

**Summer 2025 Monitoring Avian Productivity and Survivorship
(MAPS) Season Report
Jackson, Wyoming**



**Conducted by Jackson Hole Wildlife Foundation
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Introduction

For over three decades, the Monitoring Avian Productivity and Survivorship (MAPS) program has been at the forefront of avian conservation efforts across North America. By focusing on critical metrics such as avian productivity, recruitment, and survival, the program provides invaluable insights into the factors driving bird population decline. This data-driven approach eliminates much of the uncertainty in conservation planning, enabling targeted actions to address specific threats to bird populations.

One of the program's most significant findings underscores the importance of winter habitats and migration routes—integral components of landbird ecology that directly influence reproductive success in subsequent breeding seasons. The long-term continuity of MAPS data collection allows scientists to uncover trends and patterns that reveal the effects of climate change on bird populations. This includes shifts in phenology, geographic distributions, and survival rates. Such comprehensive data equips land and wildlife managers with the information necessary to adapt management strategies, ensuring the protection of avian species in an era of escalating environmental challenges.

The Jackson Hole Wildlife Foundation (JHWF) is happy to participate in this global initiative. Our care of Teton County's MAPS stations builds on a solid dataset that began in 1991, with the setting up of Station 11114, which was initially overseen by Teton Science Schools (TSS). In the interim, Teton Raptor Center (TRC) ran these stations from 2016 to 2017. By continuing this important work, we not only contribute to a better knowledge of avian conservation, but we also provide valuable data that influences decision-making and wildlife management in Teton County, Wyoming.

This year marked JHWF's eighth consecutive year managing the MAPS banding program in Teton County, Wyoming. Operating under the master banding permit of Bryan Bedrosian, Conservation Director at TRC, all data collection strictly adhered to the standardized MAPS protocol established by the Institute for Bird Populations. During the 2025 season, banding activities were conducted

at two MAPS stations: the Teton Science School's Kelly Campus station (TSS-) and the Boyles Hill station (JACK), continuing the effort to monitor avian population trends and contribute valuable data to the broader MAPS network.

Methods

Study Areas

The two stations run by Jackson Hole Wildlife Foundation are located on Teton Science School (TSS) campuses. Every 5 years, a Habitat Structure Assessment is completed at each site to record changes in habitat over time and to assist IBP in the classification of MAPS stations.

The Kelly station (code: TSS-) is located on the eastern boundary of Grand Teton National Park on the Kelly Campus of TSS at an elevation of around 6800 ft (2100 m). This site is adjacent to Ditch Creek, and offers a variety of habitat types, including aspen (*Populus tremuloides*) woodland, sagebrush shrubland (*Artemisia spp.*), conifer forest (predominantly *Abies* and *Picea spp.*), and riparian cottonwood-willow (*Populus* and *Salix spp.*) bottomland.

The Boyles Hill station (code: JACK) is located near Indian Springs Ranch, about 2.5 miles west of downtown Jackson and adjacent to the Snake River, at an elevation of around 6100 ft (1800 m). The primary habitat type at this location is riparian woodland, with the dominant tree species comprising narrowleaf cottonwood (*Populus angustifolia*) and willows (*Salix spp.*). There are large permanent ponds and streams throughout the banding site.

Banding

Following the Institute for Bird Population's (IBP) guidelines, both stations started banding during Period 4 (May 31-June 9) and ended during Period 10 (July 30-August 8). Banding is conducted between these periods to best capture local bird data and avoid migrating individuals. In 2024, banding was conducted for an extra period but was determined to not contribute enough valuable data to warrant repeating.

Each site runs 10 nets, each 12 meters long and three meters tall. In accordance with MAPS protocol, nets were opened 15 minutes before sunrise and operated for 6 hours after opening. Nets were checked every 40 minutes and captured birds were brought to the banding table to be banded, processed, and released. Each bird was marked with a uniquely numbered aluminum band issued by the USGS. Birds that were captured but could not be banded were also recorded. All captured birds were identified by species, age, and sex.

At the end of each session, a Breeding Status List was also compiled to record local bird breeding activity and establish summer residency status for all birds detected during the banding session.

Results and Discussion

Overall Results

Between both banding stations, a total of 967 individual birds were captured, with 694 new birds banded and 201 recaptures. A total of 45 species were captured between both sites. A total of 1175.94 net hours were recorded out of a possible 1200. These are summarized below in Table 1. Banding at both stations ran from MAPS Intended Periods 4 through 10: specifically, June 4 to August 8, 2025 (TSS-), and June 5 to August 7 (JACK), 2025, with banding sessions every 7 days: Wednesdays at TSS- and Thursdays at JACK. This year, no make-up days were needed for either station.

2025 Total Effort Summary	
Total net hours	1175.94
Grand total (incl. unbanded)	967
Newly banded birds	694
Recaptures	201
Unbanded birds	72
Total species	45

Table 1. Summary of effort between both TSS- and JACK stations in 2025.

The ten most commonly captured species between both stations were Yellow Warbler (n=247), Song Sparrow (n=89), American Robin (n=88), Cedar Waxwing (n=37), Gray Catbird (n=37), Warbling Vireo (n=37), Pine Siskin (n=37), MacGillivray's Warbler (n=34), Black-capped Chickadee (n=31), and Black-headed Grosbeak (n=27) (Figure 1).

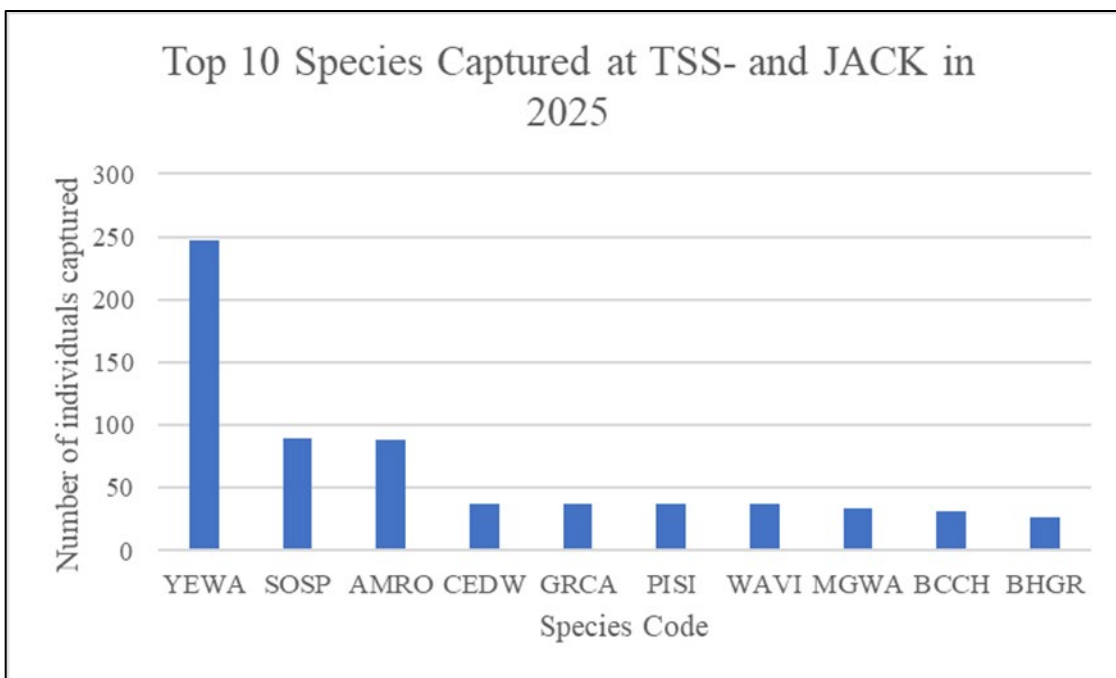


Figure 1. A summary of the top 10 most frequently captured species at both MAPS stations in 2025. Species codes follow the Institute for Bird Populations' four-letter alpha codes, found [here](#).

Kelly (TSS-) MAPS Station

2025 marked the 34th consecutive year for the TSS- station, one of the longest running MAPS banding stations in the United States. 10 banding sessions were completed between June 4 and August 8, conducted weekly on Wednesdays. A total of 489 birds were captured across 37 species. 585.95 net hours were completed out of a possible 600; weather was primarily good for banding operations, and the missing hours were due to a particularly windy day on which nets were temporarily closed. A summary of the station's results is compiled in Table 2.

2025 TSS- Station Summary	
Total net hours	585.95
Total captures (excl. unbanded)	489
Newly banded birds	354
Recaptures	102

2025 TSS- Station Summary	
Unbanded birds	33
Total species	37

Table 2. A summary of the season's results at the TSS- MAPS station in 2025.

The five most frequently captured species were Yellow Warbler (n=49), American Robin (n=45), Song Sparrow (n=41), Pine Siskin (n=32), and MacGillivray's Warbler (n=31). Figure 2 displays the top 10 species captured this year.

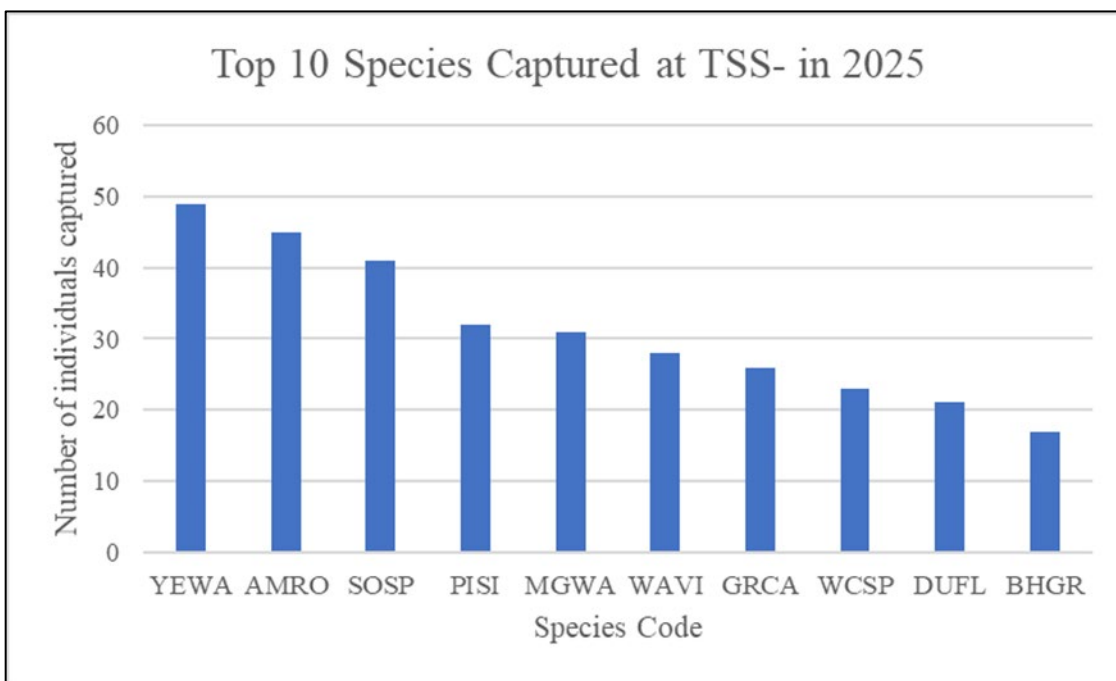


Figure 2. A summary of the 10 most frequently captured species at the TSS- MAPS station in 2025. A guide to alpha codes can be found [here](#).

An unusual capture this season was an adult male American Goshawk (formerly Northern Goshawk)- first recorded for the station and a highly unlikely species to catch passively in mist nets. Another notable species was a female Wilson's Warbler captured on June 25. This second-year bird had an advanced brood patch, indicating she was potentially breeding nearby. This species is a sporadic breeder in the area and an uncommon find in the breeding season.



Figure 3. An adult male American Goshawk and an adult female Wilson's Warbler were both unusual captures at the Kelly MAPS Station.

Boyles Hill (JACK) MAPS Station

2025 was the 21st year of operation for the JACK station. 10 banding sessions were completed between June 5 and August 7, conducted every week on Thursdays to adhere to the requirement of operating the station every seven days. At this station, 456 individuals were captured across 35 species. 589.99 net hours were recorded from this station out of a possible 600 hours. Weather this season was favorable, and no days required nets to be closed for a significant amount of time. A summary of the season's results is compiled in Table 3.

2025 JACK Station Summary	
Total net hours	589.99
Total captures (excl. unbanded)	456
Newly banded birds	323
Recaptures	94

2025 JACK Station Summary	
Unbanded birds	39
Total species	35

Table 3. A summary of the season's results at the JACK MAPS station in 2025.

The five most frequently captured species were Yellow Warbler (n=190), Song Sparrow (n=46), American Robin (n=41), Cedar Waxwing (n=27), and Black-capped Chickadee (n=25). Figure 4 summarizes the 10 most frequent species; note that Calliope Hummingbirds are recorded but go unbanded. Uncommon captures at this station included a Lazuli Bunting and a Violet-green Swallow, both common around the station but rarely captured. Another notable capture was an after second year (ASY) male White-breasted Nuthatch undergoing its definitive pre-basic molt (Figure 5)

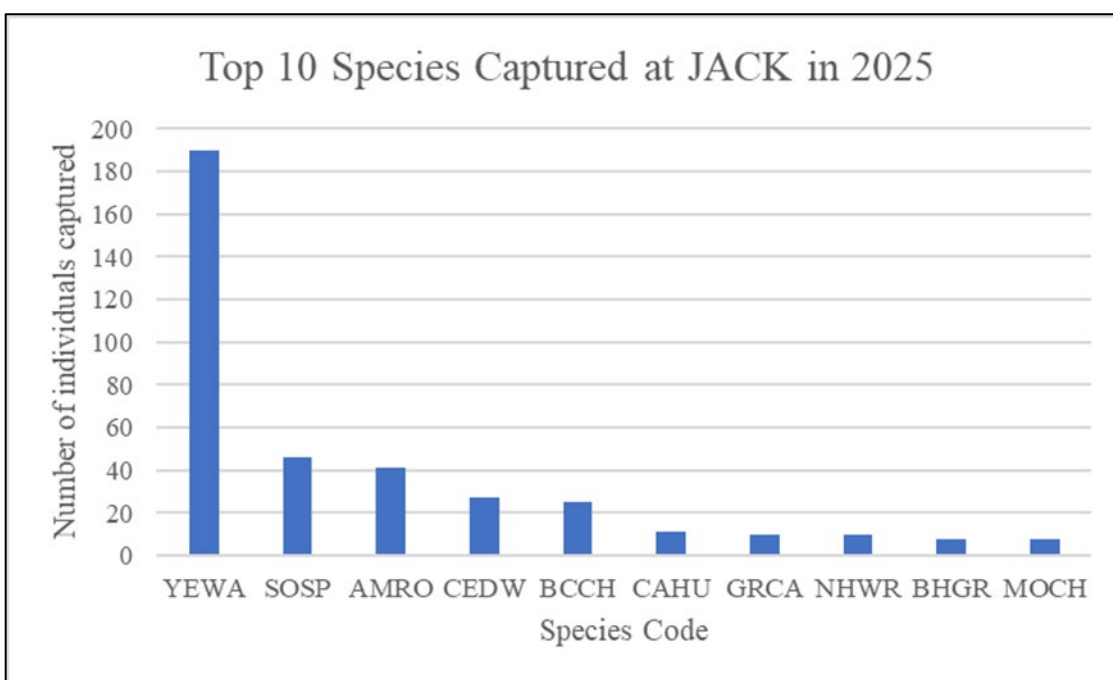


Figure 4. A summary of the 10 most frequently captured species at the JACK MAPS station in 2025. A guide to alpha codes can be found [here](#).



Figure 5. An after second year (ASY) male White-breasted Nuthatch in the beginning stage of its definitive pre-basic (DPB) molt.

Volunteer and Visitor Engagement

This season, 13 dedicated volunteers supported our banding operations, ensuring smooth data collection while welcoming the 90 visitors who joined us at the stations. These visitors — families, students, and community members — experienced the rare opportunity to see birds up close, an encounter that often sparks a lasting interest in wildlife, especially for children. We view this growing engagement as an important complement to our science, transforming rigorous monitoring into a shared experience that educates, inspires, and builds community support for bird conservation.



Figure 6. During 2025 we were able to engage 90 visitors.

Conclusion

JHWF's MAPS banding sites remain a critical source of valuable long-term data, offering insights that extend far beyond annual capture totals. With more than three decades of continuous monitoring at the Kelly (TSS-) station and over two decades at Boyles Hill (JACK), these datasets form one of the strongest longitudinal records of avian demographics in the northern Rocky Mountains. Such continuity enables us to detect subtle changes in productivity, survivorship, and species composition—changes that often serve as early indicators of broader ecological shifts.

The 2025 season reinforced both the value of consistency and the importance of collaboration. Captures of uncommon species such as the American Goshawk and Wilson's Warbler at Kelly, or Lazuli Bunting and Violet-green Swallow at Boyles Hill, highlight the ability of MAPS to reveal unique snapshots of local breeding activity. At the same time, recurring captures of Yellow Warblers, Song Sparrows, and American Robins build the statistical backbone that allows us to model population trends and understand how land management decisions and climate variation influence common species.

Looking ahead, continued operation of the TSS- and JACK MAPS stations in 2026 will allow JHWF to contribute not only to local management decisions but also to continental-scale conservation efforts through the Institute for Bird Populations. By maintaining these stations, we

reaffirm our commitment to a science-driven approach that connects conservation in Jackson Hole to the larger story of bird population health across North America.

Acknowledgements

The Jackson Hole Wildlife Foundation extends our deepest gratitude to the many individuals and organizations who made the 2025 MAPS season possible. Our dedicated staff, including seasonal bird banders, provided the expertise, attention to detail, and persistence required to maintain two active stations on a weekly basis throughout the summer. Without their skill and reliability, the integrity of these long-term datasets would not be possible.

We are especially grateful to our agency partners at the Bridger-Teton National Forest and Grand Teton National Park for their logistical support, field assistance, and collaboration. The Teton Raptor Center—through the continued leadership of Principal Investigator Bryan Bedrosian—provided permitting oversight and scientific guidance, ensuring our work remained aligned with national standards.

Finally, we thank our individual donors, volunteers, and community members who visited the stations this season. From long-time Nature Mappers to families experiencing bird banding for the first time, your presence reinforced the educational power of hands-on science and the importance of connecting people with wildlife. The Jackson Hole Wildlife Foundation is proud to steward this work on behalf of the community, and we look forward to another year of collaboration, discovery, and conservation impact.