Interagency Grizzly Bear Study Team
2026 Research & Monitoring Update



USGS science for a changing world

Photo: J. Davis

Study Team Members

Cade Bowlin (IDFG)

Justin Clapp (WGFD)

Hilary Cooley (USFWS)

Cecily Costello (MTFWP)

Justin Dellinger (WGFD)

Matthew Gould (USGS)

Kerry Gunther (NPS)

Mark Haroldson (USGS)

Pat Hnilicka (USFWS)

Becca Lyon (USFWS)

Matt Mumma (IDFG)

Justin Schwabedissen (NPS)

Jeremiah Smith (MTFWP)

Dan Thompson (WGFD)

Dan Tyers (USFS)

Frank T. van Manen (USGS)

Kate Wilmot (NPS)

Overview

Research and monitoring update

- Females with cubs
- Occupancy of reproductive females
- Mortalities

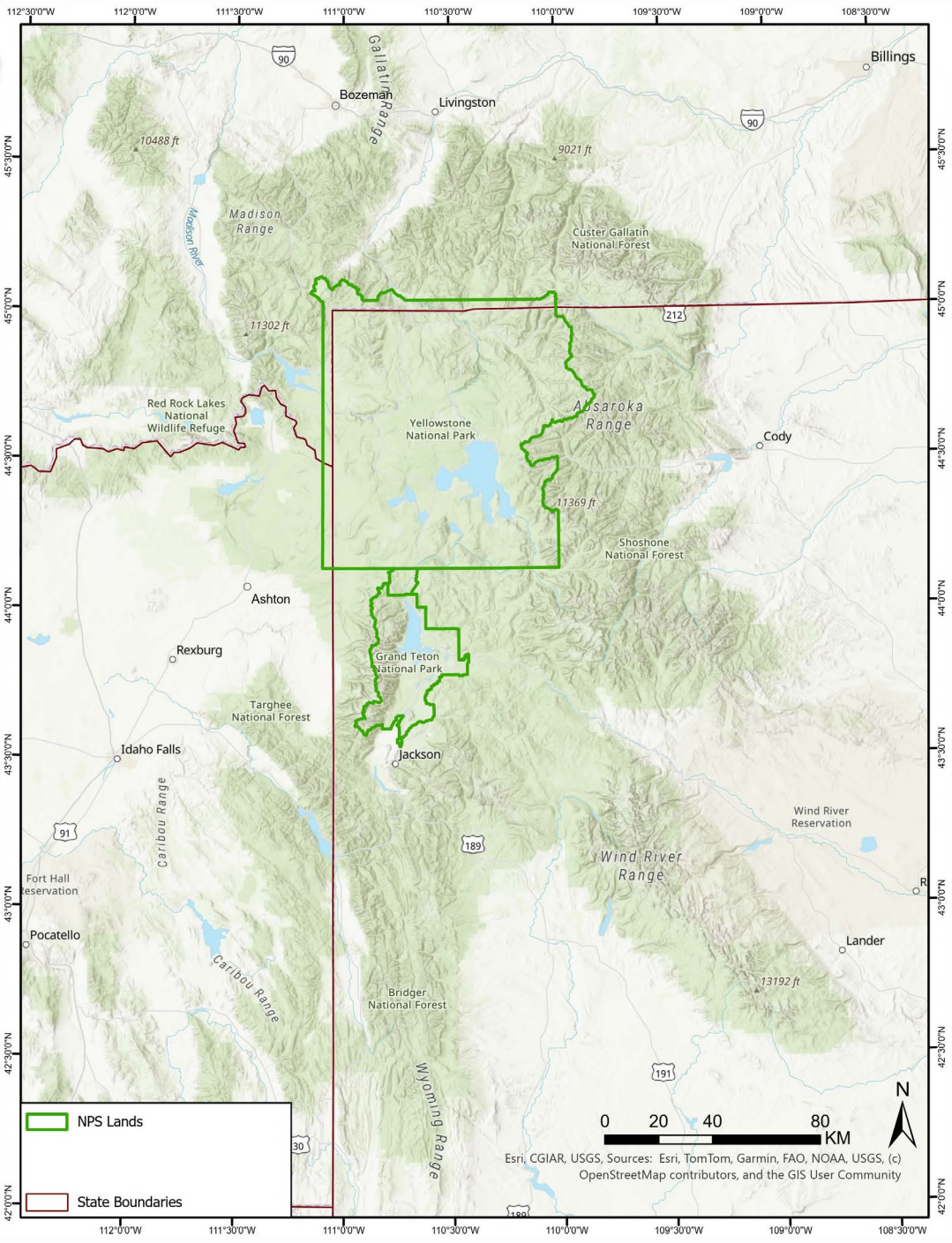
Miscellaneous updates

This information is preliminary and is subject to revision. It is being provided to meet the need for timely best science. The information is provided on the condition that neither the U.S. Geological Survey nor the U.S. Government shall be held liable for any damages resulting from the authorized or unauthorized use of the information

Photo: J. Davis

Greater Yellowstone Ecosystem

National Parks = 10,344 km^2

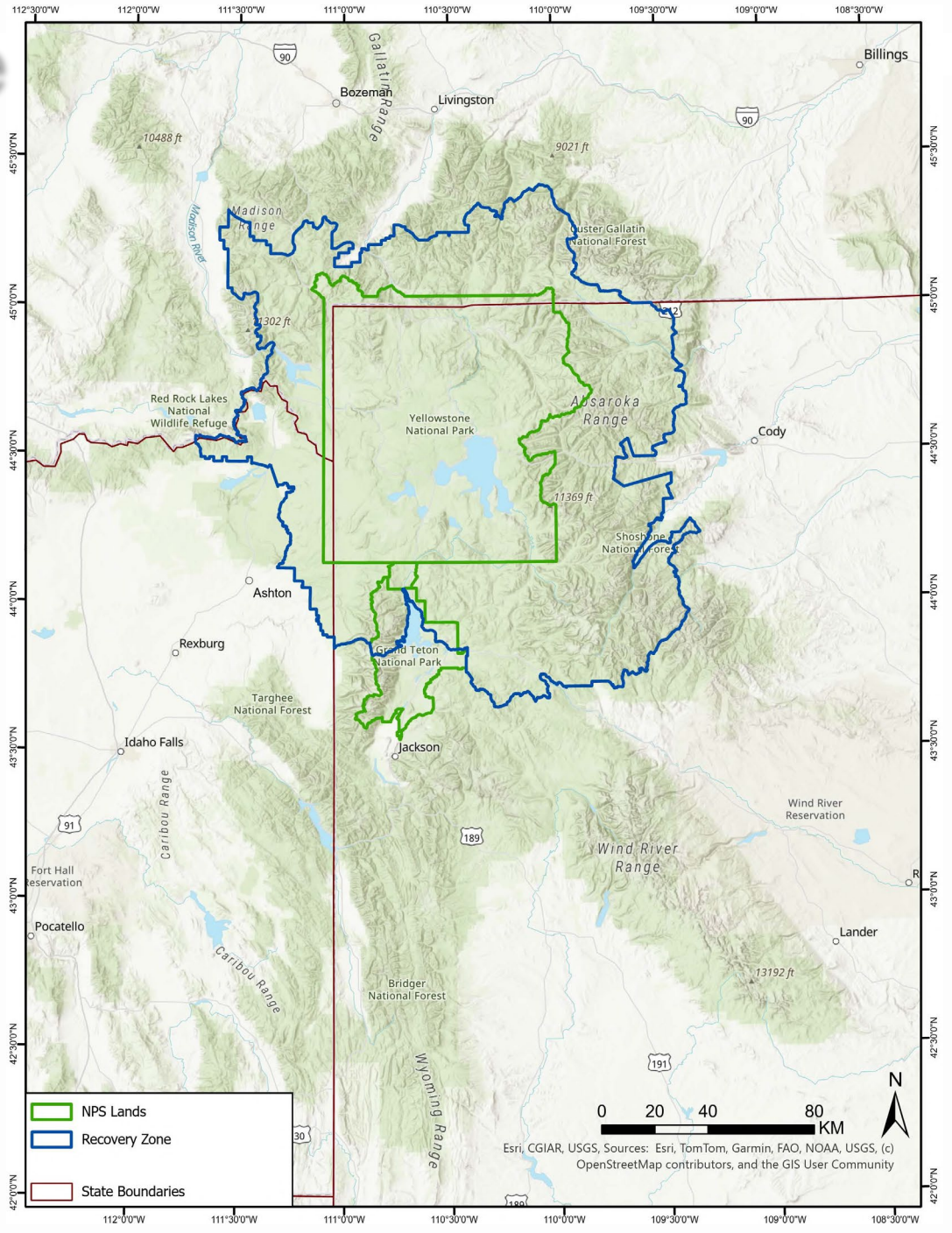


IGBST

Greater Yellowstone Ecosystem

National Parks = 10,344 km^2

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



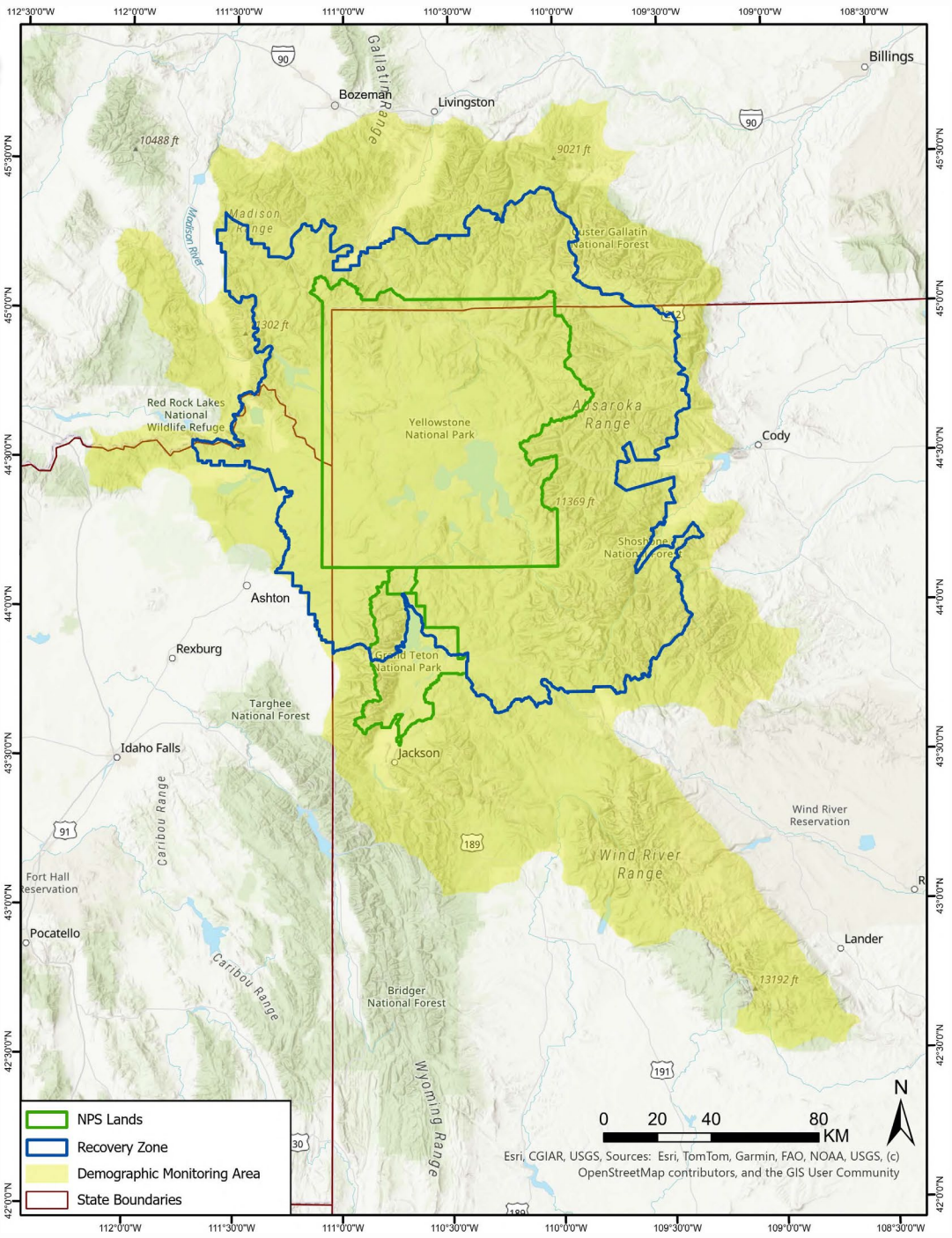
IGBST

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)



IGBST

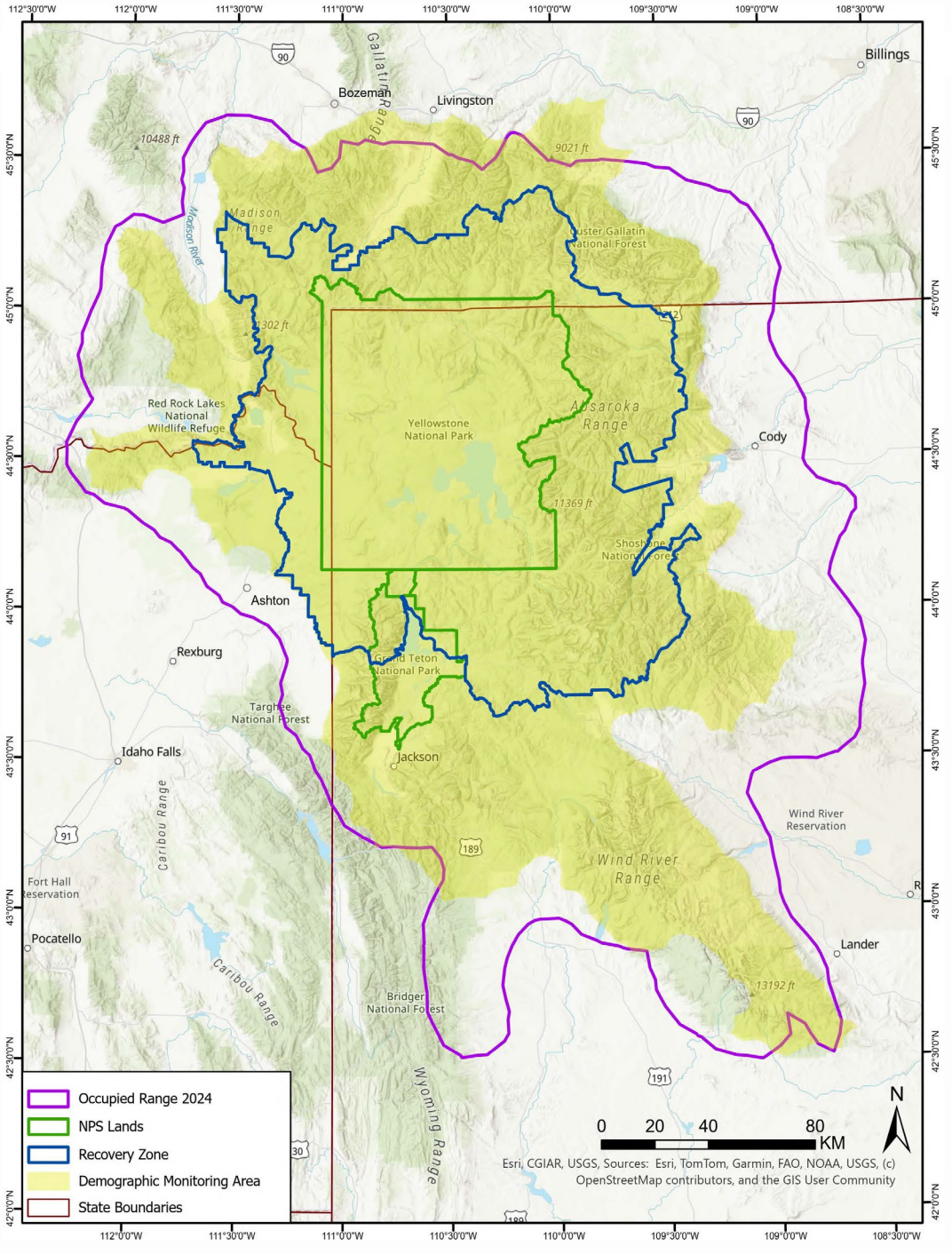
Greater Yellowstone Ecosystem

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) (Dellinger et al. 2026)



IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Females with Cubs of the Year and Population Size



IGBST

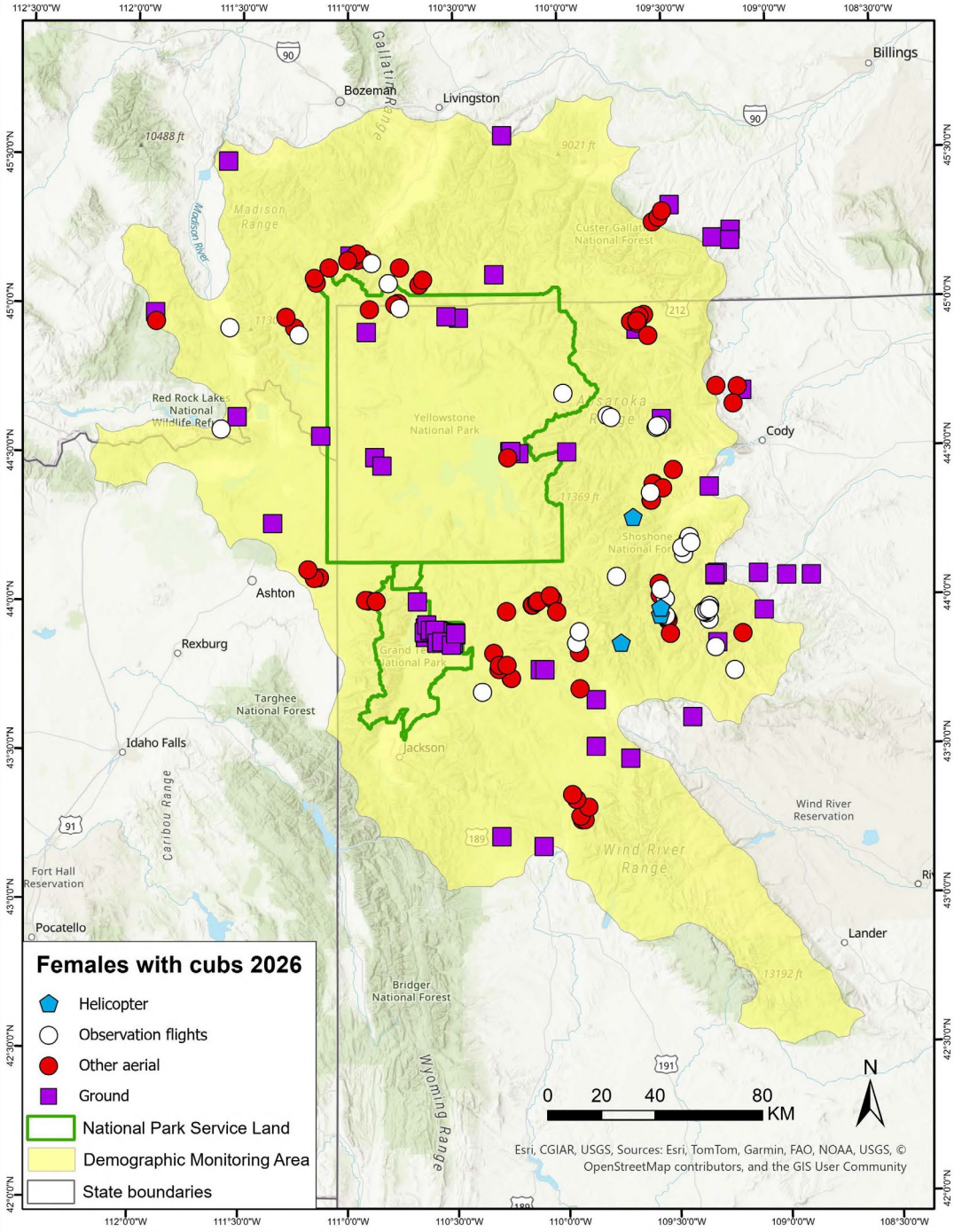
Photo: J. Davis

Females with cubs 2026

212 observations

- 35 observation flights (16%)
- 81 other aerial (38%)
- 97 ground (46%)

Data as of 11/16/2026



IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Females with cubs 2026

212 observations

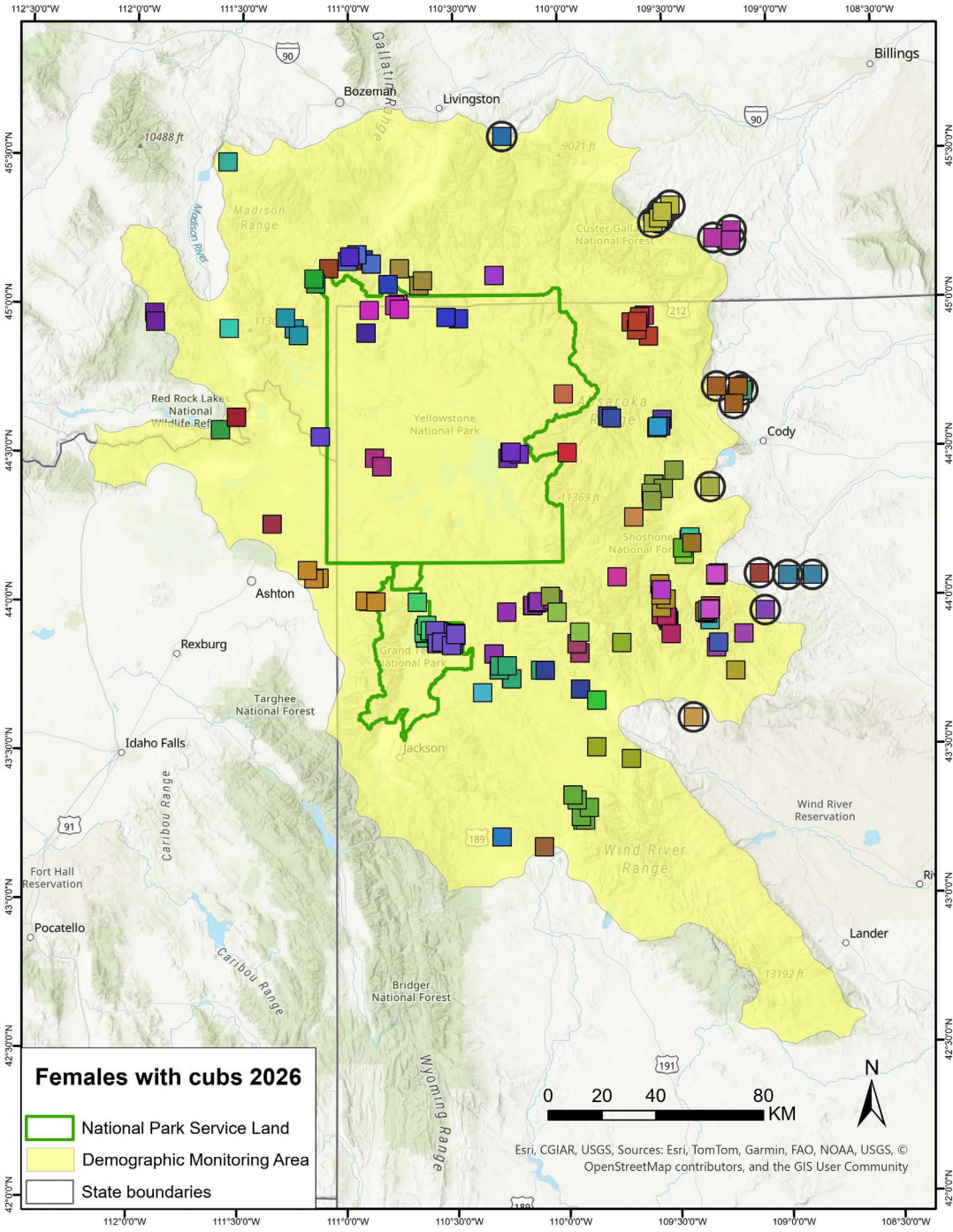
- 35 observation flights (16%)
- 81 other aerial (38%)
- 97 ground (46%)

73 unique females with cubs

Mean litter size = 1.9

- 17 single (23%)
- 45 twins (62%)
- 9 triplets (12%)
- 2 quadruplets (3%)

Data as of 11/16/2026



IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Number of females with cubs 2026

Parameter	Estimate
Unique females with cubs	73
Unique females with cubs (DMA only)	64
Unique females with cubs (DMA only + excluding telemetry sightings)	58
Chao2 estimate (DMA only)	82

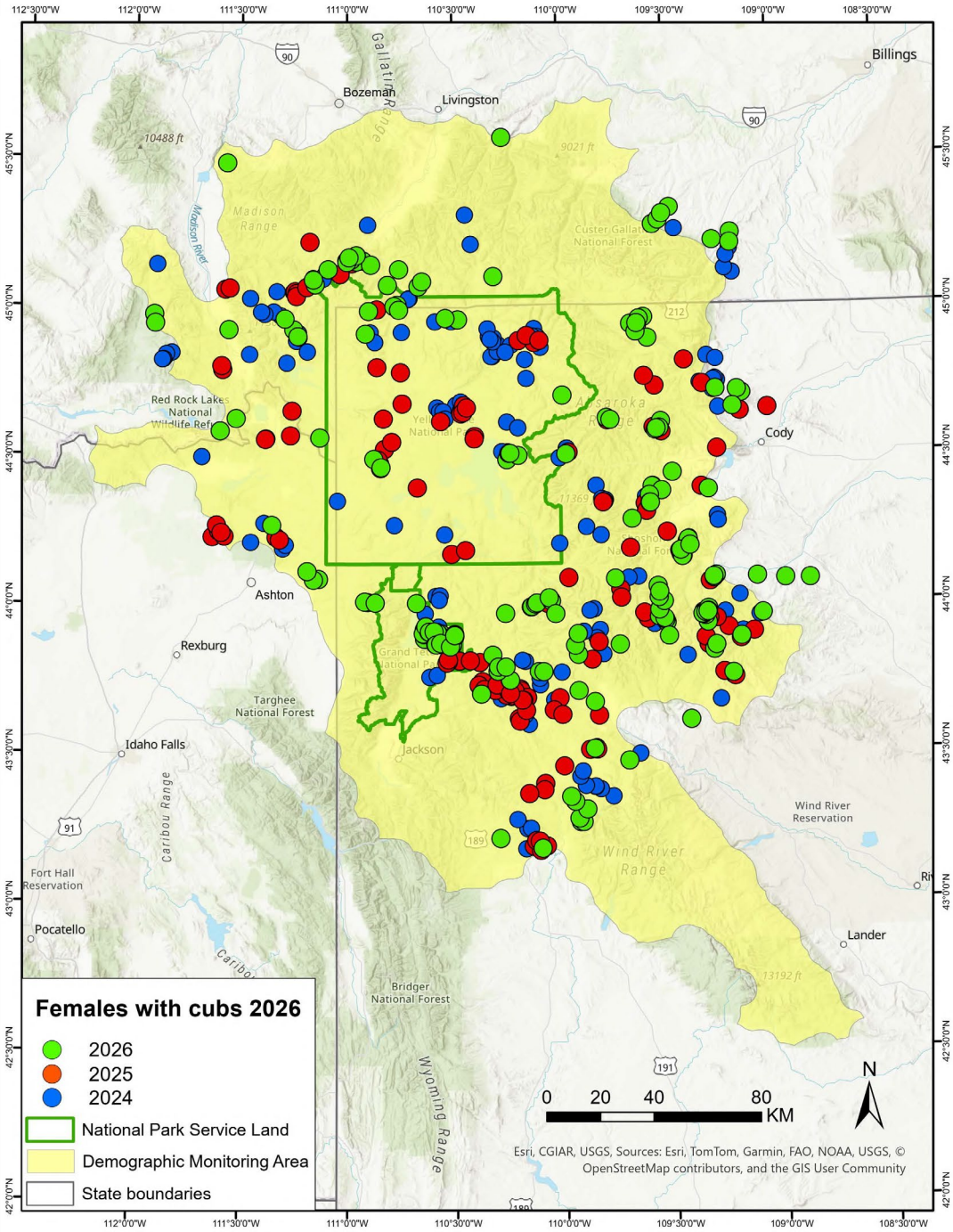
Data as of 11/16/2026

Preliminary information-subject to revision. Not for citation or distribution.

Females with cubs 2024-2026

Observations

Den emergence through 31 Aug



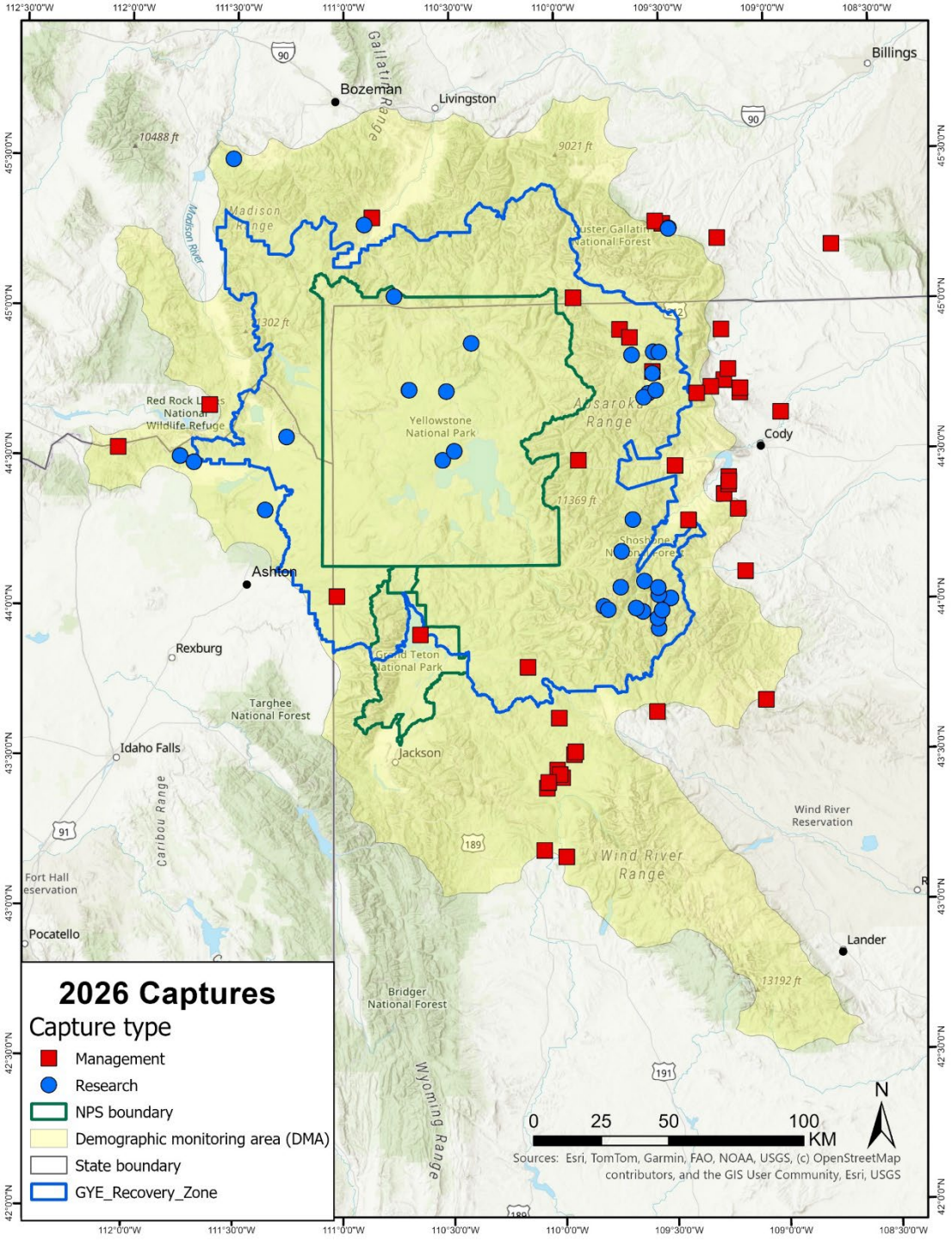
IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Grizzly bear captures 2026

- **Total captures = 112**
  - Research = 55
  - Management = 57
- **Individual bears = 104**
  - Females = 34
  - Males = 70
  - Unknown = 0
- **New bears = 80 (77%)**
  - 1998-2025 = 63%

Data as of 11/16/2026



IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Grizzly bears radio monitored 2026

Total monitored = 114

Adult females = 49

Current = 61

Females = 40

Males = 21

Bears missing = 0

(1 with probable battery failure)



Data as of 11/16/2026

Preliminary information-subject to revision. Not for citation or distribution.

Occupancy by Females with Young



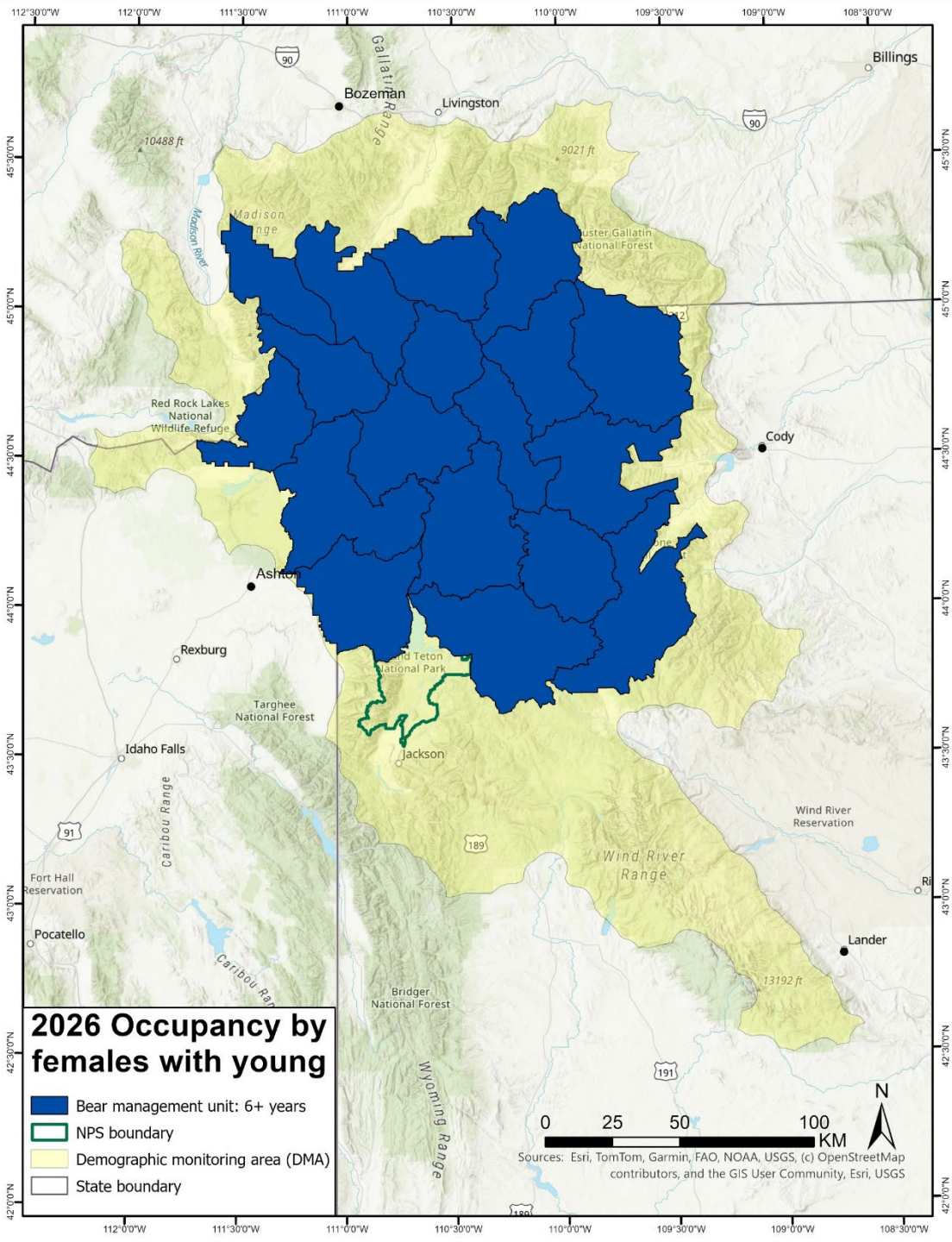
IGBST

Photo: J. Davis

Occupancy by females with young (cubs, yearlings, or 2-year-olds) 2026

- 18 of 18 Bear Management Units (BMUs) occupied during 2026
- 18 of 18 BMUs occupied during last 6 years (2021-2026)

Data as of 11/16/2026



IGBST

Preliminary information-subject to revision. Not for citation or distribution.

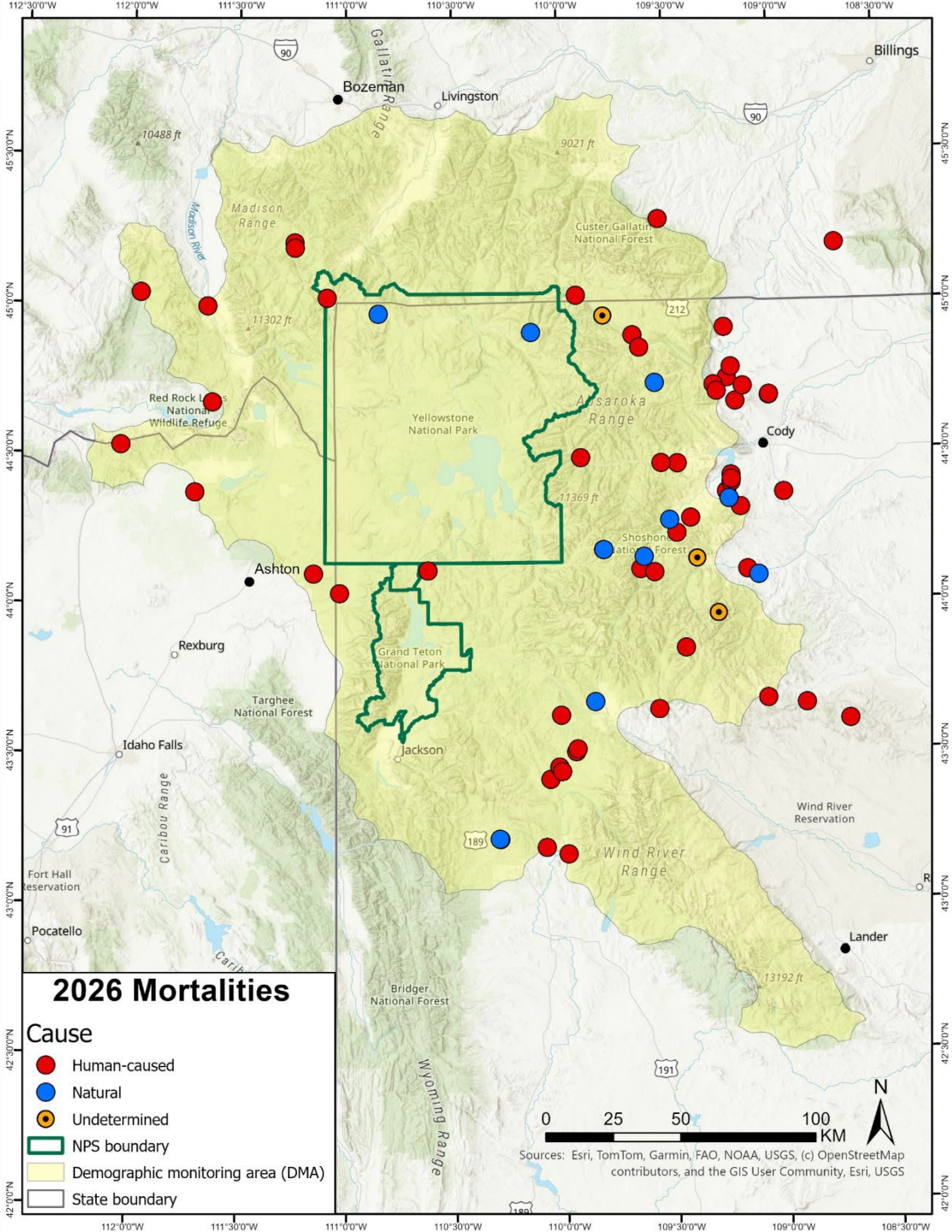
Mortalities



Photo: F.T. van Manen/USGS

Known and probable mortalities 2026

- **84 documented**



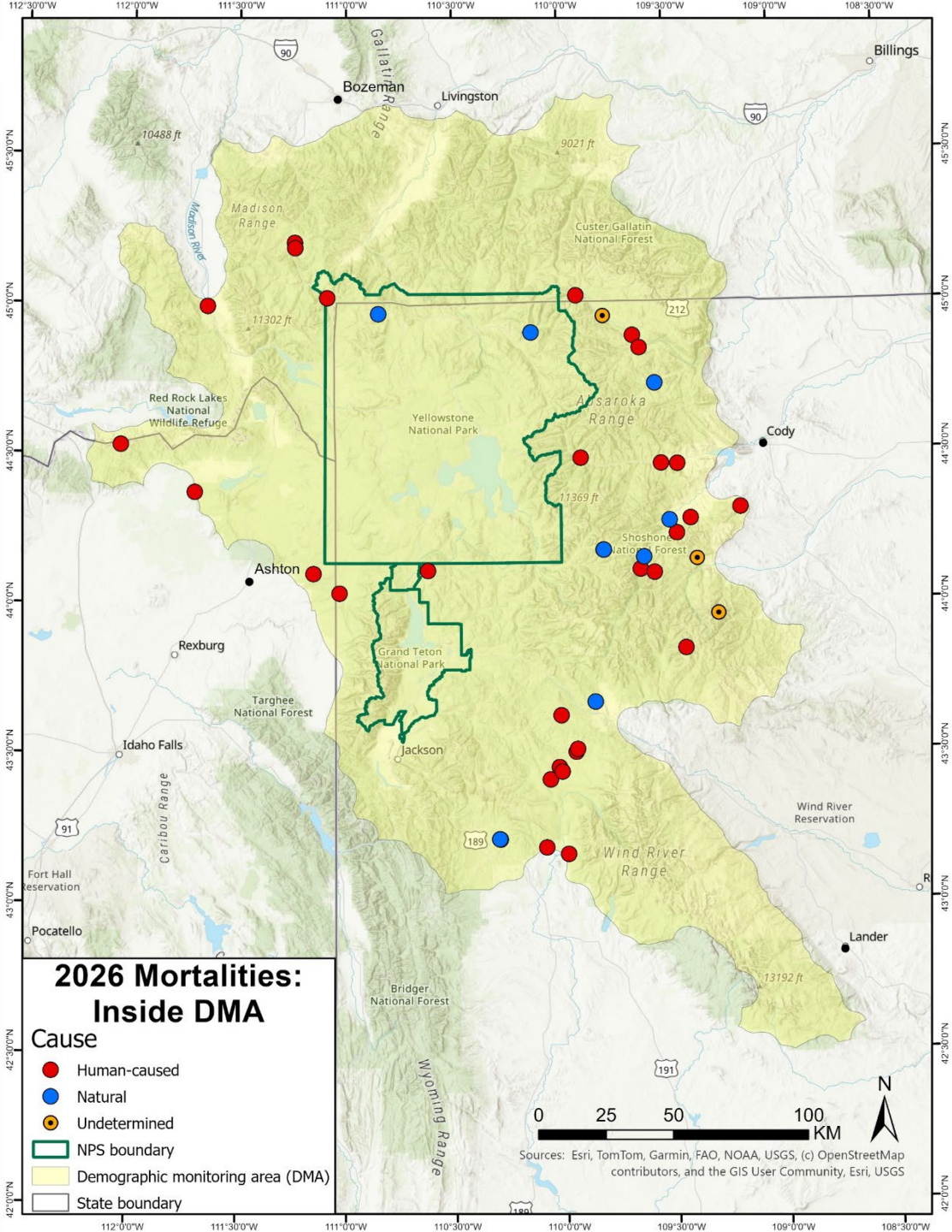
Data as of 11/16/2026

IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Known and probable mortalities 2026

- **50 in DMA**
  - 40 human-caused
  - 8 natural
  - 2 undetermined



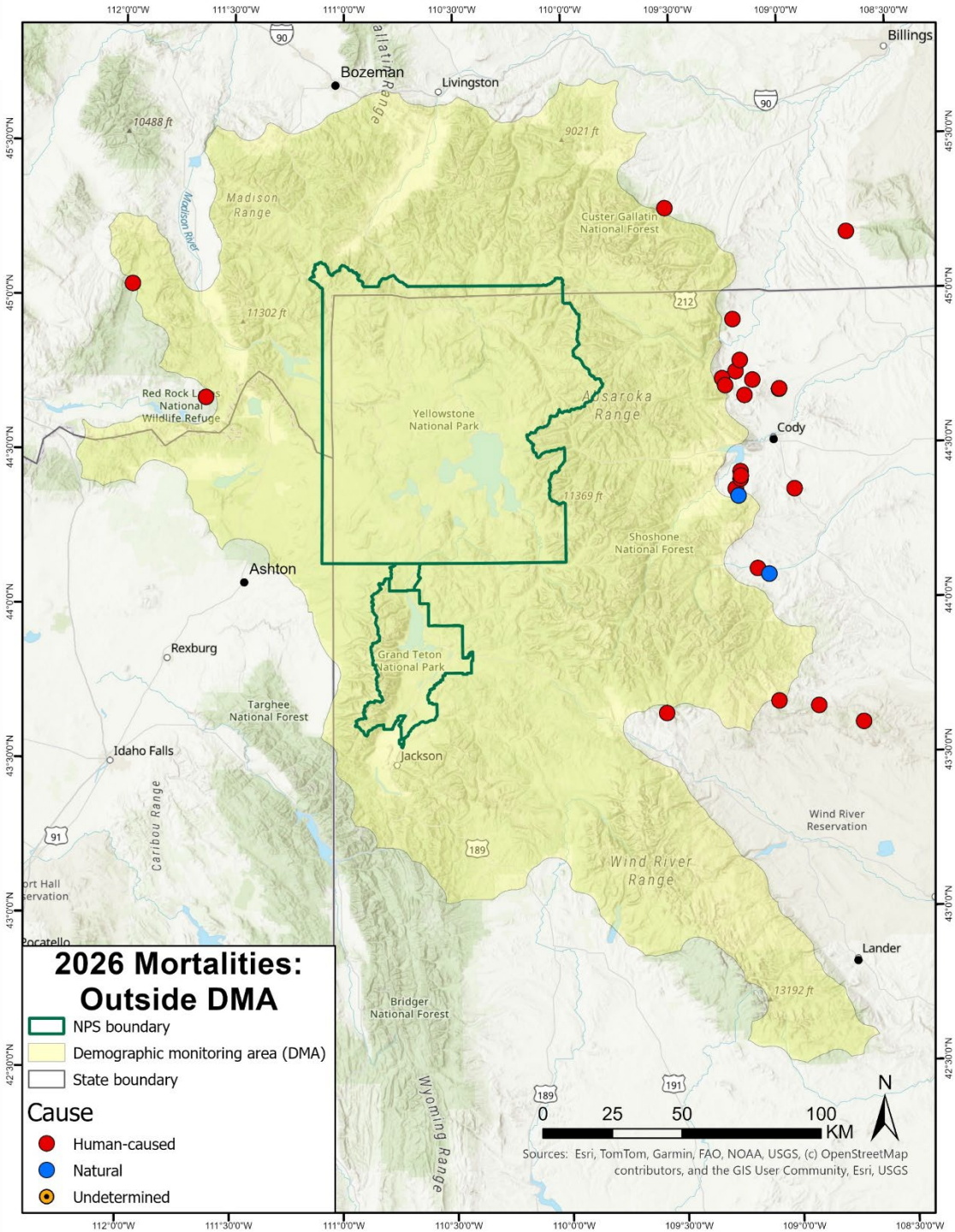
Data as of 11/16/2026

IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Known and probable mortalities 2026

- **50 in DMA**
  - 40 human-caused
  - 8 natural
  - 2 undetermined
- **32 Outside DMA**
  - 29 human-caused
  - 3 natural



Data as of 11/16/2026

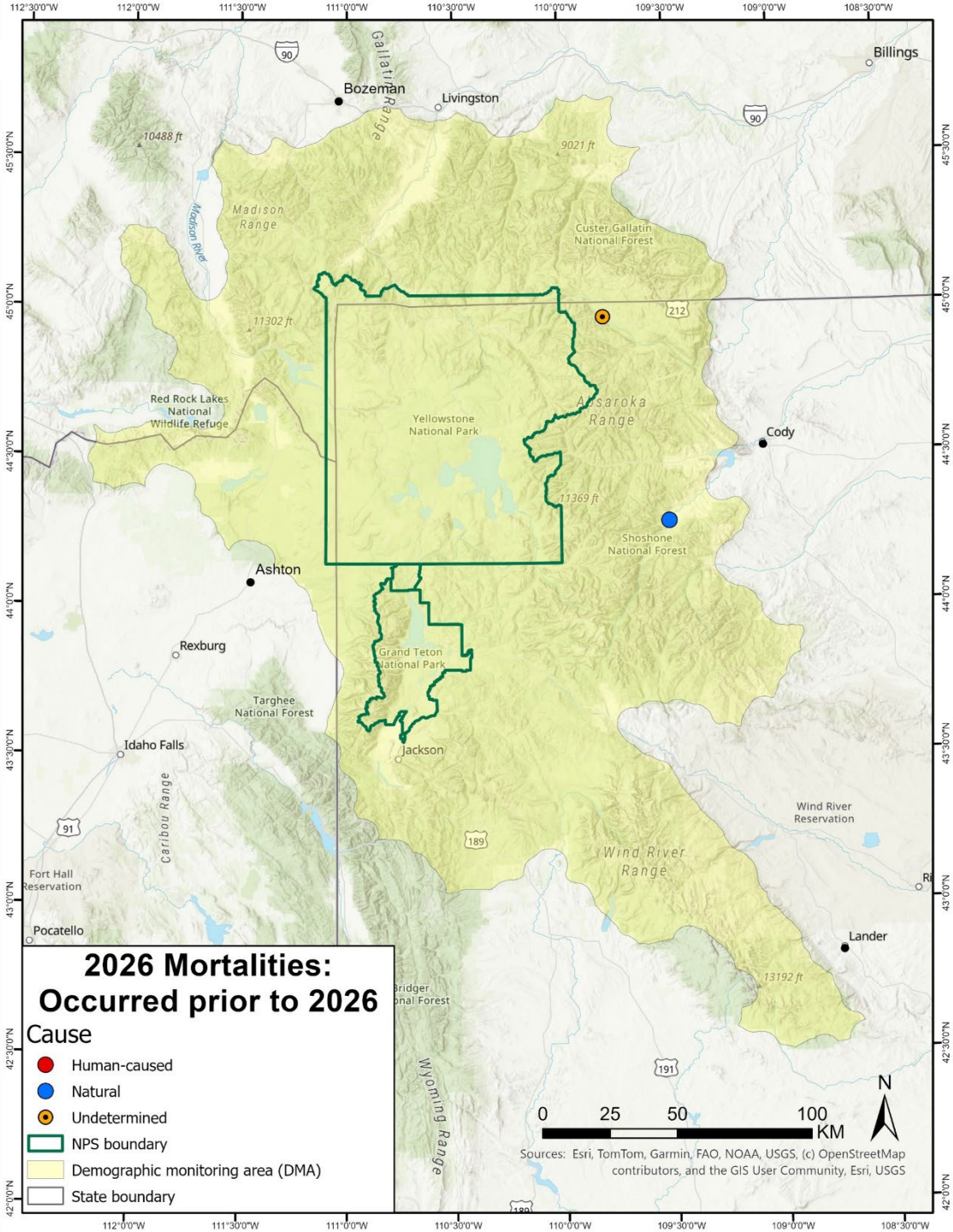
IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Known and probable mortalities 2026

- **50 in DMA**
  - 40 human-caused
  - 8 natural
  - 2 undetermined
- **32 Outside DMA**
  - 29 human-caused
  - 3 natural
- **Prior years**
  - 1 natural (~2025)
  - 1 undetermined (~2020)

Data as of 11/16/2026



IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Known and probable mortalities by sex and age class 2026 (inside DMA)

Area	Sex	Age class		Total
		Dependent (<2 years old)	Independent (≥2 years old)	
Inside DMA	Female	2	10	12
	Male	4	23	27
	Unknown	6	5	11
	Total	12	38	50

Data as of 11/16/2026

Preliminary information-subject to revision. Not for citation or distribution.

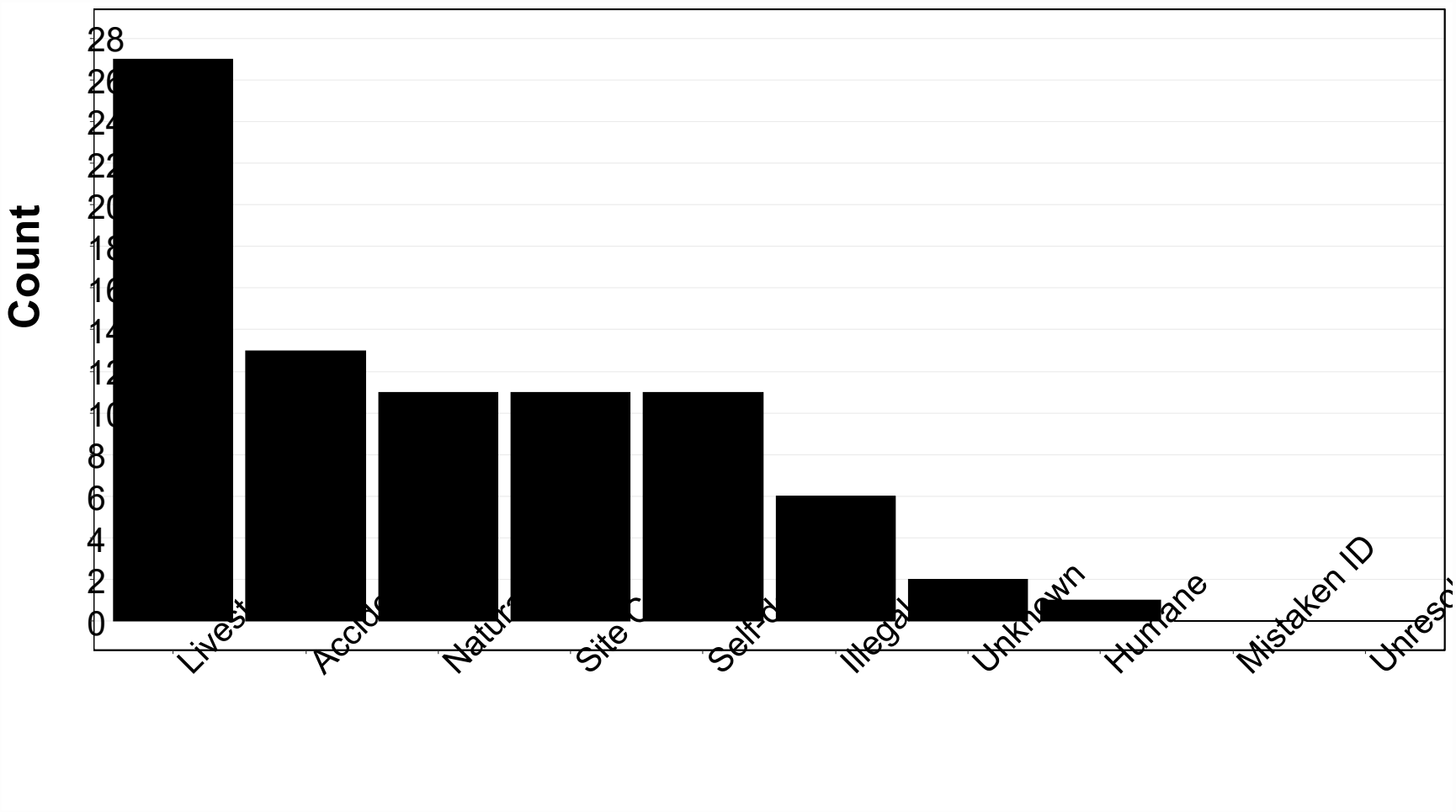
Known and probable mortalities by sex and age class 2026 (outside DMA)

Area	Sex	Age class		Total
		Dependent (<2 years old)	Independent (≥2 years old)	
Outside DMA	Female	2	7	9
	Male	6	16	22
	Unknown	1	0	1
	Total	9	23	32

Data as of 11/16/2026

Preliminary information-subject to revision. Not for citation or distribution.

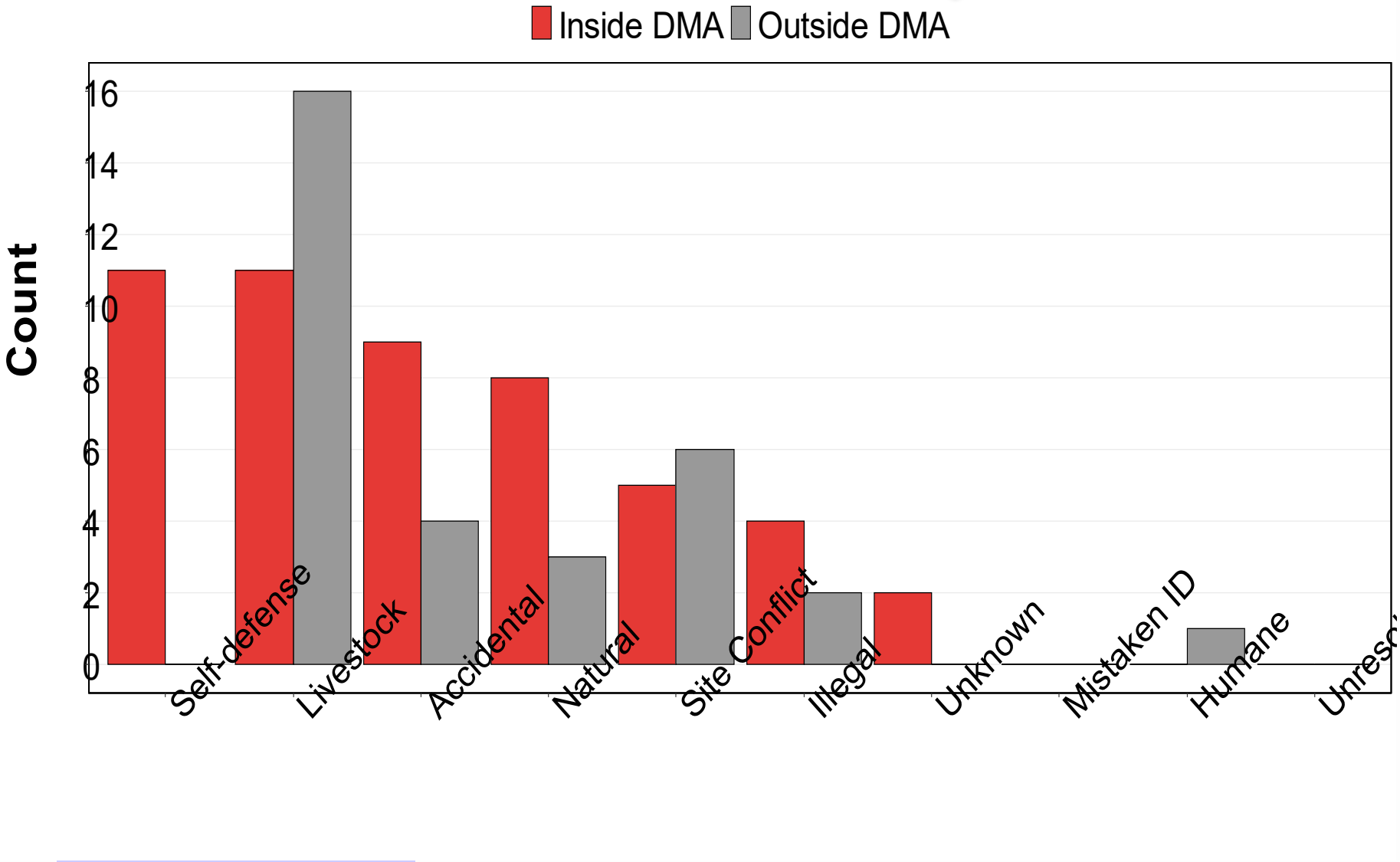
Total mortality in the GYE by cause 2026



Data as of 11/16/2026

Preliminary information-subject to revision. Not for citation or distribution.

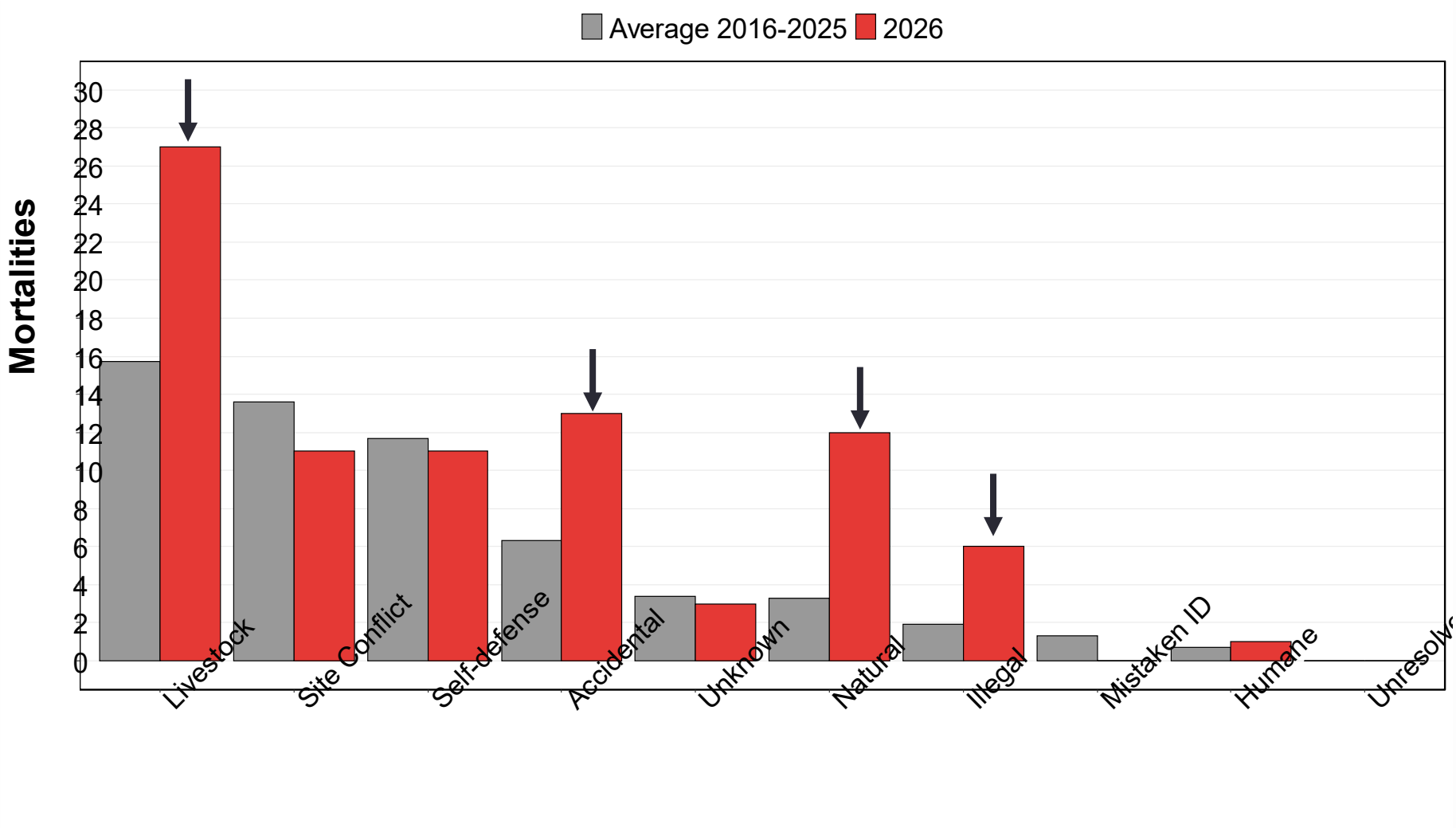
Mortalities inside/outside DMA by cause 2026



Data as of 11/16/2026

Preliminary information-subject to revision. Not for citation or distribution.

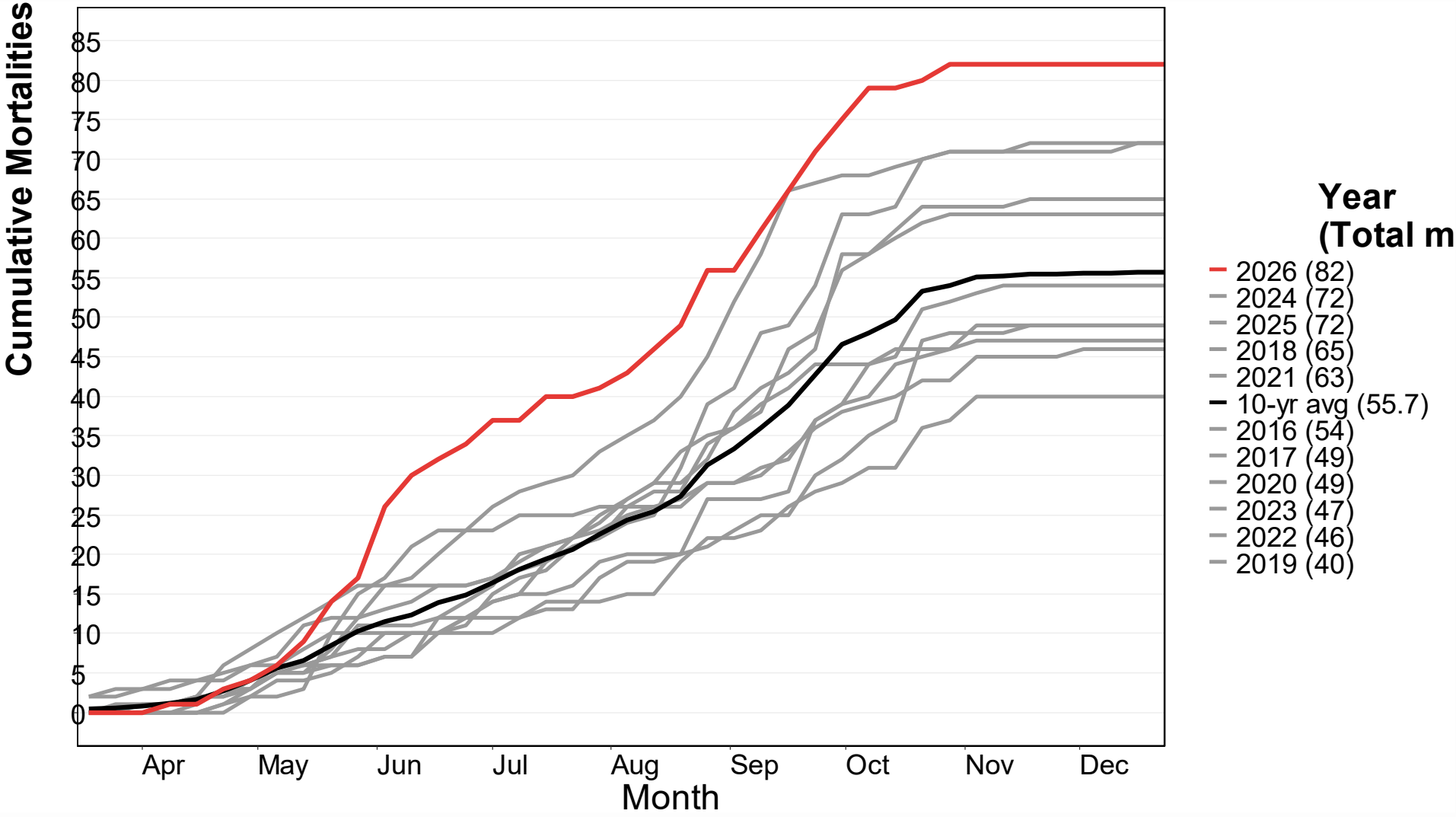
Annual mortalities inside DMA by cause 2016-2025 vs. 2026



Data as of 11/16/2026

Preliminary information-subject to revision. Not for citation or distribution.

Cumulative documented mortalities 2016-2026

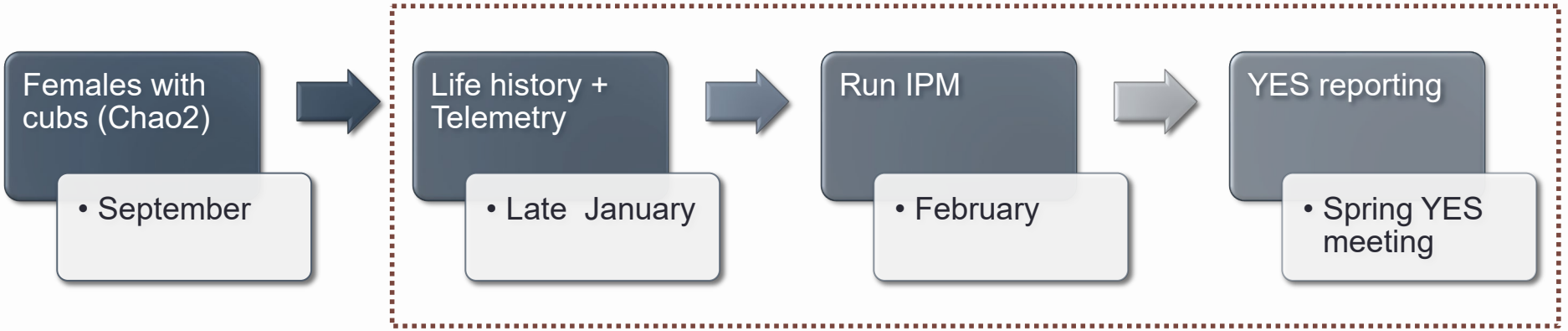


Data as of 11/16/2026

IGBST

Preliminary information-subject to revision. Not for citation or distribution.

Integrated Population Model



Reminder: population size 2025 (IPM, DMA)

Population segment	Median estimate
Independent females (≥2 yrs)	373
Independent males (≥2 yrs)	364
Yearlings	102
Cubs born	211
----------	----------
Total estimate 2025*	1,055 (95% CI = 901–1,247)
Population growth (2024–2025)	2.75 %

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

Preliminary information-subject to revision. Not for citation or distribution.

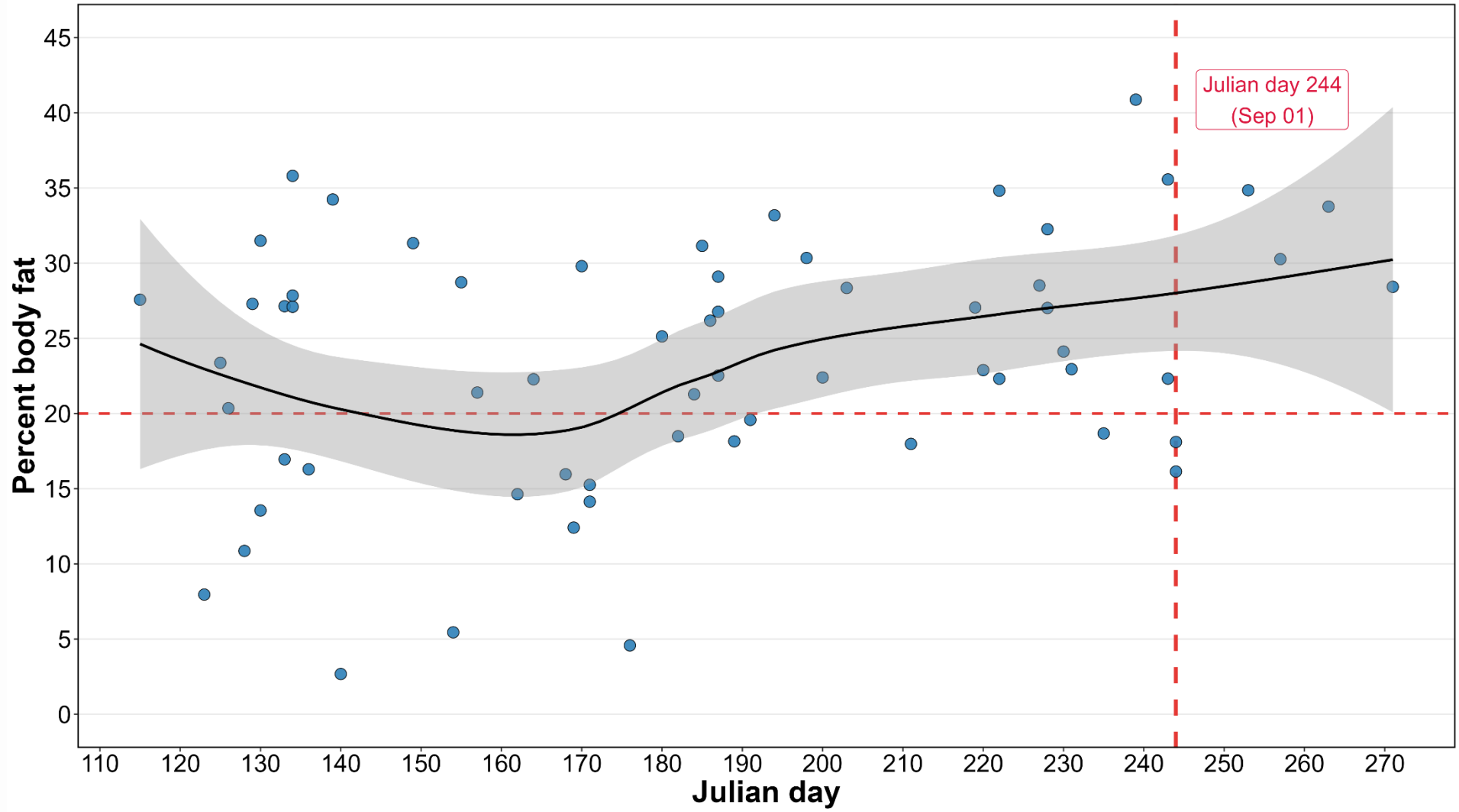
Miscellaneous Updates



IGBST

Photo: J. Davis

Percent body fat by Julian day



Data as of 11/16/2026

Preliminary information-subject to revision. Not for citation or distribution.

Genetic monitoring

KEY FINDING:
No evidence of non-GYE ancestry in any of the individuals genotyped to date

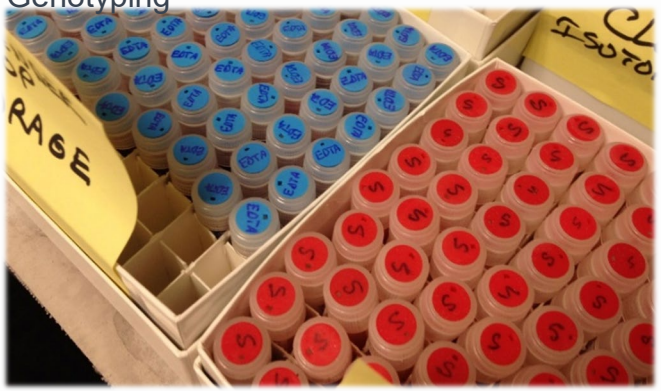
1983-2025:

1,732 individuals genotyped

Field sampling

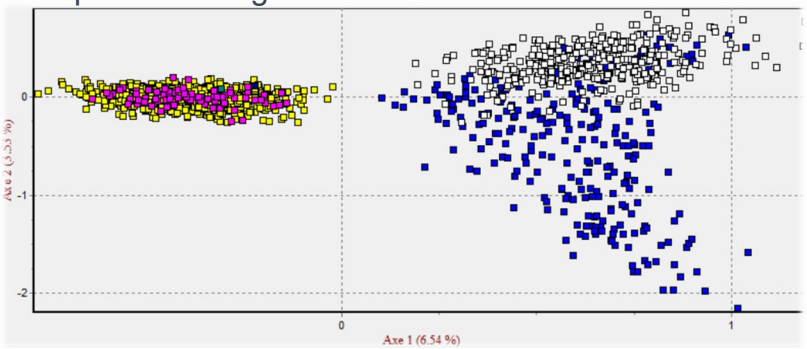


Genotyping



Population assignment analysis clustered all sampled GYE bears separately from Northern Continental Divide and Selkirk/Cabinet-Yaak ecosystems

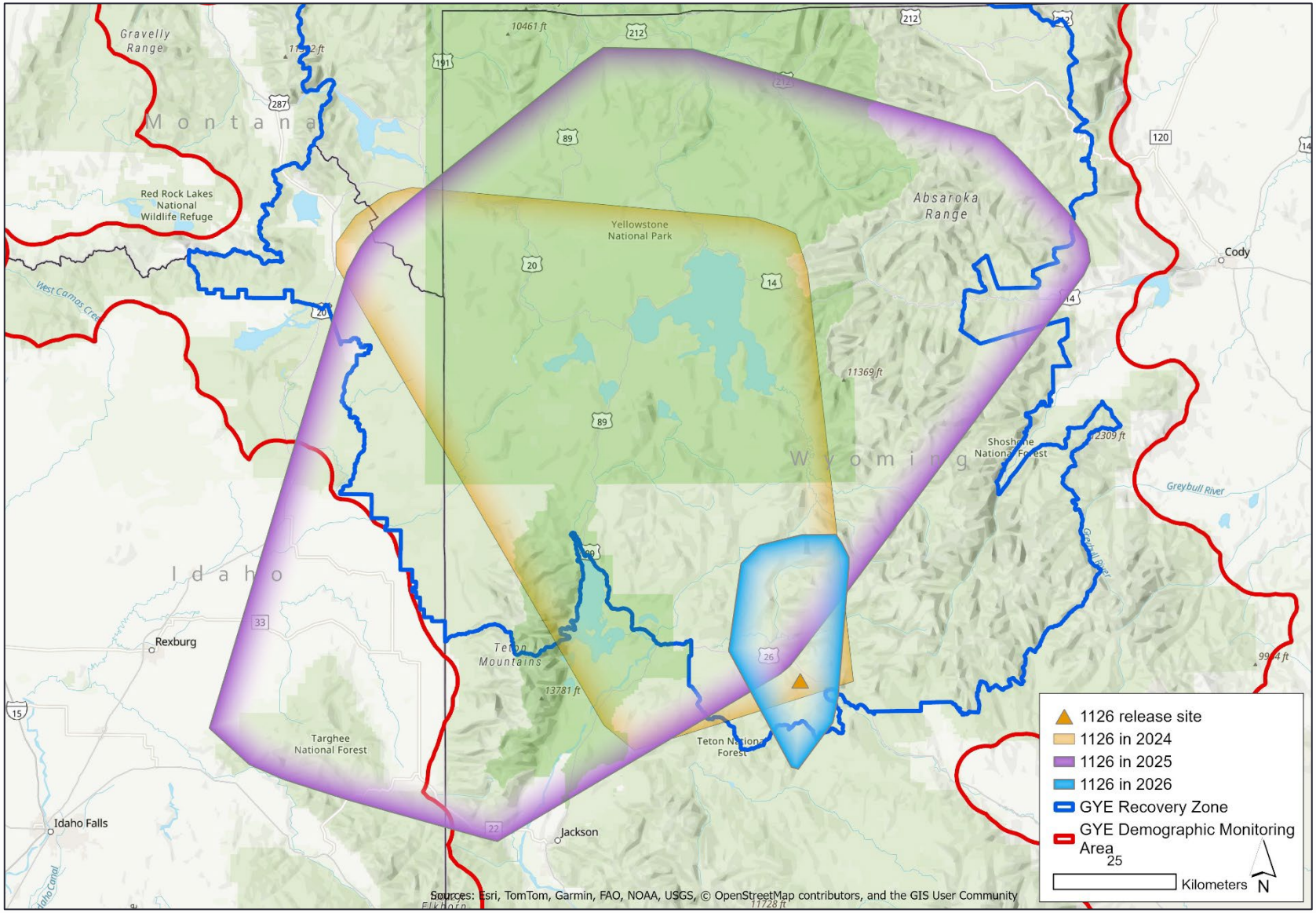
Population assignment



IGBST

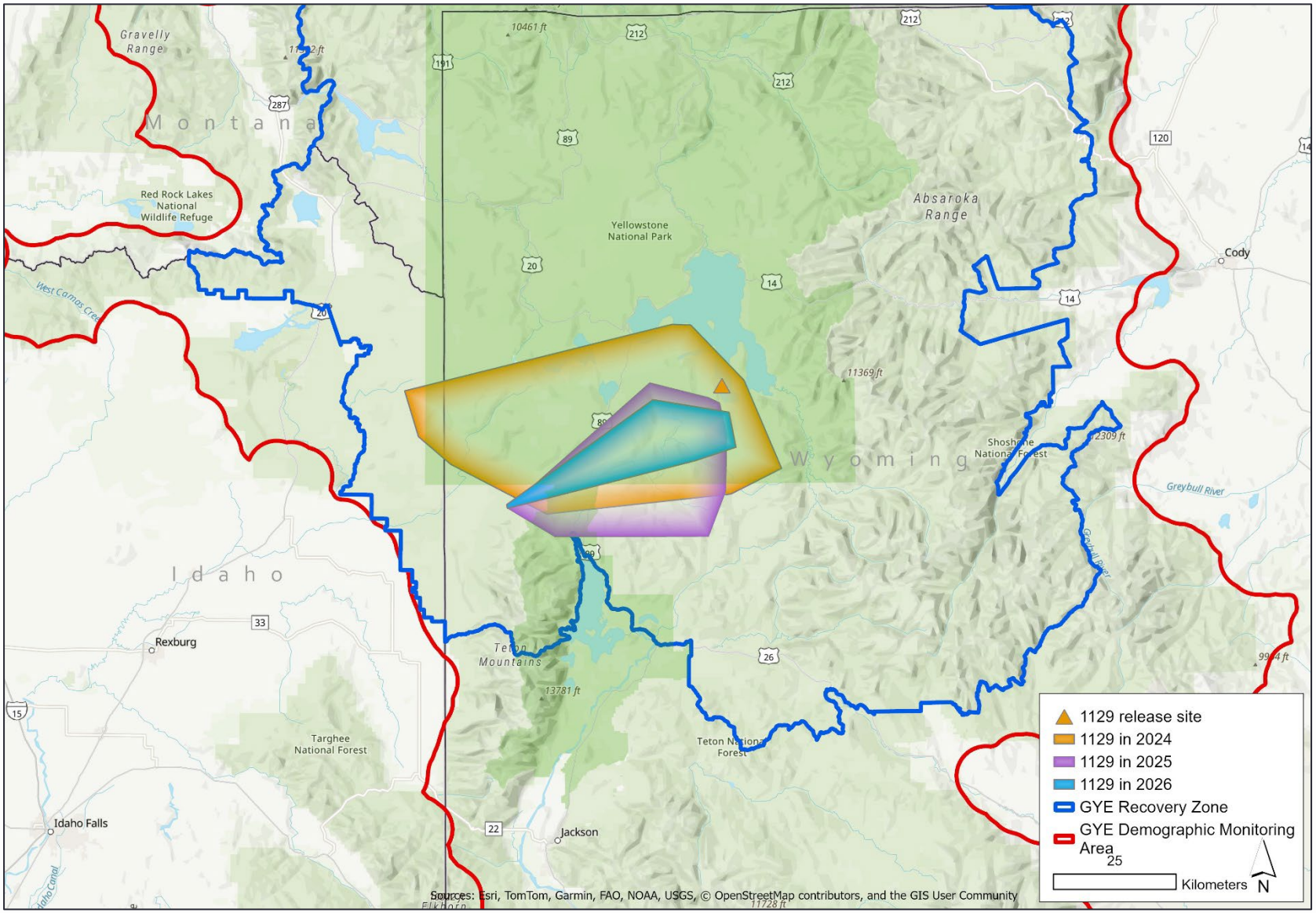
Preliminary information-subject to revision. Not for citation or distribution.

GB1126 – augmentation female



Preliminary information-subject to revision. Not for citation or distribution.

GB1129 – augmentation male

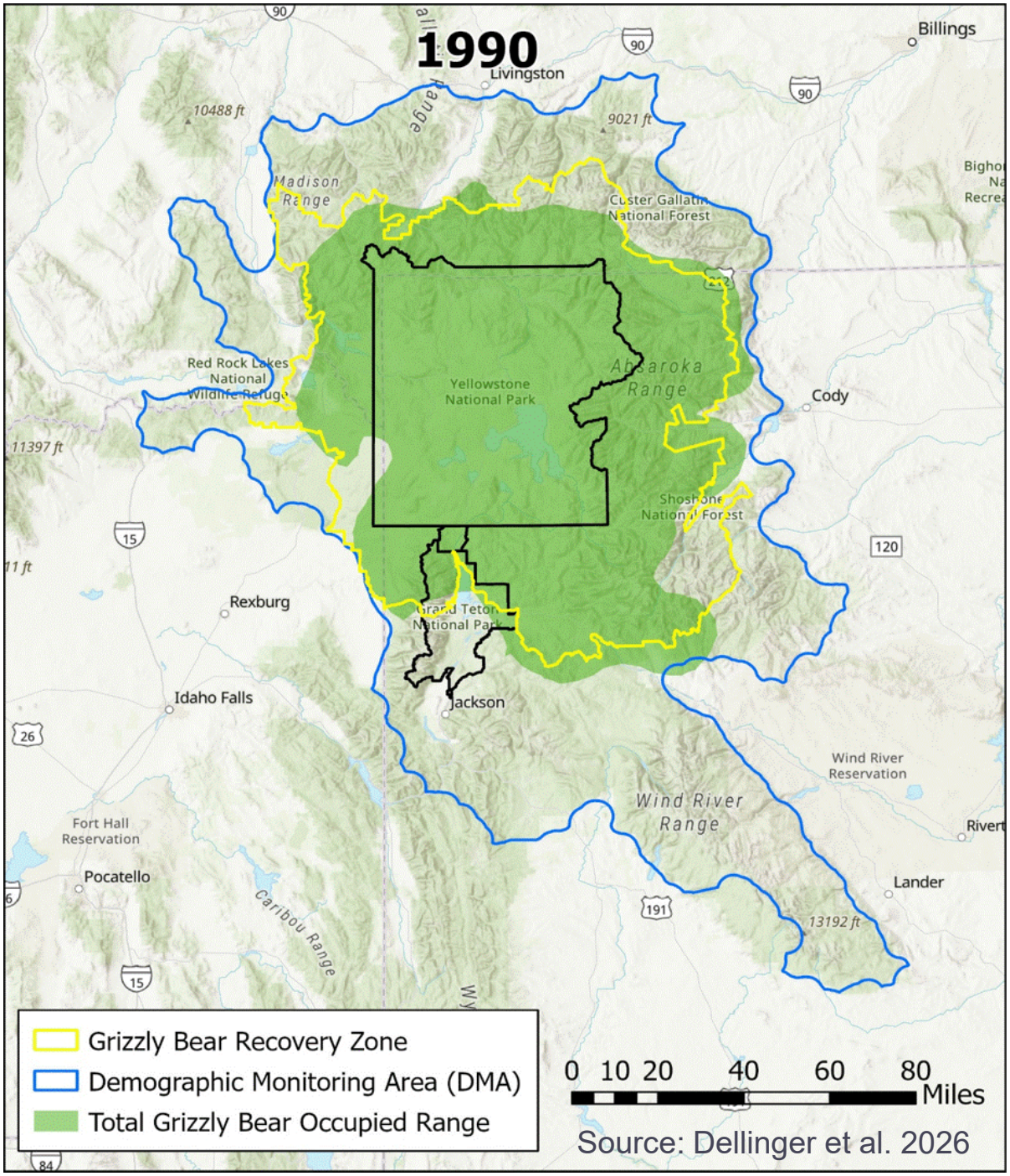


Preliminary information-subject to revision. Not for citation or distribution.

Occupied range 1976-2024

1976-1990:
23,361 km^2

2010-2024:
67,608 km^2



IGBST

Additional information

Study Team website: search “IGBST”

Annual reports: IGBConline.org



IGBST

Photo: J. Davis

Acknowledgments 2026

IDFG: C. Bowlin, J. Brower, B. Cummings, I. Ellsbury, E. Freeman, C. Johnson, J. Melvin, M. Mumma, M. Pieron, A. Sorenson, T. Swearingen

MSU: O. Dalling, A. Litt, E. Loggers

MTFWP: M. Becker, 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, Kameron Rauser, S. Stewart, O. Thomi, M. Wemple, D. Waltee

YNP: J. Bergstrand, K. Gunther, Z. Haroldson, M. King, B. Mornin, D. Nickinelo, E. Reinertson, D. Ruka, R. Schipf, K. Vetter, T. Wyman

GTNP: G. Angelo, B. Apel, C. Aviles, C. Butler, L. Castle-Fericks, L. Clark, M. Clark, R. Clark, R. Coscarelli, S. Dewey, R. DuCharme, D. Ellis, R. Fericks, L. Fisher, C. Forstall, N. Gonsiewski, C. Hayden, T. Hayden, C. Hedinger, C. Hutson, L. Jenkins, M. Kilfeather, M. Kirby, L. Kirby, T. Kirby, A. Langford, J. Lentz, S. Liske, R. Mascia, T. Mascia, N. Montealvo, S. Morriss, S. Morriss, D. Northrup, S. Northrup, A. Ryan, S. Ryan, J. Schwabedissen, K. Smith, J. Stephenson, R. Swift, 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, K. Skeen, D. Tyers

USFWS: S. Becker, H. Cooley, P. Hnilicka, B. Jimenez, W. Lane, B. Lyon, 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; S. Stephens

WS: L. Czapenski, J. Farr, K. Glazier, F. Helske, C. Hoover, C. Knopp, G. McDougal, C. Richardson, J. Rost, D. Tidwell

WGFD: C. Atkinson, M. Aughton, B. Baker, C. Barthelman, M. Boyce, J. Clapp, C. Class, T. Crane, J. Crump, A. Courtemanch, B. DeBolt, J. Dellinger, L. Ellsbury, B. Frude, G. Gerharter, Z. Gregory, C. Hoffer, J. Hunter, B. Hovinga, J. Kraft, 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.



IGBST