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DATA PAPER

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SNAPSHOT USA 2021: A third coordinated national camera trap survey of the United States

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Abstract

SNAPSHOT USA is a multicontributor, long-term camera trap survey designed to survey mammals across the United States. Participants are recruited through community networks and directly through a website application (https://www.snapshot-usa.org/). The growing Snapshot dataset is useful, for example, for tracking wildlife population responses to land use, land cover, and climate changes across spatial and temporal scales. Here we present the SNAPSHOT USA 2021 dataset, the third national camera trap survey across the US. Data were collected across 109 camera trap arrays and included 1711 camera sites. The total effort equaled 71,519 camera trap nights and resulted in 172,507 sequences of animal observations. Sampling effort varied among camera trap arrays, with a minimum of 126 camera trap nights, a maximum of 3355 nights, a median 546 nights, and a mean 656 ± 431 nights. This third dataset comprises 51 camera trap arrays that were surveyed during 2019, 2020, and 2021, along with 71 camera trap arrays that were surveyed in 2020 and 2021. All raw data and accompanying metadata are stored on Wildlife Insights (https://www.wildlifeinsights.org/), and are publicly available upon acceptance of the data papers. SNAPSHOT USA aims to sample multiple ecoregions in the United States with adequate representation of each ecoregion according to its relative size. Currently, the relative density of camera trap arrays varies by an order of magnitude for the various ecoregions (0.22–5.9 arrays per 100,000 km^2), emphasizing the need to increase sampling effort by further recruiting and retaining contributors. There are no copyright restrictions on these data. We

request that authors cite this paper when using these data, or a subset of these data, for publication. Any use of trade, firm, or product names is for descriptive purposes only and does not imply endorsement by the US Government.

KEYWORDS
biodiversity, biogeography, camera traps, Carnivora, Cetartiodactyla, Cingulata, Didelphimorphia, Lagomorpha, mammals, Rodentia

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Aside from the primary SNAPSHOT USA team based at the Smithsonian Conservation Biology Institute and NC Museum of Natural Sciences, all authors contributing data were listed in alphabetical order.

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CONFLICT OF INTEREST STATEMENT

The authors declare no conflicts of interest.

DATA AVAILABILITY STATEMENT

Summaries of the camera trap image metadata are available as Supporting Information in Data S1. These data and the original images used to compile the database are available from Wildlife Insights at http://n2t.net/ark:/63614/w12003286.

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SUPPORTING INFORMATION

Additional supporting information can be found online in the Supporting Information section at the end of this article.

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