SNAPSHOT USA 2020: A second coordinated national camera trap survey of the United States during the COVID-19 pandemic


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1Department of Forestry and Environmental Resources, North Carolina State University, Raleigh, North Carolina, USA
2North Carolina Museum of Natural Sciences, Raleigh, North Carolina, USA
3Smithsonian Conservation Biology Institute, Front Royal, Virginia, USA
4Department of Biology, Abilene Christian University, Abilene, Texas, USA
5Alaska Department of Fish and Game, Division of Wildlife Conservation, Douglas, Alaska, USA
6Arizona State University, Tempe, Arizona, USA
7Field Conservation Research Department, Arizona Center for Nature Conservation/Phoenix Zoo, Phoenix, Arizona, USA
8McDowell Sonoran Conservancy, Scottsdale, Arizona, USA
9School of Forestry and Wildlife Sciences, Auburn University, Auburn, Alabama, USA
10Department of Biology, Appalachian State University, Boone, North Carolina, USA
11Department of Health and Exercise Science, Appalachian State University, Boone, North Carolina, USA
12Department of Education & Conservation, Brandywine Zoo-Delaware State Parks, Wilmington, Delaware, USA
13Department of Biological Sciences, Bridgewater State University, Bridgewater, Massachusetts, USA
14Predator Detection and Deterrence, Fresno, California, USA
15Department of Forestry and Environmental Conservation, Clemson University, Clemson, South Carolina, USA
16Crocodile Lake National Wildlife Refuge, Key Largo, Florida, USA
17DC Cat Count at the Humane Rescue Alliance, Washington, District of Columbia, USA
18Biological Sciences Department, Dixie State University, St. George, Utah, USA
19Caesar Kleberg Wildlife Research Institute, Texas A&M University-Kingsville, Kingsville, Texas, USA
20Georgia Department of Natural Resources, Wildlife Resources Division, Brunswick, Georgia, USA
21Natural Resource Ecology and Management, Iowa State University, Ames, Iowa, USA
22Cumberland Mountain Research Center, Lincoln Memorial University, Harrogate, Tennessee, USA
23Mianus River Gorge, Bedford, New York, USA
24Craighead Beringia South, Kelly, Wyoming, USA
Managing wildlife populations in the face of global change requires regular data on the abundance and distribution of wild animals, but acquiring these over appropriate spatial scales in a sustainable way has proven challenging. Here we present the data from Snapshot USA 2020, a second annual national mammal survey of the USA. This project involved 152 scientists setting camera traps in a standardized protocol at 1485 locations across 103 arrays in 43 states for a total of 52,710 trap-nights of survey effort. Most (58) of these arrays were also sampled during the same months (September and October) in 2019, providing a direct comparison of animal populations in 2 years that includes data from both during and before the COVID-19 pandemic. All data were managed by the eMammal system, with all species identifications checked by at least two reviewers. In total, we recorded 117,415 detections of 78 species of wild mammals, 9236 detections of at least 43 species of birds, 15,851 detections of six domestic animals and 23,825 detections of humans or their vehicles. Spatial differences across arrays explained more variation in...
the relative abundance than temporal variation across years for all 38 species modeled, although there are examples of significant site-level differences among years for many species. Temporal results show how species allocate their time and can be used to study species interactions, including between humans and wildlife. These data provide a snapshot of the mammal community of the USA for 2020 and will be useful for exploring the drivers of spatial and temporal changes in relative abundance and distribution, and the impacts of species interactions on daily activity patterns. There are no copyright restrictions, and please cite this paper when using these data, or a subset of these data, for publication.

**KEYWORDS**
biodiversity, biogeography, camera traps, Carnivora, Cetartiodactyla, Didelphimorphia, Lagomorpha, mammals, occupancy modeling, species distribution modeling

**CONFLICT OF INTEREST**
The authors declare no conflict of interest.

**DATA AVAILABILITY STATEMENT**
The complete data set is available as Supporting Information (Data S1). Associated data are also available at the Smithsonian’s eMammal data repository [https://emammal.si.edu/analysis/data-download](https://emammal.si.edu/analysis/data-download) by choosing North America in the map and then selecting the project: Snapshot USA – 2020.

**ORCID**
Roland Kays [https://orcid.org/0000-0002-9247-6665](https://orcid.org/0000-0002-9247-6665)
Michael V. Cove [https://orcid.org/0000-0001-5691-0634](https://orcid.org/0000-0001-5691-0634)
Christopher A. Lepczyk [https://orcid.org/0000-0002-5316-3159](https://orcid.org/0000-0002-5316-3159)
Marketa Zimova [https://orcid.org/0000-0002-8264-9879](https://orcid.org/0000-0002-8264-9879)
Zach Farris [https://orcid.org/0000-0003-0600-9682](https://orcid.org/0000-0003-0600-9682)
M. Caitlin Fisher-Reid [https://orcid.org/0000-0003-1587-7086](https://orcid.org/0000-0003-1587-7086)
Sophie Moore [https://orcid.org/0000-0001-7359-7109](https://orcid.org/0000-0001-7359-7109)
Stephen L. Webb [https://orcid.org/0000-0001-6034-5164](https://orcid.org/0000-0001-6034-5164)
John P. Vanek [https://orcid.org/0000-0002-8684-9632](https://orcid.org/0000-0002-8684-9632)
Christine C. Rega-Brodsky [https://orcid.org/0000-0002-3483-1465](https://orcid.org/0000-0002-3483-1465)
Hila Shamon [https://orcid.org/0000-0001-5252-7013](https://orcid.org/0000-0001-5252-7013)
Robert C. Lonsinger [https://orcid.org/0000-0002-1040-7299](https://orcid.org/0000-0002-1040-7299)
M. Teague O’Mara [https://orcid.org/0000-0002-6951-1648](https://orcid.org/0000-0002-6951-1648)
Tyler Petroelje [https://orcid.org/0000-0003-4957-6732](https://orcid.org/0000-0003-4957-6732)
Erik K. Kuprewicz [https://orcid.org/0000-0002-6658-9052](https://orcid.org/0000-0002-6658-9052)

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

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