



FINAL REPORT

Prepared for Meg and Bert Raynes Wildlife Fund
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EXECUTIVE SUMMARY

Outdoor recreation helps connect people to nature, promotes healthy lifestyles, and contributes to thriving local economies. However, recreation can also have negative effects on wildlife if it is not well-managed. In the Jackson Hole area, recreation is expanding rapidly, and managers need accurate and localized information about recreation and wildlife trends to plan for current and future use. The Nature Conservancy (TNC) in Wyoming's project objectives are to monitor wildlife and human activity in the Cache-Game area of the Bridger-Teton National Forest to establish a baseline for trends, and to involve volunteers and citizen scientists to increase public appreciation of nature and awareness of the issue of recreation and wildlife.

Using funds from the Meg and Bert Raynes Wildlife Fund, we purchased 10 trail cameras and deployed them, along with other trail cameras, along trails in the Cache-Game area. The cameras were placed strategically to capture variability in human use, including trails with different intensities of use and areas where we expect human use will increase in the future. The cameras collected over 500,000 images in 2020 and included pictures of a broad diversity of wildlife species as well as mountain bikers, hikers, and skiers. To process the images, we uploaded them to the citizen science platform Zooniverse and recruited and trained at least 66 volunteers from the Jackson Hole Community School, Nature Mapping program, and outside the Jackson area to tag the images. To date, over 200,000 classifications have been made on the Zooniverse platform.

Ongoing work on this project involves continuing to process and sort images from the trail cameras with the help of citizen scientists and Artificial Intelligence (AI) machine learning processing. Data garnered from image processing will inform our analyses of wildlife habitat use and activity patterns in relation to recreation. We are also gearing up for the 2021 data collection season.

Monitoring wildlife and recreation use on the Bridger-Teton National Forest

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