
****USE OF CAMERA COLLARS TO REASSESS THE FORAGING STRATEGIES OF BEARS IN YELLOWSTONE NATIONAL PARK**

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Black bears and grizzly bears are opportunistic omnivores that consume a seasonally dynamic diet that varies over time and space. Changes in climate may influence the abundance and distribution of foods consumed by bears, which may place bears in closer proximity to humans and increase human-bear interactions. Therefore, reliable data on bear diets will remain important information for managers. Previous studies of bear foraging relied on visiting locations from GPS collars and documenting bear activity, but evidence of activity or foraging was observed at only 30–50% of locations. Emerging technologies, such as GPS camera collars, can provide new insights into the ecology of cryptic animals, including bears, and could be used to better understand the dynamic nature of their diets. During 2014–2016, we deployed GPS camera collars on 3 grizzly bears and 3 black bears in Yellowstone National Park as a pilot study to gain insights about the nutritional ecology of these species. Field crews observed sign of bear activity at ~52% of the GPS locations searched, which is comparable to other studies. However, when we compared the sign found by field crews to videos recorded by the collars at the same locations, the two methods matched only 18.6% of the time. This low congruence demonstrates a need to improve methods to understand foraging activities. Inference may be improved by matching rich datasets from GPS-tracking devices (i.e., location information and accelerometer data) with video documentation to predict bear foraging behaviors.