Rampart Range Wildlands Project Bioblitz

Summary Report

During the period June 20-22, 2014, the Colorado Mountain Club sponsored a Bioblitz in the Rampart East Roadless Area and adjoining roadless lands. The Pike National Forest also cooperated and participated. This 35,000 acre area is bounded by Dakan Road and Rampart Range Road in the north and west, and Balanced Rock Road in the south and the Forest boundary in the east, Figure 1. This project area is roadless and considered to have some of the best remaining relatively unfragmented wildlife habitat along the Colorado Front Range. Elevation in the project area ranges from approximately 7,500-9,200 feet. The principal plant communities are lodgepole pine and ponderosa pine associations. There are a few cherry-stemmed roads into the area which are excluded from the project area.

A Bioblitz is a rapid inventory of plant and animal species that is typically completed in 1-2 days. Phenology governs seasonal changes (migration dates, flowering dates) in species. For this reason, phenology limits species, especially plants, that are observed in a short time. For this Bioblitz, eleven separate hikes were conducted in the project area. Each hike was led by a CMC trip leader and included several scientists who conducted the inventory. A list of the scientists who contributed their time is contained in Attachment 1. Other non-scientists participated but did not prepare inventory lists.

Figure 1 shows the approximate locations of the hikes. The hike location names and elevations are shown in Table 1. Because of the higher plant diversity in riparian areas, the hikes took place in the various stream segments in the project area. Because of access and time considerations, most of the hikes took place within 1-2 miles of a road at elevation 8,000-9,000 feet. While we did not perform random sampling, the number of sampling locations was probably greater than most bioblitzs.

Attachment 2 is an excel spreadsheet of the species recorded. The vascular plant inventory list is probably fairly complete for a June phenology for the upper elevations of the project area because of the number of sites sampled. Over 430 species were recorded. Because most of the sampling locations were in the elevation range of 8,000-9,100 feet, foothill species may be under-represented. Only a few non-vascular plants were identified. The list includes only one fungus, no lichen, only a few ferns and fern allies. Additional efforts could make these categories better represented. Grasses are also probably under-represented due to field identification complexities and plant phenology.

One of the important findings is the low occurrence of invasive species. We define occurrence as the number of observations relative to the 12 observers. While ten Colorado listed noxious weeds were identified, only one occurrence of a List A species was reported. The occurrence of the other listed species was also very low (1/12 reports), except for *Cirsium arvense* (Canada thistle)which was reported 7/12 times and *Linaria vulgaris* (butter-and-eggs) 5/12 times. In the author's experience, at similar elevations in Jefferson County Open Space parks, the occurrence of all of these noxious weeds is far greater. Many common noxious weeds were not observed at all. The low occurrence of invasives is probably due to the roadless nature of the area.

Several rare plant species were observed in the Bioblitz, including ten orchid species. No threatened or endangered species were observed.

We allowed definitive evidence (tracks, scat, skulls, etc.) of a wildlife species to count even if it was not observed. The vertebrate lists are probably very incomplete due to elusiveness and the few wildlife biologists participating. One rare sighting of mountain lion was made near the Bioblitz camping area. Five bat species were observed by Mikele Painter of the Forest Service using a mist net along upper Stark Creek. 54 avian species were observed or detected by song. A one-night survey for Mexican Spotted owl by Painter was negative. Fish were not collected or observed although they are probably present in the lower stream reaches. Only two reptiles or amphibians were observed, *Rana pipiens* (Northern Leopard frog) and *Thamnophis elegans*, (Western garter snake).

Table 1. Hike locations, elevations and dates

| Hike Location | Elevation | Date |
|-----------------------------|-----------|---------|
| Upper Gove Creek bat survey | 8500 | 6/20/14 |
| Upper Dry Creek | 8200 | 6/21/14 |
| Upper Bear Creek | 8600 | 6/22/14 |
| Upper Bear Creek-owl survey | 8600 | 6/21/14 |
| Rampart Range Road Wetlands | 9100 | 6/22/14 |
| Upper Gove Creek | 8400 | 6/22/14 |
| Upper Stark Creek | 8800 | 6/21/14 |
| East Plum Creek | 8800 | 6/22/14 |
| Ice Cave Creek | 7900 | 6/21/14 |
| Cook Creek | 8000 | 6/21/14 |
| Upper N. Monument Creek | 9100 | 6/22/14 |

ATTACHMENT 1 LIST OF CONTRIBUTORS

Daniel Barcelon Colorado Butterfly Pavillion
Ed Biery Pike-San Isabel National Forest

Richard Bunn Ft. Carson

Denise Culver Colorado State University

Jeff Dawson URS

Eric Eaton author: Kaufman Field Guide to Insects of North America

Jeff Jones Jones Technologies, LLC

Tass Kelso Colorado College
Judy King Native Plant Master

Lauren Livo independent herpetologist

Patrick Murphy Ecotone Corp.

Steve Olson Pike-San Isabel National Forest
Mikele Painter Pike-San Isabel National Forest
Scott Smith author: Native Orchids of Colorado

Denise Wilson Colorado State University

Jeanne Willson Co-President, Colorado Native Plant Society, Denver chapter

ATTACHMENT 2 2014 Rampart Range Wildlands Species Lists