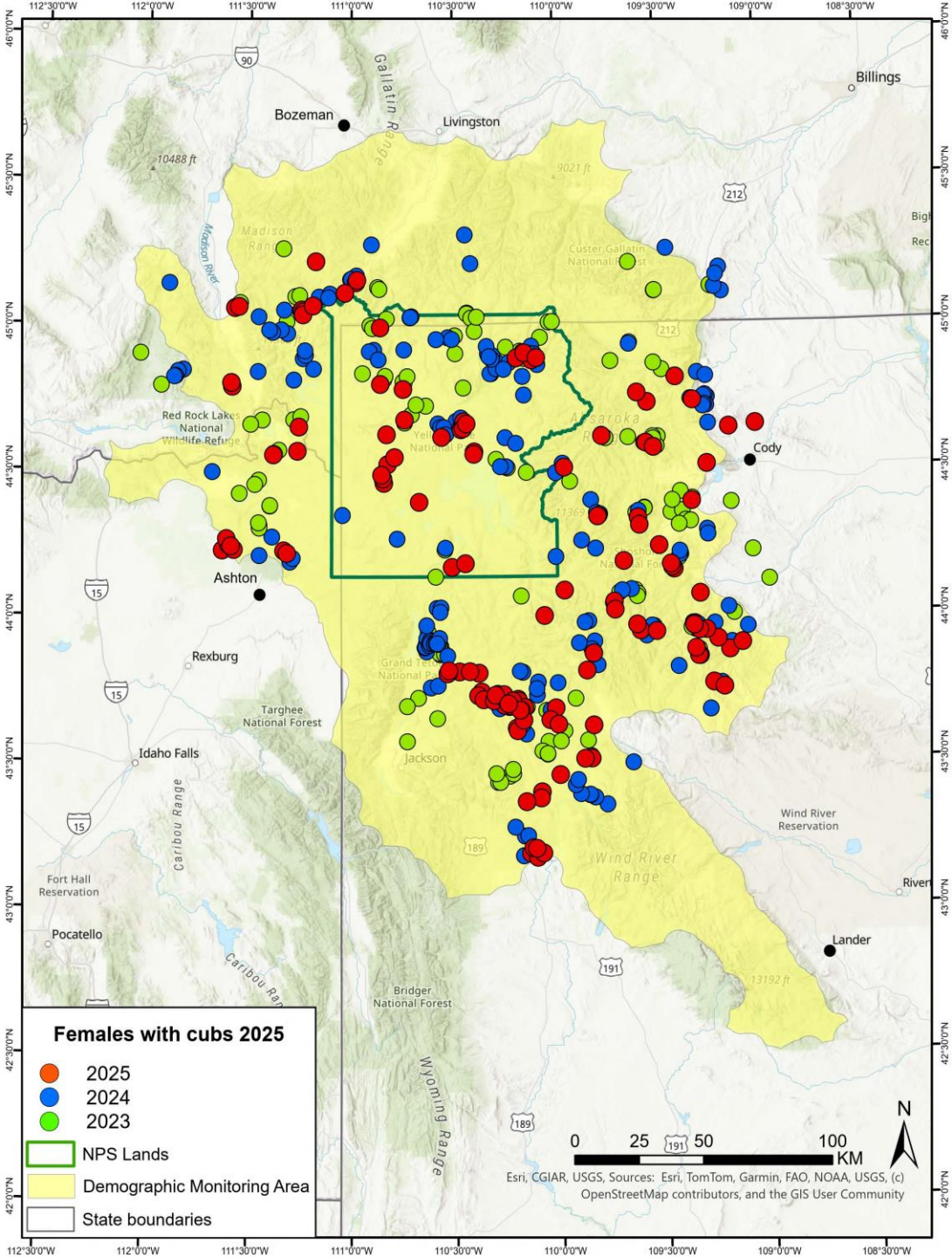
Parameter	Estimate
Unique females with cubs	65
Unique females with cubs (DMA only)	64
Unique females with cubs (DMA only + excluding telemetry sightings)	58
Chao2 estimate (DMA only)	87

Data as of 04/24/2026

Females with cubs 2023-2025

Observations

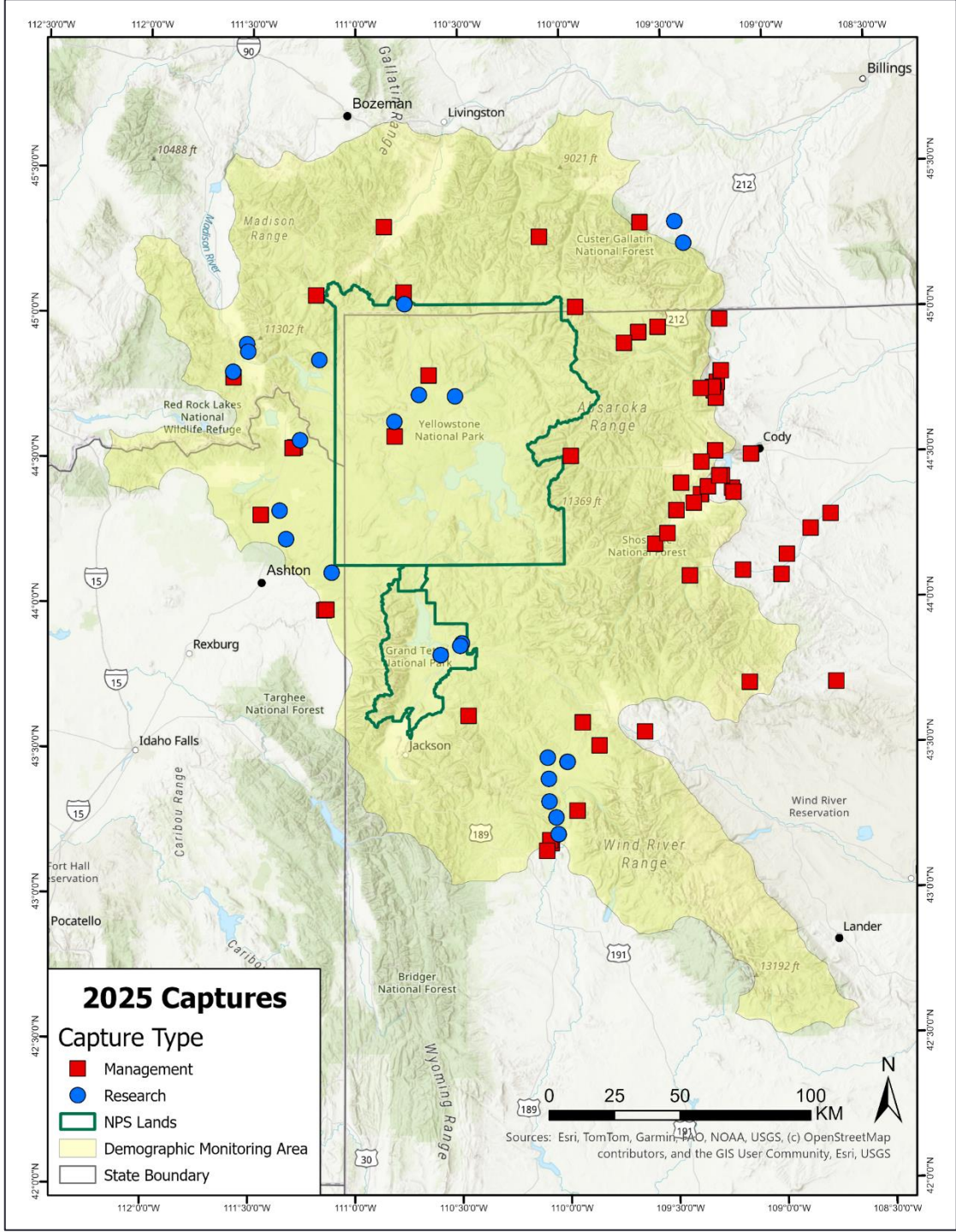
Den emergence through 31 Aug



Grizzly bear captures 2025

- **Total captures = 102**
  - Research = 36
  - Management 66
- **Individual bears = 98**
  - Females = 39
  - Males = 58
  - Unknown = 5
- **New bears = 69**

Captures as of 04/24/2026



Grizzly bears radio monitored 2025

Total monitored = 83

Adult females = 40

Current = 52

Females = 36

Males = 16

Bears missing = 0

(4 cast/dead)

Monitored as of 04/24/2026

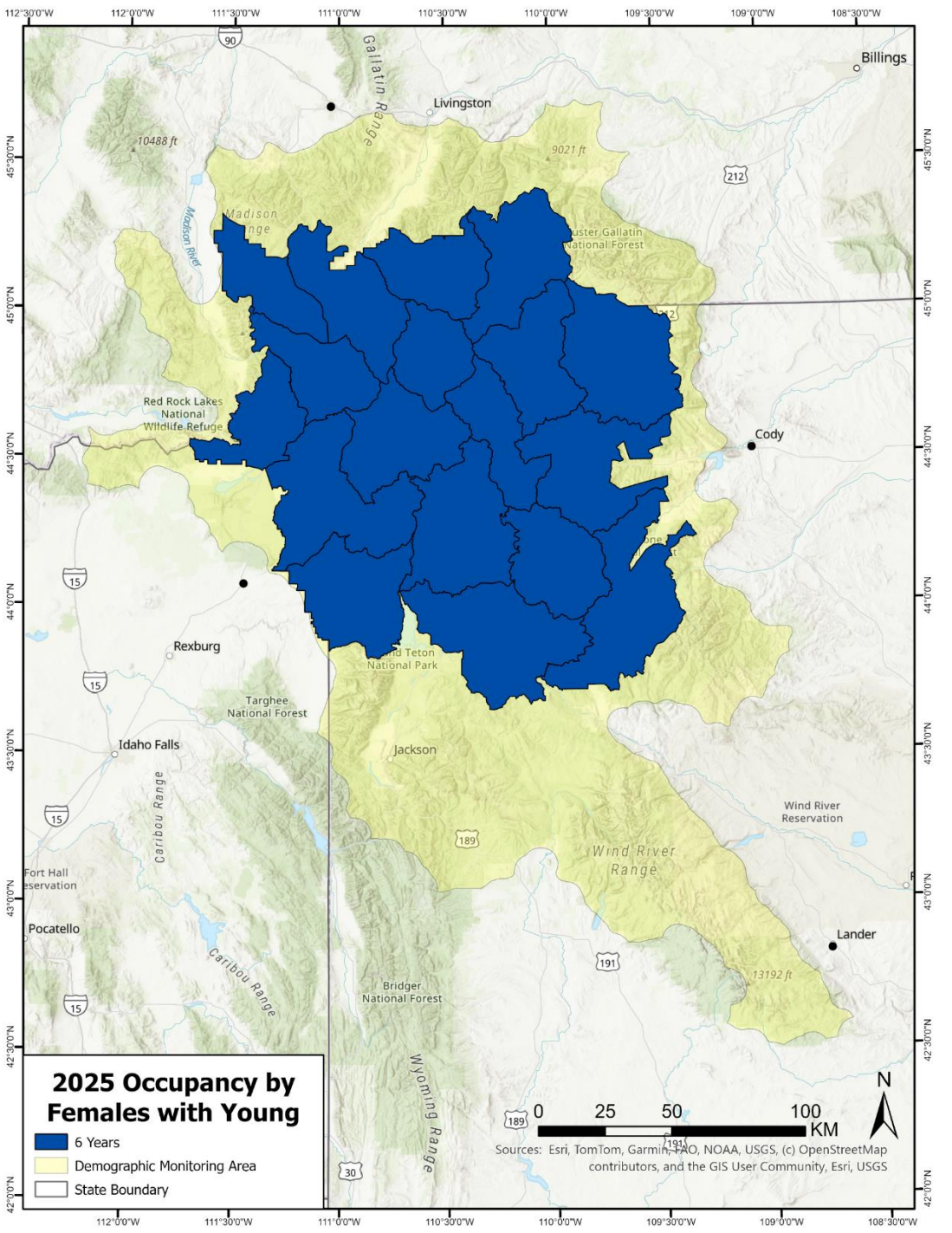
Photo: USGS/B. Karabensh/USGS

Occupancy by Females with Young

Photo: C. Whitman/USGS

Occupancy by females with young (cubs, yearlings, or 2-year-olds) 2025

- 18 of 18 Bear Management Units (BMUs) occupied during 2025
- 18 of 18 BMUs occupied during last 6 years (2020-2025)



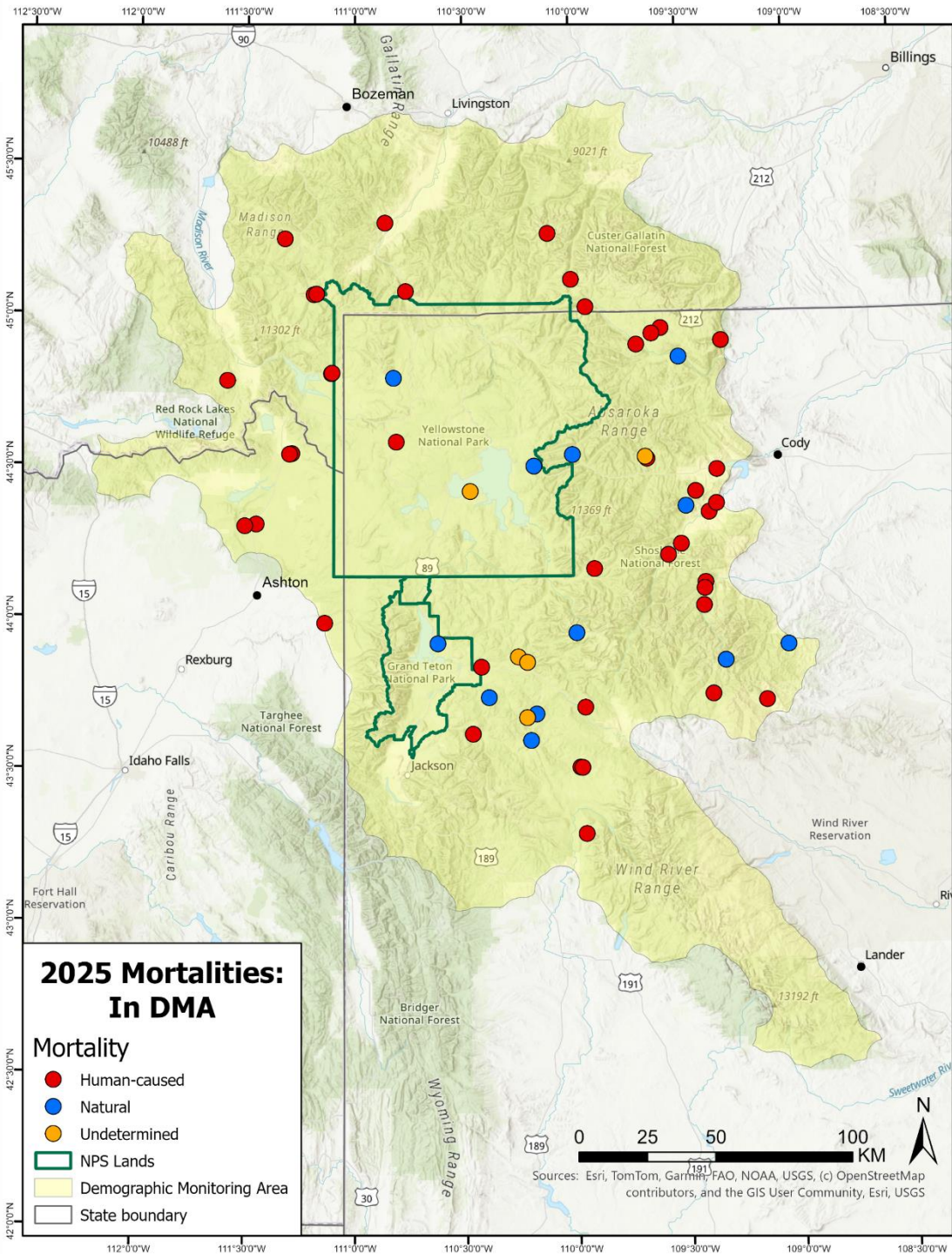
Mortalities

Photo: Wyoming Game and Fish Department

Known and probable mortalities 2025

- **54 in DMA**
  - 45 human-caused
  - 6 natural
  - 3 undetermined

Mortalities as of 04/30/2026



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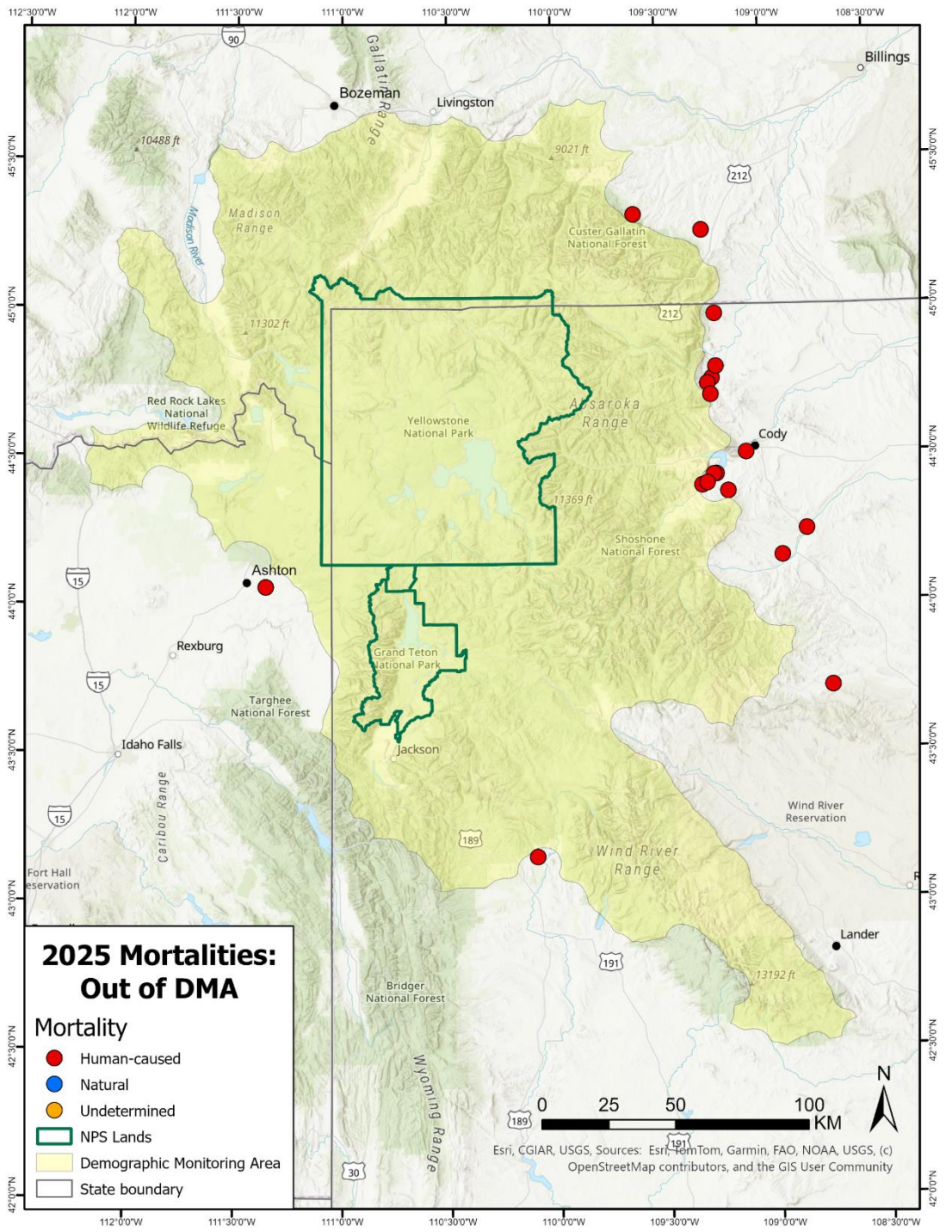
Known and probable mortalities 2025

- **54 in DMA**
  - 45 human-caused
  - 6 natural
  - 3 undetermined
- **18 Outside DMA**
  - All human-caused

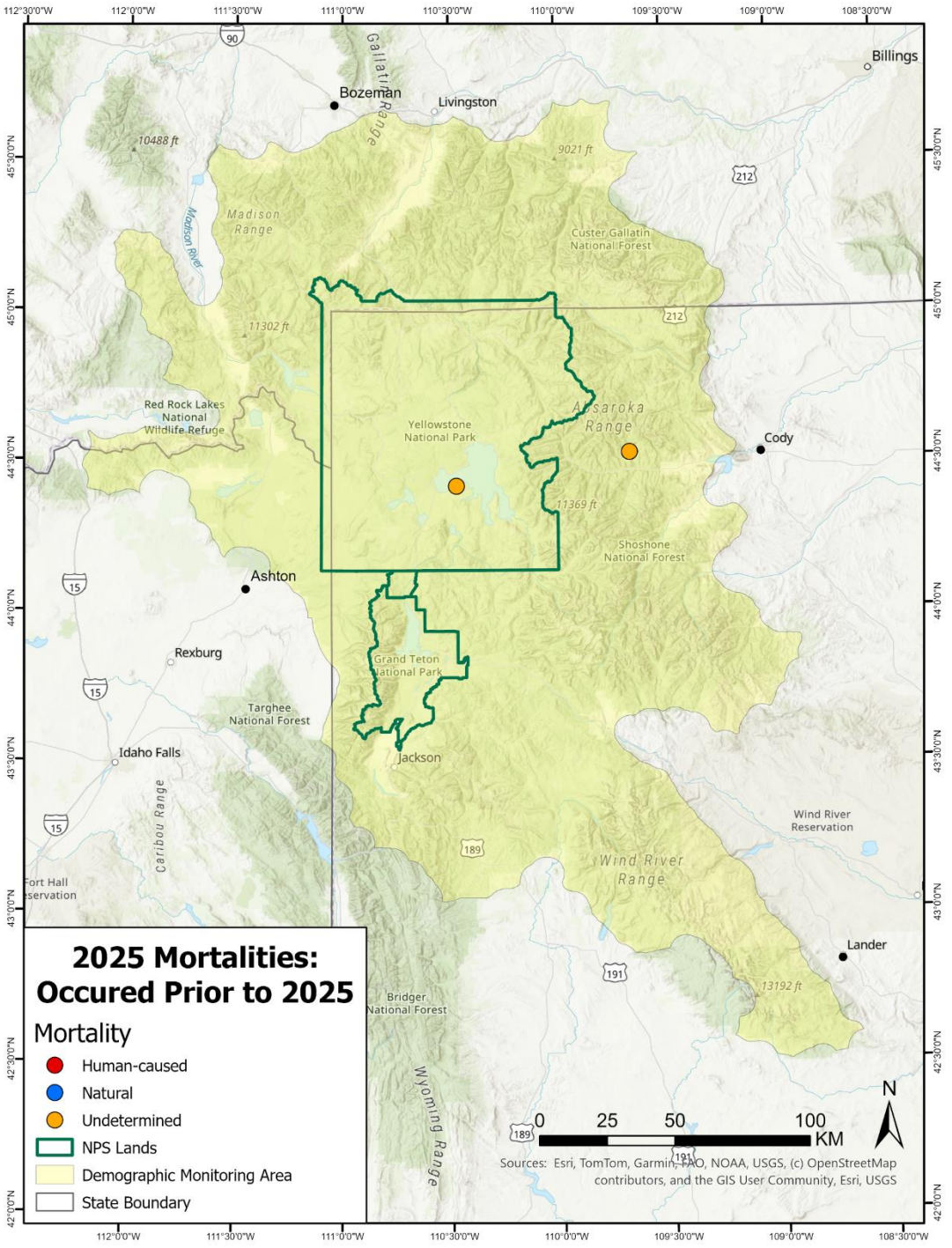


Mortalities as of 04/30/2026

Known and probable mortalities 2025

- **54 in DMA**
  - 45 human-caused
  - 6 natural
  - 3 undetermined
- **18 Outside DMA**
  - All human-caused
- **Prior years**
  - 2 undetermined (~2023 and 2024)

Mortalities as of 04/30/2026



Known and probable mortalities by sex and age class 2025 (inside DMA)

Area	Sex	Age class		Total
		Dependent (<2 years old)	Independent (≥2 years old)	
Inside DMA	Female	2	11	13
	Male	3	30	33
	Unknown	6	2	8
	Total	11	43	54

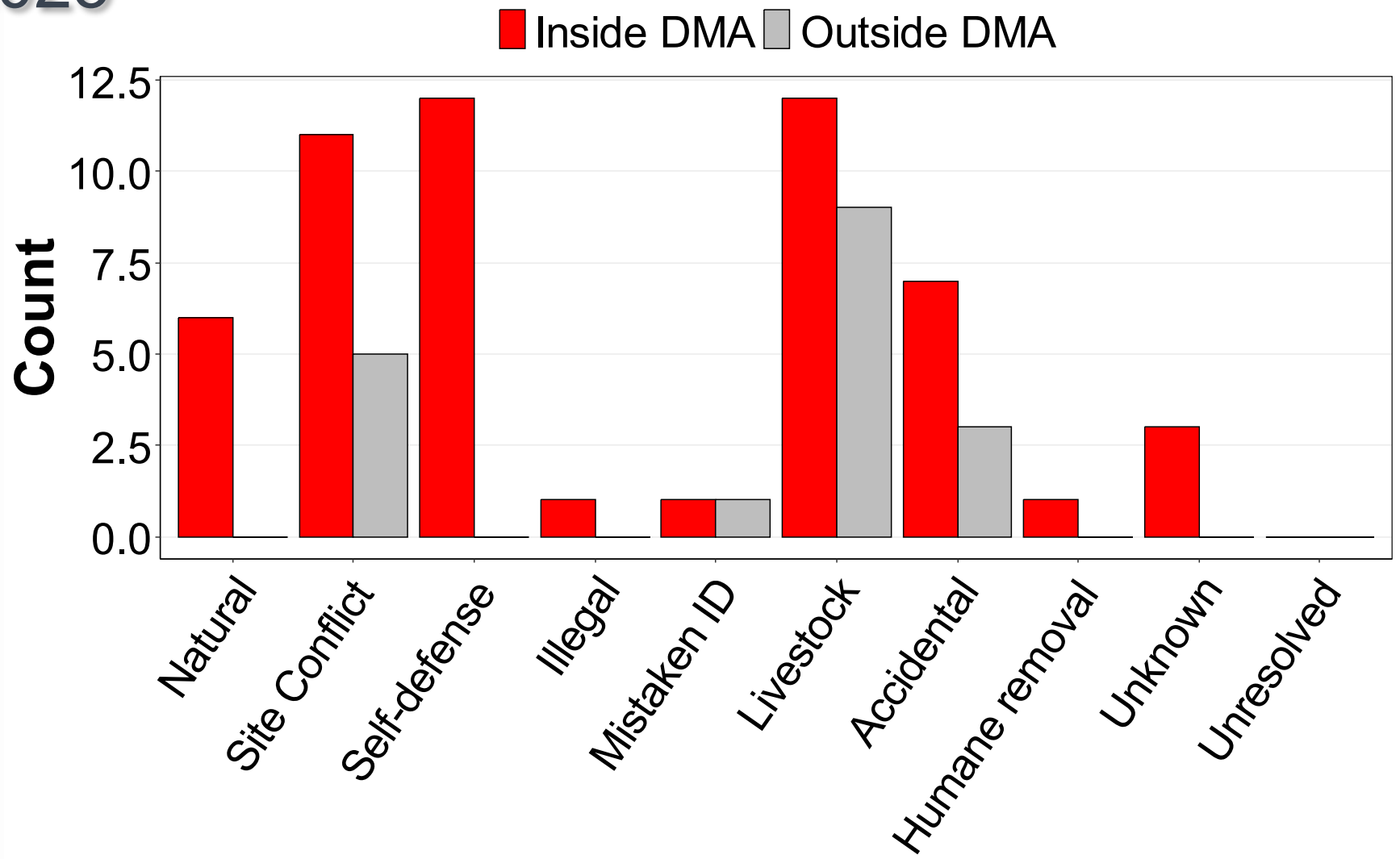
Mortalities as of 04/30/2026

Known and probable mortalities by sex and age class 2025 (outside DMA)

Area	Sex	Age class		Total
		Dependent (<2 years old)	Independent (≥2 years old)	
Outside DMA	Female	1	2	3
	Male	1	14	15
	Unknown	0	0	0
	Total	2	16	18

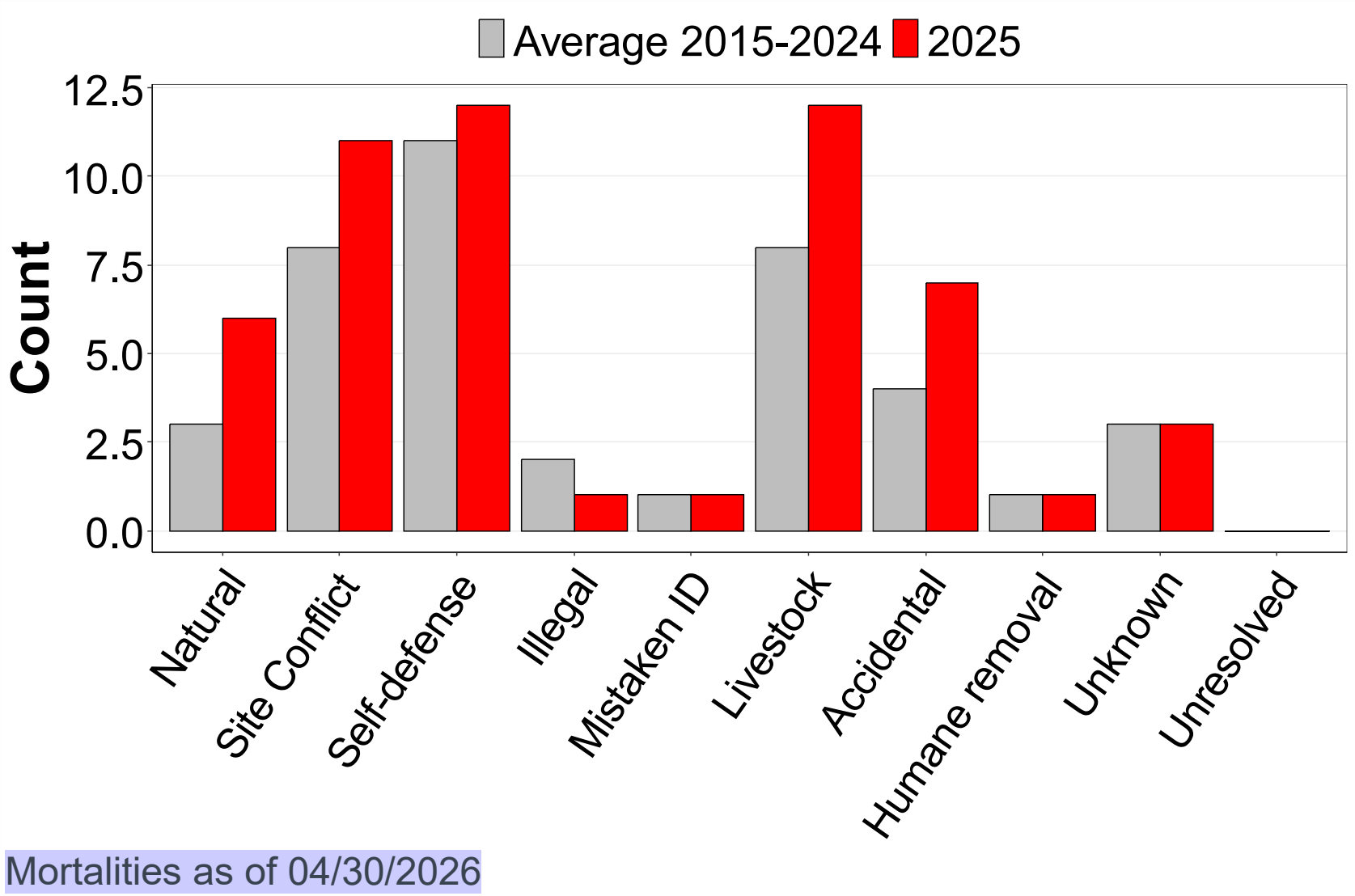
Mortalities as of 04/30/2026

Mortalities by DMA status and cause 2025



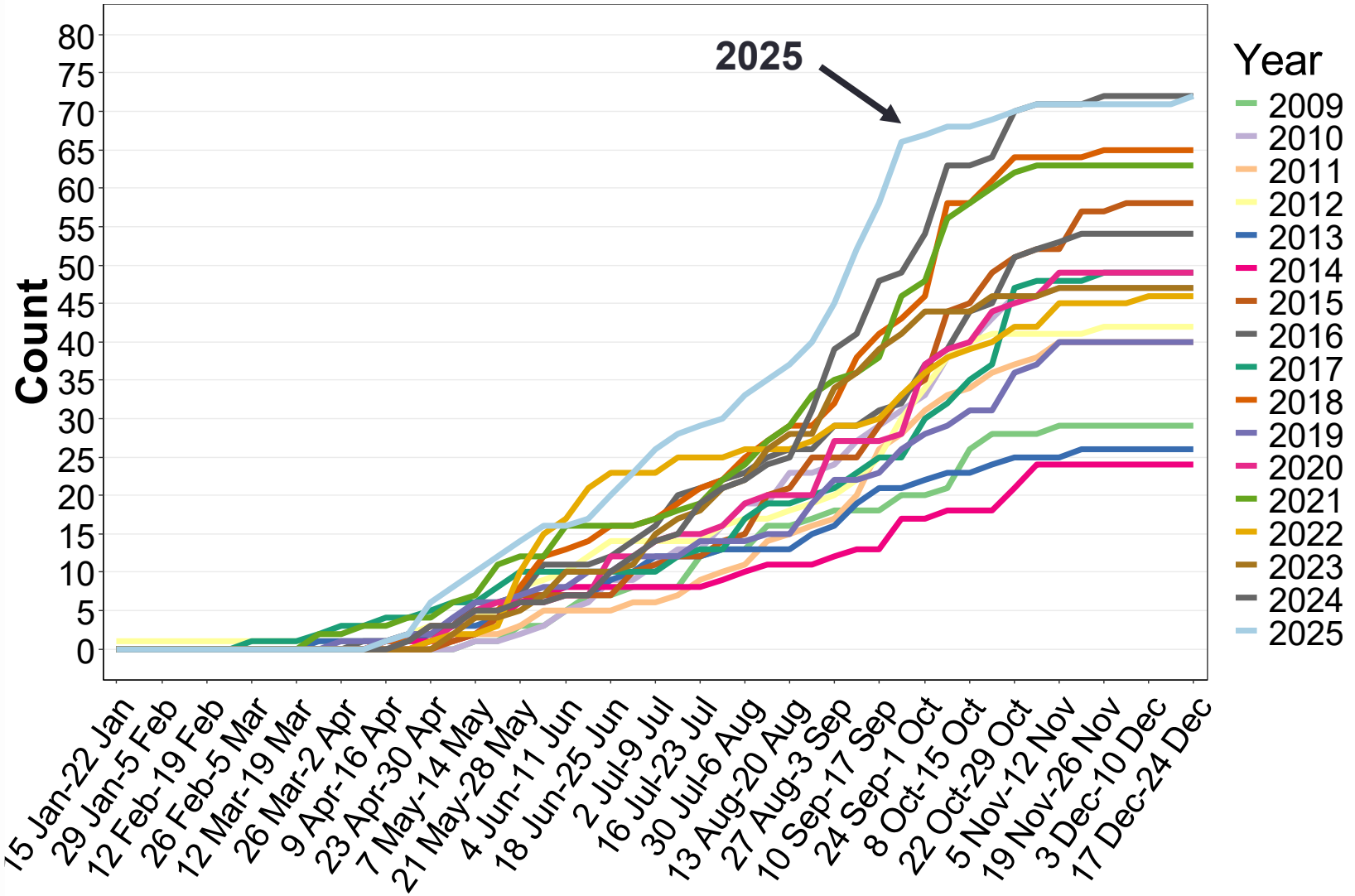
Mortalities as of 04/30/2026

Mortalities inside DMA by cause 2015–2024 vs. 2025



Mortalities as of 04/30/2026

Cumulative documented mortalities by week 2009–2025



Mortalities as of 04/30/2026

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Population size 2025 (IPM, DMA)

Population segment	Median estimate
Independent females (≥2 yrs)	373
Independent males (≥2 yrs)	364
Yearlings	102
Cubs born	211
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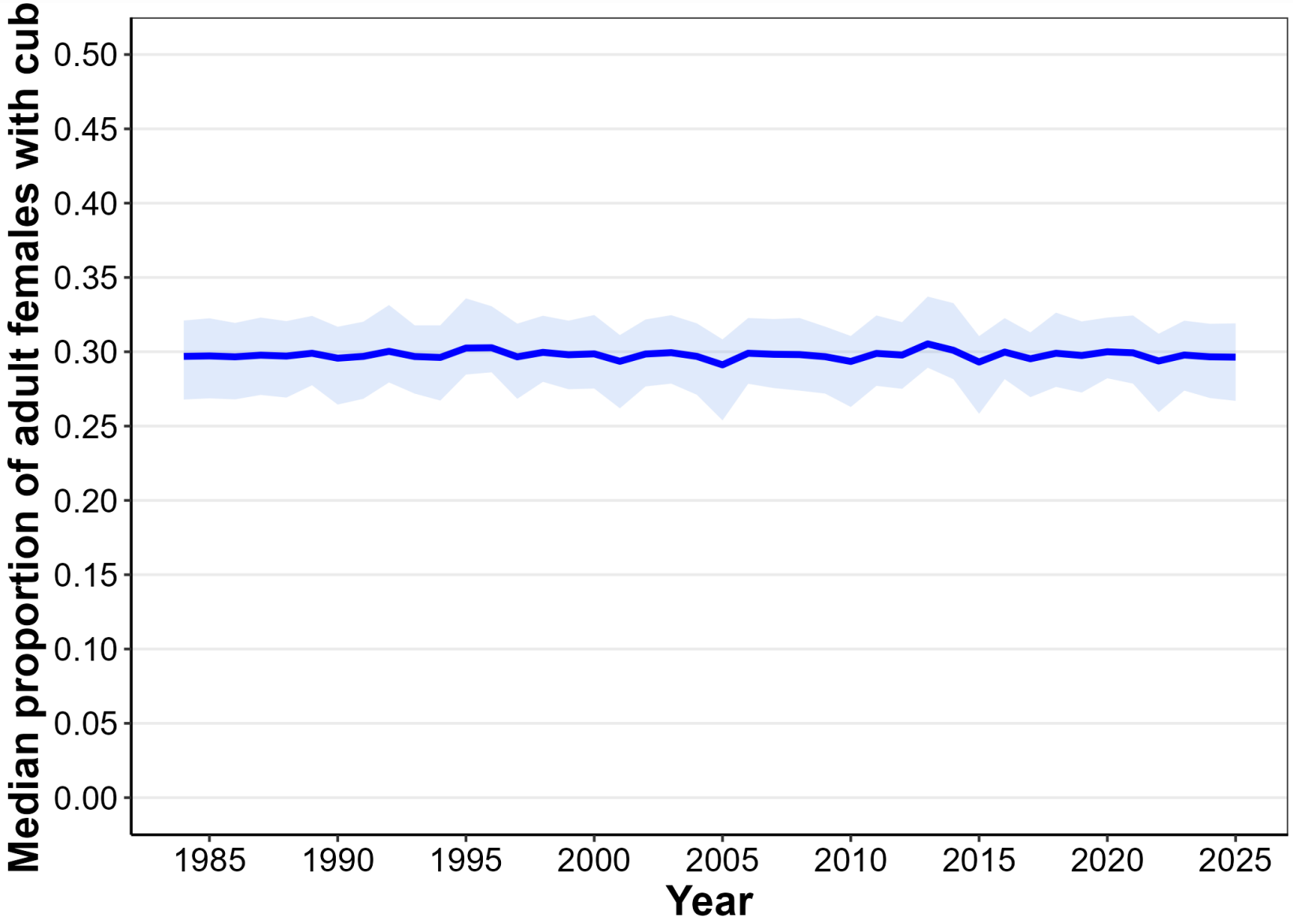
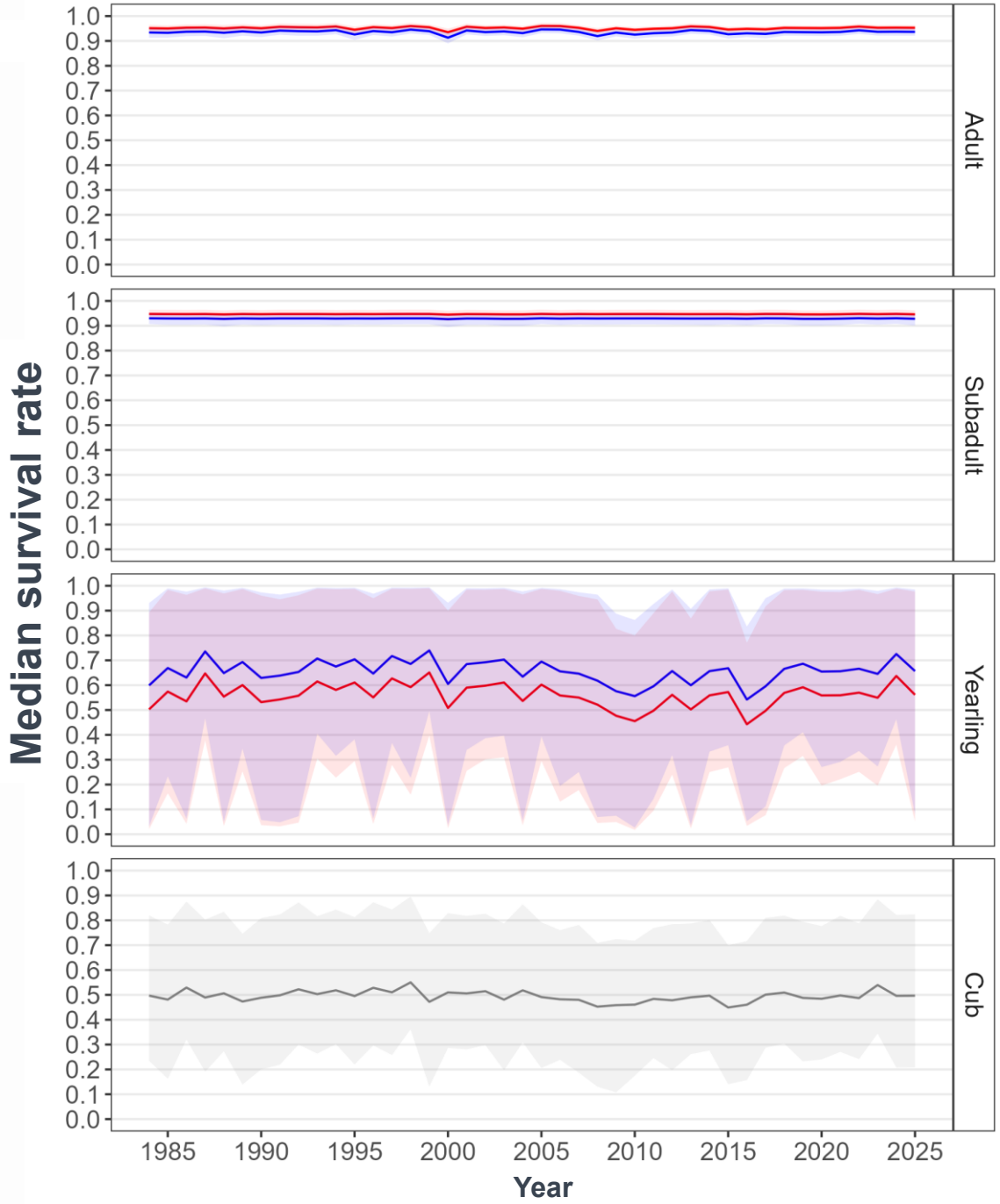
Total estimate 2025*	1,055 (95% CI = 901–1,247)

*Sum of segment medians slightly different from median of total estimate

Proportion of adult females with cubs



Survival



Age class

Adult (≥3 yrs old)

Subadult (2 yrs old)

Yearling (1 yr old)

Cub (<1 yr old)

Females

Males

Females & males

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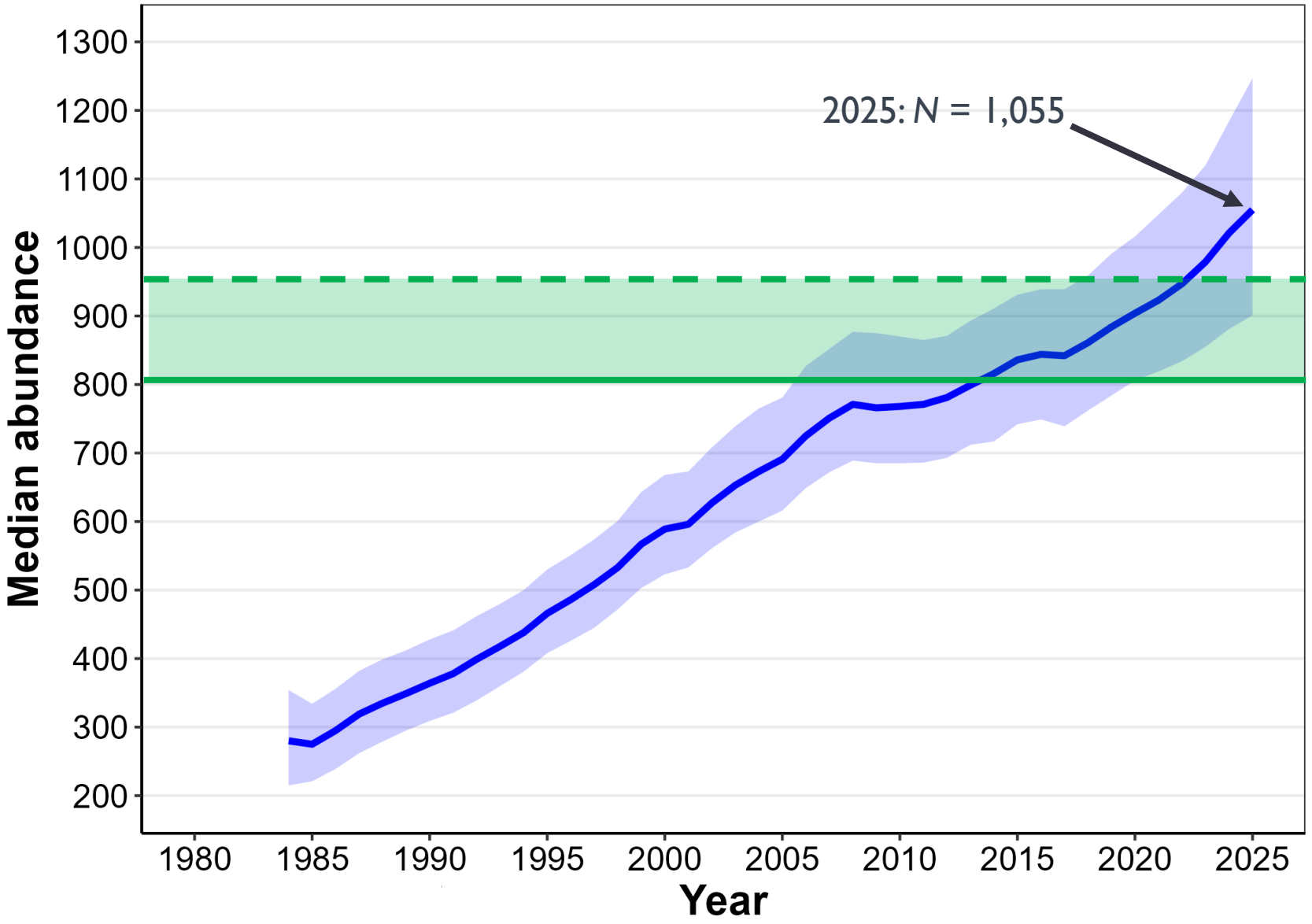
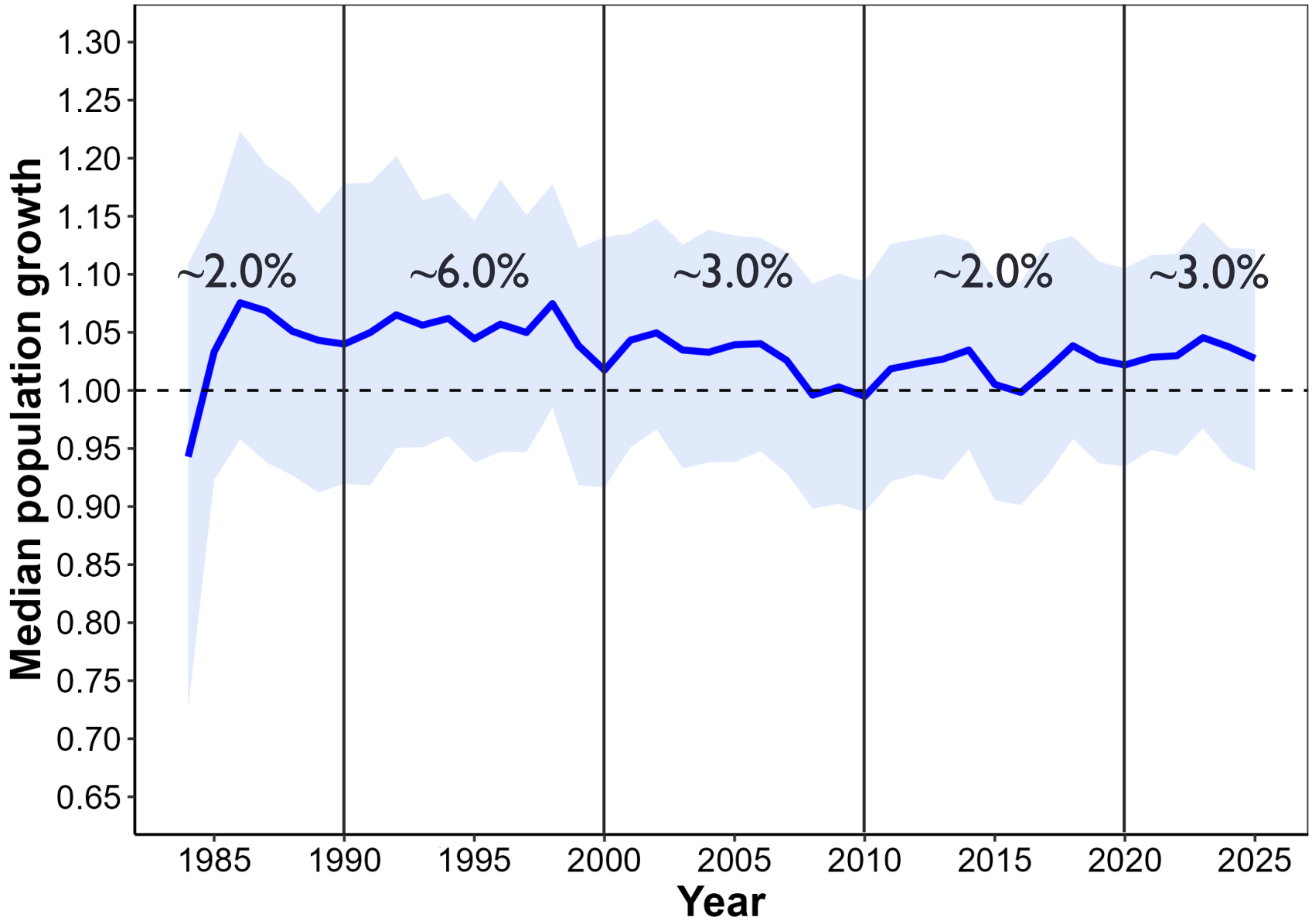
Total population size (IPM, in DMA)



Population growth (IPM, in DMA)



The Journal of Wildlife Management 80(2):300–313; 2016; DOI: 10.1002/jwmg.1005

Research Article

Density Dependence, Whitebark Pine, and Vital Rates of Grizzly Bears

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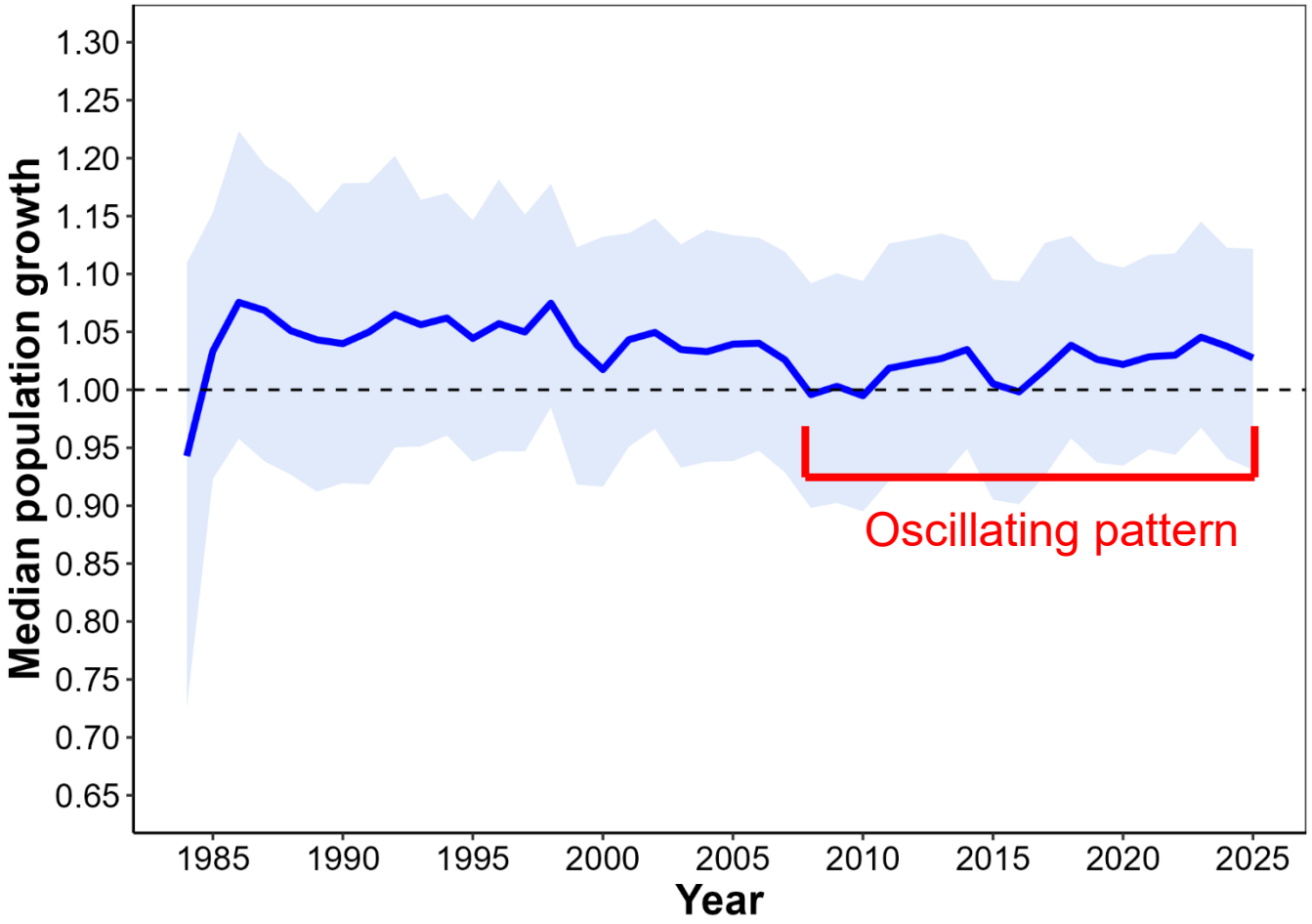
ABSTRACT Understanding factors influencing changes in population trajectory is important for effective wildlife management, particularly for populations of conservation concern. Annual population growth of the grizzly bear (*Ursus arctos*) population in the Greater Yellowstone Ecosystem, USA has slowed from 4.2–7.6%

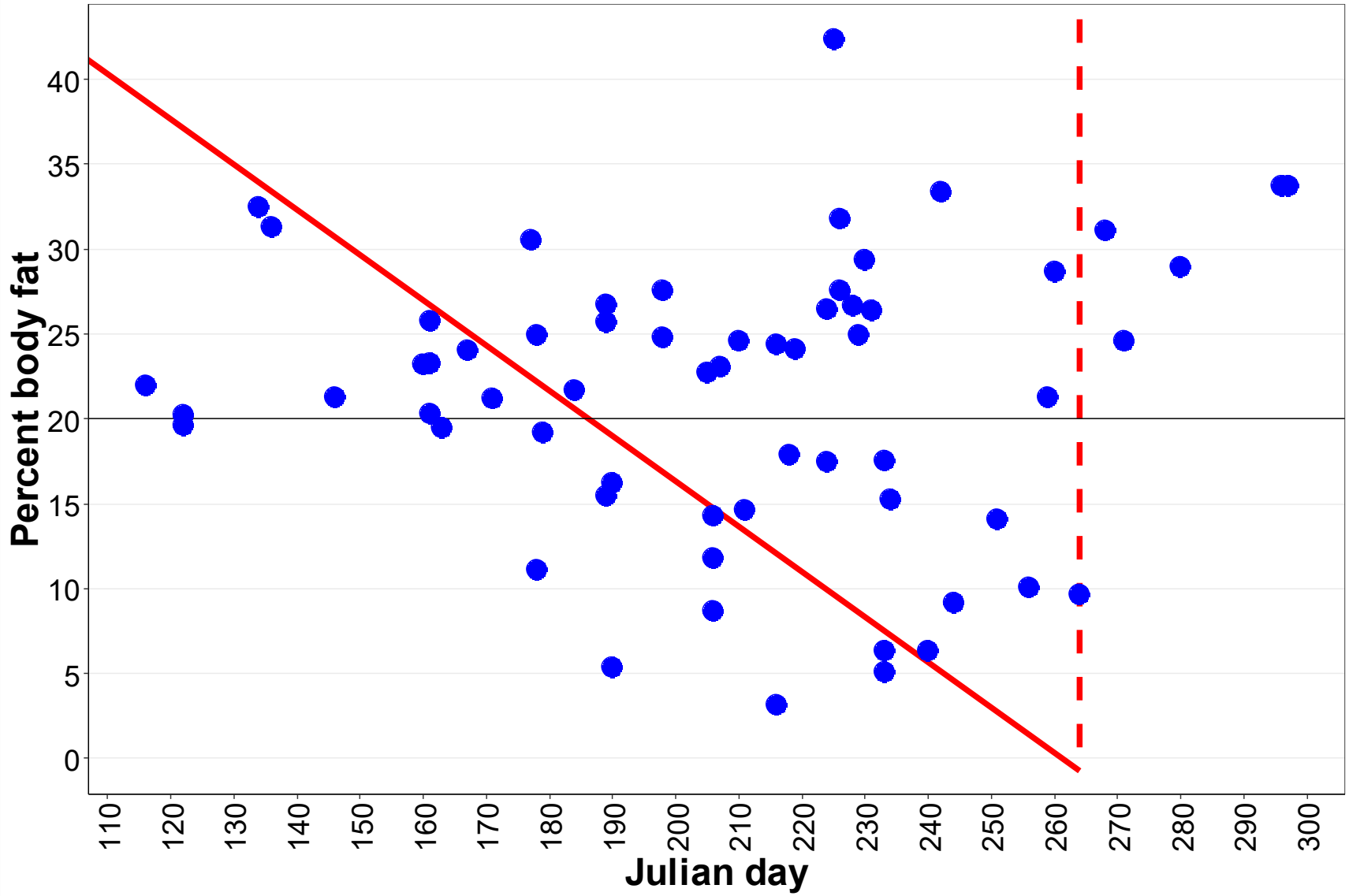
van Manen et al. (2016): "In fact, consideration should be given to the possibility that the population may start exhibiting fluctuations around a long-term mean. Such oscillations could include short periods of population increases or decreases, which may only be distinguished from sustained increasing or decreasing trends with continued, long-term monitoring."



Miscellaneous Updates

Photo: J. Davis

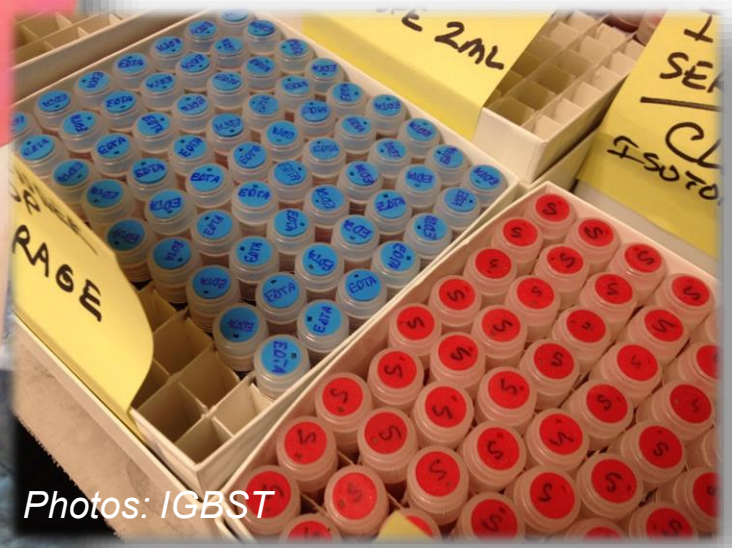
% Body fat by Julian day



Monitored as of 04/24/2026

Genetic monitoring

- Results for 1983-2024
- **1,654** individuals genotyped (20 microsatellite markers)
- No evidence of non-GYE ancestry in any of the individuals genotyped to date



GB1126

- Translocated from Northern Continental Divide Ecosystem in 2024
- Observed April 2026 with two cubs of the year
- First documented non-GYE ancestry by IGBST
- Words of caution
  - Lower success rate for first-time mothers
  - Low dependent survival rates
  - Long generation time (~14 years)
  - However, likely to reproduce again

Photo: Wyoming Game and Fish Department

Acknowledgments 2025

- **IDFG:** C. Bowlin, J. Brower, B. Cummings, I. Ellsbury, E. Freeman, C. Johnson, J. Melvin, M. Mumma, M. Pieron, E. Ruta, A. Sorenson, T. Swearingen
- **MSU**: O. Dalling, A. Litt, E. Loggers
- **MTFWP**: M. Becker, S. Brozovich, C. Costello, J. Cunningham, D. Fagone, K. Frey, W. Hansen, M. Heaton, D. McHugh, M. Jacobsen, B. Lloyd, K. Orozco, R. Pickens, R. Pohle, J. Ramsey, J. Smith, D. Scott, S. Stewart, O. Thomi, M. Wemple, D. Waltee
- **YNP**: J. Bergstrand, K. Gunther, Z. Haroldson, M. King, B. Mornin, M. O'Grady, E. Reinertson, D. Ruka, K. Vetter, J. Wright, T. Wyman
- **GTNP**: G. Angelo, B. Apel, T. Brasington, C. Butler, M. Clark, R. Clark, R. Coscarelli, S. Dewey, R. DuCharme, C. Faustman, C. Faustman, L. Fisher, J. Gonsiewski, N. Gonsiewski, C. Hayden, T. Hayden, C. Hutson, M. Kirby, L. Kirby, T. Kirby, A. Langford, J. Lieb, S. Liske, R. Mascia, T. Mascia, S. Morriss, S. Morriss, J. Potter, A. Ryan, S. Ryan, J. Schwabedissen, J. Stephenson, B. Swift, D. Titley, K. Titley, E. Vetter, P. Waite, A. Willemain, C. Willemain, J. Willemain, K. Wilmot, C. Whaley, A. Zuckerman
- **Pilots and Observers**: N. Cadwell, M. Packila
- **Shoshone and Arapaho Tribes**: Eastern Shoshone Business Council, Northern Arapaho Business Council, G. Gonzalez, J. Friday, A. Lawson, B. Snyder, W. Wagon, D. Williams
- **Speedgoat**: P. Lukacs, H. Martin, J. Nowak
- **USFS**: S. Derusseau, J. Flower, E. Moyer, K. Murphy, M. Park, A. Pils, S. Pils, K. Skeen, D. Tyers
- **USFWS**: S. Becker, H. Cooley, J. Fortin-Noreus, P. Hnilicka, B. Jimenez, W. Lane, B. Lyons, M. Mazur, M. Munn
- **USGS**: B. Augustine, C. Dickinson, M. Gould, M. Haroldson, B. Karabensh, K. Schafer, F. T. van Manen, C. Whitman, B. Whitman; A. Corradini, A. Donatelli, S. Stephens
- **WS**: K. Glazier, F. Helske, C. Hoover, A. Kammann, C. Knopp, G. McDougal, J. Rost, D. Tidwell
- **WGFD:** C. Atkinson, M. Aughton, B. Baker, M. Boyce, J. Clapp, C. Class, T. Crane, J. Crump, A. Courtemanch, B. DeBolt, J. Dellinger, L. Ellsbury, B. Frude, G. Gerharter, Z. Gregory, J. Hunter, B. Hovinga, R. Kindermann, J. Kraft, B. Kroger, K. Lash, J. Lund, K. Mills, T. Mong, P. Quick, P. Rivera, C. Schoonover, K. Secrist, C. Stewart, A. Stevens, D. Smith, J. Stephens, S. Stingley, D. Thompson, J. Winter, L. Wood.

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