A PRELIMINARY CAMERA TRAP SURVEY FOR LARGE MAMMALS IN RED BUTTE CANYON RESEARCH NATURAL AREA, UTAH
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Red Butte Canyon, Utah is designated as a Research Natural Area (RNA) by the USDA Forest Service, and has been largely devoid of human activity for the last 150 years. The canyon features Red Butte Creek, which flows from the canyon through the University of Utah’s research park to Liberty Park and then west to the Jordan River. The gradient of pristine canyon to urban development offers a unique opportunity to study wildlife along the wildland-urban interface (WUI) that exists between Salt Lake Valley and the Wasatch Front. We used motion activated camera traps as a noninvasive approach to document species that are present on the landscape. The use of camera traps in this area will tell us not only what species of mammals are present in the canyon but what species are making their way into the WUI. We deployed 24 different camera stations over the course of 16 months. Our results yielded 1,137 camera nights in the RNA section and 286 camera nights in the urban section. A total of 9 mammal species were caught in the RNA section that included the American black bear (*Ursus americana*), bobcat (*Lynx rufus*), common raccoon (*Procyon lotor*), coyote (*Canis latrans*), elk (*Cervus canadensis*), cougar (*Puma concolor*), human (*Homo sapien*), moose (*Alces alces*) and mule deer (*Odocoileus hemionus*). A total of 8 mammal species were caught in the urban section that included common raccoon (*Procyon lotor*), domestic cat (*Felis catus*), domestic dog (*Canis lupis familiaris*), human (*Homo sapien*), mule deer (*Odocoileus hemionus*), norway rat (*Rattus norvegicus*), rock squirrel (*Spermophilus variegatus*) and striped skunk (*Mephitis mephitis*). Although each section yielded similar species richness they varied in the diversity of species. The results of the survey provide an ecological baseline for surrounding canyons that feature more human activity. The results also tell us which animals may cross the WUI. Future work done by project will provide density estimates of large mammal species in the canyon and along the WUI.